UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FINAL ENVIRONMENTAL IMPACT STATEMENT
WHITE-TAILED DEER MANAGEMENT PLAN

GETTYSBURG NATIONAL MILITARY PARK
EISENHOWER NATIONAL HISTORIC SITE

This Final Environmental Impact Statement (FEIS) assesses the environmental impacts of a proposed deer management plan for Gettysburg National Military Park and Eisenhower National Historic Site. These parks were established for their historic significance. Management objectives for maintaining the landscapes of the parks were developed so visitors could better understand the events that took place at each park. Certain components of the landscapes are being adversely affected by white-tailed deer browsing which, in turn, is keeping the parks from meeting their management objectives. The parks propose to manage the level of deer browsing so they may meet their landscape management objectives.

Some alternatives were dismissed from further analysis for reasons explained in the FEIS. Alternatives fully considered included:

1 No Action
2A Deer Population Management Through Capture and Transfer
2B Deer Population Management Through Direct Reduction (authorized personnel shooting deer in the parks)
3 Reproductive Intervention (sterilization or contraception)
4 Cooperative Management (increasing public hunting outside the parks by cooperative efforts of private landowners, the Pennsylvania Game Commission, and the National Park Service)
5 Combination Management (a combination of Alternatives 2B and 4)

Alternative 5 Combination Management is the preferred alternative. The proposed action would reduce the deer population by shooting deer in the parks and increasing public hunting outside the parks. These methods would be used annually to maintain the deer population at a predetermined density. The Draft Environmental Impact Statement (DEIS) discussed the environmental consequences of these alternatives.

The public review period for the DEIS began November 30, 1994, and ended February 10, 1995. The FEIS contains the public comments on the DEIS and the NPS responses. Following publication of the notice of availability of the FEIS in the *Federal Register*, there will be a 30-day no-action period.

For additional information contact:

Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325
(717) 334-0909

SUMMARY

FINAL ENVIRONMENTAL IMPACT STATEMENT: WHITE-TAILED DEER MANAGEMENT PLAN

GETTYSBURG NATIONAL MILITARY PARK
EISENHOWER NATIONAL HISTORIC SITE

PURPOSE AND NEED FOR ACTION

This Final Environmental Impact Statement (EIS) proposes management of white-tailed deer browsing within Gettysburg National Military Park (NMP) and Eisenhower National Historic Site (NHS), Adams County, Pennsylvania. The purpose of the EIS is to provide National Park Service decision makers, other officials, and members of the public with information on the environmental effects of several deer management alternatives being considered so that the most informed decision possible could be made before action is taken.

The 5,733-acre Gettysburg NMP preserves the battlefield at Gettysburg and interprets its significance as one of the most eventful battles of the American Civil War. Eisenhower NHS lies next to Gettysburg NMP and interprets the life and career of President Dwight D. Eisenhower and the important events that occurred on the property. This 690-acre park includes the Eisenhower farm and adjacent parcels of land.

The landscape of the sites is critical to the interpretation of the events that took place in these parks. The landscape at Gettysburg NMP reflects the pre-battle 1863 rural agricultural environment that is essential for the visitors' perspective and understanding of the battle. The landscape at Eisenhower NHS is preserved so visitors can experience the historic, scenic, rural, and agricultural character of the farms during the Eisenhowers' occupancy from 1950 to 1969. The condition of the cultural landscapes of the parks is important for achieving the management objectives for interpreting the sites to park visitors.

Note: The vertical line in the right margin identifies text that has been modified in this environmental impact statement and differs from the corresponding text in the draft environmental impact statement.

Deer population surveys have been conducted annually since 1987 to determine their number in the parks. The April 1994 survey estimated that the study area had an average of 853 deer. April mean population estimates the previous 4 years (1990-1993) were over 1,000 deer or 90 deer per square mile.

Intensive deer browsing is preventing the parks from meeting specific management objectives for woodlots and cropfields, two elements of the cultural landscapes. Scientific research and monitoring have documented deer browsing effects on the woodlots and interpretive crops. Management action is proposed to control the browsing effects of white-tailed deer so the parks can meet their management objectives.

ALTERNATIVES

The National Park Service considered a range of alternatives to directly and indirectly control the level of deer browsing in the parks. A deer density goal was established for those alternatives which propose to control the level of browsing through managing the number of deer in the parks. The goal is directly tied to the level of deer browsing that would enable the parks to meet their objectives for woodlot and cropfield management.

The National Park Service examined the effects of known deer densities on croplands and forested areas to estimate the deer density that would have an acceptable level of browsing. The National Park Service established an initial April mean deer density goal of 25 deer per forested square mile for the deer study area. The April 1994 mean population estimate for the study area was 853 deer. Using the initial deer density goal means the April population level for the study area would be an average of 80 deer. The initial goal would be raised or lowered based on how close the conditions of the cropfields and woodlots are to the objectives after the goal is reached. The woodlots, cropfields, and deer population would be monitored throughout the process to determine what density would enable

the parks to achieve their objectives for cropfield and woodlot management.

Alternatives considered but eliminated from further consideration include releasing predators; using repellents, deterrents, or poison; installing fencing; converting the cropfields to native grasses; permitting hunting in the parks; selling the deer; and giving nearby landowners "rights" to the deer. The last three alternatives are not legal under current federal or Pennsylvania law. The following alternatives are proposed to control the level of white-tailed deer browsing in the parks.

Alternative 1: No Action. No management action would be undertaken to reduce the level of white-tailed deer browsing in the parks.

Alternative 2: Deer Population Management. The deer population would be reduced and maintained at or near a predetermined density. Initially, this would require a reduction of the present deer population in the parks to reach an April mean population of 25 deer per square mile of forested study area. An average annual reduction in the population of 40 percent for three years would be required to reduce the population to this density. At the time of the management action, the most recent population estimate would be used to establish the number of deer to be removed from the parks. After the predetermined density was reached, deer would be removed from the parks annually to keep the deer population at or near the predetermined density. Two methods to reduce the deer population to the predetermined density and maintain it at that level are proposed.

> ***Alternative 2A: Capture and Transfer.*** Deer would be captured and relocated to a predetermined site outside the parks. Deer could be captured by using traps, nets, or immobilizing drugs fired from a dart gun. The deer would be transported by vehicle to the relocation site for release. Permits from the Pennsylvania Game Commission would be required to release deer on non-federal public land or to a private facility.

Alternative 2B: Direct Reduction--Shooting. National Park Service personnel or authorized agents would shoot deer in the parks. Personnel trained in public safety and skilled in the use of firearms would shoot the deer with a high-velocity rifle. Deer would be shot during the day and night from October through April. Bait stations would be used in predetermined areas to concentrate the deer, reduce the shooting time, and increase safety. Night shooting would only occur at bait stations. The carcasses would be processed and donated to a food service organization.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Deer would be sterilized or contraceptives would be administered to control deer reproduction. Surgical sterilization of deer could be performed in the field and would be permanent. Steroids or immunocontraceptives would be given to deer through bait, surgical implantation, or injection. The effects of steroids and immunocontraceptives are believed to be reversible. Approval must be granted by the U.S. Food and Drug Administration (FDA) for the use of steroids or immunocontraceptives for deer population management.

Alternative 4: Cooperative Management--Private Landowners, Pennsylvania Game Commission, and National Park Service. An agreement would be developed among private landowners near the parks, the Pennsylvania Game Commission, and the National Park Service to cooperatively reduce the deer population in the parks. This cooperative agreement would increase hunter access and opportunity to kill deer outside the parks which would reduce the number of deer that move into the parks. Scaring deer out of the parks would be the only action to occur in the parks. A "controlled" public hunt, where all aspects of the hunt would be highly managed, could be held outside the parks. In a controlled hunt, selected hunters meeting a minimum proficiency level with a firearm or bow would be assigned a hunting location. Hunters could keep the deer carcass or donate it to a food service organization.

***Preferred Alternative** **Alternative 5: Combined Management--A Combination of Alternative 2B Direct Reduction and Alternative 4 Cooperative Management.* A combination of National Park Service personnel or authorized agents shooting deer in the parks (Alternative 2B) and public hunting outside the parks (Alternative 4) would be used simultaneously to reduce the deer population in the parks. These two alternatives would be repeated as needed and appropriate, annually from October through April until the number of deer required to reach the predetermined deer density was removed. Once the deer population was reduced to this density, either or both of the alternatives may be used to maintain the deer population at or near the predetermined density.

AFFECTED ENVIRONMENT

Eisenhower NHS and Gettysburg NMP are parts of the Gettysburg Battlefield Historic District and are listed in the National Register of Historic Places. Gettysburg NMP has one of the largest collections of historic outdoor monuments and memorials in the United States. Historic structures and many natural elements collectively make up the cultural landscape of the parks. Most of the vegetation in the parks is managed as part of the cultural landscape of each park. Almost two-thirds of the wooded areas of the battlefield are historic woodlots. The remaining woodlands are maintained in a natural state. The cropfields in both parks are farmed by permittees under the Agricultural Special Use Permit Program.

Private land within and surrounding the parks is mostly agricultural land. Agriculture is an important part of the economy although residential and commercial development surrounding the parks is occurring. Six highways and approximately 40 miles of avenues provide access to the battlefield and Eisenhower NHS. Over one million people visit the parks annually. Most of the visitors come in April through October. Deer viewing and photographing are popular activities. Visitors, battlefield guides, park employees, and permittees are active throughout the parks.

The deer in the parks are in good health and are reproducing well. The deer are free-ranging and move in and out of the parks on a daily and seasonal basis. Some movement into the parks may be a result of hunting pressure outside the parks. Hunting is prohibited by law in the parks. Management of the deer in the parks has been limited to responding to deer/vehicle collisions and deer accidents. The National Park Service has the authority to manage the wildlife in the parks without the consent of the state and by methods contrary to state law.

ENVIRONMENTAL CONSEQUENCES

The deer population in the parks would be reduced to and maintained at or near the predetermined deer density by *Alternative 5: Combined Management*. An approach which adapts to changing situations and opportunities would be most successful in managing the free-ranging deer population in the parks. Initially a large number of deer would be killed each year to reduce the deer population to the predetermined density. After the population was reduced, fewer deer would need to be killed annually to maintain the population at that density.

Historical structures may be damaged from stray bullets. The possibility of this occurring is low because personnel would be trained in the use of firearms and safety. The use of bait to bring deer to a particular area away from historical structures would further protect these resources. The woodlot and cropfield management objectives of the parks would be met when the deer population was reduced to the predetermined density. Herbaceous and woody vegetation would increase in abundance and diversity because of reduced browsing by deer. The presence and abundance of some wildlife species would respond to the change in vegetation. The level of deer browsing on private land and the incidence of deer/vehicle collisions would be reduced.

Access to portions of the parks may be restricted during the management action. Shooting deer at night when the parks are closed would not affect

visitor use. The sights and sounds of the management action would detract from some visitors' experiences at the parks. The reduction in the number of deer in the parks would eliminate the pleasure some people gain from viewing large numbers of deer. Although maximum safety precautions would be taken, injury or death of an individual from a stray bullet is a remote possibility. No cumulative impacts would be expected from combining the individual alternatives.

TABLE OF CONTENTS

SUMMARY iii

CHAPTER 1: PURPOSE AND NEED FOR ACTION 1

1.1 Park Purpose and Significance 1
1.1.1 Gettysburg National Military Park 1
1.1.2 Eisenhower National Historic Site 3
1.1.3 Gettysburg Battlefield Historic District 5
1.2 Park Management Objectives and the Cultural Landscape . 5
1.2.1 Woodlot Management Objectives 9
1.2.2 Cropfield Management Objectives 11
1.3 Need for Action 13
1.4 White-Tailed Deer in the Parks and Management Guidance 13
1.5 Other Management Concerns Relating to Deer 17
1.6 Issues and Concerns Identified Through the Scoping Process 18
1.7 Policy and Legal Compliance 20

CHAPTER 2: ALTERNATIVES 23

2.1 Process Used to Formulate Alternatives and Deer Density Goal 23
2.2 Alternatives Considered But Eliminated From Detailed Study 24
2.3 Description of Alternatives 30
Alternative 1: No Action 30
Alternative 2: Deer Population Management 31
Alternative 2A: Capture and Transfer 31
Alternative 2B: Direct Reduction 34
Alternative 3: Reproductive Intervention 36
Alternative 4: Cooperative Management 40
Alternative 5: Combined Management 42
2.4 Summary of Impacts 42

CHAPTER 3: AFFECTED ENVIRONMENT 49

3.1 White-Tailed Deer 49
3.2 Physical Environment 51
3.2.1 Cultural Resources 51
3.2.2 Cultural Landscape 52
3.2.3 Private Land 52
3.3 Biological Environment 53
3.3.1 Vegetation 53
3.3.2 Rare, Threatened, and Endangered Species . . . 54
3.3.3 Wildlife 54
3.4 Social Environment 55
3.4.1 Visitor Use 55
3.4.2 Human Safety 56
3.4.3 Deer/Vehicle Collisions 56

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES 59

4.1 White-Tailed Deer 59
4.1.1 Effects on Deer Population Management 59
4.1.2 Effects on Deer 66
4.2 Physical Environment 70
4.2.1 Effects on Historical Structures 70
4.2.2 Effects on Certain Cultural Landscape Components . 71
4.2.3 Effects on Private Land 75
4.3 Biological Environment 76
4.3.1 Effects on Vegetation 76
4.3.2 Effects on Rare, Threatened, and Endangered Species 78
4.3.3 Effects on Wildlife 79
4.4 Social Environment 81
4.4.1 Effects on Visitor Use 81
4.4.2 Effects on Human Safety 84
4.4.3 Effects on Deer/Vehicle Collisions 85
4.5 Unavoidable Adverse Impacts 86

4.6 Relationship between Short-Term Uses and Long-Term Productivity 87

CHAPTER 5: PREPARERS AND CONSULTANTS 89

CHAPTER 6: ENVIRONMENTAL IMPACT STATEMENT RECIPIENTS 93

CHAPTER 7: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS) 97

7.1 Letters Not Requiring Response 97
7.2 Comments and Responses 102

APPENDIXES 107

A Management Objectives for Gettysburg National Military Park 109
B Management Objectives for Eisenhower National Historic Site 111
C National Park Service Document Entitled "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots" 113
D The Scoping Process 145
E Process Used to Arrive at Deer Density Goal 151
F Park Visitation Records 155
G Number of Deer Killed for Crop Damage and on Highways Within and Near the Parks 159
H Deer Mortality Rates by Capture and Transfer Methods. . 163
I Cost Estimates 167
J Comment Letters on Draft EIS Requiring No Response . 183

BIBLIOGRAPHY 185

GLOSSARY 197

INDEX 199

Figures

Figure	1	Park Location	2
	2	Park Vicinity	4
	3	Location of Historic Woodlots	7
	4	Location of Cropfields	8
	5	Deer Study Area	15
	6	Deer Population Estimates	16

Tables

Table	1	Summary of Impacts	43

Illustrations

Photo	1	The Gettysburg Cyclorama painted by Paul Philippoteaux shows the fierce fighting at the Angle.
	2	President Eisenhower and the First Lady on the farm.
	3	High densities of white-tailed deer are preventing the park from maintaining the historic landscape of the battlefield.
	4	Traditional fences are inefficient barriers to white-tailed deer.

Illustrations (Continued)

Photo	5	Corn shocks on the battlefield after a harvest as seen from the Longstreet tower, circa 1900.
	6	An agricultural permittee harvests corn on the battlefield.
	7	General George Gordon Meade Monument.
	8	The Peach Orchard at Gettysburg saw intense fighting on July 2, 1863.
	9	A browse line created by deer can be seen in this photograph.
	10	Corn grows significantly higher inside deer exclosures.

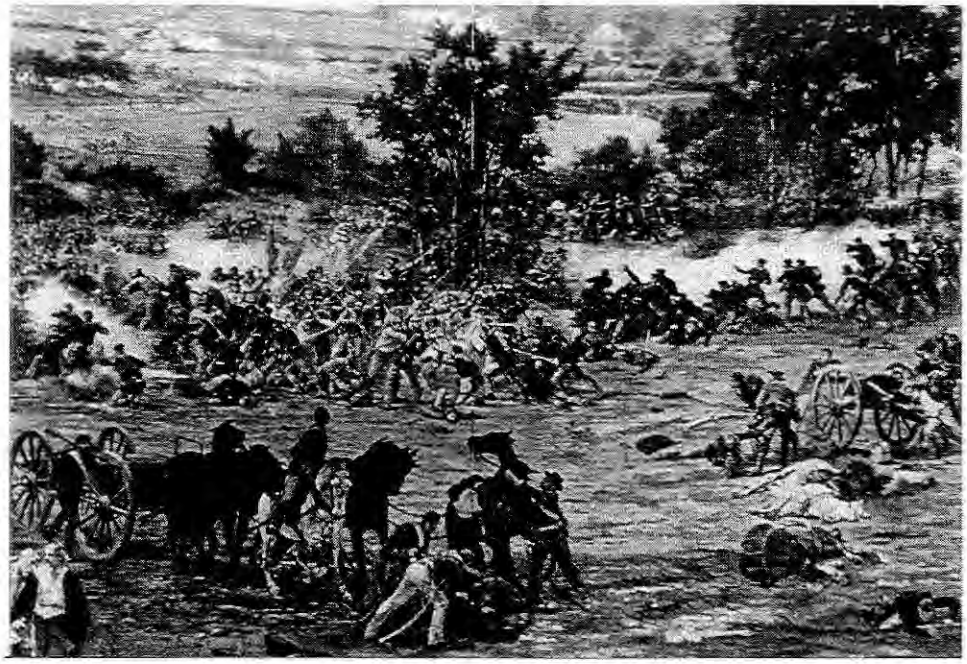


Photo 1. The Gettysburg Cyclorama painted by Paul Philippoteaux shows the fierce fighting at the Angle.



Photo 2. President Eisenhower and the First Lady on the farm.

Chapter 1

PURPOSE AND NEED FOR ACTION

Gettysburg National Military Park and Eisenhower National Historic Site were established because of their historic significance. Management objectives for maintaining the landscapes of the parks have been established to enable visitors to understand the events that took place at each park. Certain components of the landscapes are being adversely affected by white-tailed deer browsing which is keeping the parks from meeting their management objectives. According to the April 1994 population survey, the free-ranging deer population within and in the vicinity of the parks numbers about 853 deer. This chapter describes the parks, their management objectives, and the effects of the deer browsing. Terms in this text that may be unfamiliar are in bold print the first time they are mentioned and are, along with other terms, included in the glossary.

1.1 Park Purpose and Significance

1.1.1 Gettysburg National Military Park

A small town in Adams County in south-central Pennsylvania was the site of one of the most eventful battles of the American Civil War (Figure 1). This three-day battle between the Union and Confederate armies began July 1, 1863, and resulted in about 50,000 casualties, thus making Gettysburg the bloodiest battle of American history. To many battle veterans, Gettysburg became famous as the turning point in the Civil War and represented the "high water mark of the Rebellion." Within weeks of the battle, local citizens and state groups took steps to begin preserving the battlefield.

Gettysburg National Military Park (NMP) was officially established on February 11, 1895, (28 Stat. 65; 16 U.S.C. g.) "to ascertain and definitely mark the lines of battle of all troops engaged in the battle of Gettysburg" (Sec. 3). The Secretary of War was authorized and directed to acquire

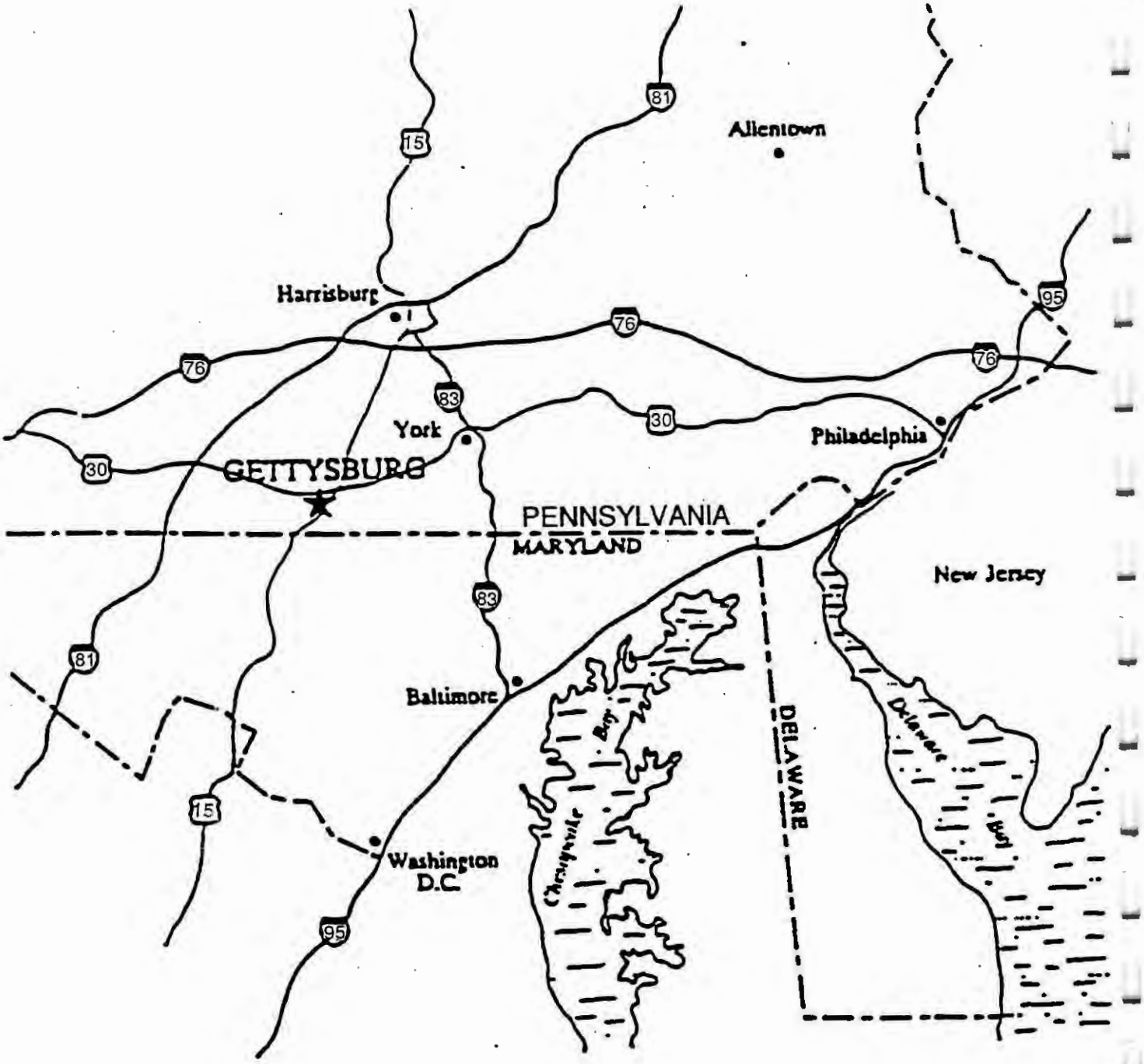


Figure 1. Park Location

lands "to preserve the important topographical features of the battlefield" (Sec. 4). An Executive Order in 1933 transferred Gettysburg NMP from the War Department to the National Park Service. The Organic Act of 1916, which created the National Park Service, charges this agency to conserve "the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 U.S.C. Sec. 1).

The boundary of Gettysburg NMP was redrawn in 1990, adding land that had historic importance to the battle (Figure 2). The 5,733-acre park includes within its boundary 114 landowners owning 1,696 acres of private land. Also included in the boundary are 22 acres of the Gettysburg National Cemetery, which President Abraham Lincoln dedicated. Most of the lands of Gettysburg NMP nearly encircle the Borough of Gettysburg. The East Cavalry Battlefield lies 1.5 miles east of the town and encompasses about 450 acres, including 150 acres of private land. Six highways converge at Gettysburg and traverse the park. Approximately 1,400 monuments and memorials and approximately 400 artillery pieces stand tribute along 40 miles of avenues through the park. The park has approximately 117 historic farm buildings and ruins (e.g., building or foundation remains). Almost a quarter of the park is wooded.

1.1.2 **Eisenhower National Historic Site**

Eisenhower National Historic Site (NHS) lies on the southwestern side of Gettysburg NMP and shares a common boundary. President Dwight D. Eisenhower and his wife Mamie donated their 230-acre farm to the United States on November 27, 1967. Life tenancy was reserved for the General, as he preferred to be called. Following the General's death in 1969, the National Park Service assumed management, granting use of the home and 14 acres to Mrs. Eisenhower who died in 1979. The site was opened to the public in 1980. By that time, three adjacent parcels of land had been added to Eisenhower NHS, bringing the total area to 690 acres. The

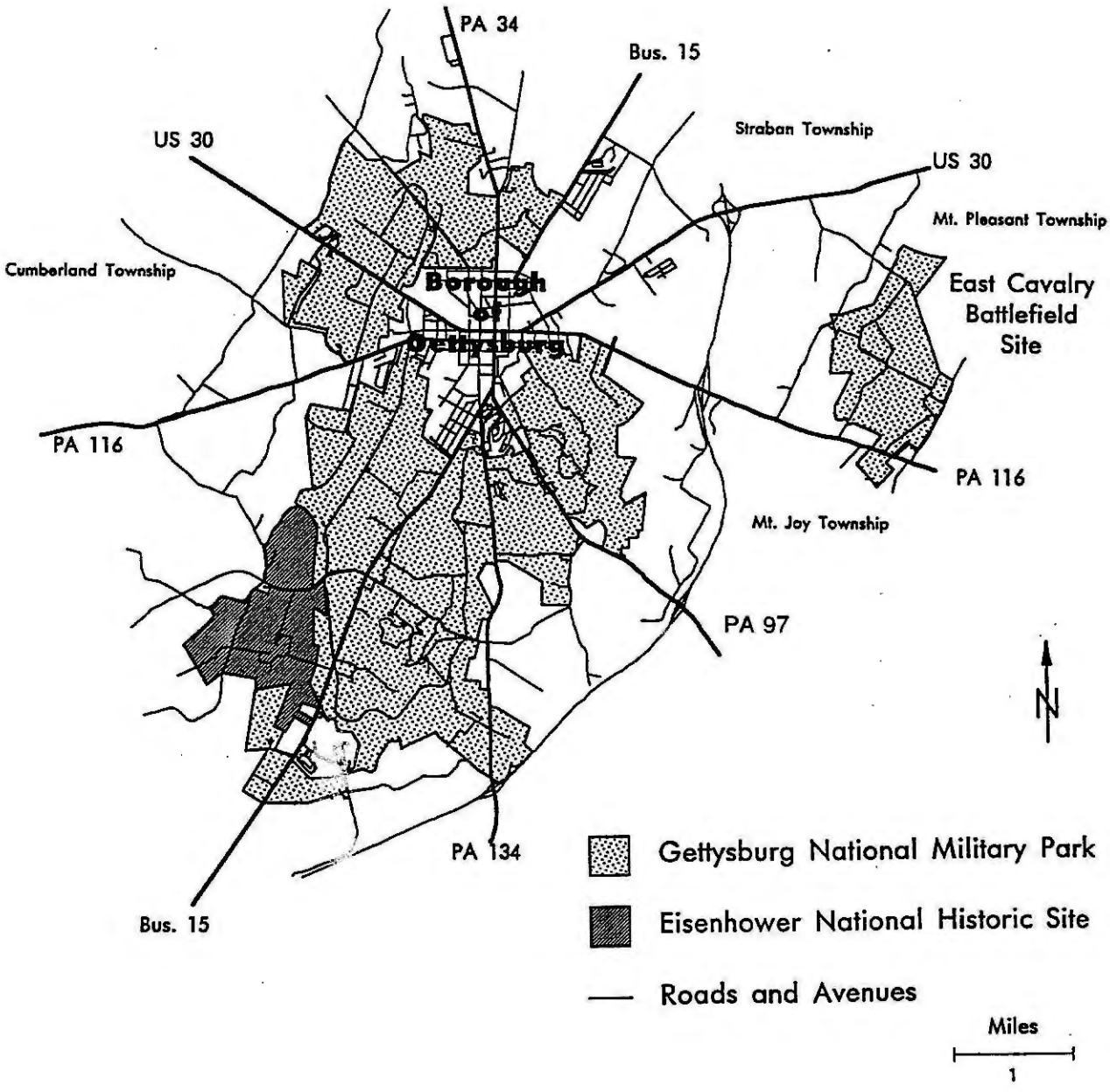


Figure 2. Park Vicinity

Superintendent of Gettysburg NMP administers Eisenhower NHS. Four lanes, presently used for residential, park, and farm traffic only, and one township road pass through Eisenhower NHS.

General management, in keeping with the 1967 Order of Designation which created the park, is designed to preserve the **cultural** and natural **resources** of the Eisenhower farm and home. Secondly, the setting is managed "to **interpret** the life and career of Dwight D. Eisenhower and the events of far-reaching importance which have occurred on the property" (Eisenhower NHS, Statement for Management 1992). The Secretary of the Interior assured Congress in 1968 that the federal government would "maintain the hayfields, the General's garden, and the Black Angus cattle."

Eisenhower NHS contains cropfields and pastures around four separate building complexes, with a farmhouse and barn at the center of each. Seven miles of historic fence are maintained. Eighteen acres of the site are wooded.

1.1.3 Gettysburg Battlefield Historic District

Hereafter, Gettysburg NMP and Eisenhower NHS will be referred to collectively as the parks. The parks are part of the 11,000-acre Gettysburg Battlefield Historic District and are listed on the **National Register of Historic Places** as part of that historic district and as separate entities. This affords the parks protection under the provisions of the National Historic Preservation Act of 1966. All actions affecting the parks, including proposed deer management, must comply with the legislation of this act.

1.2 Park Management Objectives and the Cultural Landscape

The legislation that established each unit and past management history and goals form the basis for the current **management objectives** for the parks. These objectives serve to guide management in fulfilling the purposes of the parks which are to preserve and interpret the parks.

One management objective for Gettysburg NMP is to maintain the park as a memorial landscape (Gettysburg NMP, Statement for Management 1991). This landscape "reflects the pre-battle 1863 rural agricultural environment and includes the superimposed post-battle elements" (e.g., monuments, avenues, interpretive devices, and facilities) which are necessary for commemoration and visitor understanding of the battle. Maintaining the historic visual setting of the battlefield and the post-war commemorative features is integral to the visitors' perspective and understanding of those first three days in July 1863. Appendix A lists the management objectives for Gettysburg NMP.

One management objective for Eisenhower NHS is "to promote conservation of the setting so that visitors can experience the historic, scenic, rural, and agricultural character of the farms during the period of the Eisenhowers' occupancy, 1950 to 1969" (Eisenhower NHS, Statement for Management 1992). The resource management objective for the Eisenhower farm complex is to "preserve significant features of the **cultural landscape** to reflect the general character of the farm at the time of its donation in 1967." The condition of the landscape of the setting influences the ability to achieve the management objectives for interpreting the site. Appendix B lists the management objectives for Eisenhower NHS.

Primary elements of the cultural landscape at the parks are the collective landscape patterns that include open fields, **woodlots**, vegetation, building clusters, fence and boundary lines, circulation systems, monuments, and many other elements. Two components of the cultural landscape, the woodlots and cropfields, are being browsed by deer. The woodlots (Figure 3) and cropfields (Figure 4) are managed according to standards developed by the National Park Service to aid the parks in reaching their interpretive objectives. Some of the management objectives and standards are given below. More specific management objectives and standards are presented in a 1992 document produced by the National Park Service titled, "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots" (Appendix C).

GETTYSBURG NATIONAL MILITARY PARK
EISENHOWER NATIONAL HISTORIC SITE

1. *Culp's Hill/A. Spangler (75)
2. *Herbst (22)
3. *Rose (60)
4. Biesecker (33)
5. Bushman (54)
6. Codori–Trostle (12)
7. Guinn (55)
8. Herr Ridge (45)
9. McMillan (8)
10. McPherson/Wills (15)
11. Patterson (9)
12. Pitzer/Sherfy (49)
13. Powers Hill (60)
14. Rummel (27)
15. Shultz (10)
16. H. Spangler (28)
17. Trostle (14)
18. G. Weikert (35)
19. Wills (20)
20. McAllister (10)
21. Blocher (10)
22. McClean/Forney/Cobean (50)
23. Culp's Hill (50)
24. Slyder (10)
25. J. Weikert/G. Bushman (30)

(#) acreage
*category A woodlots

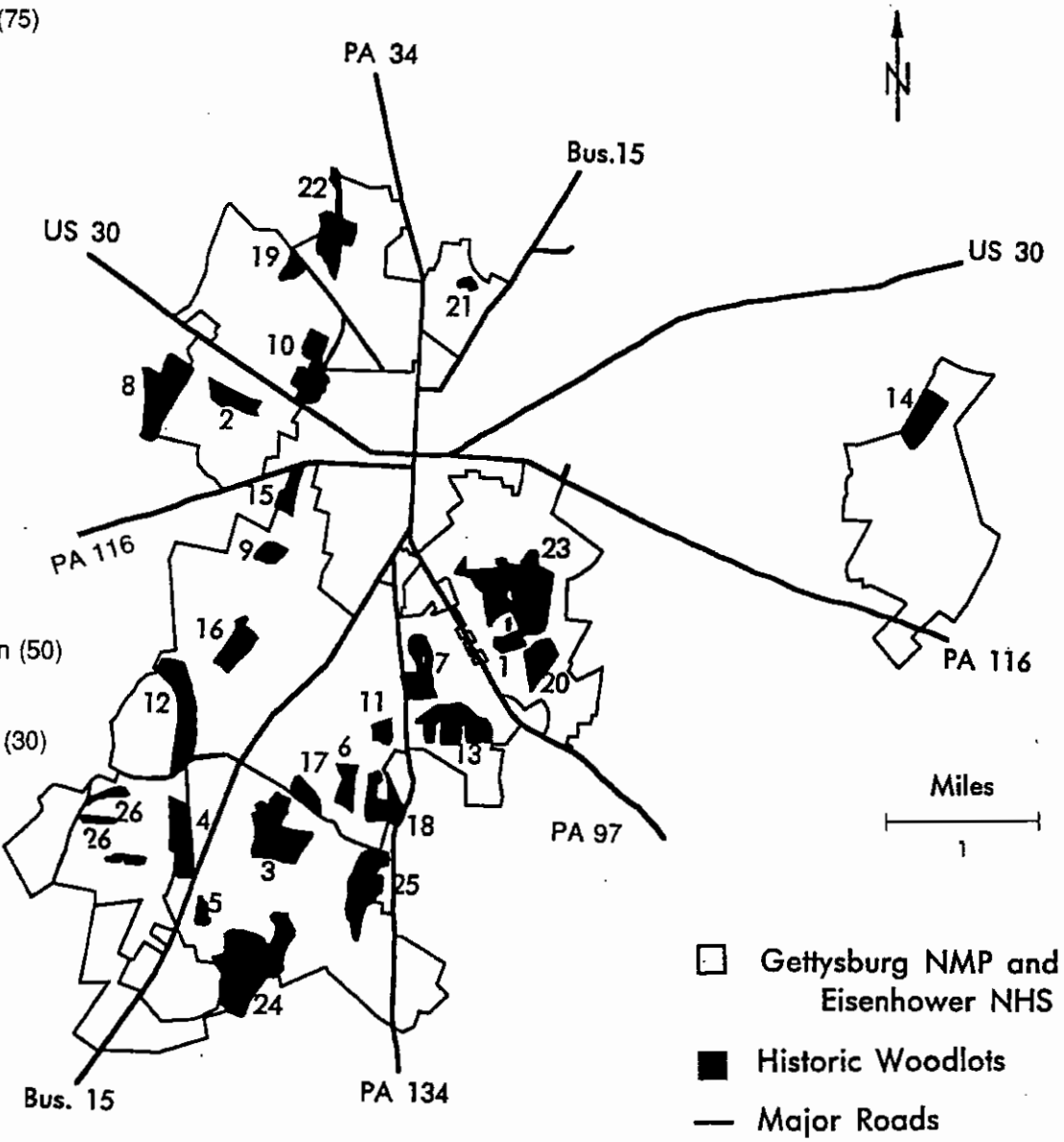


Figure 3. Location of Historic Woodlots

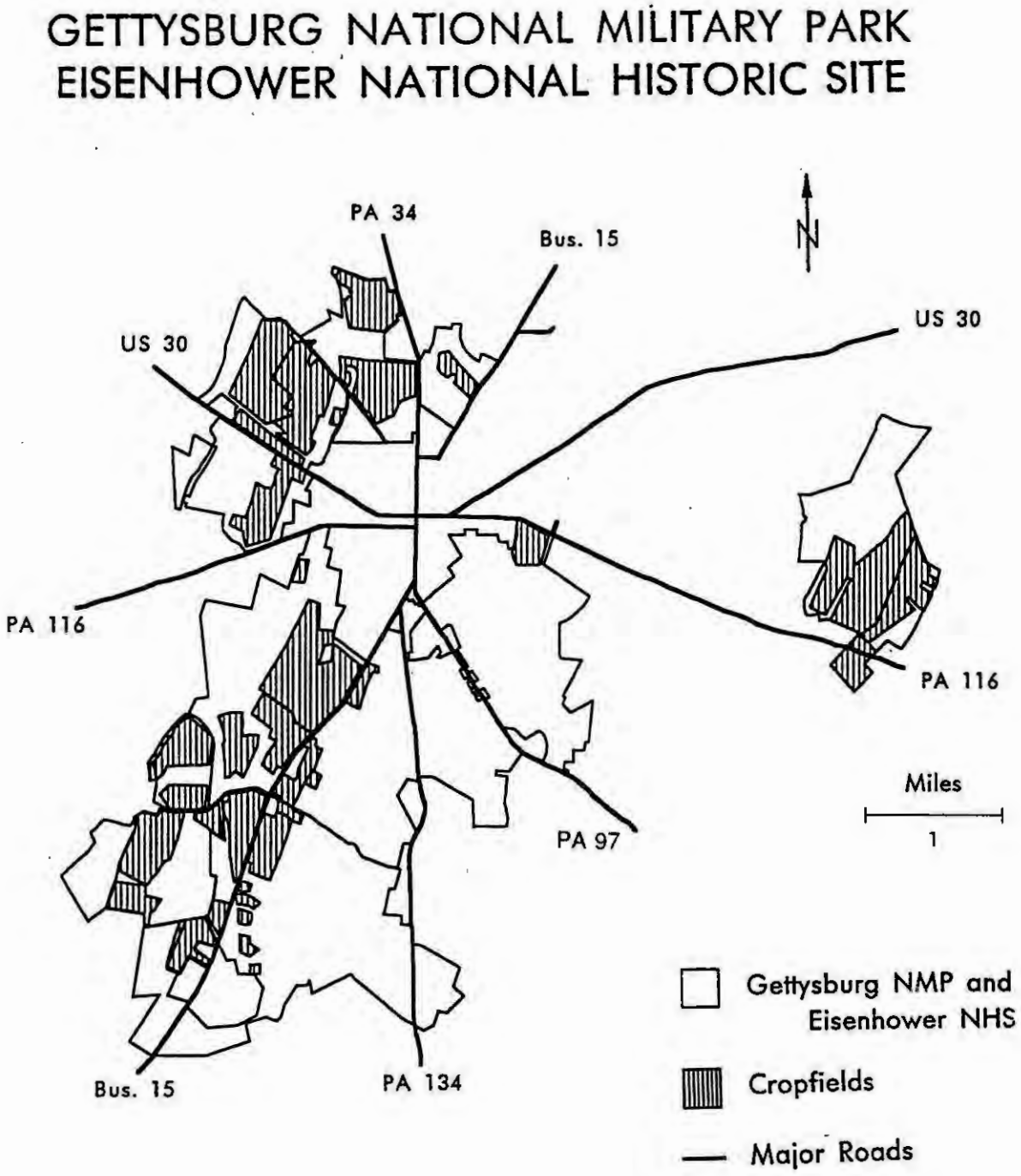


Figure 4. Location of Cropfields

1.2.1 Woodlot Management Objectives

Approximately 1,300 acres of Gettysburg NMP are wooded. Many wooded areas in the parks are landscape features essential to the historic scene. Of particular importance are 25 historic woodlots on the battlefield totaling approximately 800 acres (Figure 3). These woodlots were important sources of lumber, fence material, firewood, and wood for making furniture and tools for 19th-century farmers. During the battle, the woods and woodlots provided the setting for some of the actual fighting and were used for shelter and troop movements. The woodlots have been classified into two categories: (A) those associated with significant battle action and (B) those significant to battle movements and positions. The National Park Service has decided that the important characteristics for which it will manage the woodlots are the overstory height, understory density, and mix of deciduous and coniferous trees.

Only three historic woodlots are classified category A and viewed as a high priority for restoration. Restoration is based on a 1990 study by Fairweather and Cavanaugh of historical photographs and records and will reflect the historic appearance of the battlefield. Evaluation of historic photographs indicates that an average of 25 percent of the trees in these woodlots were composed of trees 1 to 4 inches in diameter at breast height, and 35 percent were in the 5-inch to 8-inch class. Maintenance of these relative percentages for the small diameter understory tree densities in category B woodlots is of lesser importance. One woodlot, actually three separate areas, in Eisenhower NHS is also managed as a category B woodlot. Relative percentages of understory tree densities in this woodlot are also of lesser importance.

Perpetuation of the historic category B woodlots in Gettysburg National Military Park and Eisenhower National Historic Site, according to their landscape objectives and standards, depends in part on the natural establishment of adequate numbers of tree seedlings to provide new growth and recruitment into the overstory. In the late 1970s, resource managers at the parks noticed increasing evidence of deer browsing in the

Note: The vertical line in the right margin identifies text that has been modified in this environmental impact statement and differs from the corresponding text in the draft environmental impact statement.

woodlots. They believed there were fewer seedlings and saplings (trees up to 5 inches in diameter at breast height) in these woodlot areas compared to previous years. In the 1980s, research scientists documented this scarcity of woody seedlings in Gettysburg NMP which they believed was due, in part, to heavy browsing by the large population of deer (Fairweather and Cavanaugh 1990). Storm et al. (1989) found that browsing by deer on woody stems at Gettysburg NMP was considerably greater than reported for Valley Forge National Historic Park and for six national forests in the northeast United States. Overstory shading of the forest floor may also be contributing to the low number of seedlings and saplings. Research is currently being conducted to learn the role different levels of shading of the understory may be playing in the establishment of understory vegetation and its comparison to the effects of deer browsing (Bowersox et al. 1992). Preliminary analysis of fenced and unfenced plots, after two growing seasons, shows that regardless of the amount of shade, deer are having an effect on herbaceous vegetation. Under different levels of shade but inside fenced plots, herbaceous vegetation has an increase in size, volume, and number of species compared to vegetation in unfenced plots (T. Bowersox, pers. com. 1994). The National Park Service has not, however, established management objectives for the herbaceous vegetation in the woodlots. It is too early to quantify the impacts to the woody vegetation.

Another management concern related to deer browsing of the seedlings is the perpetuation of the current mix of oak and hickory species that historically dominated the woodlot overstory. Although the woodlot management objectives do not specify management for particular tree species, maintenance of this mix in the woodlots is desired to perpetuate their historic appearance. In the long term, changes in the overstory tree composition may result from selective browsing of seedlings by deer (Storm et al. 1989). There is some evidence that this may be occurring at Gettysburg NMP. Tzilkowski et al. (1993) reported that ash and black cherry may be stronger competitors than oaks and hickories. They are faster growing species that have a better chance of growing beyond the reach of deer. The slower growing white oak is important in the historic

scene in some woodlots. Tzilkowski has stated that white oak will likely disappear from the woodlots unless some management actions are taken to ensure oak regeneration (Tzilkowski, et al. 1993).

1.2.2 **Cropfield Management Objectives**

The agricultural setting is another feature of the cultural landscape. A management objective of each park is to reflect historic field patterns and to grow crops compatible in general appearance with the parks' historic periods. This includes maintaining historic field sizes and vegetative textures, groupings, and patterns. Much larger field sizes are required to accommodate the use of modern farming techniques and machinery than what the 19th-century farmers worked in the area which is now Gettysburg NMP. The cropfields on the battlefield are, therefore, not presently being maintained to their historic size and do not reflect historic field patterns.

The National Park Service uses an **Agricultural Special Use Permit Program** to maintain the agricultural landscape on 1,841 acres of cropland (1994 figures) in the parks. Although it is difficult to use modern farm machinery to maintain the historic field patterns on the battlefield, the National Park Service wishes to maintain the Agricultural Special Use Permit Program as long as it is viable. The program ensures that the agricultural landscapes in the parks are maintained at little cost to the government. This program and the 15 permit holders enable the National Park Service to keep the land in active agricultural production.

It is believed that 19th-century farmers grew traditional crops of hay, wheat, oats, barley, rye, and corn on the battlefield. Maintaining the rural agricultural landscape in Gettysburg NMP is important for interpreting the events that took place during the battle. Some fields (216 acres) of lower interpretive or historic significance, however, can be maintained in grass and provide an acceptable cropfield appearance.

Corn, milo, soybeans, small grains, and various species of hay were grown when the Eisenhower farm was active. It is essential to grow the same

crops so that the former president's conservation philosophy, management strategies, and agrarian use of the farm are properly understood. The types of crops grown are an integral interpretive component of the agricultural landscape at Eisenhower NHS.

To achieve a setting which can adequately interpret the parks' stories, park management has determined that 75 percent of the plants in an agricultural field must grow from seed and reach maturity where harvest is possible, unless prevented from doing so by uncontrollable environmental conditions. This means that a maximum of 25 percent crop loss is acceptable (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots). This will ensure that the crops in the fields will have an appearance similar to that of the historic period. In addition, crops are to be planted in the same relative percentages or patterns as existed during the historic time period.

As in the case with the historic woodlots, the large population of white-tailed deer adversely affects the historic agricultural landscapes at the parks. Deer are causing heavy damage to the farm crops (Storm et al. 1989). The deer have had the most effect on Eisenhower NHS and the southern section of Gettysburg NMP (Storm et al. 1989). Research scientists have stated that this may be due to the greater amount of wooded land in the southern end that provides cover for the deer. Corn has not been grown on the southern portion of Gettysburg NMP since 1986 and on Eisenhower NHS since 1989 because it could not reach maturity. In many cases, stalks of corn were eaten to ground level. Because deer prevented corn from reaching maturity, milo (a type of grain sorghum similar in appearance to corn) has been planted as a replacement since 1989. Although deer initially found milo less appetizing, they now browse the milo crop. The parks' wheat crops are also heavily browsed by deer (Vecellio et al. 1994).

The parks' objectives and standards, as stated in the "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots," cannot be met due to the effects of deer browsing. The present agricultural

operation, which the National Park Service uses to perpetuate the agricultural setting of the landscape, is failing. For example, a permittee who has a 15 percent grain crop reduction because of deer damage the previous year can request a waiver of fees. Two permittees, one of whom farms all of Eisenhower NHS, have had fees waived for four years (1991 to 1994) on approximately 900 acres of cropfields. Because these farmers still have expenses for seed, fertilizer, fuel, and their time, some permittees may no longer be able to participate in the agricultural program because of severe crop damage by deer.

1.3 Need for Action

Perpetuation of the woodlots and the rural agricultural scene, according to management objectives and standards of the parks, and the agricultural program is not possible given the current level of deer browsing. Therefore, a management action is needed to control the browsing effects of white-tailed deer in the parks.

This environmental impact statement provides relevant information and analysis of the environmental impacts of a range of alternatives for managing deer browsing in Eisenhower NHS and Gettysburg NMP. This environmental impact statement will contribute to helping the National Park Service determine the best alternative that will enable the parks to meet their management objectives. Chapter 2 describes the range of alternatives and mitigation measures to reduce potential impacts. Chapter 3 describes the current environment in each park. Chapter 4 analyzes and documents the potential effects on the environment of each alternative.

1.4 White-Tailed Deer in the Parks and Management Guidance

Extensive cutting of the forests and unrestricted hunting nearly exterminated the white-tailed deer in Pennsylvania during the latter part of the 19th century. Observations of deer in the area of the parks at that time were rare. There are no recorded sightings of deer during the battle era or

for nearly eight decades after that. Within 20 years the deer population in the area grew so fast that in 1964, National Park Service and Pennsylvania Game Commission personnel met to discuss deer management strategies. Management of deer in the state is the responsibility of the Pennsylvania Game Commission. The National Park Service, however, has the authority to manage the deer in the parks in fulfillment of its **enabling legislation**, the Organic Act (16 U.S.C. 3).

The present agricultural land interspersed with the forested land of Adams County is excellent habitat for white-tailed deer (Palmer and Lang 1987). The free-ranging deer population has a large and nutritious food source and uses the agricultural cropfields and woods in and out of the parks (Storm et al. 1989). Population surveys of the free-ranging deer have occurred since April 1987. Surveys are conducted in the parks (excluding the East Cavalry Battlefield) and on some adjacent private land (Figure 5). Surveys have revealed that deer are not evenly distributed on park lands.

The April 1988 **study area** survey found 93 percent of the estimated deer population south of Route 116, which is 76 percent of the total study area (Storm et al. 1989). For 4 years (1990 to 1993), the April mean population estimate for the study area was more than 1,000 deer (Figure 6). This is an average of over 90 deer per square mile for the mix of forest and cropland of the study area.

Residential and commercial development around the parks has steadily increased. The increase in single family homes in the Gettysburg area replaces deer habitats and generally reduces the amount of land available for hunting. Some of the new landowners enjoy seeing wildlife on their property and do not allow hunting on their land.

The legislation that created Gettysburg NMP specifically forbids hunting within the park (28 Stat. 65, Sec. 7). Although no mandate against hunting exists in the legislation creating Eisenhower NHS, neither is there legislation specifically allowing hunting. The *Code of Federal Regulations* (CFR) state that hunting is prohibited in national park areas where the

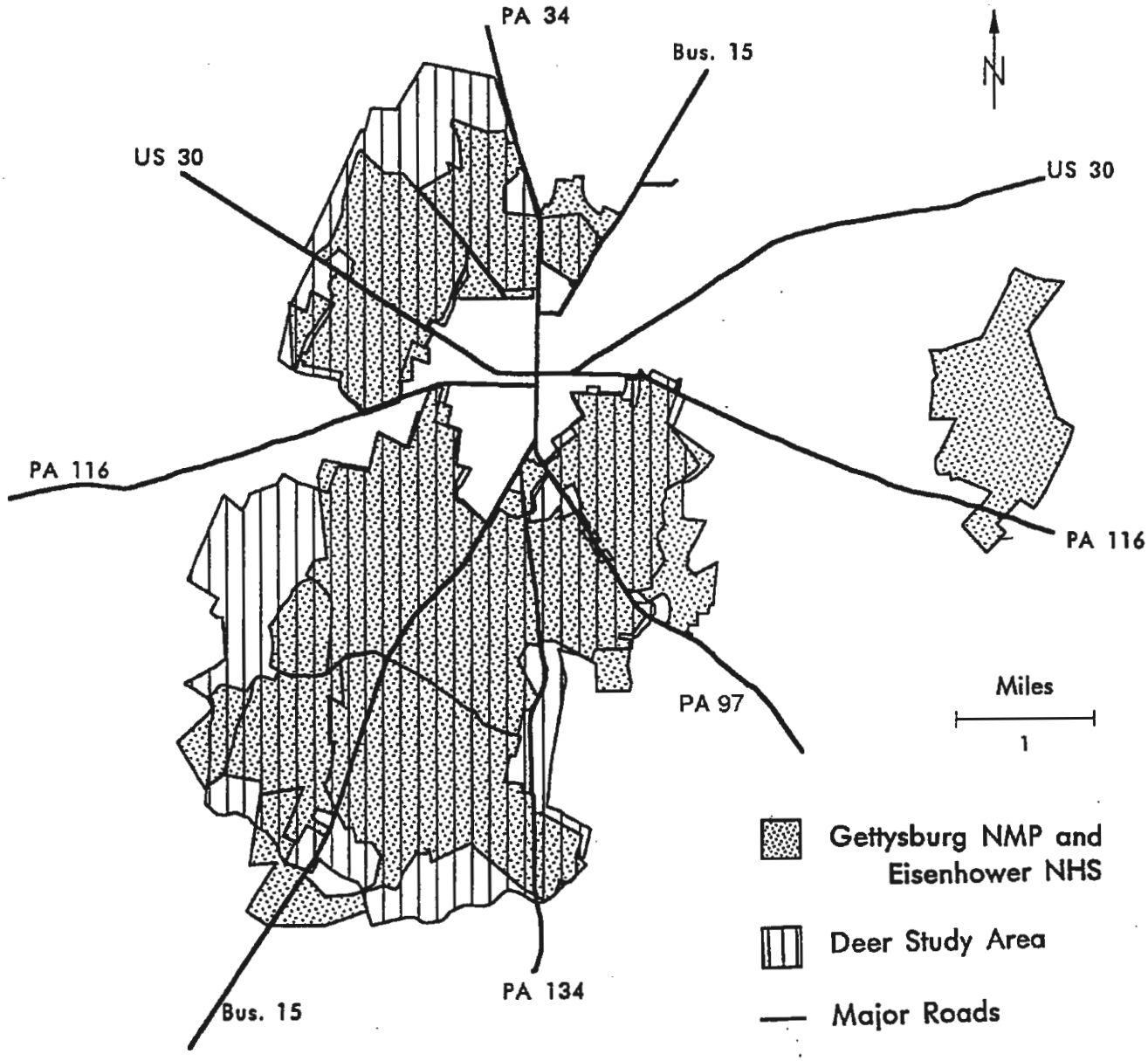
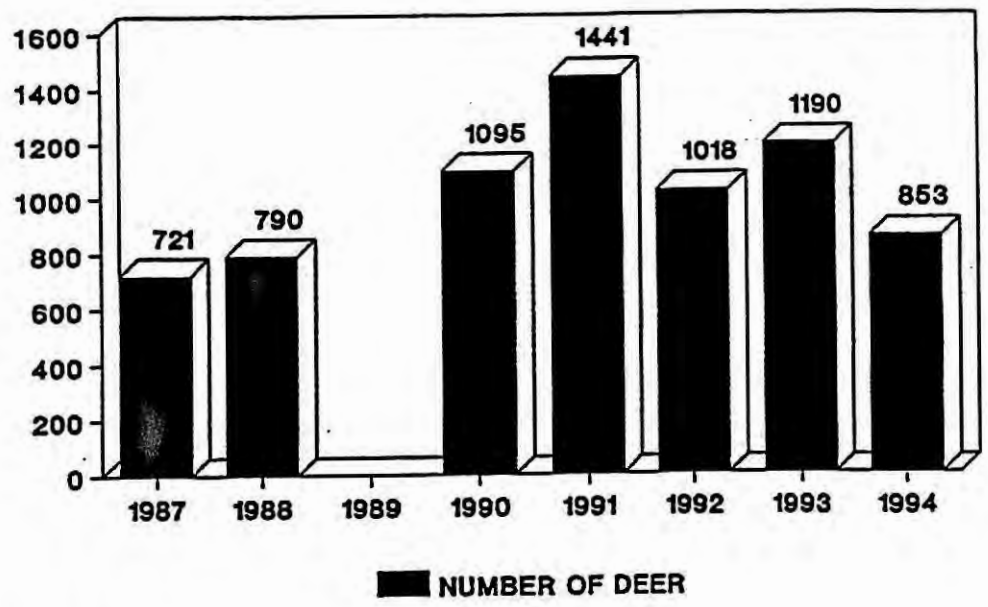


Figure 5. Deer Study Area



Counts were not conducted in 1989

FIGURE 6. DEER POPULATION ESTIMATES FOR THE GETTYSBURG DEER STUDY AREA

legislation does not mention hunting but "shall be allowed in park areas where such activity is specifically mandated by federal statutory law" (36 CFR 2.2). Therefore, public hunting is not permitted at either site.

National Park Service policies and guidelines direct management of natural resources including wildlife. National Park Service *Management Policies* (4:2) specifies that management of natural resources will support cultural resource objectives at historic parks such as Gettysburg NMP and Eisenhower NHS. At these parks, the primary resource management objectives are to preserve and foster appreciation of the cultural resources which include cultural landscape features (e.g., woodlots and cropfields). Gettysburg NMP's *General Management Plan* (U.S.D.I./NPS 1982) specifically states that wildlife management activities are to follow or support these primary goals.

1.5 Other Management Concerns Relating to Deer

The large population of deer affects other aspects of park management in addition to the woodlots and cropfields. Concerns regarding other cultural landscape components, deer/vehicle collisions, private lands, and deer viewing by visitors would be affected by any action to control deer browsing. These management problems, however, are not the reason this environmental impact statement has been prepared.

ORCHARDS AND GARDENS: Other elements are important to the cultural landscape of both parks but have not had specific management objectives and standards established. The orchards in Gettysburg NMP were features of the historic rural landscape and some were sites of significant battle action. Few historic orchards currently exist, but replanting is planned. In the early 1980s, the historically important Sherfy "peach orchard" was replanted with 135 seedlings. The seedlings were planted without protection from browsing which resulted in the loss of 100 seedlings due to deer browsing. The following year, 100 seedlings were planted in the same orchard, and all plantings were individually fenced. This resulted in no loss of seedlings due to deer browsing. With the current level of deer browsing, protection of orchard seedlings would be required until the trees grow above deer browse height. The protection devices, however, would not be historically accurate.

Two critical components of the Eisenhower farm are the General's garden and Mrs. Eisenhower's rose bushes. Although soap is hung around the vegetable garden and rose bushes to repel deer, the park manager reports damage from deer browsing each year.

DEER/VEHICLE COLLISIONS: In 1985, resource managers estimated that 50 deer were killed on highways within the deer study area (Figure 5). This increased to an estimated 150 deer in 1993. Most of these collisions occurred in the southern section of Gettysburg NMP. These accidents usually caused inconvenience to the driver and passengers of the vehicles and led to vehicle damage. Drivers and passengers have been injured and

some required a visit to a hospital. National Park Service *Management Policies* (4:6) authorizes control of animal populations "when they present a direct threat to visitor safety."

PRIVATE LANDS: Park managers have received complaints from private landowners regarding deer consuming garden and ornamental plants, fruit trees, and crops on their land. The deer in the parks are part of the region's free-ranging deer population and move in and out of the parks on a daily and seasonal basis. Migration and dispersal are normal movement patterns for deer. Female deer generally return to an area whereas male deer do not. Storm et al. (1989) documented deer movements in their study. Radio-collared female deer traveled up to 7 miles, and marked males moved 10 to 14 miles from the study area. The average home range size, where a deer spends 95 percent of its time during one year, was estimated to be 0.5 to 0.7 square miles.

DEER VIEWING: Due to the large number of deer and system of roads in the parks, deer can easily be seen in the open fields. The deer in the parks are not tame, but they have become accustomed to close association with humans and vehicles. Paved pull-offs exist for viewing battlefield sites and other cultural resources; however, visitors often pull off the road in undesignated locations where deer are spotted. In some places this has led to damage to road shoulders, monument berms, and vegetation, and concerns for traffic safety.

1.6 Issues and Concerns Identified Through the Scoping Process

Scoping is a process to define the extent and influence of a proposed activity (Appendix D). The purpose is to identify the issues and concerns that relate to the proposal and to provide a way for concerned agencies and individuals to participate in the decision.

As part of the scoping process for the preparation of the draft environmental impact statement, two public meetings were held at the

Gettysburg Junior High School regarding the proposal to control the effects of deer browsing in the parks. Approximately 130 people attended an informational meeting held on February 27, 1993. At this meeting, information related to park management objectives and the effect of deer on the parks' ability to meet these objectives was provided. A second meeting, attended by about 195 people, was held on March 27, 1993. People attending this meeting were given the opportunity to identify issues and concerns in deciding the options for controlling the effects of deer browsing in the parks. In addition, the National Park Service received 49 written comments from interested individuals and groups.

This scoping process identified both public and government agency issues and concerns. Broad categories relating to the main issues are listed below and are the points of discussion for evaluating the alternatives for managing the effects of deer browsing.

Human Safety: the safety of any person near or in the parks at the time of the management action, including the participants in the management action

Visitor Use: possible effects on the 1.5 million annual visitors who use the parks

Cost: the cost to the government to carry out the management action

Deer Population Management: the probability of successfully managing the level of deer browsing in the parks over time

Cultural Landscape: the effect on certain cultural landscape elements over time

Deer/Vehicle Collisions: the possible effect on the number of deer/vehicle collisions within the deer study area during and after the management action

Private Lands: the possible effects on the level of deer browsing on private land (i.e., croplands, orchards, and ornamental plantings) near and within the boundary of the parks

Effects on Deer: the possible effects of the management action on deer (e.g., death, injury, and stress)

1.7 Policy and Legal Compliance

The National Park Service is governed by the following laws, regulations, and management plans before, during, and following any management action related to this environmental impact statement.

National Environmental Policy Act, 1969, as Amended. Section 102(2)(c) of this Act requires that an environmental impact statement be prepared for proposed federal actions that may significantly affect the quality of the human environment. The Council on Environmental Quality regulations (40 CFR 1508.27B4) further defines an effect as anything likely to be highly controversial.

Endangered Species Act of 1973, as Amended. This act requires all federal agencies to consult with the Secretary of the Interior on all projects and proposals having potential impact on federally endangered and threatened plants and animals.

The Historic Sites Act of 1935. This act declares as national policy the preservation for public use of historic sites, buildings, objects, and properties of national significance. It gives the Secretary of the Interior broad powers to protect these properties, including the Secretary's authority to establish and acquire nationally significant historic sites.

The National Historic Preservation Act of 1966, as Amended. Section 106 of this act requires federal agencies to consider the effects of their undertakings on properties listed on the National Register of Historic Places. All actions affecting the parks' cultural resources must comply with this legislation.

The Organic Act of 1916, as Amended. This act declares the key purpose of the National Park Service.

Code of Federal Regulations, 1992. Title 36 Chapter 1 provides the regulations "for the proper use, management, government, and protection of persons, property, and natural and cultural resources within areas under the jurisdiction of the National Park Service." Title 16 Sec. 414 states that "every person who shall trespass upon any national military parks for the purpose of hunting or shooting, or who shall hunt any kind of game thereon with gun or dog, or shall set trap or net or other device whatsoever thereon for the purpose of hunting or catching game of any kind, shall be guilty of a misdemeanor, punishable by a fine." Title 16 Sec. 3 stipulates that the Secretary of the Interior may also provide in his discretion for the destruction of such animals and of such plant life as may be detrimental to the use of any of said parks, monuments, or reservations."

The Redwood National Park Act of 1978, as Amended. All National Park System units are to be managed and protected as parks, whether it is a recreation area, an historic site, or any other designation (16 U.S.C. 1C(b)). "Protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress."

Management Policies, U.S. Department of the Interior, National Park Service, 1988. *Management Policies* is the service-wide policy document of the National Park Service. It states the conditions or processes that must be undertaken, considered, or followed before taking a management action. *Management Policies* provides the general direction and foundation for management actions of the National Park Service.

Natural Resources Management Guideline, NPS-77, 1991. The purpose of this document is to provide guidance to park managers for all natural

resource management activities planned and ongoing at parks. Managers must follow all federal laws, regulations, and policies. This document provides the guidance on which park management may design, set up, and evaluate a comprehensive natural resource management program.

Statements for Management, Gettysburg National Military Park, 1991, and Eisenhower National Historic Site, 1992. These documents contain information about the purpose of each park, the nature and significance of its resources, the legislative and administrative requirements for its management, and the influences on park resources. The management objectives for the parks are presented. These objectives describe the conditions that need to be achieved to realize the parks' purposes consistent with National Park Service policy. Major issues and problems that need to be addressed are identified. The effects of white-tailed deer browsing are discussed in both park documents.

General Management Plans, Gettysburg National Military Park, 1982, and Eisenhower National Historic Site, 1987. Each park has a General Management Plan which sets forth a management concept for the park and identifies strategies for resolving issues and achieving management objectives over a 10-year plan.

Resources Management Plans, Gettysburg National Military Park, 1994, and Eisenhower National Historic Site, 1984. These working documents contain a description of the current programs for managing the natural and cultural resources of each park.

Chapter 2

ALTERNATIVES

A primary objective at both Gettysburg NMP and Eisenhower NHS is to create and maintain landscapes that help visitors understand the events that took place at the sites. The "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots" (Appendix C) defines the landscape objectives and standards for woodlots and certain elements of the cropfields for each park. Browsing by white-tailed deer is preventing the National Park Service from achieving the objectives statmd in this document. Several alternatives are described to manage the level of deer browsing so these objectives can be achieved. Section 2.4 summarizes the environmental consequences of implementing each alternative.

2.1 Process Used to Formulate Alternatives and Deer Density Goal

The National Park Service determined an environmental impact statement would be needed to comply with the National Environmental Policy Act (NEPA). The public and other government agencies were contacted to define the issues and concerns (Chapter 1) and alternatives for managing the deer browsing were drafted. A list of alternatives was created from suggestions received during the scoping process, from National Park Service personnel, and by reviewing the available literature. All alternatives received were considered as possible solutions for managing the level of deer browsing in the parks. Agencies and individuals with relevant knowledge and expertise were consulted during the evaluation of each alternative (Chapter 5).

Two broad categories of alternatives have been identified to bring deer browsing to an acceptable level. One is to indirectly control the deer to discourage browsing and reduce its effects on the parks' woodlots and agricultural crops. This could be accomplished by blocking access to vegetation or by making the vegetation less appetizing to the deer. The second is to directly manage the deer to reduce the population in the parks

and thus reduce the level of browsing. The second category of alternatives required setting a deer density goal. The goal is directly tied to the level of deer browsing that would enable the parks to meet their woodlot and cropfield management objectives. The specific deer density to accomplish this is unknown, however, a starting point has been established by reviewing available literature and talking to experts.

The National Park Service has decided that 25 deer per forested square mile would be the initial deer density goal for the alternatives that propose to directly manage the number of deer in the parks. Appendix E describes the process used to establish this initial goal. The April 1994 mean population estimate for the study area was 853 deer. Using the initial deer density goal means the April population level for the study area, which has 3.2 square miles of forest, would be 80 deer. The woodlots, cropfields, and deer population would be monitored throughout the process to determine what density would enable the parks to achieve their objectives for cropfield and woodlot management. The initial deer density goal would be changed, if necessary, to achieve the cropfield and woodlot objectives.

2.2 Alternatives Considered but Eliminated from Detailed Study

A range of alternatives to directly and indirectly control the deer and manage the level of deer browsing in the parks was considered. Direct control of the deer includes lethal and nonlethal methods. Some alternatives presented involve the participation of citizens. These individuals would have to comply with the laws governing game and wildlife in Pennsylvania which are covered in the Pennsylvania Game and Wildlife Code found in Title 34 of the *Pennsylvania Consolidated Statute* (1986). The Pennsylvania Game Commission enforces these laws.

After reviewing the current literature and consulting with experts in the field, the following alternatives were rejected based on the best professional judgement of National Park(Service managers. Each was rejected because it conflicted with National Park Service laws or regulations, would result in substantial negative social or environmental impacts, or would not

sufficiently reduce the level of deer browsing in order to meet the objectives and standards for the woodlots and cropfields. Following the description of each alternative is an explanation of why it was rejected.

1. **Restore predators. Predators such as wolves, coyotes, mountain lions, or bobcats would be released in the parks to prey on the deer.** Although some studies have shown that predators do not limit deer numbers, other studies have shown that predators can cause high fawn mortality and limit deer numbers when the ratio of predators to prey is high (Connolly 1978). Some predators, such as wolves and mountain lions, are highly mobile and require a large territory away from humans for survival (Belden and Hagedorn 1993, Fritts et al. 1985). This environment does not exist in Adams County. Such predators would also prey on other native animals and pets. Coyotes and black bear are present in small numbers in Adams County and do prey on fawn populations. Their effect on the parks' deer population is unknown but probably minimal. Predators, if introduced in the parks, would have a limited influence on the deer population and could not maintain a reduced number of deer.

2. **Deterrents. Audible scare devices, such as alarms, firecrackers, and exploding devices, or domestic dogs would be placed in the parks to scare deer.** Various devices are designed to discourage deer from inhabiting an area by scaring them away. Free-ranging dogs are not allowed in the parks; however, dogs on a long run could keep deer out of a limited area. These deterrents would have a negative influence on adjacent landowners and would detract from visitors' experiences at the parks. The number of deer on adjacent lands could temporarily increase as the deer in the parks stayed away from the deterrents. Deer would likely become accustomed to these deterrents and, in the long run, the level of deer browsing would not decrease (Matschke et al. 1985). Also, the deer browsed areas in the parks which the park wishes to protect are too large for scare tactics alone to be effective.

3. **Repellents. Area or contact repellents would be used on park vegetation to repel deer from the woodlots and cropfields of the parks.** Repellents, such as Ro•pel$_{TM}$, Hinder$_{TM}$, and soap are designed to make a food source taste bad or to repel animals by odor (Craven and Hygnstrom 1986, Sullivan et al. 1985). Purchase and maintenance of equipment for storing and dispensing the repellent would be required. Continuous applications would be needed due to weathering and new vegetative growth. Visitors to the parks could be disturbed by the noise and visual distraction of the ongoing spraying activities. Although presently used at Eisenhower NHS to protect the garden and individual trees, repellents are not practical over large forested areas, such as the woodlots in Gettysburg NMP. The effectiveness of repellents for protecting a preferred food source is questionable and quickly declines under heavy deer browsing pressure (Conover 1984). It is not recommended to apply repellents to plant parts intended for human or livestock consumption (Craven and Hygnstrom 1986). The use of repellents could cause an initial and temporary movement of deer to adjacent private lands.

4. **Poison. Poisonous compounds would be applied to bait and distributed throughout the parks to kill deer.** A poison, when mixed with feed grains to entice deer to eat the mixture, would kill them. This alternative poses significant public and wildlife health concerns. Poisoned deer, which wandered out of the parks, could be shot and eaten by hunters. The poison would also be lethal to any animal that eats the bait or carcass of a poisoned animal, including domestic pets that wander into the parks. There are no poisons registered for deer control and poisoning of deer with any product for any reason is illegal.

5. **Public hunting or a controlled public hunt. Both parks would be open to public hunting or a controlled public hunt during the deer hunting seasons to reduce the number of deer in the parks.** The laws and regulations that govern the National Park Service would be broken under this alternative. The public would be allowed

to hunt in portions of the parks during Pennsylvania's deer hunting seasons. Alternatively, a controlled public hunt could be held where a predetermined number of hunters would be selected by lottery from the licensed deer hunting population of Pennsylvania. This alternative would provide hunters access to more land in Adams County, increase hunter opportunity to shoot a deer, and reduce the deer population in the parks. The safety of local residents, park employees, and visitors would be a concern. Monuments and other cultural resources could be damaged from stray bullets, and human injury from ricocheting bullets could occur. A controlled public hunt would provide an element of safety compared to a general public hunt because all aspects of the hunt could be regulated.

According to 36 CFR 2.2, public hunting is allowed in national park areas only where specifically mandated by federal statutory law. Gettysburg National Military Park's enabling legislation specifically prohibits public hunting, so special legislation would be required to permit it in that park. To change Gettysburg National Military Park's enabling legislation, a legislative environmental impact statement proposing public hunting must first be completed. This statement would be part of the legislative proposal to Congress to serve as the basis for public and Congressional debate.

The legislation for Eisenhower National Historic Site is silent on the hunting issue. To legally allow hunting at that park, legislative authority would have to be granted by Congress.

The National Park Service has a legislative mandate to preserve the cultural landscapes of the two parks and to provide a setting for visitors to understand the history of the two sites. It does not have a mandate to allow public hunting in these two parks. At this time, the National Park Service intends to exhaust all other possible alternatives before it attempts to change its governing laws,

regulations, or policies due to concerns that such actions may have negative impacts on the resources of other parks in the National Park System.

6. **Fencing. The cropfields and woodlots would be fenced to keep the deer out.** There are 26 woodlots totaling about 800 acres and approximately 1,841 acres of cropland (1994) in the parks. Installation of fencing such as an 8-foot high woven-wire or snow fence or a 5-wire electric fence around these areas would restrict deer access. Fences would need to accommodate roads and avenues of the parks and provide visitor access. They would also require ongoing inspection and repairs. An archaeological investigation or assessment would be required before ground breaking for fence construction to ensure no archaeological resources would be affected.

   Fencing could be used to protect small areas such as specific specimen trees or orchards. Because fencing would decrease the amount of food available to deer, the level of deer browsing in unfenced areas of the parks and private lands could increase. In time, all of the woodlots and cropfields may need to be fenced to meet park objectives.

   Installation of an electric fence could pose a hazard to human safety. The parks would not meet their cultural management objectives by installation of nonhistoric fencing. It is not possible to build a fence in the parks that would effectively exclude deer on the 2,641 acres of cropfields and woodlots and at the same time meet the historic landscape objectives of the National Park Service (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots 1992).

7. **Conversion of cropfields to pasture or hay and grasses. The agricultural cropfields would be used as pasture or planted to a mixture of various native grasses to create the appearance of an agricultural landscape.** Planting grasses of different colors and textures in the agricultural lands could create checkerboard field patterns to give the appearance of different agricultural crops. This would eliminate the existing deer damage to agricultural crops. Conversion of the cropfields to mixed grass, hay, or sod would reduce or eliminate the use of pesticides and fertilizer needed for crop production. Maintaining the fields in grasses or pasture would be easier if historic field sizes were reestablished by the reconstruction of historic fence lines on the battlefield.

   A conversion of cropfields to native grasses, whether permanent or temporary, would not provide the desired height and texture features for acceptable cropfield appearance (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots 1992).

   Accurate interpretation of the Eisenhower farm would not be possible without maintenance of all the characteristic historic crops and field sizes. At Gettysburg NMP, fields of lower interpretive or historic significance may be planted in permanent grass and have acceptable cropfield appearance. The 216 acres of cropland designated as such, however, are located in areas with the least crop damage from deer. Deer browsing on woodlots and private lands would continue at the present level or possibly increase. This option does not support the objectives and standards for cropfield appearance at Gettysburg NMP and Eisenhower NHS (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots 1992).

8. **Deer as a commodity. Deer would be sold to reduce the number of deer in the parks.** The deer in the parks would be considered a product and offered for purchase in *Commerce Business Daily*. The selected bidder would remove the deer from the parks either by live trapping or killing the deer. This alternative would reduce the number

of deer in the parks and provide income to the government. It is not legal under Pennsylvania law, however, for any person to buy, sell, or barter deer or deer carcasses (34 Pa.C.S. Sec. 2312).

9. **Landowner privilege. Within a prescribed area of the parks, landowners would have the privilege of using or selling the deer.** Private landowners within a designated area around the parks would be allowed to shoot as many deer as they wished and use or sell the carcasses for profit. The number of deer in the parks may be reduced by this alternative. Pennsylvania law would have to be changed to permit this activity. It is not legal under current Pennsylvania law for any person to buy, sell, or barter deer or deer carcasses (34 Pa.C.S. Sec. 2312).

2.3 Description of Alternatives

The following alternatives are proposed to control the level of white-tailed deer browsing in the parks. These alternatives could be used individually **or in some combination** as would be appropriate for each park or areas within each park. The alternatives could also be selected to be a series of actions. In all cases, monitoring of the cropfields, woodlots, and deer population would continue to determine if management objectives for interpreting the sites are being met.

Alternative 1: No Action. **The no action alternative in this document means that no management action would be undertaken to control the effects of deer browsing in the parks.** An exhibit to educate and inform the public about deer ecology and management policies and objectives would be created and displayed in the parks.

Regeneration in the woodlots would continue to be limited by deer browsing of seedlings. Trees in the woodlot understory would not be present in the same numbers as during the time of the battle. The objectives and standards for all of the woodlots would not be met.



Photo 3. High densities of white-tailed deer are preventing the park from maintaining the historic landscape of the battlefield (Jack Hubley).



Photo 4. Traditional fences are inefficient barriers to white-tailed deer (Jack Hubley).

The larger grain crops, particularly in Eisenhower NHS and in the southern section of Gettysburg NMP, would continue to have less than 75 percent of the plants in a field reach maturity. The crops could not be grown in the percentages specified to meet the cropfimld management objectives for interpreting the parks without sustaining unacceptable crop damage. As a result, the Agricultural Special Use Permit Program might not remain viable due to continual heavy crop losses. If this occurred, the National Park Service would take over the planting, care, and harvest of the agricultural fields. However, even under these circumstances, cropfield management objectives would still not be met (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots 1992).

Alternative 2: Deer Population Management. **These alternatives would reduce and maintain the deer population at or near a predetermined density to reduce the level of deer browsing in the parks.** Initially, this would require a reduction of the present deer population in the parks to reach an April population of 25 deer per square mile of forested study area (see section 2.1 and Appendix E). An average annual reduction in the population of 40 percent for three years would be required to reduce the population to this density. At the time of the management action, the most recent population estimate would be used to establish the number of deer to be removed from the parks. The population would be kept at or near the predetermined density once it was decreased to that level. Because of reproduction, an annual removal of 30 to 40 percent of the population may be required to maintain the population near the predetermined density (Storm et al. 1989, Matschke et al. 1984). The management action would take place only on federal land. Two methods to reduce the deer population to the predetermined density and maintain it at that level are proposed.

> ***Alternative 2A: Capture and Transfer.*** **Deer would be captured and relocated.** National Park Service *Management Policies* (4:6) states that for controlling wildlife populations, highest priority would be given to encouraging public hunting outside the parks (see Alternative 4) and live trapping within parks for transplanting

elsewhere. An exhibit to educate and inform the public about the capture and transfer program would be created and displayed in the parks. The public would be notified of the potential dangers of deer crossing roadways during the management action. Visitor access to some areas may be restricted to maximize human safety (36 CFR 1.5). Capture and transfer would be best conducted during fall and winter when deer density in the parks is highest.

A Pennsylvania Game Commission permit would be required to release deer in another location. The Pennsylvania Game Commission believes that all suitable white-tailed deer range in the state is occupied at present. Relocation out of state would require special permits for transporting across state boundaries, testing each animal, and possible quarantine before release. Deer could be relocated to private land if the landowner has the proper permits, sufficient fenced land, and suitable holding facilities.

Capture techniques could include the use of box, corral, or clover traps; cannon (rocket), drop, or drive netting; or net or dart guns. Bait placed in or under each trap would be necessary to attract the deer to the site. The use of several methods of capture would be best because a particular deer may be more susceptible to one method than another. Capture devices would be used in areas of the parks where the deer concentrate.

Previous trapping at the parks for the deer population study (Storm et al. 1989) used clover traps, drop nets, and dart guns. Clover traps were used in woods along deer trails. This experience resulted in several problems: deer were unwilling to enter traps, other animals were caught, and traps were susceptible to tampering by people. In addition, time to set up, monitor, and reset traps made this the least effective method to capture deer. Drop nets could only be used in the open but had the advantage of capturing multiple deer at a time. Deer captured in a trap or under a net may need to be sedated before transport.

Of the three methods used in the Storm et al. (1989) study, darting deer with an anesthetic or immobilizing drug from a vehicle, tree, or stand proved to be the best method for capturing deer. This method was the most effective and efficient, in part, because it enabled the researchers to select adult-sized females. Storm used an injection rifle with a range of 30 yards and estimated that two people would be needed for two months to dart 100 deer (G. Storm, pers. com. 1993). Use of an injection rifle with a longer range could reduce the man-hours required for capture. Capturing deer by darting requires getting within shooting range of the rifle to accurately deliver the drug. This ability could prove more difficult as time progressed and the deer became more wary. Although an animal would be injected with an anesthetic, some time could pass before the(drug took effect. Meanwhile, the animal would remain mobile and could leave the immediate area. Drugged deer would need to be located and their health monitored by a veterinarian or experienced biologist.

Dosage instructions for drugs approved by the U.S. Food and Drug Administration (FDA) for use in capturing deer prohibit the use of the drug 30 days prior to and during the hunting seasons. This time frame gives sufficient time for the drug to pass out of the animal's body before it could be used for food. The Pennsylvania deer hunting seasons start in early October and end in late January. One or more of the other methods of capturing deer could be used during this time frame.

Once captured, deer would be transported by vehicle to the relocation site for release. Deer may be hobbled by temporarily binding their legs to prevent injury to the deer and people. The deer would be kept calm by covering the animal's eyes with a hood or blindfold.

Personnel experienced in trapping animals would be used to ensure the proper handling of the animal. Confinement during transport would be as short as possible to reduce the chance of stress-related mortality or injury.

Alternative 2B: Direct Reduction. **National Park Service personnel or authorized agents would shoot the deer.** National Park Service *Management Policies* says that National Park Service personnel or their authorized agents are permitted to carry out this type of activity (4:6). The management action would occur when the deer are concentrated in the parks (October through April) to maximize the number of deer killed and reduce the time required to conduct the action. An exhibit to educate and inform the public about the direct reduction program would be created and displayed in the parks.

The public would be notified prior to the beginning of the management action for the year as to the time period when shooting may occur and the areas where access would be restricted. Visitor access would be denied to the parks or restricted from portions of the parks during the shooting period to maximize human safety (36 CFR 1.5). National Park Service law enforcement personnel would patrol the parks to ensure access is restricted. Park records show that visitation to the parks is lowest during the months of November, December, and January when most of the shooting would occur (Appendix F). At present, Eisenhower NHS is closed on Monday and Tuesday from November 1 to April 21, and is closed for four weeks each year in January and early February.

Access to roads in the parks would be regulated or restricted and the public would be notified of the potential dangers of deer crossing roadways. Safety zones of 150 yards or more would be designated around buildings. During the daylight hours, participants would be required to wear fluorescent orange to maximize human safety.

Bait, such as large amounts of corn or other enticements, would be placed in predetermined areas to concentrate the deer and increase the number that could be shot at one time. This would reduce the amount of shooting time and require fewer participants. Bait stations would be selected based on access, downward direction line of fire, and safety of the backdrop. Sites located away from public use areas and cultural resources would be selected for bait stations to provide maximum public safety and protection of monuments, buildings, and other historic structures.

Deer would be shot during day and nighttime hours. Night shooting would require the use of spotlights and possibly night vision equipment. Shooting deer at night would improve efficiency and cost effectiveness, because deer move into open fields and closer to roadways at that time (Palmer et al. 1980). Night shooting would be conducted only at bait stations.

Personnel highly skilled and trained in the use of firearms and public safety would shoot the deer with a high-velocity rifle. Rifles are the most effective and efficient weapons for killing deer. Scopes would be required on the firearm to maximize safety and the probability of a humane kill. Silencers or sound suppression devices may be required on all firearms to reduce disturbance to people. Participants must comply with all federal firearm laws administered by the Bureau of Alcohol, Tobacco, and Firearms.

Personnel would shoot the deer at distances of less than 100 yards. Injured deer would be subsequently shot as soon as possible for a humane kill. Deer could also be captured, as in Alternative 2A, and killed. A follow-up crew would collect, field-dress, and process the deer at check stations for recording of age and sex. The hides, if removed, and entrails would be used or disposed of consistent with federal and state laws and regulations.

The venison would be donated to a food service organization for distribution to the needy. An organization that collects and distributes venison to needy people could provide assistance with distribution. At air temperatures above 50 degrees Fahrenheit, carcasses would be stored in a refrigerated trailer to avoid spoilage. Some carcasses could also be given to a zoo for food for meat-eating animals.

Alternative 3: Reproductive Intervention. **Deer would be surgically sterilized or contraceptives would be administered to control deer reproduction which would, in time, reduce the number of deer in the parks.** Deer could be permanently sterilized through a vasectomy or tubal ligation surgery. Steroids and immunocontraceptives are chemical contraceptives that could be given to deer to disrupt the reproductive process (Plotka and Seal 1989). After 8 to 10 years with little reproduction in the population, animal deaths would greatly outnumber births and the deer population would quickly decrease (Porter 1991). An exhibit to educate and inform the public about the reproductive intervention program would be created and displayed in the parks. The management action would take place only on federal land.

If the ratio of male to female deer has remained the same as during the deer study, there are about six times more female than male deer in the parks (Storm et al. 1989). Treating male deer would seem to be more efficient; however, one male deer can impregnate many female deer. If 90 percent of the males were treated, productivity of the population would be about the same as if none were treated (J. Kirkpatrick, pers. com. 1994).

A computer model would be used to determine the actual number of deer that must be treated to reduce and maintain the population at or near the predetermined deer density. To be accurate, the age, and productivity and mortality rates of the deer at the parks must be used in the model. In general, modeling suggests that 70 percent of the fertile females in a population must be treated to control population growth (Porter 1991). More deer may need to be treated since the population is not enclosed.

Surgical sterilization of deer would require that the deer be captured and sedated. Vasectomies on male deer could be performed in the field and would take approximately 1.5 hours per deer, which includes monitoring the animal until release. Tubal ligation of female deer could be performed in the field but would require electricity and light. This surgery would take approximately 3.5 hours per deer. Although never field tested, it is believed one veterinarian with qualified technicians could do surgery on six female deer in a day (E. Frank, pers. com. 1994). Additional time would be required to capture the deer.

Steroids could be delivered orally through bait (Harder 1971, Harder and Peterle 1974, Matschke 1977a, 1977d, Roughton 1979), injected into a muscle (Harder and Peterle 1974), surgically implanted (Bell and Peterle 1975, Kirkpatrick and Turner In press, Matschke 1977b, 1980), or remotely delivered into a muscle using a gun (Kirkpatrick and Turner 1991). Steroids could be used on male or female deer. Natural steroids (e.g., testosterone, estradiol, and progesterone) are rapidly used by the body and would have to be administered almost every day to be effective. Synthetic steroids (e.g., norgestomet, ethinylestradiol, and melengestrol acetate) are more effective contraceptives and are not metabolized by the body very rapidly. This means they do not need to be given to the animal as often.

Surgical implantation of steroids would require capturing each animal before treatment. Research with implantation has shown that implants containing the drug melengestrol acetate (MGA) could be effective on white-tailed deer for up to two years (Plotka and Seal 1989). Use of this drug could reduce the requirement of capturing each animal to every other year.

Remote delivery of a steroid using a gun and a dart or "biobullet" would eliminate the need for capturing animals. Biobullets are made of a type of cellulose that contains a rod that holds the steroid (Jessup et al. 1993). A biobullet would be fired from a special rifle and implanted beneath the skin of the animal. The cellulose would disintegrate, and the steroid dose would

be delivered. Compared to a syringe dart, remote delivery of the drug by a biobullet would be more accurate at hitting the mark and less traumatic to the muscle upon impact (Warren et al. 1993). The range of a biobullet, however, is far less than the range of a dart. Because they rapidly break down, biobullets would pose no human safety concerns if the biobullet missed the animal and was not recovered. National Park Service certification would be required for users of the rifle and immobilizing drugs.

One problem with remote delivery of a steroid is the inability to mark a treated animal. Marking treated deer is important to warn of the potential risk to humans from eating the meat (Turner and Kirkpatrick 1991, Turner et al. 1992). Steroids, either natural or synthetic, accumulate in the fat of treated animals and are passed through the food chain (Turner et al. 1992). Treated deer could move from the parks onto private land during the hunting season and be shot by a hunter for food. Also, without some form of identification, a treated deer could be mistakenly treated again and receive more than the required dose. Researchers are attempting to adapt a dart for use on deer that has been used on elk to inject and simultaneously mark the animal. This dart could be available soon (J. Kirkpatrick, pers. com. 1994).

Norgestomet is the only steroid approved by the U.S. Food and Drug Administration (FDA) for use in the livestock industry (Scientific Panel Review 1992). This drug has no measurable tissue residues immediately after withdrawal of the drug (Scientific Panel Review 1992). The drug is removed from the animal's food 30 days before slaughter, however, to ensure any steroid residues clear out of the animal's tissues. Norgestomet has been administered through a biobullet to seven captive black-tailed deer (Jessup et al. 1993). This research showed the drug was effective for one year, and its use resulted in no pregnancies. Its effects were reversible after one year. If approved for use on free-ranging deer and given the same withdrawal period, norgestomet could be used up to 30 days before the Pennsylvania deer hunting seasons which start in early October and after the seasons which end in late January. Withdrawal

periods are established, when necessary, by the FDA when a drug is approved for a particular use on a specific species of animal.

An alternative to steroids for female deer is immunocontraception (Turner et al. 1992). This method involves the production of antibodies that attack specific proteins to prevent fertilization of the egg (Turner and Kirkpatrick 1991). Unlike steroids, immunocontraceptives are unable to survive the digestion process and thus pose no risk if ingested (Turner et al. 1992). To remain effective, female deer would need to be treated as often as the vaccine or technology required.

The most promising agent at this time is porcine zona pellucida (PZP) which is taken from pig ovaries. For the first treatment, female deer need to be darted with two doses in one month to cause infertility for one year. Annual one-shot boosters would be required after that. To most quickly reduce the deer population to the predetermined density by immunocontraceptives, all the females should be treated each year until the population nears the predetermined density. For 1994, this would have required treating approximately 731 female deer 5 to 6 weeks before the breeding season (early September) for the initial treatment and then again 3 to 4 weeks later for the second dose. In 3 days, 74 female deer were inoculated by one person with two assistants at Fire Island National Seashore, New York (J. Ebert, pers. com. 1994). The deer on the island are very approachable, which enabled the use of a blowgun to inject the dart. Using this as a guide, it would take **at least** 29 days to dart the 731 female deer in the population one time. The treatment of deer in the parks would be expected to take much longer, because these deer are not as approachable as the deer on Fire Island. Several people would be needed to dart all the female deer twice in one month.

In the future it may be possible to use microencapsulated boosters, where the coating breaks down in the body over time, along with the initial dose. These boosters would cause multiple years of infertility. A one-shot initial treatment and a one-shot treatment effective for multiple years could soon be available (J. Kirkpatrick, pers. com. 1994). Researchers at the

University of Georgia are investigating the production of a vaccine that would direct antibodies toward sperm for use in male animals. The Pennsylvania State University is conducting experiments into an oral dose that would survive the digestive process and be target-specific. Researchers are also investigating the synthetic production of a protein similar to PZP which would increase the availability of the vaccine and reduce the cost. The reversibility of the contraceptive effect of PZP after short-term and long-term use is being studied.

Food and Drug Administration approval would be required for steroids or immunocontraceptives used on free-ranging deer for population management. It is unknown if the FDA would require a withdrawal period for the use of immunocontraceptives. To date, these agents have only been classified by the FDA as Investigational New Animal Drugs which can only be used in research (21 CFR 511). These contraceptives are not registered, regulated, or produced on an economical scale.

Alternative 4: Cooperative Management. **An agreement would be proposed between private landowners, the Pennsylvania Game Commission, and the National Park Service to cooperatively reduce the deer population in the parks.** National Park Service *Management Policies* (4:6) states that for controlling wildlife populations, highest priority would be given to encouraging public hunting outside the parks and live trapping within parks for transplanting elsewhere (see Alternative 2A). An exhibit to educate and inform the public about the cooperative management agreement would be created and displayed in the parks. This alternative would increase the number of deer shot on private land to reduce the level of browsing in the parks.

Private landowner participation would mean allowing increased hunter access to the property during each deer hunting season. This would eliminate their property as a refuge for deer and increase the number of deer exposed to hunters.

The Pennsylvania Game Commission could increase the number of deer allowed to be shot in specified areas around the parks. This could be done through increasing the length of the hunting season, raising the limit for antlered and antlerless deer, or both. Particularly important would be increasing the antlerless limit which would reduce the number of young born each year.

The role of the National Park Service may entail conducting deer drives on park lands during the regular state deer hunting seasons. This would expose more deer to hunters off the parks. A deer drive is meant to force or scare deer in a particular direction. Personnel conducting the drives would be required to wear fluorescent orange to maximize human safety. Visitors would be informed of the drive and access to these areas would be restricted to maximize human safety (36 CFR 1.5). Access to roads in the parks would be regulated or restricted and the public would be notified of the potential dangers of deer crossing roadways.

A "controlled" public hunt, instead of a general public hunt, could be organized by the National Park Service and Pennsylvania Game Commission and held outside the parks. This means that all aspects of the hunt would be controlled, which may make private landowners more receptive to granting hunter access. Individuals would be selected from the current licensed deer hunting population of Pennsylvania by lottery. Hunters would be assigned a hunting or stand location and would learn the location of memorials and historical structures near their assigned area to ensure their protection. All selected hunters would be required to attend one or more safety education class and would be required to meet a minimum proficiency level with a firearm or bow. Hunters would be required to wear distinctive identification to show authorized participation in the management action. The type of firearm or archery equipment a hunter would use would be specified. A "zone of fire" could be established for hunters to direct the line of fire away from personnel conducting the drives to ensure their safety. All deer carcasses would be processed through a check station for recording of age and sex. Hunters would be permitted to keep the carcass or donate it to a food service organization.

Preferred Alternative ***Alternative 5: Combined Management.*** **A combination of Alternative 2B Direct Reduction and Alternative 4 Cooperative Management would be used to reduce and maintain the deer population at or near the predetermined density.** This alternative would use a combination of the two alternatives, as needed and appropriate, to manage the deer population in the parks. National Park Service personnel and/or authorized agents would shoot the deer in the parks (Alternative 2B) and hunters would shoot deer outside the parks (Alternative 4) to reduce the deer population to the predetermined density. Highest priority would be given to encouraging public hunting outside the parks (Alternative 4) as stated in National Park Service *Management Policies* (4:6). These two alternatives would be conducted simultaneously and repeated annually, as necessary, from October through April until the number of deer required to reach the predetermined deer density was removed. Once the deer population was reduced to this density, either or both of the alternatives may be used to maintain the deer population at or near the predetermined density.

2.4 Summary of Impacts

Table 1 summarizes the environmental consequences (Chapter 4) of implementing each alternative on the environmental resources of the parks.

Table 1. Summary of Impacts

Alternative	Description

EFFECTS ON DEER POPULATION MANAGEMENT

1: No Action

Management:	Natural processes, no active management	
Population:	Over 700	
Shot for crop damage:	Same or increase	
Health:	With cropfield food source, good	
	Without cropfield food source, decline	
Cost:	Initially	$ 1,400
	When permittee program terminates	$ 304,641
	Maintenance (assumes market for crops)	$ 26,361

2A: Capture and Transfer — Requires relocation sites and permits from Pennsylvania Game Commission. Deer browsing impacts would be transferred from parks to relocation sites.

Management:	Success varies, requires long-term commitment of large number of personnel & equipment	
Population:	If successful, near predetermined density (initially 80)	
Shot for crop damage:	Decreased	
Health:	Good	
Cost:	Reduction phase	$ 345,514
	Maintenance phase	$ 14,055

2B: Direct Reduction

Management:	Less personnel, equipment, and time than Alternative 2A	
Population:	Near predetermined density (initially 80)	
Shot for crop damage:	Same as Alternative 2A	
Health:	Same as Alternative 2A	
Cost:	Reduction phase	$ 155,509
	Maintenance phase	$ 9,965

Alternative	Description	
3: Reproductive Intervention		
Management:	Need FDA approval for steroid or immunocontraceptive use, best on small populations, still experimental	
Population:	When approved, same as Alternative 1, then gradually reduced to same as Alternative 2A	
Shot for crop damage:	Same as Alternative 2A	
Health:	Same as Alternative 2A	
Cost:	a. Sterilizing male deer	$ 64,294
	Sterilizing female deer	$ 436,407
	Maintenance costs using sterilization	unknown
	b. Surgical implants	$ 438,600
	Maintenance costs using surgical implants	$ 5,961
	c. Darting with PZP	$ 63,957
	Maintenance costs darting with PZP +	$ 5,088
4: Cooperative Management		
Management:	Success variable. Depends on increased season length and limits, hunter access and success, and effectiveness of deer drives	
Population:	Same as Alternative 2A	
Shot for crop damage:	Same as Alternative 2A	
Health:	Same as Alternative 2A	
Cost:	Reduction phase	$ 33,239
Maintenance phase		$ 5,536
5: Combined Management*		
Management:	Adaptable, less cost and visitor use impacts than Alternative 2B alone	
Population:	Near predetermined density (initially 80)	
Shot for crop damage:	Same as Alternative 2A	
Health:	Same as Alternative 2A	
Cost:	Reduction phase	$ 101,351
	Maintenance phase using Alternative 2B	$ 9,965
	Maintenance phase using Alternative 4	$ 5,536

*Note: Impacts of this alternative on the remaining environmental resources would be the same as the individual alternatives.

Alternative	Description

EFFECTS ON DEER

1: No Action

Injury/Mortality:	Natural processes, possible malnutrition without cropfields
Stress:	Increases with high densities
Incidence of disease/parasites:	Minimal, increases with high densities
Mortality from crop depredation/vehicles:	Increase

2A: Capture and Transfer — Deer at relocation site could have increased stress and competition for food from increased deer density. Disease and parasites could be transferred to deer at relocation site.

Injury/Mortality:	0% - 23% depending on capture method After relocation, usually >50% from capture myopathy
Stress:	High stress from capture, handling, relocation
Incidence of disease and parasites:	Minimal
Mortality from crop depredation/vehicles:	Decreased

2B: Direct Reduction

Injury:	Minimal
Mortality:	40%, on average, annually
Stress:	Minimal
Incidence of disease and parasites:	Same as Alternative 2A
Mortality from crop depredation/vehicles:	Same as Alternative 2A

3: Reproductive Intervention — Physical and behavioral changes would occur.

Injury/Mortality:	Same as Alternative 2A if captured, otherwise minimal
Stress:	Same as Alternative 2A if captured, otherwise minimal
Incidence of disease and parasites:	Same as Alternative 1, then gradually reduced to same as Alternative 2A
Mortality from crop depredation/vehicles:	Same as Alternative 1, then gradually reduced to same as Alternative 2A

4: Cooperative Management

Injury:	Higher than Alternative 2B
Mortality:	If successful, same as Alternative 2B
Stress:	Same as Alternative 2B
Incidence of disease and parasites:	Same as Alternative 2A
Mortality from crop depredation/vehicles:	Same as Alternative 2A

Alternative	Description

EFFECTS ON HISTORICAL RESOURCES

1: No Action	No impacts
2A: Capture and Transfer	Possible damage from darts
2B: Direct Reduction	No impacts at bait stations, otherwise possible damage from stray bullets
3: Reproductive Intervention	Same as Alternative 2A
4: Cooperative Management	No impacts in a controlled hunt, otherwise possible damage from stray bullets, arrows, lead balls

EFFECTS ON CERTAIN CULTURAL LANDSCAPE COMPONENTS

1: No Action		
	Woodlots:	Few seedlings and saplings Perpetuation difficult Change in tree species composition Management objectives not met
	Cropfields:	Unacceptable level of crop damage Probable loss of agricultural program Management objectives not met
2A: Capture and Transfer		
	Woodlots:	Increased number and diversity of seedlings and saplings Perpetuation likely Tree species composition maintained Management objectives met when deer population is near predetermined density
	Cropfields:	Crop damage at acceptable level Agricultural program continues Management objectives met when deer population is near predetermined density
2B: Direct Reduction		Same as Alternative 2A but in less time
3: Reproductive Intervention		Same as Alternative 1, then gradually reduced to same as Alternative 2A
4: Cooperative Management		Same as Alternative 1 for areas far from a boundary, otherwise same as Alternative 2A

Alternative	Description

EFFECTS ON PRIVATE LAND

1: No Action	Browsing continues and may increase
2A: Capture and Transfer	Decreased browsing
2B: Direct Reduction	Same as Alternative 2A but in less time
3: Reproductive Intervention	Same as Alternative 1, then gradually reduced to same as Alternative 2A
4: Cooperative Management	Same as Alternative 2A

EFFECTS ON VEGETATION

1: No Action	
Woody/herbaceous species:	Decreased abundance and diversity
Woodlands:	Probably not perpetuated
2A: Capture and Transfer	
Woody/herbaceous species:	Increased abundance and diversity
Woodlands:	Likely perpetuated
2B: Direct Reduction	Same as Alternative 2A but in less time
3: Reproductive Intervention	Same as Alternative 1, then gradually reduced to same as Alternative 2A
4: Cooperative Management	Same as Alternative 1 for plant communities far from a boundary otherwise same as Alternative 2A

Alternative	Description

EFFECTS ON RARE, THREATENED, AND ENDANGERED SPECIES

1: No Action	Increased likelihood of adverse impacts
2A: Capture and Transfer	Decreased likelihood of adverse impacts
2B: Direct Reduction	Same as Alternative 2A but in less time
3: Reproductive Intervention	Same as Alternative 1, then gradually reduced to same as Alternative 2A
4: Cooperative Management	Same as Alternative 2A

EFFECTS ON WILDLIFE

1: No Action

Competition for food and cover: Continue at same level
Feeding and travel patterns: No impacts

2A: Capture and Transfer — Animals would be attracted to the bait and could be injured if caught in nets or traps.

Competition for food and cover: Decreased
Feeding and travel patterns: Possibly disrupted

2B: Direct Reduction — Same as Alternative 2A but in less time

3: Reproductive Intervention — Animals affected if eat steroid-treated bait or deer carcass. Same as Alternative 1, then gradually reduced to same as Alternative 2A except travel patterns not disrupted

4: Cooperative Management — Same as Alternative 2A

Alternative	Description

EFFECTS ON VISITOR USE

1: No Action	Undernourished deer may be observed if food becomes scarce.
Understanding/interpretation:	Decreased in time
Access:	No restrictions
Deer observations:	Same or increased
2A: Capture and Transfer	Trapping equipment and activities could interfere with visitors' experiences.
Understanding/interpretation:	Continued
Access:	Some limited restrictions year-round
Deer observations:	Decreased
2B: Direct Reduction	The sound and sight of personnel shooting deer or the sight of injured or dead deer could disturb some visitors. Impacts would not occur if deer are shot at night.
Understanding/interpretation:	Same as Alternative 2A
Access:	Large areas restricted (October through April) Minimal impacts with night shooting
Deer observations:	Same as Alternative 2A but in less time
3: Reproductive Intervention	
Understanding/interpretation:	Same as Alternative 2A
Access:	No restrictions
Deer observations:	Same as Alternative 1, then gradually reduced to same as Alternative 2A
4: Cooperative Management	Some park visitors may be disturbed by the deer drives and shooting. Observations of injured or dead deer may be higher than in Alternative 2B.
Understanding/interpretation:	Same as Alternative 2A
Access:	Some areas restricted from October through January
Deer observations:	Same as Alternative 2A

Alternative	Description

EFFECTS ON HUMAN SAFETY

1: No Action	No impacts
2A: Capture and Transfer	Visitors may be injured by trapping equipment, and trapping personnel may be injured by equipment or deer.
2B: Direct Reduction	People may be injured or killed by stray bullets. Probability of stray bullets would be extremely low.
3: Reproductive Intervention	People who eat steroid-treated deer would be affected.
4: Cooperative Management	Same as Alternative 2B but the probability of stray bullets may be higher.

EFFECTS ON DEER/VEHICLE COLLISIONS

1: No Action	Probably increase
2A: Capture and Transfer	Decreased in and near parks, increased at relocation site (if unfenced)
2B: Direct Reduction	Same as Alternative 2A in and near parks but in less time
3: Reproductive Intervention	Same as Alternative 1 in and near parks, then gradually reduced to same as Alternative 2A
4: Cooperative Management	Same as Alternative 2A in and near parks

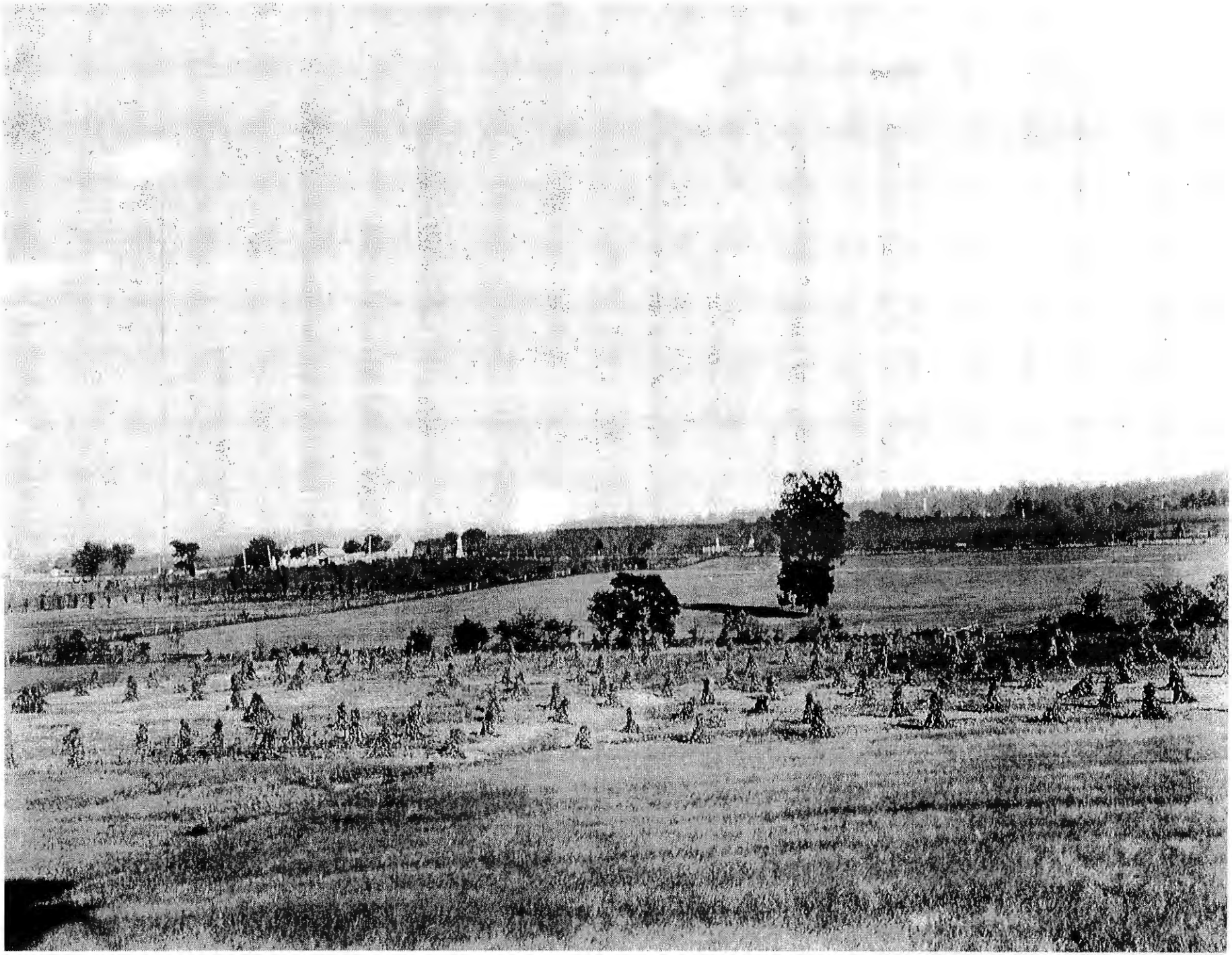


Photo 5. Corn shocks on the battlefield after a harvest as seen from the Longstreet tower, circa 1900.

Chapter 3

AFFECTED ENVIRONMENT

This chapter describes the current (1994) condition of the environmental resources at Gettysburg NMP and Eisenhower NHS that would be affected by the alternatives described in Chapter 2. The term "environmental resources" in this chapter includes white-tailed deer and several physical, biological, and social factors.

3.1 White-Tailed Deer

Deer are probably the most widely distributed and best-recognized large mammal in the world. Deer have a high aesthetic appeal and natural value and are an important game animal. White-tailed deer (*Odocoileus virginianus*) are found from North to South America in a variety of habitats. Agricultural areas mixed with woods provide deer a nutritious food source and nearby cover. Deer have a high tolerance for close contact with humans and human activities.

Deer are most active during late evening and early morning, and they usually spend dusk to dawn in fields. During the day, deer are usually in or close to cover. They eat a variety of foods including leaves, buds, and twigs of woody plants, fruits, nuts, grasses, forbs, and cultivated crops. Deer prefer to feed in areas with grass or herbaceous vegetation because the quality and quantity of food is higher (Porter 1991). Agricultural fields provide the richest food resources for deer (Harlow 1984, Short 1986). Based on body weights, fawn production, and general appearance, the deer in the parks are in good condition (Storm et al. 1989).

Size estimates of the home range of a deer vary. A home range is the area in which a deer spends 95 percent of its time during one year. Storm et al. (1989), in their study in the parks, estimated an average home range size of 0.5 to 0.7 square miles. It is speculated that as many as 20 percent of the deer in the parks migrate on a seasonal basis (G. Storm, pers. com.

1993). Some deer migration into and out of the parks could be a result of hunting pressure. Once summer and winter ranges are established, these ranges would be used throughout a deer's life (Porter 1991).

Breeding can take place from October through January with the peak in November. After 202 days of gestation, most fawns are born from May through June with the peak around 1 June. According to Pennsylvania Game Commission biologist Bill Palmer, about a third of the female deer in Pennsylvania breed as fawns, with most of these (67 percent) having a single fawn. Over 90 percent of female deer are bred at 1.5 years of age with 65 percent having two or more fawns. Storm et al. (1989) reported the average number of fawns produced in the study area to yearling and adult radio-collared female deer combined ranged between 1.4 and 1.8 fawns per year. Because most fawns were observed with their mothers in July, the actual number of fawns born may have been higher due to some fawn mortality within the first month of birth (Storm et al. 1989). At birth, roughly an equal number of fawns are male and female. In Pennsylvania, it is estimated that approximately 50 to 60 percent of the fawns born each year reach 1.5 years of age (W. Palmer, pers. com. 1994).

The average life span of a deer is 8 years and possibly longer in parks (Flowers 1931). Hunting is the major cause of mortality to deer in Pennsylvania. In areas of heavy hunting pressure, most deer do not live past 2.5 years of age. Predators (including dogs) and diseases from infection and infestation of parasites take a small toll. There has been little if any evidence of predator pressure or diseases in the deer population in the parks. In many areas of the northeast, highway accidents have been rated as the second leading cause of deer mortality. In the Storm et al. (1989) study, 49 percent of the marked deer were killed in deer/vehicle collisions in the study area. Approximately 125 to 150 dead deer are removed each year from the highways on and within two miles of the parks (Appendix G). The actual number of deer being killed by vehicles might be considerably higher due to no one reporting the dead deer or the deer dying away from the road.

The Pennsylvania Game Commission estimates that Pennsylvania has about 1.1 to 1.2 million deer preceding the hunting season and 800,000 after the hunting season. The 1993-1994 over-wintering population estimate for Adams County was 42 deer per square mile of forested land (C. DuBrock, pers. com. 1994). The commission goal for Adams County is an overwintering density of 24 deer per square mile of forested land. The April 1994, mean population estimate for the study area (Figure 5) showed 853 deer, which is 267 deer per forested square mile (Figure 6).

Deer are hunted on private land inside the parks' boundary and outside the parks. The present level of hunting on private land near the parks has little effect on deer densities in the parks, because the parks serve as refuges for deer during the hunting season (Storm et al. 1989) and mostly male deer are killed. Hunting pressure is mostly directed at adult male deer which may be due to the large antlers grown by the crop-fed deer (Storm et al. 1989). This biased hunting pressure may be one reason there are six times as many female deer as male deer in the study area (Storm et al. 1989). On most agricultural land around the parks public hunting is either not allowed or only selected individuals are allowed to hunt on a particular property.

About ten private landowners within or near the parks regularly shoot deer because of crop damage. These landowners killed an average of 85 deer annually since 1991 under the Pennsylvania Game Commission's Crop Depredation Program (Appendix G). Management of the deer in the parks has been limited to park managers responding to deer struck by vehicles and entangled in fences.

3.2 Physical Environment

3.2.1 Cultural Resources

Cultural resources in the parks include archeological resources and historical structures. Archeological resources in the parks would not be

affected since no ground breaking would occur; therefore, the effects on archeological resources will not be discussed.

The historical structures have been classified and listed for both parks. The list of classified structures for Gettysburg NMP includes approximately 1,400 monuments, memorial structures, and tablets of granite, marble, limestone, bronze, iron, and zinc. These memorials and the approximately 400 artillery pieces on the battlefield form one of the largest collections of historic outdoor statuary and commemorative monuments in the United States. Other historic structures on the battlefield include buildings, stone defense works, roadways, bridges and culverts, earthen entrenchments, fences, and artillery lunettes. Eisenhower NHS has historic farmsteads with historic furnishings, farm equipment, and tools. The historical structures in Eisenhower NHS are clustered, whereas the historical structures in Gettysburg NMP are located throughout the battlefield. These historic structures are not replaceable.

3.2.2 **Cultural Landscape**

The cultural landscapes of the parks are made up of the historical structures mentioned above (section 3.2.1) and the pastures, cropfields, and woodlots that dominate the scene. Wetlands, waterways, boulders, orchards, gardens, and **woodlands** are also part of the cultural landscapes. This document discusses the intensely managed elements (i.e., cropfields, woodlots, gardens, and orchards) that would be affected by the alternatives. The woodlands are discussed in section 3.3.1 Vegetation.

3.2.3 **Private Land**

The Gettysburg area was predominantly agricultural land at the time of the battle. A little over half of Adams County is presently in agricultural use and about 6 percent is orchards. Although agriculture is still an important part of the economy, residential and commercial development is changing the parks' surrounding landscape. Gettysburg's proximity to densely populated Baltimore, Maryland, and Washington, D.C., and the network of

highways linking Gettysburg to these cities are major factors contributing to this trend. The population of Adams County Pennsylvania in 1990 was 78,000. The Adams County Comprehensive Plan (1991) projected the population for the County in the year 2010 to be 104,000. Most of this increase is expected to be in the eastern part of the County. The present population of the Borough of Gettysburg is 7,025 (Rand McNally 1993). Because the borough is almost completely encircled by federal land, the population of the borough is expected to remain about the same.

Land inside the boundary of the parks includes 114 private landowners owning 1,696 total acres. The size of these inholdings ranges from a house site to a 200-acre farm. Some historical farmsteads pre-date the battle. Also incorporated in the boundary is a diverse range of land uses such as a commercial campground, an auction house, a 9-hole golf course, and the National Tower, which is a private commercial enterprise.

3.3 Biological Environment

3.3.1 Vegetation

Woodlands are another important cultural feature of the battlefield landscape. In comparison to woodlots which may be manipulated through silvicultural treatments, woodlands are maintained through natural processes and have no planned cultural treatments. Gettysburg NMP has one of the largest concentrations of mature woodlands in the area, particularly in the Big Round Top area. Over forty species of trees are found in the parks with the red, white, and black oaks (*Quercus* spp.) together representing the most numerous species. Other major tree species include several kinds of hickories (*Carya* spp.), yellow poplar (*Liriodendron tulipifera*), and white ash (*Fraxinus americana*). The 200-acre white pine (*Pinus strobus*)/chestnut oak (*Quercus prinus*) forest of Big Round Top is a unique vegetation type for this area. Some trees that were living during the battle in 1863 are still alive. Shrub species present include dogwood (*Cornus* spp.), hawthorn (*Crataegus* spp.), ironwood (*Carpinus* spp.), spice bush (*Lindera benzoin*), and several species of viburnum

(*Viburnum* spp.). Non-native species such as multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), Ailanthus (*Ailanthus altissima*), and honeysuckle (*Lonicera* spp.) have invaded most areas of the battlefield.

3.3.2 **Rare, Threatened, and Endangered Species**

No federally listed threatened or endangered species are known to occur in the parks. A Pennsylvania Natural Diversity Inventory search was conducted to determine the presence of any state-listed rare, threatened, or endangered plant or animal species in the parks. No state-listed animal species occur in the parks.

Six species of state-listed plants located on the battlefield are:

1. Short-fruited rush (*Juncus brachycarpus*) State endangered
2. Missouri gooseberry (*Ribes missouriense*) State endangered
3. Bicknell's hoary rockrose (*Helianthemum bicknellii*) State endangered
4. Early buttercup (*Ranunculus fascicularis*) State endangered
5. Toothcup (*Rotala ramosior*) State rare
6. Grass-leaved rush (*Juncus biflorus*) State tentatively undetermined

3.3.3 **Wildlife**

There are 21 documented species of mammals in the parks (Yahner et al. 1994). The most commonly seen are deer, raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), and woodchuck (*Marmota monax*). Approximately 153 species of birds occur in the parks during some time of the year (Yahner et al. 1994). Many bird species common to south-central Pennsylvania are also found in the parks. One of the largest black vulture *(Coragyps atratus)* and turkey vulture (*Carthartes aura*) populations found in the eastern United States lives in the southern portion of Gettysburg NMP. During the winter, these birds roost in the Big Round Top area. Sixteen reptile and ten amphibian species have been documented in the parks (Yahner et al. 1994).

3.4 Social Environment

3.4.1 Visitor Use

Annual visitation to the parks over the past 25 years has fluctuated between one million and one and one-half million people. During the summer months, approximately half are regional visitors, one-third are from the rest of the country, and 12 percent are local residents (Gettysburg NMP, Statement for Management 1991). In the fall, senior citizens in bus groups make up the majority of park users, and in the spring, school groups dominate. Most of the visitors to the parks come in April through October, with July being the peak of visitation (Appendix F). Approximately 8 and 4 percent of the average yearly visitors to Gettysburg NMP and Eisenhower NHS respectively, come during the months of November through January. Park buildings in Gettysburg NMP are open 362 days a year from 8:00 a.m. to 5:00 p.m. (6:00 p.m. in summer). Side roads and avenues, some of which have gates, are open to visitors from 6 a.m. to 10 p.m.

Eisenhower NHS is closed two days a week (Monday and Tuesday) from November through March, and is closed for four weeks each year in January and early February. Visitor access to Eisenhower NHS is through a shuttle bus from Gettysburg NMP which runs from 9:00 a.m. to 5:00 p.m..

Most visitors come to Gettysburg NMP to see the park as a historic battlefield (Gettysburg NMP, General Management Plan 1982). Many of these visitors use the self-guiding brochures for the automobile tour and hiking trails. The main theme for visitors to Eisenhower NHS is the life and career of Dwight D. Eisenhower, primarily as it pertains to the Gettysburg sites associated with him. Self-guiding brochures are available to guide visitors through the Eisenhower home and grounds. Management goals for visitor use center on interpreting the events that took place at each park to enhance visitor understanding and appreciation.

Many tourists and local visitors enjoy the quiet and visual aesthetics of the parks. Although neither park was created to serve as a recreational area, a number of visitors use the military park for picnicking, walking/hiking, cross-country skiing, horseback riding, and wildlife viewing. Deer viewing and photographing are popular activities. In a traffic study conducted by park personnel in May 1994, some visitors to the parks stated they came just to see deer. Deer viewing is most popular in late fall and winter when large numbers of deer can be seen concentrated in open areas of the park at dawn and dusk. Some visitors also enjoy seeing the antlers on male deer, which are fully developed at that time of the year.

3.4.2 **Human Safety**

The over one million annual visitors have access to almost all areas of the parks. Within and surrounding the boundary of the parks are many private landowners and their families. About 100 **licensed battlefield guides** and approximately 80 permanent National Park Service employees work in the parks. Some park employee families live in park houses. For the summer months, 30 to 40 seasonal employees are hired. Permittees and their workers are active throughout the parks tending the cropfields and pastures.

3.4.3 **Deer/Vehicle Collisions**

Six highways converge at the town of Gettysburg and cross the battlefield (Figure 2). The speed limit on these roads is 40 miles per hour. Approximately 40 miles of avenues or improved lanes provide access to the battlefield and Eisenhower NHS.

Approximately 125 to 150 dead deer are removed from the highways each year on and within two miles of the parks (Appendix G). On average, 376 deer were removed from the highways in the southern half of Adams County annually since 1986 (Appendix G).

The actual number of deer/vehicle collisions could be higher due to the failure of some drivers to report a collision and to an inability to count injured deer that leave the scene. A study in New York reported that for every reported deer killed in an accident, perhaps an additional five accidents occurred (Decker et al. 1990). Some accidents involved deer strikes and others were a result of the driver attempting to avoid the deer.



Photo 6. An agricultural permittee harvests corn on the battlefield.

Chapter 4

ENVIRONMENTAL CONSEQUENCES

This chapter describes and analyzes potential environmental impacts and effects that may result from implementation of the alternatives described in Chapter 2. A summary of this analysis can be found in Table 1 in section 2.4 Summary of Impacts. The adverse and beneficial consequences to each environmental resource described in the previous chapter are discussed.

4.1 White-Tailed Deer

4.1.1 Effects on Deer Population Management

Alternative 1: No Action. The deer population in the parks would continue to be primarily influenced by natural occurrences and collisions with vehicles. The population is in good health and reproducing well and would probably continue to number above 700 animals (Figure 6) in the short term (10 years). Severe winter weather could result in a temporary reduction in the deer population for 2 to 3 years.

The deer population in the rest of the county may remain high in the short term, in part, because of the high density of deer in the parks (Storm et al. 1989). Hunting pressure on private land near the parks would be expected to continue at the same level and to be directed primarily at male deer. Shooting mostly male deer would continue to have minimal effect on the deer density in the parks because one male usually mates with many females.

Termination of the Agricultural Special Use Permit Program is likely because some of the permittees would probably quit within the next 2 to 3 years and replacements could probably not be found (see section 4.2.2). National Park Service personnel would have to take over the farming to maintain the agricultural landscapes of the parks. The amount of

agricultural food available for deer in the parks would be reduced for the 3 or 4 years it would likely take until the National Park Service could obtain the necessary equipment and manpower to take over the care of the cropfields (see section 4.2.2). During that time, crop damage on private land near the parks may increase if deer move off the parks to seek food. As a result, the number of deer shot for crop damage on private land near the parks would be expected to remain at about the same level (85 deer a year on average) or possibly increase. Increased shooting of deer on private land near the parks may cause deer to seek refuge in the parks which would temporarily increase the deer density in the parks (G. Storm, pers. com. 1993). Shooting deer for crop damage would continue to have little or no permanent effect on the number of deer in the parks.

Long range predictions (over 10 years) of the effects on the deer population are speculative. Areas with abundant availability of natural and agricultural food can support high deer densities for a long time. As long as the parks maintain the cropfields in the parks, the deer will likely remain healthy even at high densities.

Alternative 2A: Capture and Transfer. Box traps may be the most efficient method of live capture (Hawkins et al. 1967, Palmer et al. 1980). Use of cannon or rocket nets would require spending a large amount of time to monitor the net and bait sites for timely release of the nets. Deer may be frightened away from these sites, however, by the presence of humans. "Trip wire" triggers could be set up to eliminate these problems; however, the use of an unmanned mechanism could cause injury to people or animals accidentally triggering the rockets. Drive netting works best when there is a natural or artificial barrier to help route deer into the nets (Rongstad and McCabe 1984). Such barriers do not exist at the parks. Researchers at Gettysburg NMP found clover traps to be the least effective trapping method compared to darting with drugs and using drop nets (Storm et al. 1989).

As the capture program proceeded and the population decreased, the average time spent capturing a deer by any method would increase. Capture effectiveness may also be reduced as the deer became more wary of the trapping operation. Relocating a large number of deer to other locations would transfer the effects of browsing to the relocation sites. The effects on the social organization and behavior of the remaining deer in the parks and the relocated deer are unknown.

Obtaining a permit from the Pennsylvania Game Commission to release the deer in other locations would be difficult. The Pennsylvania Game Commission believes that "all suitable white-tailed deer range in the state is occupied at present. For this and other reasons related to ineffectiveness, inefficiency, expense, and potential disease and parasite transmission, the commission would not entertain relocation of deer from the parks to other areas of the state" (S. Williams, pers. com. 1994).

The ability of capture and transfer to control deer populations on a long-term basis has not been proven for large populations. The success of this alternative first depends on the identification of suitable relocation sites. Neither the Pennsylvania Game Commission nor the National Park Service, at this time, knows of any such sites. If relocation sites are found, reducing the population to the predetermined density would then depend on the commitment of a large number of personnel and trapping equipment for a long period of time. Costs associated with this alternative would be high (see Appendix I).

As the number of deer in the parks is reduced to the predetermined density, the number of deer that move from the parks to private land would be reduced. Fewer deer would be available to hunters on private land near the parks. The number of deer shot on private land near the parks because of crop damage would probably decrease. In the long term (over 10 years), the deer population would likely continue to be healthy because of the abundant food resources available to the reduced density of deer in the parks.

Alternative 2B: Direct Reduction--Shooting. The average time required to shoot a deer would increase as the population of deer decreased. With increased exposure to a spotlight followed by shooting, deer may begin to associate the spotlight with danger. The effectiveness of night shooting may thus be reduced over time. During the shooting, some deer may leave the parks to seek refuge. Shooting deer at night and the use of a spotlight, silencer, and bait would all be against Pennsylvania Game Commission regulations but within National Park Service authority on park lands. The deer population in the parks would be reduced and maintained at or near the predetermined density for the study area by this alternative with a relatively low amount of time, personnel, and cost.

Impacts to health and density of the remaining deer in and near the parks, and the number of deer shot by farmers because of crop damage would be the same as Alternative 2A. Impacts to the social organization and behavior of the remaining deer in the parks are unknown. The reduction in the deer density in the parks would be achieved more quickly than in Alternative 2A for the same amount of time and funds committed. When carried out during the deer hunting seasons, deer seeking refuge outside the parks would be exposed to hunters, which would increase hunter opportunity to shoot a deer.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. To date, there has been very limited testing of surgical sterilization performed on deer in the field. Surgical sterilization of 8 male and 6 female deer enclosed in the Milwaukee County Zoo grounds successfully stopped reproduction (M. Frank, pers. com. 1994). Surgery performed on pregnant female deer did not terminate existing pregnancies, and sterilized male deer continued to show normal rutting behavior. Surgery performed on male deer to control reproduction in the population may be of lesser value than treating females for two reasons. First, there is a higher turnover of male deer in the population because hunting pressure near the parks is mostly directed at male deer. Secondly, fertile male deer outside the parks may move into the parks and mate with the female deer. The level of effort required to sterilize at least 70 percent of the female deer

to reduce the deer population in the parks to the predetermined density would be extremely high and expensive. Researchers are seeking techniques to simplify the surgeries.

Food and Drug Administration approval for the use of steroids would be unlikely because of concerns over the effects on humans and wildlife from eating animals treated with steroids (Turner and Kirkpatrick 1991). If a steroid was approved for use, administering it in bait would be the least effective method because the drug dose could not be controlled. In addition, nontarget species could eat the bait and become affected (Harder and Peterle 1974, Matschke 1977c). Delivery of a steroid by implantation would eliminate the problems of dosage and exposure to nontarget species but would require capturing each animal for treatment. The need to capture animals would increase costs and time required to treat each animal.

Before immunocontraceptives can be used to reduce the deer population in the parks, a number of complications must be resolved. Most important is FDA approval for the use of any immunocontraceptive for deer population management. Efficient and safe methods for treating a free-ranging population of deer must be developed, and the long-term physiological and behavioral effects on treated deer must be examined. Immunocontraception is still experimental and has yet to be tested and approved at the population level for deer.

The deer in the study area are free ranging and fertile animals would continually move into the parks and need to be treated. At this time, it would probably not be possible to effectively and continuously treat enough deer in the parks to reduce the present population to the predetermined density using surgery, steroids, or immunocontraceptives.

If it became feasible, impacts would be the same as Alternative 1 for the time of consistent treatment necessary for animal deaths to outnumber births. The deer population would then begin to decrease rapidly (Porter 1991). The length of time until the population began to decrease (likely 8

to 10 years) and the time it would take to reach the predetermined density would depend on the effectiveness of the treatment. The effects of sterilization and contraception on the social organization and behavior of deer are unknown. Once the population was reduced, impacts to deer health and density in and near the parks, the number of deer available to hunters, and the number of deer shot by farmers for crop damage would be the same as Alternative 2A.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. This alternative assumes that present levels of hunting near the parks are inadequate to significantly influence the number of deer in the parks and that private landowners want more deer killed. Persuading some private landowners to allow or expand public hunting on their land, however, may be difficult. Eliminating refuges for deer in the parks and on private land near the parks during the hunting seasons would expose more deer to hunters. The number of deer hunters near the parks may increase if hunter access was increased and if extended seasons and harvest limits were granted. Deer density in the parks could temporarily increase during the hunting season from the deer outside the parks seeking refuge in the parks (Kammermeyer and Marchinton 1976, Root et al. 1988).

Scaring deer from the parks by a deer drive should increase a hunter's opportunity to shoot a deer because more deer may be exposed to a hunter. A coordinated drive effort could move some deer off the parks. In some areas, however, deer are highly concentrated and could not be driven across park boundaries because of the open distance to boundary lines, topography, and available cover for deer (Storm et al. 1989). With each drive, deer would probably become more wary from the experience and increasingly resist moving from cover. The effectiveness of continual deer drives to move deer is questionable.

There is little experimental data showing that hunting on areas adjacent to parks contributes to population control within a park; however, there would be some reduction to deer densities in the area. This means there would be fewer deer near the parks that could move into the parks. Simulation models suggest that the higher the boundary perimeter to area ratio, the more vulnerable the deer population in a park would be to the effects of hunting on adjacent lands (Buechner 1987).

All of the parties must be willing to enter into a cooperative agreement. Willingness to enter into an agreement is dependent on good rapport and close agreement on a deer management plan among the National Park Service, Pennsylvania Game Commission, and local private landowners. Without access to large amounts of land and a significant increase in opportunities for killing deer on private land, it would be very difficult for hunters to reduce the deer population in the parks to the predetermined density.

If an agreement was made among all the parties, this alternative would result in a larger reduction in the deer population on private land than in the parks. If a general public hunt instead of a "controlled" hunt was conducted on private land, this alternative would offer limited control over the number and sex of deer killed near the parks. Crops of nearby private land would have a decreased level of deer browsing which may reduce the number of deer shot for crop damage on private land. Because deer regularly move from private land into the parks, the deer density in the parks would be slightly reduced but not as much as on private lands. The level of reduction in the deer population in the parks would depend on the effectiveness of the deer drive, season length and limits, and hunter access and ability to kill a deer. Costs associated with this alternative would be the least (see Appendix I). Long-term effects on the health of the deer population would be the same as Alternative 2A. The effects on deer social organization and behavior are unknown.

***Preferred Alternative** **Alternative 5: Combined Management*--A Combination of Alternative 2B Direct Reduction and Alternative 4 Cooperative Management**. Using Alternative 2B (direct reduction in the parks) simultaneously with Alternative 4 (encouraging public hunting outside the parks) would increase hunter opportunity to kill a deer outside the parks. Fewer deer would have to be shot in the parks by this alternative than by Alternative 2B and thus impacts to visitor use would be reduced. Private landowners who do not want deer to be shot in the parks or who would like hunters to shoot the deer may be more willing to allow hunter access to their land (Alternative 4). Decreasing the number of deer needed to be shot in the parks would also decrease the cost compared to Alternative 2B. A combination approach which adapts to changing situations and opportunities would be expected to be the most successful in managing the free-ranging deer population in the parks.

The description and analysis of the consequences of the combination of alternatives in Alternative 5 would be expected to be the same as the individual alternatives. There would be no cumulative impacts from combining the individual alternatives; therefore, there is no separate discussion of the consequences of Alternative 5 on environmental resources.

4.1.2 Effects on Deer

Alternative 1: No Action. Injury and death of deer in the parks would occur primarily from natural occurrences and accidents. Stress on an animal, incidence of disease and parasites, and death due to inadequate food resources would be expected to continue to be minimal in the short term (10 years). Deer injury and mortality from deer/vehicle collisions in and near the parks (see section 4.4.3) and from private landowners shooting deer because of crop damage would be expected to continue at the same level. In the long term (over 10 years), if food resources became scarce because the cropfields could not be maintained (see section 4.1.1),

some deer may die of malnutrition. The occurrence of severe winter weather at this time may result in high mortality of deer, especially young deer, which could not successfully compete for food.

Alternative 2A: Capture and Transfer. The level of deer injury and mortality during trapping would depend on the selected capture method, the experience of the handlers, the weather, temperature, condition of the animal, and time of confinement (Rongstad and McCabe 1984). Animals could be injured or die from trying to flee a trap or net. Euthanasia is sometimes necessary in situations where excited animals are seriously injured while confined in a box trap. Mortality rates for the different types of capture methods range from 0 to 23 percent (Appendix H). Corral traps have a higher mortality rate (14 percent) due to the large size of the enclosure (Hawkins et al. 1967). Deer can impact the walls with great force in escape attempts resulting in serious injury or death. Deer could be sedated prior to attempts to remove the deer from the corral trap to reduce this hazard.

If deer were darted, death may result from a drug overdose, accidental injection into vital areas, or serious injury from accidents resulting from being drugged (Hawkins et al. 1967). Early reports of mortality using this method were high, ranging 13 percent or greater. The use of new anesthetic and immobilizing drugs have lowered mortality rates. Lower mortality of deer from drug overdose is possible, depending on the competency of the persons calculating and delivering the drug dose.

Levels of deer injury or death due to specific transporting methods are unknown but some injury or death would likely occur. Some relocated deer would die soon after release into a new location. Often the lethal effects of a trapping method are not realized until weeks or months later. The deer in the parks are in good health and would be more likely to survive relocation than deer in poor condition. Survival rates for relocated deer are difficult to measure and vary widely. Habitat suitability and deer density at the

selected release site would have an effect on the survival of relocated deer. When relocated to areas where hunting is allowed, survival rates would range from 15 to 55 percent during the first year, most commonly less than 50 percent (Bryant and Ishmael 1990, Diehl 1988, Hawkins et al. 1971, Jones and Witham 1990, McCall et al. 1988,O'Bryan and McCullough 1985). Capture myopathy, caused by capture-related stress, has been an important influence on the survival of relocated deer (Chalmers and Barrett 1982, Jones and Witham 1990). Beringer et al. (In press) made recommendations that may reduce capture myopathy in deer.

At the relocation site, deer would be less aware of and able to avoid potential hazards such as predators (including dogs), roads, and hunters (Bryant and Ishmael 1990, Jones and Witham 1990, O'Bryan and McCullough 1985). Little could be done to reduce mortality after release. Unfamiliarity with new surroundings combined with a lack of wariness of humans adds to the unlikeliness of survival for deer relocated to public land from parks where hunting does not occur. Mortality of deer relocated to a game farm would be expected to be high because customers are able to shoot the deer. Deer may be relocated to licensed private landowners who wish to keep the deer alive and healthy. It would most likely not be possible to find enough licensed private landowners willing to take the large number of deer that would be removed from the parks initially and annually thereafter.

Any disease and parasites from the relocated deer would be passed to the deer at the release site. Deer already residing at the release site would have increased competition for food from the relocated deer. Resident deer may have an increased level of stress from an increased deer density at the relocation site.

Stress and the incidence of disease and parasites on the remaining deer in the parks would be expected to continue to be low. Injury and mortality from vehicles in and near the parks (see section 4.4.3) and from private landowners shooting deer because of crop depredation would be expected to be substantially reduced.

Alternative 2B: Direct Reduction--Shooting. Each year a predetermined number of deer would be killed. In the short term (5 years or less), a large number of deer would die annually to reduce the deer population in the parks to the predetermined deer density. Once the deer population was reduced, fewer deer would be killed each year thereafter to maintain the deer population in the parks at the predetermined level. Some deer may sustain nonlethal injuries. The number of injured deer would be expected to be low because personnel shooting the deer would be trained and highly skilled in the use of firearms.

Stress, incidence of disease and parasites, and injury and mortality due to vehicles or crop depredation would be the same as Alternative 2A.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Capturing deer for surgery would cause stress, injury, and mortality as described in Alternative 2A. Mortality rates from surgery are unknown, but some deer would probably die.

Deer mortality from treatment with steroids or immunocontraceptives would be expected to be very low. Some animals could be stressed or injured if animals have to be captured for treatment (Kirkpatrick et al. 1992, Kirkpatrick and Turner In press, Matschke 1977b). Remote delivery of the contraceptive using darts or biobullets may cause local swelling and pain associated with the impact and cause some deer to drag their hind limb for several hours (Jessup et al. 1993, Turner et al. 1992). No permanent disability would be expected from remote delivery by either biobullets (Jessup et al. 1993) or darts.

The long-term physical and behavioral effects on animals treated with steroids or immunocontraceptives or by surgery have not been fully evaluated. Research has shown that steroids cause massive behavioral changes in treated animals which increase an animal's stress (J. Kirkpatrick, pers. com. 1994). Research at Front Royal, Virginia,

suggests that repeated reproductive cycling, which results from immunocontraceptives, would have less energy drain on a female deer than pregnancy (J. Kirkpatrick, pers. com. 1994). In addition, young male deer followed treated females throughout the extended cycling period, but older male deer did not continue this behavior beyond the normal rutting season (J. Kirkpatrick, pers. com. 1994).

For the 8 to 10 years it may likely take to start reducing the population, stress, incidence of disease and parasites, and injury and mortality due to vehicles or crop depredation would be the same as Alternative 1. If the deer were successfully and consistently treated after the predetermined density was reached, these impacts would be the same as Alternative 2A.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts would be the same as Alternative 2B except that in addition to bullets, more deer would die and be injured by arrows and lead balls (muzzleloader) than what is presently occurring (1994). The number of deer injured would be expected to be higher than in Alternative 2B because hunters outside the parks would be of all skill levels and experience.

Stress, incidence of disease and parasites, and injury and mortality due to vehicles or crop depredation would be the same as Alternative 2A.

4.2 Physical Environment

4.2.1 Effects on Historical Structures

Alternative 1: No Action. The historical structures would not be affected.

Alternative 2A: Capture and Transfer. Capture and transport equipment used in the open or along deer trails would not affect historical structures. An immobilizing dart fired from an injection rifle may cause slight damage if

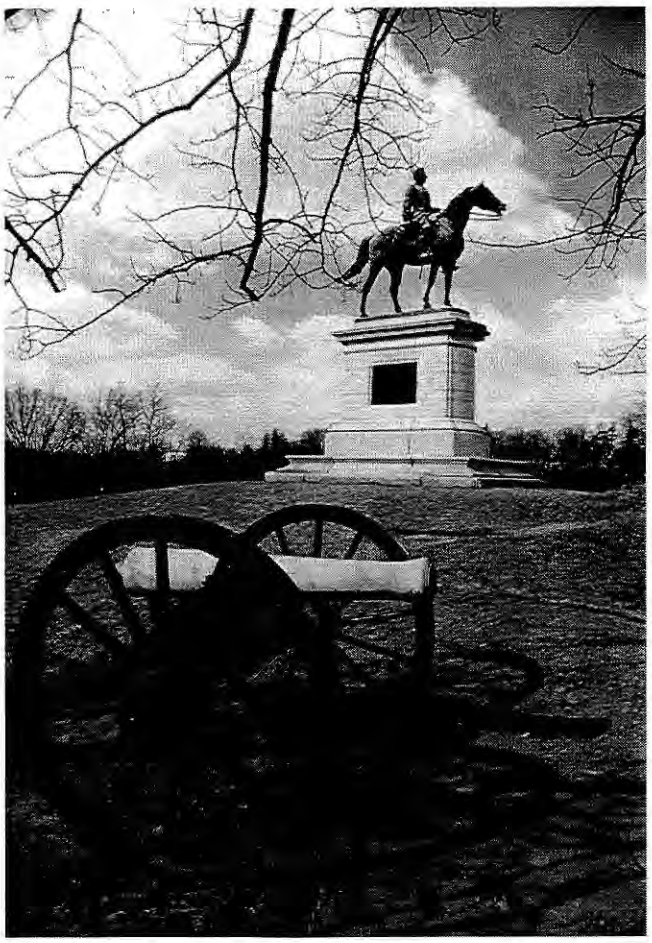


Photo 7. General George Gordon Meade Monument.

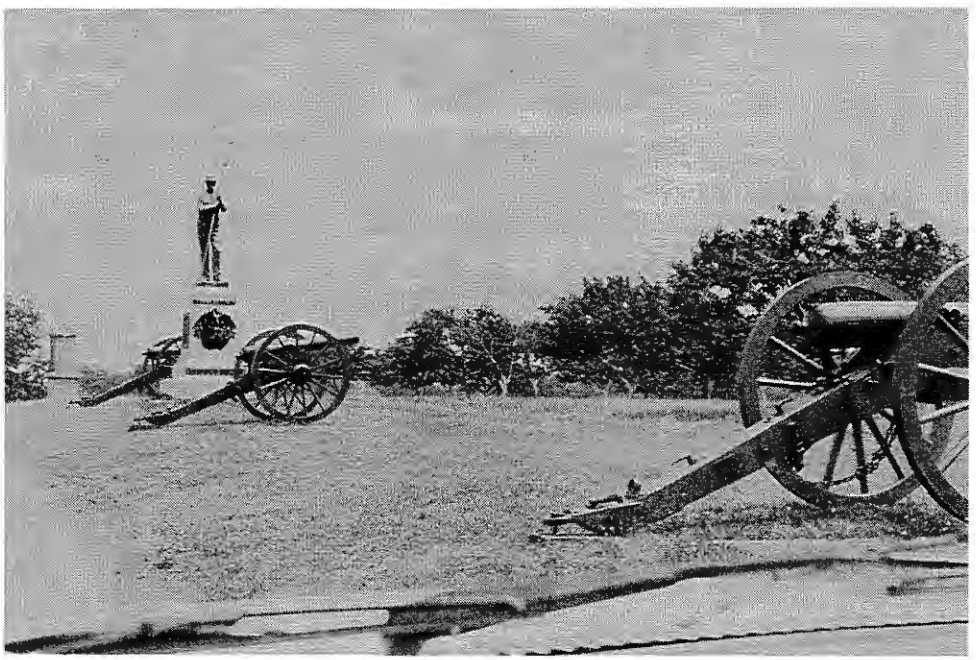


Photo 8. The Peach Orchard at Gettysburg saw intense fighting on July 2, 1863.



Photo 9. A browse line created by deer can be seen in this photograph.



Photo 10. Corn grows significantly higher inside deer exclosures.

it hit a delicate historical object. The likelihood of this occurring would be expected to be low. Damage to a historical structure from multiple darts over time would cause cumulative impacts. In addition, damage from darts combined with any nonrelated vandalism that might occur would cause cumulative impacts.

Alternative 2B: Direct Reduction--Shooting. Historical structures may receive damage from stray bullets. The possibility of stray bullets is low because personnel conducting the shooting would be trained in the use of firearms and safety. Impacts would be the same as Alternative 1 if deer were only shot at bait stations which would be away from historical structures. The severity of any damage would depend on the historical object and placement of the bullet. If a historical structure is damaged by a bullet, in some cases the damage may be permanent. Cumulative impacts would be the same as Alternative 2A except damage would be caused by bullets.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. A stray dart could cause slight damage to historical structures as in Alternative 2A. Cumulative impacts would be the same as Alternative 2A.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. If a controlled hunt was held and line of fire was directed away from historical structures, impacts would be the same as Alternative 1. Impacts would be the same as Alternative 2B for a general public hunt except the possibility of stray bullets may be higher because a hunter may not be trained in the use of firearms and safety. Cumulative impacts would be the same as Alternative 2B.

4.2.2 **Effects on Certain Cultural Landscape Components**

Alternative 1: No Action. Deer browsing would continue to limit the number of seedlings and saplings in the woodlots. Perpetuation of the

current overstory density and composition of the woodlots, which is mostly mixed oak species, would not be possible due to deer browsing (Tzilkowski et al. 1993). Continued browsing would keep the understory of the woodlots open and thus contribute to their historic appearance in the short term. A more open understory is desired for the 3 category A woodlots but not the remaining 22 category B and Eisenhower NHS woodlots. As old trees die, there would be few if any young trees to take their place to perpetuate the woodlots. Without adequate numbers of seedlings and saplings in the understory, natural regeneration of the woodlots could not occur, and perpetuation of the woodlots by other silvicultural methods (e.g., plantings) would be very difficult (Storm et al. 1989).

Seedlings of tree species that deer in this area prefer to eat (e.g., oak and maple) would continue to be scarce in the woodlots. Seedlings of tree species that are not a preferred food in the parks (e.g., ash and cherry) would continue to become more abundant. The species that deer prefer to eat are species the National Park Service wants to maintain in the woodlots. In time, the density and species composition of the woodlots would change in a manner unacceptable to park standards. The understory tree density would continue to decrease and the overstory tree species composition in the woodlots would change. As the understory grew into the overstory, black cherry, white ash, and hickory would replace oak as the dominant overstory species in the woodlots (Fairweather and Cavanaugh, 1990).

Cropfields, particularly in Eisenhower NHS and the southern section of Gettysburg NMP, would continue to have less than 75 percent of the plants in a field reach maturity. These cropfields would not have an acceptable structure. The types of crop could not be grown in the percentages desired without sustaining unacceptable crop damage. Accurate interpretation of the Eisenhower farm would not be possible because the characteristic historic crops could not be maintained. The Agricultural Special Use Permit Program would likely terminate due to the inability of the permittees farming Eisenhower NHS and the southern section of Gettysburg NMP to make a profit from farming in the parks. Replacements would not likely be

found since anyone who farms would need the crops to make a profit. The National Park Service would have to maintain the agricultural cropfields of the permittees that drop out of the program. The parks' cropfield management objectives and standards would not be met because the effect of deer browsing would remain at an unacceptable level. Park management of the orchards and gardens would continue to be difficult because of the effects of deer browsing.

Permittees farming Eisenhower NHS and the southern section of Gettysburg NMP would drop out of the Agricultural Special Use Permit Program due to an inability to profit from farming in the parks. Replacement farmers would be sought to maintain the traditional crops on this 1,000-acre area. Replacements would not be found since a farmer would not likely enter into a contract where they would not be able to have crops for animal feed or to sell because of deer browsing losses. The National Park Service would have to develop a program to maintain the agricultural cropfields of the permittees that drop out of the program. It would likely take approximately 3 to 4 years for the parks to secure funding for the program, buy equipment, find storage space for the equipment, and hire personnel to conduct the farming operation. During this time, cropfields in the northern section of Gettysburg NMP may receive increased deer browsing which may cause other permittees to drop out of the program. The Agricultural Special Use Permit Program would likely have to terminate.

Replanting of historic orchards would require protecting the orchard seedlings. This protection would represent a visual and aesthetic impact to the historic landscape and would interfere with effective historic site interpretation.

Alternative 2A: Capture and Transfer. The abundance and diversity of tree seedlings and saplings in the woodlots would increase with a decrease in deer browsing. Because the woodlots historically had a more open understory, a dense understory would cause the woodlots not to have an historically accurate appearance. A more open understory, however, is

only desired for the three category A woodlots. In the long term, if enough regeneration became established in the understory, these trees would replace the overstory trees that die, and the woodlots would be perpetuated. There is a greater chance that the mix of oak species that dominate the woodlots would be maintained since browsing on the preferred oak seedlings would be reduced. This will increase the probability of oak regeneration.

The Agricultural Special Use Permit Program would continue to maintain the agricultural scene in the parks since crop losses would eventually be reduced to the level where the park management objectives were being met. Crops could be grown to maturity in the relative percentages as existed during the historic period of each park and crops would have an acceptable structure when browsing was reduced sufficiently. Accurate interpretation of the Eisenhower farm would continue to be possible with maintenance of all the characteristic historic crops.

As capture and transfer was successful at reducing and maintaining the deer population in the parks **at or near the predetermined density** (see section 4.1.1), the level of deer browsing on the woodlots and cropfields would be reduced to an acceptable level. With a continued effort of capture and transfer to maintain this level of browsing, the objectives and standards for the woodlots and cropfields of the parks (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots) would be met. The orchards and gardens in the parks would have reduced or no effects from this level of deer browsing.

Alternative 2B: Direct Reduction--Shooting. Impacts would be the same as Alternative 2A, but this alternative would likely reduce the deer population in the parks to the predetermined density in a shorter period of time.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Impacts would be the same as Alternative 1 until deer deaths outnumbered births. Then impacts would be reduced to the same as Alternative 2A when the predetermined density was reached.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts would be the same as Alternative 2A. Depending on the effectiveness of the deer drive, however, parts of the cultural landscape of the parks farthest from a boundary may respond as in Alternative 1 or receive only a slightly reduced level of browsing.

4.2.3 Effects on Private Land

Alternative 1: No Action. Deer browsing on the ornamental plantings, orchards, and agricultural crops on private land would continue at the same level and probably increase. If maintenance of the cropfields in the parks temporarily ceases (see section 4.2.2), deer browsing on nearby private land may increase as deer move off the parks in search of food. When development removes food resources in certain areas, deer browsing may increase in those areas not heavily developed.

Alternative 2A: Capture and Transfer. During the trapping effort, deer may leave the parks to seek refuge. This may temporarily increase the level of browsing on private land.

When the deer population in the parks is decreased (see section 4.1.1), this alternative would result in a decrease in the number of deer that move from the parks onto private land. Fewer deer on private land would mean a decreased level of browsing on the ornamental plantings, orchards, and agricultural crops.

Alternative 2B: Direct Reduction--Shooting. Impacts would be the same as Alternative 2A, but this alternative would likely reduce the deer population in the parks to the predetermined density in a shorter time.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Impacts would be the same as Alternative 1 until deer deaths outnumbered births, then impacts would be reduced overtime and be the same as Alternative 2A when the predetermined density was reached.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts would be the same as Alternative 2A except the decrease in deer browsing on private land would be a direct result of a decrease in the deer population on private land.

4.3 Biological Environment

4.3.1 Effects on Vegetation

Alternative 1: No Action. The effects of deer browsing on woodland vegetation would be expected to continue at the same level or possibly increase in the short term (10 years). The high density of deer in the parks would be expected to cause a change in the composition of woody and herbaceous species in the parks (Alverson et al. 1988, Bratton 1979, Hough 1965, Jones et al. 1993). This would occur because deer browsing would reduce the abundance and distribution of plants preferred by deer and allow plant species that are not preferred by deer to increase (Porter 1991, Strole and Anderson 1992, Warren 1991). The presence of non-native species such as honeysuckle and Japanese barberry, which are not a preferred deer food item in the parks, may increase.

Deer browsing would continue to alter the natural shape of shrubs and trees, and a line of browse would become evident in all wooded areas. Repeated browsing may kill or stunt plants and delay or eliminate flowering of herbaceous plants (Porter 1991).

Vegetation would respond to any naturally occurring fluctuation in the number of deer in the parks (see section 4.1.1). Short-term reductions (2 to 5 years) in the deer population as a result of any natural die-offs probably would not allow plant communities to recover from the effects of browsing (Warren 1991). Plant communities in some areas may take several decades to recover if seed banks are depleted because of constant deer browsing. The number of seedlings and saplings of shrub and tree

species in the forested areas of the parks would continue to be limited by deer browsing. The high density of deer in the parks may cause a reduction in shrub and tree seedling height and density (Beals et al. 1960, Marquis 1981, Storm et al. 1989, Tilghman 1989). Herbaceous plants that are tolerant to deer browsing (e.g., ferns, grasses, and sedges) would eventually dominate the understory of the woodlands by suppressing woody and other herbaceous species. In the long term (over 10 years), natural renewal and perpetuation of the woodlands may not occur.

Alternative 2A: Capture and Transfer. The herbaceous and woody vegetation in the parks would increase in abundance and diversity due to a decrease in deer browsing from the lower density of deer. The level of increase in vegetative abundance and diversity would correspond to the level of reduction in deer browsing. The response in vegetation also would depend on the availability of seeds and competition from exotic or invader species. Plants highly preferred by deer may not show an increase until the deer population was reduced to very low numbers (Porter 1991). Without heavy deer browsing, trees and shrubs would grow to a natural size and shape. After 5 years with the deer population at the predetermined density, seedlings may attain sufficient height growth to escape the effects of deer browsing (Behrend et al. 1970, Underwood et al. In press). If enough seedlings became established, the woodland areas of the parks would be perpetuated.

Alternative 2B: Direct Reduction--Shooting. Impacts would be the same as Alternative 2A, but this alternative would likely reduce the deer population in the parks to the predetermined density in a shorter time.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Impacts would be the same as Alternative 1 until deer deaths outnumbered births, then impacts would be reduced overtime and be the same as Alternative 2A when the predetermined density was reached.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts would be the same as Alternative 2A; however, plant communities farthest from a boundary may respond as in Alternative 1 or receive only a slightly reduced level of browsing.

4.3.2 Effects on Rare, Threatened, and Endangered Species

Alternative 1: No Action. The degree of threat to the existence of the state listed plant species have not been identified. There is presently no documentation of deer affecting a state listed rare, threatened, or endangered species in the parks. The chance exists that a state listed species could be eaten by a deer which would reduce that species' abundance in the parks or eliminate it altogether. If food resources become limited (see section 4.1.1), deer may seek out additional food items and may have a greater chance of affecting the presence or abundance of a listed species. It is not known if any of the listed plants are a preferred deer food. Rare plant species that are preferred would not be expected to increase in abundance in the short term (10 years), but the potential exists for an increase in abundance in the long run. Long-term effects on listed species are not known.

Alternative 2A: Capture and Transfer. This alternative would reduce the competition among deer for food. Reduced competition may decrease the likelihood that a state listed species would be eaten. The probability of a plant of special concern being affected, however, may not be directly related to the number of deer in the parks since one deer could eliminate an entire plant population. Those rare plants that were preferred may increase in abundance in the long term.

Alternative 2B: Direct Reduction--Shooting. Impacts would be the same as Alternative 2A, but this alternative would likely reduce the deer population in the parks to the predetermined density in a shorter time.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Impacts would be the same as Alternative 1 until deer deaths outnumbered births, then impacts would be reduced over time and be the same as Alternative 2A when the predetermined density was reached.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts would be the same as Alternative 2A.

4.3.3 Effects on Wildlife

Alternative 1: No Action. As a result of altered plant communities (see section 4.3.1), it would be expected that animal communities that depend on this vegetation would be affected. Some wildlife species would be indirectly affected in presence and abundance because of competition for limited food and vegetative cover or by altered habitat features. A decrease in the diversity of overstory trees would result in a decrease in diversity of food (fruits, seeds, insects, and browse) for wildlife. The abundance of acorns and nuts of forest trees, which are readily eaten by deer, determine overwinter survival of many forest animal species (Johnson et al. 1989, Martin et al. 1951, McShea and Rappole 1992).

Bird species diversity is directly related to the mix of understory vegetation (Lynch and Wigham 1984). Elimination or reduction of understory trees reduces the presence and abundance of bird species that use the understory for feeding and nesting (Casey and Hein 1983, Jones et al. 1993). Birds may be unable to find sufficiently camouflaged areas for nest location or have difficulty in finding insects because of a decrease in understory vegetation. In time, the overstory would become less dense because of the absence of understory trees to replace the overstory trees that die (see section 4.3.1). Reduction or change in the overstory tree

species of the wooded areas of the southern portion of Gettysburg NMP could limit roost sites for the vulture populations (see section 3.3.3). There are no studies on the effects of different deer densities on reptiles, amphibians, insects, and other invertebrates in uncut forests.

Alternative 2A: Capture and Transfer. Squirrels, pheasants, raccoons, and other wildlife would be attracted to the bait. Wildlife, besides deer, were caught in previous trapping efforts in the parks but were uninjured (D. Cottam, pers. com. 1994). Animals could become entangled in nets left at the capture site. The management action may cause some disruption to wildlife feeding and travel patterns.

The reduced level of browsing would be expected to cause a change in plant communities (see section 4.3.1). An increase in woody and herbaceous vegetation size, volume, and species would be expected to indirectly cause an increase in the presence and abundance of some wildlife species and possibly a decrease in other species because of a change in the amount of food and cover. In the long term (over 10 years), roost sites for vultures would not be expected to become limited.

Alternative 2B: Direct Reduction--Shooting. Impacts to wildlife from the change in plant communities and feeding and travel patterns would be the same as Alternative 2A, but this alternative would likely reduce the deer population in the parks to the predetermined density in a shorter amount of time.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. If steroids were delivered through bait, wildlife other than deer may eat the bait and be affected (Harder and Peterle 1974; Matschke 1977c). Delivery of a steroid by injection or implantation would eliminate this problem. Animals that ate the meat of a treated deer would be affected by the steroid because both natural and synthetic steroids accumulate in the fat of treated animals and are passed through the food chain (Turner

et al. 1992). Immunocontraceptives do not survive the digestive process and are, therefore, not passed on to an animal that ate a treated deer.

Impacts would be the same as Alternative 1 until deer deaths outnumbered births, then impacts to wildlife from the change in plant communities and feeding and travel patterns would gradually be altered and be the same as Alternative 2A when the predetermined density was reached.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts to wildlife from the change in plant communities and feeding and travel patterns would be the same as Alternative 2A.

4.4 Social Environment

4.4.1 Effects on Visitor Use

Alternative 1: No Action. Visitor understanding of the events that took place at each park would be affected. At Gettysburg NMP, there would be a gradual inability to understand and visualize the battle because the appearance of the cropfields and woodlots would be changed (see section 4.2.2). At Eisenhower NHS, visitors would not be provided an accurate interpretation of the Eisenhower farm (see section 4.2.2).

Visitor access in the parks would not be affected. Park visitors would continue to see large numbers of deer in the fields at dusk and dawn. If, in the long term, the cropfields could not be maintained by the National Park Service and woody and herbaceous vegetation becomes scarce, visitors may observe unhealthy and undernourished deer (see section 4.1.1). Visitors would drive or park in undesignated locations to watch deer which would continue to increase the damage to road shoulders, monument berms, and vegetation in these places (see section 1.5). Some visitors may notice the effects of deer browsing. Some of these visitors would enjoy the "manicured" appearance of the park while others may be

disturbed by the change in abundance of plants and the disappearance of certain wildflowers. Visitors who enjoy observing wildlife may notice a reduced number and diversity of some species, particularly birds, compared to previous years (see section 4.3.3). In the long term (over 10 years), observations of the vultures (see section 3.3.3) may decrease if their roosting habitat is lost.

Alternative 2A: Capture and Transfer. The presence of capture and transport equipment and the trapping activities could interfere with the quality of some visitors' experiences at the parks. Some visitors may have an interest in seeing deer being captured and handled.

Interpretation of the historic events of each park and visitor understanding would be enhanced because of reduced deer browsing of the cropfields and woodlots (see section 4.2.2). Visitor use would be affected for an unknown amount of time due to some restricted access during the capture effort. A visitor's ability to observe deer would be reduced because there would be fewer deer in the parks and the deer may become more wary of humans (see section 4.1.1). A reduced ability to see deer may result in fewer visitors driving or parking in undesignated locations to watch deer. Some visitors may notice an increase in vegetative and wildlife abundance and diversity. In the long term (over 10 years), existing levels of visitor observations of vultures would be expected to continue.

Alternative 2B: Direct Reduction--Shooting. Portions of the parks may be closed to visitors for an unknown amount of time during October through April. Adequate notification of the restricted access would lessen impacts to potential visitors to the parks. Shooting deer during both day and evening hours would reduce the number of days of shooting and thereby reduce the amount of time areas of the parks are closed to visitors. Impact to visitors would be minimized if the shooting took place only at night when the parks were closed to visitors. Some park visitors may observe the activity and be disturbed by the sound and sight of personnel shooting deer. A visitor may see an injured deer or the carcass of a deer that was injured and later died. The probability of this occurring would be expected

to be low, because the number of injured deer is expected to be low (see section 4.1.2).

Impacts to visitor understanding of the historic events of the parks and observations of vegetation and wildlife would be the same as Alternative 2A, but occur sooner because this alternative would reduce the deer population in the parks to the predetermined density in a shorter period of time.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Some visitors may be interested in the activity associated with reproductive intervention. The use of a gun to inject the dart or biobullet may give the appearance of someone killing deer and disturb some visitors.

Impacts would be the same as Alternative 1 until deer deaths outnumbered births, then impacts to visitor understanding of the historic events and vegetation and wildlife observations would gradually change and then be the same as Alternative 2A when the predetermined density was reached.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Some park visitors would be disturbed by the noise and sight of the deer drives and shooting. A visitor may see an injured deer or the carcass of a deer that was injured and later died. The probability of this occurring would be higher than in Alternative 2B, because the number of injured deer would be expected to be higher (see section 4.1.2). Visitors would be denied access to areas where the deer drives and shooting would occur for an unknown amount of time.

Impacts to visitor understanding of the historic events and vegetation and wildlife observations would be the same as Alternative 2A.

4.4.2 **Effects on Human Safety**

Alternative 1: No Action. Human safety would not be affected except by deer/vehicle collisions (see section 4.4.3).

Alternative 2A: Capture and Transfer. In general, public safety would be assured, but curious people could be injured by tampering with the trapping equipment. Although the probability would be low, participants in the capture and transfer effort may be injured by deer or trapping equipment.

Alternative 2B: Direct Reduction--Shooting. Individuals in the parks or on private land adjacent to or in the parks could be injured or killed by stray bullets. The possibility of this occurring would be expected to be extremely low, because safety zones would be established and enforcement personnel would restrict access. Shooters would be familiarized with the location of private land and dwellings. Participants in the shooting could be injured or killed by stray bullets. The possibility of this occurring would also be expected to be extremely low, because personnel would be trained in public safety and the use of firearms and a small number of personnel would be used. In addition, human safety would be increased by the wearing of fluorescent orange when day shooting occurred and by the use of bait stations.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Steroids accumulate in an animal's fat and would be passed on to an individual that ate treated meat (Turner et al. 1992). The possibility of being adversely affected by eating steroid-treated deer meat is believed to be low (Kirkpatrick and Turner In press) but has not been proven. This problem would be lessened if treated deer could be marked and warnings of the potential dangers were publicized. The use of immunocontraceptives would also reduce the possibility of adverse impacts.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Injury or death of individuals conducting the deer drives in the parks could occur because individuals would be walking towards the line of fire. Conducting a controlled hunt and regulating the zone and line of fire would decrease the probability of this occurring. The wearing of fluorescent orange by individuals conducting the drives would further increase human safety. Although the possibility would be remote, an individual could be injured by a deer trying to avoid the drive.

Impacts of stray bullets on human safety in and near the parks would be the same as Alternative 2B.

4.4.3 Effects on Deer/Vehicle Collisions

Alternative 1: No Action. The number of deer/vehicle collisions in and near the parks would be expected to increase as residential and commercial development near the parks (see section 4.2.3) continued to increase. This would occur because the increase in development would result in an increase in traffic volume in the area. Any naturally occurring change in the deer population over time may bring a corresponding change in the number of deer/vehicle collisions (Porter 1991).

Alternative 2A: Capture and Transfer. The number of deer/vehicle collisions in and near the parks may increase during the trapping effort. Earlier trapping efforts did not document this occurrence; however, human activity directed at deer would be expected to cause increased movements of deer. Regulation or restriction of road access and public notification of the potential increased danger of deer crossing roadways would decrease this possibility (Allen and McCullough 1976). After the deer are relocated, the probability of a deer/vehicle collision would be reduced in and near the parks and increased at the release site unless the deer are relocated to wilderness or fenced land.

Alternative 2B: Direct Reduction--Shooting. Impacts would be the same as Alternative 2A regarding deer/vehicle collisions in and near the parks during and following the management action.

Alternative 3: Reproductive Intervention--Sterilization or Contraception. Impacts would be the same as Alternative 1 regarding deer/vehicle collisions in and near the parks during and following the management action. As deer deaths outnumbered births, impacts would be gradually reduced to Alternative 2A.

Alternative 4: Cooperative Management -- Private Landowners, Pennsylvania Game Commission, and National Park Service. Impacts would be the same as Alternative 2A regarding deer/vehicle collisions in and near the parks during and following the management action.

4.5 Unavoidable Adverse Impacts

1. A reduction in the number of deer in the parks would eliminate the pleasure some people gain from the easy viewing of large numbers of deer.

2. The sights and sounds of all but the No Action Alternative would detract from the historical or recreational experiences of some visitors to the parks.

3. The behavior and social organization of deer may be adversely altered in some way by all but the No Action Alternative.

4. Deer may suffer from the injuries obtained from all but the No Action Alternative.

5. All but the No Action Alternative would induce disturbance stress in animals during the management action, but the animals remaining in the parks would be expected to be freer of social stress. An

exception may be that Alternative 3 Reproductive Intervention may introduce some behavioral (social) stress. In the long term, under the No Action Alternative, the deer would probably have a higher level of social stress and disturbance stress from collisions with vehicles than under the action alternatives.

6. Cultural landscape management objectives for parks' woodlots would not be met by the No Action Alternative.

7. Park interpretation and visitor understanding of the historic events of the parks would be reduced by the No Action Alternative.

8. Deer/vehicle collisions in and near the parks under the No Action Alternative would continue to number over 150 incidences annually.

9. The noise from shooting deer under Alternative 2B, Alternative 4, and Alternative 5 may disturb some nearby private landowners.

10. There would be an irreversible commitment of the lives of the deer that would be deliberately (Alternative 2B, Alternative 4, and Alternative 5) or inadvertently (Alternative 2A and Alternative 3) eliminated.

11. Restricted access to roads or areas of the parks as required under Alternative 2A, Alternative 2B, Alternative 4, and Alternative 5 for safety reasons would inconvenience visitors who wanted to use these park areas or roads.

4.6 Relationship Between Short-Term Uses and Long-Term Productivity

Perpetuation and maintenance of certain components of the cultural landscapes of the parks according to park objectives requires a reduction in the level of deer browsing. A reduction in the deer population in the parks would reduce the level of browsing. A management action to reduce

the population of deer would result in some disturbances to people in and near the parks. The short-term activities associated with a management action would, in most cases, result in restricted access and may detract from the experience visitors gain from each park. The initial and annual removal operations would involve short-term use of park lands for activities that are disruptive to park resources and visitors. In the long term, the wooded areas would naturally regenerate and the cropfields would more accurately achieve a setting which can adequately be used to interpret the parks' history. In this way, the overall cultural landscapes of the parks would be perpetuated, providing visitors with a better understanding and representation of the historic events for which each park was established.

Reducing the number of deer in the parks would reduce the ability to observe deer. In addition, the deer may become more wary of human activity and stay concealed. The loss or reduction in a visitor's opportunity to observe deer would be offset, in the long run, by the increased opportunities to see a diversity of herbaceous and woody vegetation in the parks.

Chapter 5

PREPARERS AND CONSULTANTS

TEAM MEMBERS

David W. Reynolds, Chief, Natural Resource Branch, Mid-Atlantic Regional Office, B.S. Wildlife Biology, M.S. International Environmental Systems Management, 16 years experience, contributed to scoping, formulation of alternatives, editing, and overall coordination and supervision.

John F. Karish, Regional Chief Scientist, Mid-Atlantic Regional Office, B.S. Forest Science, M.S. Forest Biometrics, 20 years experience, contributed to scoping, formulation of alternatives, and technical editing.

Michele J. Batcheller, Natural Resource Specialist, Mid-Atlantic Regional Office, B.S. Wildlife Science, 1 year experience, contributed to overall writing and editing of statement.

CONSULTANTS

National Park Service

Gettysburg National Military Park/Eisenhower National Historic Site

Dr. John A. Latschar, Superintendent
MacDonald Heebner III, Chief, Resource Management
Jim Roach, Site Manager, Eisenhower National Historic Site
Katie Lawhon, Public Affairs Specialist
Hal Greenlee, Natural Resource Specialist
Kathy Harrison, Chief Historian
Laurie Coughlan, Park Ranger, Interpretation and Protection
Carol Hegeman, Supervisory Historian, Eisenhower National Historic Site
Herbert C. Frost, Wildlife Biologist
Karen Finley, Natural Resource Specialist
Kent Schwarzkopf, Outdoor Recreation Planner

Mid-Atlantic Regional Office

M. Shaun Eyring, Historical Landscape Architect
Joseph Dibello, Chief, Division of Park and Resource Planning
Robert Gift, Supervisory Outdoor Recreational Planner
J. Daniel Sullivan, Safety and Occupational Health Officer

Washington Office

Jake Hoogland, Chief, Environmental Quality Division
Michael Coffey, Wildlife Program Manager
Gary Johnston, Chief, Natural Resources Programs Branch
Terry Cecek, Integrated Pest Management Coordinator

Big Bend National Park

Jose Cisneros, Former Superintendent, Gettysburg National Military Park/Eisenhower National Historic Site

National Capital Region

John Howard, Natural Resource Specialist

Shenandoah National Park

Reed Engle, formerly Chief, Cultural Resource Management/Maintenance, Gettysburg National Military Park

Department of Interior - Office of the Solicitor

Anthony R. Conte, Regional Solicitor
Robin Lepore, Attorney Advisor

National Biological Service

John Hadidian, Research Wildlife Biologist, Center for Urban Ecology
Allan O'Connell, Leader, Cooperative Park Studies Unit, Univ. of Maine
Gerald Storm, Wildlife Biologist (Research)
Gerry Wright, Leader, Cooperative Park Studies Unit, Univ. of Idaho
Brian Underwood, Research Scientist

Adams County

Richard Waybright, Adams County Commissioner

Pennsylvania Game Commission

Donald C. Madl, Executive Director
David Sloan, Deputy Executive Director
Calvin W. DuBrock, Director, Bureau of Wildlife Management
William L. Palmer, Biologist

Pennsylvania Bureau of State Parks

Gregory Schrum, Park Operations Manager

Deaconess Research Institute

Jay F. Kirkpatrick, Senior Staff Scientist

The Pennsylvania State University

Al Luloff, Professor, Rural Sociology
James R. Pratt, Associate Professor, Aquatic Ecology
Robert O'Connor, Associate Professor, Political Science
Todd Bowersox, Professor, Silviculture
Matthew Lovallo, Graduate Student

Cornell University

Milo E. Richmond, Leader, New York Cooperative Fish and Wildlife Research Unit, Department of Natural Resources

Tommy L. Brown, Senior Research Associate and Leader, Human Dimensions Research Unit

Dan Decker, Department Chairman, Department of Natural Resources

State University of New York

William F. Porter, Professor, Environmental Science and Forestry

Other

Steven A. Williams, *former* Deputy Executive Director, Pennsylvania Game Commission

Lois Annechini-Moore, Typist/Editor

Chapter 6

FINAL ENVIRONMENTAL IMPACT STATEMENT RECIPIENTS

The social environment for deer management has grown increasingly complex as different groups of stakeholders have developed individual deer management philosophies. In a national park setting, local stakeholder groups include park visitors, nearby residents and surrounding landowners, hunters, and retail businesses. Stakeholders also include groups residing across the country who are members of organizations which have strong views about deer management. Animal welfare and environmental organizations are among the many groups who have a stake in deer management decisions.

Studies have not been undertaken at Gettysburg National Military Park or Eisenhower National Historic Site concerning the different deer management preferences of stakeholder groups. Public input, however, was obtained through written responses under the guidelines of the National Environmental Policy Act. Public responses will be considered when choosing the final management action.

A mailing list was compiled from the scoping meetings, requests for the document, and comment letters. Individuals from this list were notified that the document was available if requested in writing. The mailing list includes the following agencies, organizations, and individuals:

AAA - Gettysburg Division
AHISA - Division of Environmental Quality
Abrahamson, Jill
Adams County Commissioners
Adams County Conservation District
Adams County Fish & Game Commission
Adams County Fruit Growers Assoc.
Adams County Library Systems
Adams County Office For The Aging
Adams County Public Library
Adams County SPCA
Advisory Commission to Gettysburg NMP
Advisory Council on Historic Preservation
AG Financial Services
Akers, Dan
Albin, Brian
American Battlefield Protection Program
America's Civil War
American Farm Bureau Federation
American Historical Assoc. Newsletter
American Humane Society
Anderson, Dale
Anderson, William
Andersonville National Historic Site
Animal Legal Defense Fund
Animals Rights Coalition, Inc.
Animal Protection Institute of America
Antietam National Battlefield
Appalachian Environmental Laboratory
Appomatox Courthouse National Historic Site
Arkansas Post National Memorial
Arning, Charles
Artilleryman, Editor
Associated Press
Association of National Park Rangers
Atherton, Larry

Environmental Impact Statement Recipients

Aumen, Michael
Baker's Electronics
Baltimore Civil War Round Table
Bankert, Byron
Bard, Denny
Bearss, Ed
Bechtel, John II
Belgiano, Charles
Bender, Jeff
Bennet, Gerald
Bird, Elizabeth
Bittenger, Steve
Blue and Gray
Bodett-Anderson, D.J.
Book, Thaddeus
Booker T. Washington National Monument
Boritt, Gabor
Bowser, Dan
Boyd, Bob
Brensinger, W.
Brogan, D.
Broujos, Honorable John
Brown, Charles T. Jr.
Brown, Kent Masterson
Bucher, Crowell
Burger, Terry
Bushey, Nancy
Byers, Chester S.
C&O Canal National Historic Park
Callenbach, John I.
Camp & Heliogram
Camp Chase Gazette
Camper's Monthly
The Cannoneer
Capital Hill CWRT
Caplen, Lydia
Carlisle Sentinel
Carroll County News
Casey, Honorable Robert P.
Catoctin Mountain Park
Central Pennsylvania Conservancy
Chamber of Commerce
Chambersburg Public Opinion
Chickamauga & Chattanooga National Military Park
Congressional Liaison Office
Christopher, Scott
Civil War: The Magazine of the Civil War Society
Civil War Hotline
Civil War Institute
Civil War News
The Civil War Round Table
Civil War Sites Advisory Commission
Civil War Studies
Civil War Times Illustrated
Civil War Trust
Clark, Dave
Cluck, C.
Cole, James
Commito, John A.
Confederate Veteran
Conservation Foundation
Conservation Fund
Cornell Cooperative Extension
Corman, Charles
Costella, David
Costella, Preston
Crabbs, Lester
Crowley, Lynn
Cubbison, Douglas R.
Cumberland Gap National Historic Park
Cumberland Township Board of Directors
Cumberland Valley Review
Currens, Gary
The Currier
Civil War Roundtable Associates
CWRT of the District of Columbia
Davenport, Carroll
Davis, Beth Auburn
Davis, Ronald
Dayhoff, Kenneth
Dayhoff, Sam
Days Inn Gettysburg
Defenders of Wildlife
Delany, Patrick
Delaware Water Gap NRA
Delp, Daniel Scott
Devett, Charles
Doris Day Animal League
Downin, Joel
Dubbs, Gerald
Dubbs, Timothy
Ducks Unlimited! Inc.
Duncan, Peter - PA Deer Assoc.
Dunkleberger, Karl
Dunlap, Sheila
Earth First! Foundation
Eastern PA Conservancy
Eisenhower, Mr. & Mrs. David
Eisenhower, Honorable John S.D.
Elder, Don
Eline, John
Ellingwood, Mark
Environmental Action
Environmental Action Foundation, Inc.
Estep, Julie
Evening Sun
Eyler, Reno
Farm Journal
Feese, Staley
Fisher, Christopher
Fisher, Daniel
Fisherman, Edward
Fissel, Curtis
Fitts, Deborah
Fort Donelson National Battlefield
Fort Jefferson National Monument
Fort Pulaski National Monument
Fort Sumter National Monument
Fortier, Peggy
Franklin Township Board of Directors
Frederick News
Fredericksburg & Spotsylvania County Battlefield Mem. NMP
Freedom Township
Frey, Raymond, Jr.
Friends of Animals, Inc.
Friends of Farm Workers, Inc.
Friends of the National Parks at Gettysburg
Fritz, Judith
The Front for Animals
Fuhrman, Edward
Fuller, Pastor
The Funds for Animals, Inc.
Funk, Doug
Fuhrman, Edward
GNMP Advisory Commission
Garlach, James
Gebhard, Timothy
Gebhart, Larry
Gettysburg Area School District
Gettysburg Battlefield Preservation Association
Gettysburg Borough Manager
Gettysburg Borough Council
Gettysburg Civil War Round Table
Gettysburg Hotel

Gettysburg Motor Lodge
The Gettysburg Times
Gettysburg Tour Enterprises
Gettysburg Tours, Inc.
Gettysburg Travel Council
Gilbert, Charles
Glass, Brent
Glatfelter, Charles
Gleason, Jerry
Goodling, Honorable William F.
Goodrich, Jonathan
Green, Sam
Greenlee, Vicki
Grimsley, Jim
Grow, Robert
Gulf Island National Seashore
Gun Week
Gwynn, George
Haaland, Dr. Gordon
Hagarman, Ronald
Hammett, James
Hanover Times
Hanover Sun
Harper's Ferry National Historic Park
Hartman, Russell
Hauck, Patrick
Hawthorne, Fred
Haynes, I.D.
Heiland, Rick
Heintzman, Charles
Hendricks, Bob
Herfel, Stephanie
Herring, Lloyd
Hess, John
Hill, Lisa
Hill, Steve
Historic Gettysburg-Adams County
Hoeldtke, Jonathan
Hoffman, Daniel
Hoke, Bonita
Holiday Inn
Holiday Inn Express
The Humane Society of the U.S.
Hummelstown Sun
Hurley, Ron
Illenberger, Hank
Independent Order of Foresters
Inns of Gettysburg
International Society for Animal Rights, Inc.
Intelligencer-Journal
Jarvis, Destry
Johnson, David
Jordan, Charles
Kaiser, Richard P.
Kennedy, Bob
Kennedy, John
Kennell, Art
Kennesaw Mountain National Battlefield Park
Keran, Craig
Kerry, Michael
Killinger, Jim
Klein, Charles G.
Krammer, Thomas
Krietz, Bob
Kuhn, Edith
Kuhn, Kenneth
Kuhn, Laura
Lake Braddock Secondary School
Lalo, Julie
Lambert, George
League of Women Voters, Adams County
Lebanon News
Lehman, Roger
Lehmer, Steve
Lewis, Newton Jr.
Little, Durand
Livingston, Mark
Lynn, Mayor Francis
Macaskill, Bob
Mail Call
Main Street Gettysburg
Maitland, Honorable Steve
Mannasas National Battlefield and Park
Maroso, Elaine
Mauro, Maria
McKerrick, David
McMillan, Honorable J. Alex
McQuaid, Jamie
McSherry, Stephanie
McSherry, Steven
Mealley, Jeff
Meixell, Harry
Mellott, Doney
Mendoza, Martin
Military Images
Miller, Randy
Mitchell, Bob
Monn, Mr. & Mrs. J.
Monocacy National Battlefield
Morgan County Reenactors Assoc.
Morris, John
Mount Joy Township Supervisors
Mount Pleasant Township
Mummert, Larry
Murphy, Cdr. John A., USN
Murray, Curtis
Musselman, Mildred
Myers, Fred
Myers, Millard Jr.
Myers, Ned
Natchez Trace Parkway
The National Audubon Society
National Geographic
National Park Foundation
National Park Magazine
National Park Service, Mid-Atlantic Region
National Parks & Conservation Assoc.
National Rifle Association of America
National Trust for Historic Preservation
Neidwin, Robert
New Era
North-South Traders Civil War
Nunemaker
O'Brien, Jennifer
O'Toole, Patty
Osborne, Kevin
Patten, Donald
PA Farmers Association
PA Farmers Union
PA Federation of Museums and Historical Organizations
PA Federation of Sportsmen's Clubs
PA Fish and Boat Commission
PA Forestry Association
PA Game Commission
PA Heritage Quarterly of the PHMC
PA Veterinary Medical Association
PEA Ridge National Military Park
People for the Ethical Treatment of Animals
Petersburg National Battlefield
Pilman, Terry, Mr.
Plank, Elmer
Plank, Harold
Platt, Barbara
Plowman, Gene, Mr.

Environmental Impact Statement Recipients

Punt, Honorable Terry
Pusateri, Robert
Putting People First
Quality Inn
Rails & Trails
Ramada Inn - Gettysburg
Reaver, Joseph
Rebert, James
Reddinger, Becky
Reese, Jason
Riefsteck, Jeffery
Reenactor's Journal
Roach, Jim
Robinson, Theron, Mr.
Rockey, Cecil, Mr.
Rohrbaugh, Shirley
Rollinger, Richard
Roth, Jeff
Sahmmarco, Andrea
Sammons Communications
Sanders, Bill
Sanders, Christopher
Sanders, David, Mr. & Mrs.
Sanders, James
Sanders, Jerry
Sanders, Marc
Sanders, Susan
Sandey, Matthew
Sauer, Ron Jr.
Schneck, Marcus
Schriver, David
Schultz, Richard
Scriptunas, Vite, Mr.
Seidel, George
Seitz, James
Senft, Doug
Sentz, William
Shealer, Jerry
Sheeder, Jerry
Sheely, Walter Sr.
Sheffer, Dale
Sheffer, Gilson, Mr.
Shiloh National Military Park
Shipley, Clint
Shireman, Ronald
Shissler, Bryon, Mr.
Shorb, James
Shriner, Robert
Shultz, Dean
The Sierra Club
Sierra Club Legal Defense Fund
Sites, Tom
Slaybaugh, John
Sloan, Milly
Slonaker, Gary
Small, B.J., Mr.
Snellbaker, Anna
Snyder, Mike
The Society for the Prevention of Cruelty to Animals
Sons of Veteran Reserve
Spahr, Edward
Spangler, Barry
Spangler, Steve
Specter, Honorable Arlen
Stam, Alan
Stark, Craig
Steintl, Roger
Sterner, David
Stoner, Woody
Stones River National Battlefield
Stonesifer, Ronald
Straban Township Board of Supervisors
Subcommittee on National Parks and Public Roads
Sullivan, Kevin USDA/ADC
The Sunday Pennsylvania
This Month Magazine
Thompson, Grover
Traynham, Garry
Troxel, James
Unified Sportsmen of PA
The Union Times
Vanderau, Bob
Vicksburg National Military Park
Voigt, Jim
WCBG
WCHA AM & FM
WCMB
WCRH Radio
WGAL TV
WGET AM & FM
WHAG TV
WHP TV
WHTM TV
WHVR Radio
WITF Radio News
WITF TV
WPMT
WPVI TV 6
WSBA AM & FM
WYCR
WZBT FM
Wagner, Roy Jr.
Walker, Ron
Wallen, Wayne
Walter, Barbara
Warner, Drew
The Watchdog
Watson, Dick
Waynesboro Record Herald
Weiser, Everett
Wentz, David
Wentz, Larry
Western Maryland Conservancy
Western Pennsylvania Conservancy
White, Donald
Whyland, Robert
Wildlife Management Institute
Wilkinson, Ed
Williams, Chad
Williams, Steve
Wilson's Creek National Battlefield
Winhelman, Rich
Wintfield, Ella
Woerner, Victor
Wofford, Honorable Harris
Wolf, Gary
Woodruff, Amanda
Woodruff, G., Mr.
Wright, Bob
York Dispatch
York Record

Chapter 7

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)

Copies of the draft EIS for proposed deer management for Gettysburg National Military Park (NMP) and Eisenhower National Historic Site (NHS) were distributed by mail to interested and affected agencies and members of the public. Most copies of the draft EIS were mailed on November 25 and 28, 1994. A notice of availability of the draft EIS was published in the *Federal Register*, Volume 59, Number 218, on November 14, 1994. The notice also announced a public informational meeting which was held on January 7, 1995, to answer questions and receive written comments on the document. The date of the meeting was announced on television, radio, and in newspapers. The meeting was held at the Gettysburg Junior High School in Gettysburg, Pennsylvania. Approximately 105 people attended the meeting.

The public review and comment period was 70 days and comments were due February 10, 1995. Two hundred forty-five letters were received.

7.1 Letters Not Requiring Response

The majority of the letters received were from individuals expressing support for or against one or several alternatives. Many letters offered suggestions for an action plan or discussed topics covered in the draft EIS. While a response is not required for these types of letters, as the letters did not raise analytical issues, they are reproduced in the final EIS (Appendix J). Although no response is attached to these letters, the National Park Service would like to thank the following agencies, organizations, and individuals for commenting. **The number in parentheses following the name can be used to locate that particular letter in Appendix J.**

Agencies and Organizations:

Adams County Farm Bureau (36)
Advisory Commission Gettysburg National Military Park (37)
Blair County Federation of Sportmen's Clubs (38)
Cumberland Valley Sportsmen-Conservationists Association (44)
Doris Day Animal League (39)
Friends of the National Parks At Gettysburg, Inc. (40)
In Defense of Animals (42)
Marion County Humane Society (43)
Pennsylvania Historical and Museum Commission (41)
Unified Sportsmen of Pennsylvania (45)
United States Environmental Protection Agency (35)

Individuals:

Anderson, Charles E. (78)
Anderson, Dale, C. (79)
Anderson, Debra P. (79)
Baker, Joe (81)
Ball, Matt (82)
Banco, Barbara (83)
Barash, Allison (84)
Batary, Gregg (85)
Baumgardner, Lisa K. (80)
Bensen, W. C. (46)
Bernstein, Dr. Mark H. (87)
Birk, Alfred J. (86)
Boss, Sandra (89)
Bracale, Rick (90)
Bradley. James E. (92)
Brady, William H. (91)
Brenner, Kurt M. (47)
Brogan, C. M. (93)
Brower, Susan (94)
Bucher, Kirby (95)
Buckheit, David L. (48)
Castellani, John (96)
Christine, Sr. Kevin C. (49)
Church, Paul A. (98)
Clippinger, Jeffrey (97)
Clouser, Scott (99)
Clugh, Eddie L. (88)
Conalin, Dorothy G. (146)
Conaway, Randy A. (50)
Concerned (102)
Connor, Ed (51)
Conrad, Carolyn B. (100)
Craig, James (101)
Crist, Burnell A. (103)
Daugherty, Darla (105)
Deem, Wayne (106)
Deisselberg, Jennifer (107)
Dennis, Beth (109)

Dennis, Marion (109)
Dowling, Sidney (110)
Downs, Theodore S. (108)
Duncan, Don (112)
Dunn, Larry S. (113)
Dunworth, Robert (52)
D'Angelo, Bob (104)
Edwards, Bryan T. (114)
Eitnier, Richard D. (116)
Enck, Chad (117)
Farr, Linda (115)
Feuerstein, Trisha L. (211)
Fichtner, Mary S. (119)
Firme, Tim (118)
Fissel, Andrea M. (121)
Forbush, Todd (123)
Frantz, Galen C. (124)
Fredorchak, Cindy (120)
Freligh, Marc (122)
Friedl, Michelle (53)
Fuey, Jr. Raymond A. (125)
Ganjon, Eric (126)
Gargallo, Jane S. (130)
Geisler, Christine (131)
Gies, Timothy N. (54)
Gilbert, Charles P. (111)
Ginther, Roger (55)
Glusaskas, Jr. Thomas G. (127)
Glusaskas, Maryann (127)
Glusaskas, Thomas G. (127)
Glusaskas, Thomas J. (127)
Goetz, Jerry (56)
Gouffer, Mary (128)
Grassi, Adeline (134)
Gresham, Cyane (132)
Gropp, Eileen M. (133)
Guaz, Norman (67)
Harvey, Helen (135)
Heintzelman, Charles A. (136)
Heitzman, Diane (137)
Heller Family (138)
Hemperly, Robin (139)
Hillary-Prins, Claire (140)
Hillary-Prins, Claire (245)
Hite, C. A. (239)
Hogan, Kathy (141)
Hollard, R. D. (239)
Hollobaugh, Walter R. (57)
Hoover, Craig S. (142)
Howard, Adam (58)
Jackson, Alvin (143)
Jones, Eleanor L. (144)
Jones, Kathryn A. (146)
Jones. Robert E. (145)
Keene, Mary J. (147)
Kennedy, Michael K (148)
Kennell, Arthur (150)
King, Robert (59)
Kingston, Rhoda (149)
Kleckner, Thelma (151)
Knopoff, Mr. and Mrs. Milton (152)
Knopp, Jr. Vincent G. (153)
Knouf, Kenneth G. (155)
Laser, Sara M. (156)
Leahy, Richard and Phyllis (159)
Lemmers, Susan (154)
Lenye, Kevin J. (60)
Lingafelt, William R. (157)
Loar, Jenny (160)
Loges, Jackie (161)

Lynfeller, David (61)
Maddix, Vicki (163)
Magee, Janet M. (164)
Mallette, Robert C. (165)
Mann, Mrs. John (162)
Martin, Francis F. (166)
Masier, Ken (47)
McClusky, Donald J. (62)
McGuigan, James P. (169)
McNellie, Charlene (167)
McNellie, Tasha (168)
Melhorn, Mr. and Mrs. John (194)
Metra, Donald S. (133)
Moyer, William (172)
Mulherin, Sr. Andrew J. (170)
Murphy, Bill (171)
Murry, George D. (173)
Musser, John (174)
Myers, Helen J. (175)
Myers, Ned A. (176)
Myers, Richard E. (177)
Myers, Roy E. (179)
Myers, S. J. (178)
Nardos, II Dr. Dean (180)
Nelson, Catherine A. (182)
Ness, Brian G. (63)
Ness, Jr. Richard A. (64)
Ness, Ray A. (181)
Ness, Sr. Richard A. (65)
Nickey, Robert S. (183)
Odenwelder, Catherine (184)
Pagano, James (185)
Pease, Steven (66)
Peiper, Lawrence (186)
Petcavage, Leona T. (146)
Peters, Donald R. (188)
Peters, Jack L. (190)
Peterson, Donald F. (187)
Piho, S. (192)
Place, Roger A. (189)
Plotica, Carolyn (191)
Pope, Jennie (193)
Price, Brenda (196)
Price, David R. (195)
Rampulla, Gloria (197)
Rebert, Adam (198)
Rebert, James D. (199)
Rebert, Rena S. (200)
Reese, Dr. David A. (202)
Rhines, Mark (68)
Rohrbaugh, Rodney E. (201)
Rundquist, Carl (203)
Rupert, John E. (204)
Rupp, Doris (129)
Sanders, James R. (212)
Sanders, Susan (205)
Savage, Alice E. (206)
Schach, William (207)
Schatz, Steve (69)
Schlegelmilch, Mrs. Nelson (208)
Schneider, Michael J. (70)
Schneider, Rodney (71)
Schooley, W. H. (209)
Scrimshaw, Wayne A. (72)
Seaman, Donald J. (214)
Seger, Richard G. (215)
Shifflett, David G. (216)
Shoffner, Michael D. (73)
Shrina, Robert D. (217)
Shultz, Dean A. (213)

Singer, Allan (74)
Sitler, Harvey K. and Bernice (221)
Slonaker, Allen A. (222)
Smith, Beulah (219)
Smith, John A. (224)
Smith, Leroy E. (226)
Somers, Kimberly (225)
Sowers, Lee (223)
Spangler, Donna (218)
Spangler, Richard C. (228)
Stambaugh, Todd E. (75)
Stansfield, E. (220)
Stokes, David J. (229)
Stone, Carl E. (76)
Stouffer, Cindy (227)
Swartz, Keith (77)
Taylor, Doris M. (230)
Toomey, Sr. Clarence W. (232)
Traister, Jr. William H. (231)
Unreadable (133)
Vanderau, Robert E. (234)
Wagner, Mike (233)
Walze, Barry (158)
Weaner, Connie H. (236)
Weary, Max (235)
Weaver Family (210)
Weiser, M. Everett (237)
Wendler, Robert B. (238)
Williams, Barbara A. (240)
Wolf, Kurt (241)
Zakarian, Joy M. (242)
Ziegler Family (243)

7.2 Comments and Responses

Most of the substantive comments received referred to four general topics: National Park Service legislative authority, hunting, reproductive intervention, and cropfield and woodlot management. These four topics are discussed below in further detail to provide clarification of these issues and to respond to comments. Comments in the letters are referred to these general responses or are addressed individually. **The parts of the comment letters that require a response are designated with a shaded bar and a letter. The response to these comments is written to the right of the comment letter.**

General Response #1: National Park Service (NPS) Authority

Policy and legal compliance are discussed in Section 1.7. Further clarification of NPS legislative authority to manage the wildlife in the parks is offered.

In 1916 Congress passed the Organic Act (16 U.S.C. Sec 1-3) which directed that the Secretary of the Interior manage wildlife in National Park System units. Several court cases have clarified this issue. In Hunt, Governor of Arizona et al. versus United States, 278 U.S. 96, 100, 49 S.Ct (1928), the Supreme Court established that Congress had the power to enact laws governing wildlife on federal lands under the Property Clause. This case implied that there must be a connection between regulating wildlife and protecting federal lands. In New Mexico State Game Commission versus Udall, 410 F 2d 1197, 1201 (1969), the NPS was taken to court for killing mule deer in Carlsbad Caverns without first getting a permit from the state. This case determined that it was immaterial that the United States did not have exclusive jurisdiction over the lands within Carlsbad Caverns National Park. The court ruled that the NPS may manage the wildlife in its units in fulfillment of the Organic Act and unit enabling legislation without the consent of the state and even by means contrary to state law. Therefore, the NPS does not need permits from state government (i.e., the Pennsylvania Game Commission) to manage the

wildlife in the parks. Kleppe versus New Mexico, 426 U.S. S29, 96 S.Ct. 2285 (1976) held that the federal authority to govern wildlife on federal lands extended beyond the Hunt and Udall cases where some connection between the management action and protecting Federal lands was necessary. This ruling by the Supreme Court gave a broad reading to the Property Clause and affirmed the power of Congress to manage wildlife on public lands.

As stated on page 21, under 16 U.S.C. 3, the Secretary of the Interior may provide for the destruction of animals which may be detrimental to the use of any park. This is not in conflict with 16 U.S.C. 414 which covers trespassing for hunting or shooting. National Park Service personnel or their authorized agents charged with the responsibility of reducing the deer population in the parks would not be trespassing and would not be in violation of this statute.

General Response #2: Hunting

Hunting and trapping by any method (archery, muzzleloader, rifle, etc.) are prohibited in units of the National Park System unless specifically authorized by law. Hunting does occur on units that have legislation authorizing hunting. For example, Public Law 81-787 authorized sport hunting by licensed hunters in portions of Grand Teton National Park. Assateague Island National Seashore and Delaware Water Gap National Recreation Area have legislation authorizing hunting in each park's enabling legislation. Gettysburg NMP and Eisenhower NHS do not have legislation specifically authorizing hunting. Gettysburg NMP legislation prohibits hunting, and Eisenhower NHS legislation is silent on the issue. National Rifle Association of America et al. versus J. Craig Potter, Acting Assistant Secretary for Fish and Wildlife and Parks et al. (628 F.Supp. 903 D.D.C. 1986) challenged NPS regulations that forbid hunting and trapping unless specifically authorized by legislation. The NRA argued that these activities should be permitted in parks where legislation is silent on the issue or not specifically prohibited. The court ruled in favor of the NPS that

parks cannot be opened to hunting without legislative authority specifically permitting hunting.

General Response #3: Reproductive Intervention

When the analysis of possible options for alternatives for the draft EIS was begun in late 1993, reproductive intervention was selected as a possible alternative. Reproductive intervention as a tool for deer population management is still in the experimental stage. Research into practical application of chemical contraceptives for managing free-ranging deer populations has not kept up with the progress of the EIS. The current technology is being analyzed and refined and may change by the time FDA approval is granted for use on free-ranging deer. At the present time, we cannot fully evaluate the environmental consequences of this alternative since the technology is still evolving. Therefore, this alternative is rejected at this time and is removed from the preferred alternative (Alternative 5). We will continue to keep informed on the progress of reproductive intervention technology. When it is available for application to manage free-ranging deer populations, we will reevaluate this alternative through the NEPA process for possible inclusion into a management plan.

General Response #4: Cropfield and Woodlot Management

Cropfield and woodlot management objectives have been established for the parks (Appendix C). The "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots" document describes in detail how the cropfields and woodlots are to be managed. The decisions made in this document were approved by the Superintendent and Regional Director. The National Park Service continues to fully support this document and the management decisions made through this document.

The choice of management techniques to maintain the agricultural fields is based on cultural management objectives and cost feasibility to the National Park Service. Maintenance of the cropfields by feasible methods

is a criterion for the parks. Profit is not a criterion for the NPS, but it is for the farm permittees who cannot continue to operate at a loss.

The 293 acres of cropfields on Eisenhower NHS are presently maintained in the historic field sizes and patterns of 1967. The use of modern machinery, which is similar to machinery used during the historic period of 1950-1960, is appropriate for the site.

To be more representative of the 1863 landscape, the 1,548 acres of cropfields on the battlefield could be divided into 75 units of about 20 acres each. The total acreage to manage would still be 1,548 acres. If historic methods, such as horse-drawn plows, were used to maintain the fields, the NPS would have to provide the equipment, animals, and coordination for a large work force. The scope of such a program to maintain 1,548 acres in agricultural crops would not be practical even with free labor. Although non-historic, the use of modern farm machinery in the existing permittee program is more feasible than a public works program to maintain 1,548 acres of agricultural fields. The use of modern machinery requires that fields be larger than their historic size.

OFFICE OF
EXECUTIVE DIRECTOR
717-787-3633

COMMONWEALTH OF PENNSYLVANIA
Pennsylvania Game Commission
2001 ELMERTON AVENUE
HARRISBURG, PA 17110-9797

ADMINISTRATIVE BUREAUS:

ADMINISTRATION	787-5670
AUTOMOTIVE AND PROCUREMENT DIVISION	787-6594
LICENSE DIVISION	787-3084
PERSONNEL DIVISION	787-7838
WILDLIFE MANAGEMENT	787-5529
INFORMATION & EDUCATION	787-6286
LAW ENFORCEMENT	787-6740
LAND MANAGEMENT	787-5818
REAL ESTATE DIVISION	787-6568
MANAGEMENT INFORMATION SYSTEMS	787-4078

1

February 9, 1995

RECEIVED
FEB 13 1995
GETT — EISE

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. #1
Gettysburg, PA 17325

Dear Dr. Latschar:

The purpose of this letter is to provide comments on the Draft Environmental Impact Statement: White-tailed Deer Management Plan (EIS) for the Gettysburg National Military Park and Eisenhower National Historic Site, dated November 1994.

The EIS is comprehensive in its presentation of the complex issues involved with overabundant deer populations and management on national parks. We support basic points of the EIS including that there are too many deer in the park, and that a deer population goal of 25 deer per square mile of forest land in April is an acceptable goal.

We also support most of your choices of deer browsing control alternatives that were eliminated from further consideration. Two exceptions are that public hunting should not have been eliminated, and that reproductive intervention should have been.

It is unfortunate that controlled public hunting is not an alternative because it has been demonstrated repeatedly to be a safe and cost-effective method of controlling overabundant deer populations on special areas. We acknowledge that the EIS documents the illegality of public hunting on Gettysburg National Military Park due to enabling legislation, but disagree with the National Park Service's (NPS) intent to exhaust all other possible alternatives before attempting to change its governing laws, regulations or policies. The intent of enabling legislation to protect wildlife resources was appropriate after the turn of the century when wildlife resources were greatly depleted. However, today it is time to recognize that current NPS laws, regulations and policies are the primary cause of overabundant deer population problems on parks, and that some form of harvest mortality is the only proven effective alternative. Particularly for Eisenhower National Historic Site, where a change in legislation would not be necessary, an alternative of a carefully planned and implemented public hunt would be valuable. a

Reproductive intervention, particularly chemical contraception, is an alternative that is currently not available for application in free-ranging populations, as stated in the EIS. Although much interest and progress have been achieved in the area of chemical contraception, numerous hurdles on such issues as delivery, effectiveness, reversibility, animal welfare, etc., need to be resolved before the Food and Drug Administration (FDA) would approve any technology for application to free-ranging wildlife populations. Considering that FDA approval may be 5-10 years away at the earliest (if ever), and as indicated in the EIS, an effective reproduction intervention program may take 8-10 years to begin to reduce deer populations, this alternative is not an alternative for all practical purposes for making progress in reducing deer populations in the immediate and near future, and should be eliminated from further consideration at this time. b

RESPONSES

PENNSYLVANIA GAME COMMISSION

a. The National Park Service Organic Act of 1916 states that our directive is "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The service has found the act and its related regulations and policies to be as relevant today as when they were written.

b. See General Response #3: Reproductive Intervention.

Regarding the various alternatives, we have the following comments:

1. NO ACTION. We cannot support this alternative because it is irresponsible to avoid taking action in trying to address the serious problems that have been presented, when viable alternatives are available.

2. DEER POPULATION MANAGEMENT. We support the deer population goal and the time frame desired to reach the goal. Of the two methods outlined to manage deer population's, CAPTURE AND TRANSFER (2A) and DIRECT REDUCTION-SHOOTING (2B), we support only the latter. As we have stated previously, and the EIS acknowledges, deer range in Pennsylvania is considered to be fully stocked, and moving deer from Gettysburg to other areas would only move the problem, not solve it. There are high costs and low deer survival rates associated with trap and transfer programs, and unnecessary risks of disease and parasite transmission to deer in areas where relocation occurs. We would not support requests for permits to transfer any trapped deer. Direct reduction through shooting has the greatest potential for safely and effectively controlling deer numbers.

3. REPRODUCTIVE INTERVENTION. This topic was addressed above.

4. COOPERATIVE MANAGEMENT - PRIVATE LANDOWNERS, PENNSYLVANIA GAME COMMISSION, AND NATIONAL PARK SERVICE. The Commission will work with the NPS and private landowners to maintain and increase deer harvests on land outside the park. However, success of such endeavors is contingent upon cooperation by private landowners whose deer management goals may conflict with goals of the NPS.

5. COMBINED MANAGEMENT - A COMBINATION OF ALTERNATIVES 2B, 3 AND 4. We concur that a combination of alternatives should be applied to achieve the most effective solution to the deer population problem. However, for the reasons stated above, including that alternatives 3 and 4 are unproven, and that alternative 3 is illegal and should be eliminated from consideration, we feel that this alternative is little better than alternative 2B.

I only offer one text change in the interest of accuracy. In the Summary, page v, line eight, text should read "The last two (not three) alternatives . . . ," or " . . . under current Federal or (add) Pennsylvania law."

C

c. Correction made.

Overabundant deer populations are causing serious problems on park and surrounding neighbor lands. I offer this agency's continued support in refining and implementing actions to resolve deer management issues at the Gettysburg and Eisenhower parks.

Sincerely,

Donald C. Madl

Donald C. Madl
Executive Director

DCM:RCB:bkb
CC: Sloan, DuBrock, Boyd, Shope, Palmer, Clouser, Haynes

ANIMAL PROTECTION INSTITUTE
P.O. Box 22505, Sacramento, CA 95822 • 2831 Fruitridge Road, Sacramento, CA 95820
1-800-348-PETS • (916) 731-5521 • FAX (916) 731-4467

RECEIVED
JAN 24 1995
GETT — FISE

January 11, 1995

John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Sir:

Speaking for our national membership, the Animal Protection Institute (API) appreciates the opportunity to respond to your proposed deer cull. We are not able to agree with any of the alternatives in the Environmental Impact Statement. We disagree with setting an arbitrary density number as a management objective. a

API adopts an ecological perspective toward wildlife and urge federal land agencies to manage for the ecological balance between the community of wildlife in a given area and their shared habitat. We appreciate the fact that the Gettysburg living monument is an entirely different situation with different objectives than a regular park or multiple-use lands. Still, we look first to habitat condition for both the problems and the solutions to wildlife management issues.

The crop fields in the Monument have been enlarged to accommodate machinery and the cost effectiveness of the farmer permittees. They complain of crop lose to deer. We suggest that you re-consider your crop maintenance program in keeping with 1863 field sizes and equipment. Profit for the few farmer permittees should not be a criteria. We believe a contract between Parks and a minimum security county jail public works program (or youth authority) could be developed to till and harvest crops with horse drawn plows and field workers. This would eliminate the conflict between deer and a cash-crop for local farmers. It would allow you to bring the size of the fields down to their 1863 size. b

Plantings that do not encourage deer can be introduced into the landscape design of the crop fields. In the woodlots we suggest planting and maintaining woody underbrush as browse to help keep deer off the saplings and seedlings you are attempting to establish for interpretive purposes in the Category A woodlots. We note that the narrative depends upon casual observations such as "managers at the parks noticed increasing evidence of deer browsing in woodlots. They believed there were fewer saplings..." Research scientists "believed" the c

API IS A NONPROFIT, TAX-EXEMPT ORGANIZATION.
ALL CONTRIBUTIONS ARE DEDUCTIBLE FOR INCOME AND ESTATE TAX PURPOSES.

RESPONSES

ANIMAL PROTECTION INSTITUTE

a. See Appendix E.

b. See General Response #4: Cropfield and Woodlot Management

c. Deer browsing on saplings and seedlings is more severe during the winter months when there are no other food sources. Under the current population levels, deer are consuming most of the available native seedlings, saplings, and woody underbrush. Plants not preferred or browsed by deer are non-native plants such as Japanese barberry, multiflora rose, and allanthus. These plant species are not native or historic to the battlefield. Planting non-native and non-historic species would be against NPS policy of preserving the accurate presentation of a historic scene.

Providing continuous and sufficient underbrush of native species to keep deer from browsing woodlot seedling and saplings would not be possible because of cost, labor, and the size of the current deer population. Planting more browse would supplement deer food resources and may increase the size of the deer population, but it is unlikely the impacts to other seedlings or crops would be reduced.

scarcity of woody seedlings was due to deer. Storm et al found deer browsing at Gettysburg greater than at Valley Forge and elsewhere. Why? The narrative continues with the statement that current research suggests that regardless of overstory shading "deer are having an effect on herbaceous vegetation." You admit that it is too early to quantify the impacts to the woody vegetation. We believe it is too early to blame deer by setting an arbitrary management number and initiating this cull.

You do not list the community of wildlife that live in the fields and woodlots, particularly the vegetarians that might also cause damage to the seedlings and saplings. We would endorse the introduction of predators such as local coyotes and local red fox as population control to affect fawn survival rates as well as the balance of gray squirrels, rabbits, woodchucks, porcupine, and meadow vole that impact herbacious vegetation.

Most important we support a deer management program in which the determination of an overpopulation is based on monitoring the actual impact of deer on the habitat and what the habitat will carry rather than setting an arbitrary population number as a management objective. When monitoring shows that excess deer exist and no other control alternative is possible, then we believe only specially certified marksmen should be allowed to shoot that number needed to restore the balance as a controlled conservation tool. It is not a "sport hunt." When removing population members as excess, skewing the sex ratio or age structure as a population control measure needs to be justified on biologically sound population-dynamics and gene pool protection principles for the given population under the given circumstances. Managing for an ecological balance is consistent with the National Environmental Policy Act (NEPA) and other federal laws.

To our members and countless Americans across the country wildlife are a national treasure to be protected and cherished. They are our legacy to our children's children. We strongly oppose the USDA's "pest management" program and the attitude that underlies it. We would not support turning a deer cull program over to them. We would encourage the Park Service to either certify your own marksmen or contract with USFW.

If the only option is death by lethal bullet or lethal injection, it must be a swift, humane death without inflicting pain, fear, or suffering. Management practices and activities should not be intrusive, invasive, and interfering but respect the integrity of the wild animal and the intrinsic value of their wildness.

We urge you to review your management objectives for the community of wildlife on your property and seek innovative solutions while pursuing your mandate to provide the country with a living monument.

FOR THE ANIMAL PROTECTION INSTITUTE

Nancy Whitaker

Nancy Whitaker
Director, Public Land Wildlife Division

d

e

f

g

d. The draft EIS is not a research document but an administrative document written for public review. Therefore, it is appropriate to point out observations by park resource managers in the 1970s (page 9) that led to the first inclination by park managers of deer browsing effects. To ascertain the extent of these effects, three fenced exclosures were built in 1985 and three more in 1986 for the scientific research study conducted by Storm et al. (1989). These deer exclosures have been maintained since that time, and monitoring of the vegetation has been ongoing. There is clear evidence of greater numbers of seedlings inside the deer exclosures. Storm et al. (1989) found a higher level of deer browsing in Gettysburg NMP compared to other parks in the east but had no explanation for this occurrence (Gerald Storm, March 21, 1995, phone conversation).

Determining the browsing impacts on woody vegetation from the Bowersox et al. (1992) study is premature, because the vegetation only had two growing seasons. The Storm et al. (1989) study is used to quantify the deer browsing impacts.

e. Red fox are present in the parks (page 54). The presence of coyotes has not been documented in the parks. According to Pennsylvania Game Commission biologist Arnie Hayden, Pennsylvania has 15,000 coyotes and the population is increasing about 10 percent a year (Noonan 1994). Hayden says coyotes find plenty of dead deer, as well as livestock and pets, to eat. Most literature states that predator populations do not reduce prey populations but moderate fluctuations in the prey populations (Connolly 1978).

f. The setting of the deer density goal is directly tied to the management objectives for the cropfields and woodlots (see Appendix E). An acceptable deer population level is based on monitoring the actual impact of deer on the cropfields and woodlots and comparing this data to the management objectives. When the cropfield and woodlot management objectives are met, the deer population will be at an acceptable level. The number of deer these areas can support is not a determining factor.

g. The U.S. Department of Agriculture is not a part of this program.

National Parks
and Conservation Association

NORTHEAST REGIONAL OFFICE

7 February 1995

Dr. John A. Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

The National Parks and Conservation Association (NPCA) appreciates this opportunity to comment on the Draft Environmental Impact Statement/White-Tailed Deer Management Plan at Gettysburg National Military Park and Eisenhower National Historic Site. NPCA is America's only private nonprofit citizen organization dedicated solely to protecting, preserving and enhancing the U.S. National Park System. NPCA has more than 450,00 members, over 25,000 of whom are residents of Pennsylvania.

NPCA conditionally endorses the parks' selection of Alternative 5: Combined Management, as the preferred alternative. While we understand the underlying need for choosing this alternative, we have a number of concerns and questions that should be addressed and clarified in the Final Environmental Impact Statement. Destruction of wildlife in national parks, no matter what the rationale, is an extremely sensitive matter. However, we feel that preservation of the cultural landscape, ie. the agricultural landscape and the historic woodlots, takes precedence over the uninhibited and destructive expansion of the deer population. In light of this, NPCA asks the National Park Service to give the strongest possible justifications for its proposed deer management action and seeks clarification of the following aspects of the Draft EIS: the need and purpose of the proposed action; the selection of sharpshooters; and the timeframe for approval of reproductive intervention methods.

Chapter One: Purpose and Need for Action (Cropfields)
The guide for action is the need to preserve the agricultural nature of the two park units. At Gettysburg, management objectives for the cropfields are already compromised with larger field size than used historically. Despite this necessary compromise, the Agricultural Special Permit Program is a very reasonable alternative given that the most important feature is the agricultural landscape, especially particular crops such as corn.

This being said, Chapter One needs to quantify more clearly the need to reduce the deer population, and stated up front in this chapter should be a more precise assessment of how much crop damage is occurring in the two sites. The Draft EIS does demonstrate need to some extent, except that it is diluted across the chapters of the document and is not quantified directly in any one section. The text of Chapter One says that more than 15 percent damage has occurred over the past five years on approximately 900 acres (pps 12,13). The text somewhat obliquely indicates that this is about one half of the total acreage (1841) maintained as cropland between the two sites. However, it is not until Chapter Four, Enviromental

a

Northeast Regional Office
P.O. Box 382372, Cambridge, MA 02238-2372
Tel: (617) 354-8940 • Fax: (617) 354-8635

National Office
1776 Mass. Ave., N.W., Washington, D.C. 20036
Tel: (202) 223-6722 • Fax: (202) 659-0650

PRINTED ON RECYCLED PAPER

RESPONSES

NATIONAL PARKS AND CONSERVATION ASSOCIATION

a. As stated on page 12, corn has not been grown on the southern portion of Gettysburg NMP since 1986 and on Eisenhower NHS since 1989. In these areas, corn had traditionally been grown on approximately 470 acres. For several years prior to those dates, over 50 percent of the corn in these fields was consumed by deer. Corn grown in a 3-acre demonstration plot on Eisenhower NHS in 1990 and on Gettysburg NMP in 1994 was completely eaten by deer. Milo (i.e., sorghum) that was planted on 150 acres as a replacement for the corn suffered losses of over 40 percent in 1992 and 1993.

Consequences. (p72) where it states "Cropfields. particularly in Eisenhower NHS and the southern section of Gettysburg NP. would continue to have less then 75 percent of the plants in a field reach maturity." if no action is taken that we understand that crop damage to be not just "more than 15 percent." but much more. The National Park Service should more succinctly quantify the need for selecting its preferred alternative by stating more concisely the extent of crop damage over the past several years and the percenatage of the cropfields affected.

Chapter Two: Alternatives

Direct Reduction

Our second concern is the selection of sharpshooters and the need for the Park Service to define "authorized agents" (p.34.) The Draft EIS is not precise about who will be sharpshooters and how they will be chosen. The final EIS needs to define who will be choosen and how. NPCA feels strongly that the sharpshooters should be wildlife experts and that they should not be private citizen hunters deputized to carry out the work. no matter what their level of expertise and marksmanship. In no way should the implementation of this management action create the expectation that the sites will be open to hunters in the future regardless of the context for their presence. This action is not being proposed as a benefit to the hunting community. rather it is first and foremost to preserve the cultural resources of the two park units. The possible creation of future expectations on the part of hunters may seem an unlikely scenario in the specific instance of Gettysburg and Eisenhower sites. but this may not be case in other national park units. NPCA feels, therefore. that from a national perspective. that the sharpshooters should not be deputized hunters in order not to create expectations in any national park units where such expectations are inappropriate.

Reproductive Intervention

The description of Alternative 3: Reproductive Intervention and the preferred alternative, Alternative 5: Combined Management do not outline any estimated time frame for the FDA approval of steroids or immunocontraceptives for human consumption. We understand that this is very difficult to estimate, but a "best guess" would be more informative and give us a better understanding of the length of time it may be before this alternative could be used and what the resulting damage to the historic woodlots and cropfields due to continued deer browsing would be during that time period.

In addition. when FDA approval does takes place and the National Park Service intends to introduce this action into its deer management program, park management needs to do some kind of public announcement to let the greater community know. An outline of a process for public notification should be included in the final EIS/Management Plan.

NPCA agrees that NPS management policies allow for the destruction of wildlife in Gettysburg and Eisenhower sites in this instance. Our conditional support for this action should in no way be construed as support for hunting in the park units, or for opening up the park units in the future for hunting. Likewise, NPCA will not support any change to the authorizing legislation to allow hunting at the sites. Hunting, as emphasized in the Draft EIS/Deer Management Plan, is clearly in appropriate at the Gettysburg and Eisenhower sites. Further, NPCA urges the National Park Service to pursue to the fullest extent possible the coordinated management strategy outlined in Alternative 4 and incorporated into Alternative 5, the preferred alternative. By actively encouraging coordinated and "controlled" public hunting, the Park Service may be able to lessen the need for direct reduction on park lands.

NPCA looks forward to supporting Gettysburg National Military Park and Eisenhower National Historic Site in its implementation of the deer management plan. The cropfields and woodlots are not only important to the interpretation of the Battle of Gettysburg and President Eisenhower's tenure there, they are also a window into a way of life that is quickly disappearing in America. NPCA offers its assistance preserving and enhancing this window for future generations.

Thank you for your consideration of these comments. If you have any questions about them. please feel free to call me at 617/354-8940.

Yours,

Eileen Woodford
Northeast Regional Director

b

b. Authorized agents may include NPS personnel, personnel from other federal agencies, or private contractors. Who will be chosen and how they will be chosen will be defined in the action plan if this alternative is selected as the final alternative in the Record of Decision.

c

c. See General Response #3 Reproductive Intervention.

PENNSYLVANIA SPORTSMEN FOR THE DISABLED, INC.
R.D. #1, BOX 470, NEW ALEXANDRIA, PA 15670-9240
(412) 668-7439 or (412) 539-3095

RECEIVED
FEB 10 1995
GETT — EISE

Dr. John Latschar, Superintendent
Gettysburg Nat'l Military Park
R.D. #1
Gettsyburg, PA 17325

Dear Dr. Latschar:

I am writing to you on behalf of the membership of PA Sportsmen For The Disabled, Inc. concerning your request for public input regarding the proposed deer management plan at Gettysburg National Military Park and the surrounding area. PA Sportsmen For The Disabled, Inc. (PSFTD) is a statewide organization comprised of both physically challenged and able-bodied men, women and children. One of the primary purposes of PSFTD is to secure accessible outdoor recreation opportunities and facilities for use by all physically challenged, disabled and blind individuals in Pennsylvania.

The need to reduce the deer herd in and around Gettysburg National Military Park to a manageable number can provide an accessible outdoor recreation opportunity to the physically challenged hunters of this state while helping you to meet your objective of reducing the number of deer in and around the park. The following ideas on ways to include physically challenged hunters in your overall management plan come from the PSFTD membership and are only a couple of suggestions for you to consider. We feel sure that there are other ideas available should you need them for consideration.

One suggestion is to allow physically challenged hunters who have a permit to shoot from their vehicle (use vehicle as a blind permit) and have an unfilled deer tag, either antlered (statewide) or antlerless (county specific, but for this any county) to try to fill that tag by harvesting a deer from within the park under the supervision of park personnel during the extended hunting season which takes place after Christmas. At this time of the year visitors to the park are at a minimum and the physically challenged hunters ability to use their vehicle would minimize the threat of exposure or frostbite to the qualifying hunter, while reducing drastically the risk of frightening the deer with the hunters scent and/or presence.

Your park personnel would select the areas within the park where this hunting would take place and they would accompany the physically challenged hunters to insure maximum safety. The hunters would obey all regulations imposed for this hunt and they would be required to apply in advance for the opportunity to participate in the hunt at the

RESPONSES

PENNSYLVANIA SPORTSMEN FOR THE DISABLED

a

a. See General Response #2: Hunting.

PENNSYLVANIA SPORTSMEN FOR THE DISABLED, INC.
R.D. #1, BOX 470, NEW ALEXANDRIA, PA 15670-9240
(412) 668-7439 or (412) 539-3095

park. The park personnel would notify the successful applicants of the date, time and place to meet the park personnel for the hunt. This type of a hunt would allow you to fully regulate how many hunters per day were in the park and where the hunters would be stationed for their hunt on any given day.

Another suggestion was for a special hunt by physically challenged people to take place the last week of September and/or the first week of October and allow those hunters to use firearms on the farms surrounding the park and the Eisenhower farm. The physically challenged hunters who would qualify for this hunt would be those possessing either a permit to shoot from their vehicle (use vehicle as a blind) or a crossbow permit Again a waiver of needing an antlerless license for that specific county where these farms are located would need to be given and instead the deer tag on the regular hunting license (antlered deer tag) would be used to tag a deer of either sex which was legally harvested on one of these farms.

This type of a hunt would eliminate the problems associated with a late season hunt in the park as far as cold weather and the physically challenged hunters are concerned, but in my opinion it would also be much harder to regulate and get the necessary approvals from the Pennsylvania Game Commission on the antlerless permit waiver and the use of firearms at this time in the hunting season (archery season).

Whatever proposal the park service approves for reducing the deer herd to manageable numbers on the Dwight D. Eisenhower farm, Gettysburg National Military Park and the farms surrounding these properties PSFTD feels certain that every opportunity to include the physically challenged hunters of this state, along with the able-bodied hunters, will be included in that final plan. PSFTD is hopeful that by having all concerned parties work together to achieve this goal the outcome will be one that satisfies everyone.

PSFTD thanks you for the opportunity to provide you with our organization's suggestions which can benefit both you and the physically challenged hunters of Pennsylvania. Feel free to contact PSFTD at the address and/or telephone numbers listed at the top of this letter.

Respectfully yours,

Harry B. Miller

Harry B. Miller, President
PA Sportsmen For The Disabled, Inc

5

NATIONAL RIFLE ASSOCIATION OF AMERICA
INSTITUTE FOR LEGISLATIVE ACTION
11250 WAPLES MILL ROAD
FAIRFAX, VA 22030-7400

RECEIVED
FEB 13 1995
GETT — EISE

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taney Town Road
Gettysburg, PA 17325

February 10, 1995

Dear Dr. Latschar:

The National Rifle Association of America (NRA) appreciates the opportunity to comment on the Draft Environmental Impact Statement (DEIS) entitled " White-Tailed Deer Management Plan" for the Gettysburg National Military Park and the Eisenhower National Historic Site.

The NRA has historically been concerned about the management of various ungulate populations on numerous National Park Service (NPS) units. Although the constraint of legislative mandates has been used as the reason for the inability of NPS units to effectively manage ungulate populations, it appears that the constraint is not a legislative, but a public relations problem. Regardless, the lack of implementing a management program for these ungulate populations has resulted in the NPS not fulfilling a principle legislative mandate of the NPS Organic Act of 1916 which states that the Secretary shall promote and regulate the use of NPS lands " by such means and measures to conform to the fundamental purposes of said parks, monuments, and reservations which purpose is to conserve the natural and historic objects and wildlife therein ...."

The NRA views this Environmental Impact Statement (EIS) process as an important step in developing a NPS policy for future management of these wildlife conflicts on NPS units. To that end, we are justifiably concerned that the DEIS is woefully deficient in its examination of the background information fundamental to the DEIS process, the alternatives identified, and the evaluation of the identified alternatives. We believe the deficiencies as addressed below are of such significance as to warrant the publication of a revised DEIS for subsequent review and comment.

Concerning background information, in Section 1.7 "Policy and Legal Compliance" it is stipulated that an EIS "be prepared for proposed federal actions that ... are a major or controversial federal action." A review of Section 102 (2) (c) of the National Environmental Policy Act of 1969 does not state this as a reason an EIS must be developed. Clarification is needed in a revised DEIS as to the origins of this requirement for the development of an EIS. Also, in Section 1.7 no reference is made to Title 16 U.S.C. 414 which states that " Every person who ...shall hunt any kind of game thereon [national military parks] with gun or dog ... for the purpose of hunting or catching game of any kind shall be guilty of a misdemeanor, punishable ...by both fine and imprisonment." The NRA supports inclusion and discussion of 16 U.S.C. 414 and its implications to the alternatives in a revised DEIS. Also the DEIS claims the NPS has the authority to "manage the wildlife of the parks... without the consent of the state and... contrary to state law". The citation is confusing, is it CFR 36, Chapter I or 16 U.S.C. 3? The NRA cannot locate this reference in either citation. Further, in Section 1.7 the DEIS states that the Redwood National Park Act of 1978 mandates that, " All National Park System units be managed and protected as parks." The Act's language does not support this interpretation.

Additionally, a review of ongoing or proposed hunts of any type on NPS lands should be included in the revised DEIS. This review should include, but not necessarily be limited to, what type of NPS lands hunts occur on, legal authority to

a

RESPONSES

NATIONAL RIFLE ASSOCIATION OF AMERICA

a. Corrections have been made to Section 1.7 Policy and Legal Compliance.

allow for the hunts, species hunted, management objectives, type of hunt (public controlled public, NPS personnel or designated agents). Examples of park units that should be included in the [illegible] are Hawaii Volcanoes National Park, Grand Tetons National Park and the Olympic National Park.

b

b. See General Response #2: Hunting.

As presented in the DEIS the Preferred Alternative involves "a combination of National Park Service personnel or authorized agents shooting deer in the parks (Alternative 2B) and public hunting outside the parks (Alternative 4)" to reduce the deer population. Once the deer population is reduced to this density, the Alternative allows for reproductive intervention (Alternative 3) to be used to maintain the deer population at or near the predetermined density." The NRA assumes the Preferred Alternative is legally based on the Secretary's broad discretionary powers as allowed for under the 1916 NPS Organic Act. It was determined as a result of a court case (National Wildlife Federation v. National Park Service, D. Wyo. 1987, 669 F. Supp.384.) that the " National Park Service has broad discretion in determining which avenues best achieve the Act's mandate (16 U.S.C. 3, pg 151)."

Regardless of the legal justification, it appears that a direct reduction of the deer on the Gettysburg National Military Park by anyone, including park personnel or their designated agents, will be in conflict with 16 U.S.C. 414, as referenced earlier in these comments. Interestingly enough, 16 U.S.C. 414 makes no mention of a prohibition against archery hunting and this option should be examined in a revised DEIS alternative.

c

c. See General Response #1: NPS Legislative Authority.

d

d. See General Response #2: Hunting.

The inclusion of reproductive intervention (Alternative 3) in the Preferred Alternative is misleading to the public. While particular techniques or agents may at this time be "promising", steroids or immunocontraceptives which have not been approved for use on free ranging deer should not be included. Only after reproductive intervention techniques have been approved for use should they be evaluated in their own EIS to establish their potential applicability to free-ranging deer herds on publicly-owned lands and wildlife. In his 1992 paper entitled "Control of Deer and Feral Horse Populations in Eastern U.S. National Parks", R.J. Warren, a leading expert in the experimental field of immunocontraception states "There are several possible limitations to the use of contraceptives in controlling free-ranging deer. A population control technique must be logistically feasible and cost-efficient to implement, and it must be effective at the population level. The number of deer that reside in a particular park is not only dependant on the population's reproductive rate, but also reflects mortality rate, immigration rate and emigration rate. In other words, national park managers may be effective in reducing deer reproductive rates in a particular park, but the reduced fertility may be offset by increased movements by deer from surrounding areas into the park, with no net reduction in the population being the result." Additionally, there remain questions concerning the long-term genetic effects of the use of immunocontraceptives on a treated population.

e

e. See General Response #3: Reproductive Intervention.

Including Alternative 4 in the Preferred Alternative is also premature. There is no evidence of consultation with the Pennsylvania Game Commission or the surrounding and adjacent landowners to ascertain if this Alternative is a viable option.

f

f. The National Park Service consulted with the Pennsylvania Game Commission regarding the feasibility of all the alternatives. Park personnel contacted some nearby private landowners to discuss the possibility of cooperative management (Alternative 4). We determined Alternative 4 to be a viable option through these meetings.

The lack of examining viable alternatives renders this DEIS incomplete. The NRA proposes the examination of other Alternatives in a revised DEIS. The Organic Act of 1916 specifically empowers the Secretary to "provide in his discretion for the destruction of such animals...as may be detrimental to the use of any of said parks, monuments, or reservations" (16 U.S.C. 3). In addition, NPS policy allows for the control of native species when they occur in unnatural concentrations or meet the criteria of a pest. Under these circumstances, populations may be controlled to "preserve the historical integrity of cultural resources" (NPS Management Policies, 1988). The negative impact of the deer on the "historical integrity of the cultural resources" has been well documented through the use of deer exclosures.

Therefore, the NRA supports the inclusion of an Alternative in a revised DEIS that examines what the Secretary could authorize to manage this problem as it pertains to the broad powers of the Secretary in such a situation (16 U.S.C. 3). For example, is the Secretary authorized to allow for a controlled public hunt on Eisenhower, but not Gettysburg, due to a conflict with 16 U.S.C. 414?

g

g. See General Response #2 Hunting.

The DEIS did not seriously consider the option of controlled public hunting on the park lands. Conflict with Gettysburg's enabling legislation and the addition of a regulation to the Code of Federal Regulations (CFR) were stated as reasons for dismissing this as a viable Alternative. A review of Gettysburg enabling legislation (16 U.S.C. 430g. thru 430g-9) does not reveal this conflict. As shown at Hawaii Volcanoes National Park, the Park Superintendent utilized his authority under the CFR to designate individuals from the public to hunt on park lands to achieve management objectives. The "deputizing" of hunters to control elk in Grand Teton National Park is an example of where a minor legislative change has allowed for a controlled public hunt to achieve management objectives. h i

Additionally, the NRA feels it is important that any deer management actions taken should be designated as "experimental", and that the NPS carefully define how the success of the deer management program will be measured. j

Finally, the NPS needs to be more aggressive in addressing wildlife management issues on the national level. The NPS has identified forty-nine park units in five regions which have possible management conflicts with white-tailed deer. Additional park units have populations of elk, bison, mountain goats and feral pigs which also conflict with management objectives. It is important that the NPS begin to recognize the necessity of active and long-term wildlife management to protect the ecological and cultural aspects of the parks.

In conclusion, we believe that the NPS and the public will be better served by revising the DEIS to correct the deficiencies as described above. A reanalysis of the existing and suggested alternatives would also be of benefit to other NPS units facing similar wildlife conflicts.

Sincerely,

Susan E. Lamson
Director, Conservation, Wildlife and
Natural Resources Division

Richard L. DeChambeau
Director, Hunter Services Division

h. See the full enabling legislation (Sec. 7) for Gettysburg NMP dated February 1, 1895 which prohibits hunting.

i. Deputized hunters are used on Hawaii Volcanoes National Park as part of an exotic species extermination program.

j. We disagree with the need to designate the action as experimental, because the management action can be regulated. We will continue to monitor the deer population, cropfields, and woodlots. Success will be met when park management objectives for the cropfields and woodlots are met.

OFFICERS
O. J. Ramsey, Esq.
Chairman of the Board
Coleman Burke, Esq.
Chairman Emeritus
David O. Wiebers, M.D.
Vice Chairman
Amy Freeman Lee, LHD.
Secretary
John A. Hoyt
Chief Executive
Paul G. Irwin
President
G. Thomas Waite III
Treasurer
Patricia Forkan
Executive Vice President
Roger A. Kindler, Esq.
Vice President/General Counsel
SENIOR VICE PRESIDENTS
Richard M. Clugston, Ph.D.
Higher Education
Michael W. Fox, D.Sc., Ph.D., B. Vet. Med., MRCVS
Farm Animals and Bioethics
John W. Grandy, Ph.D.
Wildlife and Habitat Protection
Randall Lockwood, Ph.D.
Training Initiatives
Wayne Pacelle
Government Affairs and Media
Deborah J. Salem
Publications
Martin L. Stephens, Ph.D.
Laboratory Animals
Kenneth D. White
Companion Animals and Field Services
David K. Wills
Investigations
Murdaugh Stuart Madden, Esq.
Senior Counsel
DIRECTORS
H. L. (Sonny) Bloch
Donald W. Cashen
Anita W. Coupe, Esq.
Judi Friedman
Harold H. Gardiner
Alice R. Garey
Jane Goodall, Ph.D.
Jennifer Leaning, M.D.
Amy Freeman Lee, LHD.
Eugene W. Lorenz
Jack W. Lydman
Virginia B. Lynch
William F. Mancuso
Thomas L. Mainhardt
O. J. Ramsey, Esq.
James D. Ross
Marilyn G. Seyler
John E. Taft
Carroll S. Thrift
Robert F. Welborn, Esq.
David O. Wiebers, M.D.
Marilyn E. Wilhelm
K. William Wiseman

Printed on recycled paper

RECEIVED
FEB 15 19
GETT

February 10, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17235

Dear Dr. Latschar:

On behalf of The Humane Society of the United States (HSUS) and its 2.3 million members and constituents, I write to comment on the Draft Environmental Impact Statement (Draft) on the White-Tailed Deer Management Plan for Gettysburg National Military Park (GNMP) and the Eisenhower National Historic Site (ENHS)(Parks).

For over a decade, The HSUS, which is the largest animal protection organization in the nation, has provided advice and technical assistance to communities and agencies confronting deer management dilemmas. In pursuit of our mission to prevent cruelty and needless animal suffering, we have promoted the use of humane, non-lethal methods for resolving conflicts between wildlife and people. We currently collaborate with the National Park Service (NPS) on three projects, at Assateague Island and Fire Island National Seashores and Virgin Islands National Park, developing innovative, humane methods of population control for deer and other free-ranging animals. And, consistent with our mission, The HSUS strongly opposes lethal management of deer except as a last resort, when all non-lethal alternatives have been tried and proven inadequate.

In our view, the Draft fails to adequately consider non-lethal approaches to managing deer impacts. Rather, by narrowing its scope to the direct management of deer populations, the Draft has arbitrarily limited the choices it presents to decision makers. The NPS's zeal to reduce the Parks' deer population is blocking rational consideration of all alternatives, including alternatives that we believe would be more consistent with park management objectives and visitor satisfaction.

The HSUS believes that implementation of the Draft's Preferred Alternative, which demands the lethal reduction of the Parks' deer population by more than 90%, would be unsafe, unwise, and harmful to the Parks' image and mission. The proposed action would raise deer killing to prominence as the NPS's principal and most visible management activity in the Parks for the next three to five years. In our

The Humane Society of the United States
2100 L Street, NW, Washington, DC 20037
(202) 452-1100 FAX (202) 778-6132

view, however, the deer kill is designed more to preserve the Parks' subsidized agricultural lease program than to enrich the historical perspective achieved by park visitors. The HSUS maintains that this is no way to run a unit of the NPS, especially one dedicated to interpreting America's bloodiest battle. There has been enough bloodshed already at Gettysburg.

The HSUS recommends that the NPS instead develop and adopt a comprehensive landscape management plan as its preferred alternative. Selective use of electric fencing, restoration of historic land use patterns and natural topography on the battlefield, and management of woodlots through selective cutting and use of temporary barriers to protect seedlings will achieve park management objectives at lower cost and with less disruption than the massive deer kill proposed by the NPS. Implementing such a plan will also reduce the biological carrying capacity for deer in the park area, thus permanently reducing the deer population.

The Draft identifies two main concerns with white-tailed deer. These are crop damage on fields leased to private farmers, and browsing damage to historic woodlots. Deer-vehicle collisions are also raised as a secondary issue. I discuss each below.

Crop Damage

Under the Agricultural Special Use Permit program, the NPS has leased lands at GNMP and ENHS to farmers who raise crops for profit. According to the Draft, crop damage by deer at ENHS and the southern section of GNMP has become so severe that permittees have threatened to withdraw (p. 13 and elsewhere). Such a withdrawal would force the NPS to find alternative means to maintain those lands in a manner consistent with park objectives.

a

According to the Draft, the practice of modern agriculture by permittees has radically altered the historic battlefield topography (p. 11). Small, traditional agricultural fields have been consolidated through elimination of historic fencelines. Natural drainages have been eradicated with grading, contour plowing, and construction of tile fields. In short, the prospect presented to the modern visitor in no way resembles that experienced by Confederate and Union soldiers in 1863. The intensity of NPS's concern with the height, texture, and color of crops is completely inconsistent with the agency's relative indifference to the important physical features of the battlefield. It is hard to imagine that the soldiers crossing those cropfields in July 1863 were more concerned with what crop they were trampling than with approaching a fence that might expose them to enemy fire or reaching a slope that might shelter them.

In our view, consistent and accurate interpretation of the battlefield scene requires that the NPS end the use of modern agricultural practices on all battlefield areas in GNMP. The NPS should restore historic fencelines and field sizes, as well as natural drainage patterns. If the NPS is committed to maintaining field crops such as wheat, oats,

a. See General Response #4: Cropfield and Woodlot Management.

barley, rye, and corn, these crops should be raised either by the NPS, by contractors, or by volunteers, following mid-19th century land-use patterns. Alternatively, the fields could be planted with a mosaic of native grasses and hay crops; varieties could be selected for their structural similarity to various field crops. Both strategies would provide a richer and more historically accurate vista to GNMP visitors; the latter approach would also require little maintenance (periodic mowing, which can be scheduled to preserve an appearance typical of crops in early July), and reduce the quality of forage available to deer.

ENHS presents a different problem. The continuation of "modern" agricultural practices are a principal management goal of this historic site. Because it covers a much smaller area than GNMP, however, the construction and maintenance of electric fencing becomes practical and cost effective, with initial installation costs on the order of $53,000, and subsequent maintenance costs of about $8,600 per year (pp. 125-126). Consequently, The HSUS recommends the use of such fencing to exclude deer from field crops at ENHS. This will allow profitable agriculture to continue, and reduce the amount of high quality forage available to deer.

b

Woodlot Browse Damage

The NPS is concerned with the maintenance of understory tree densities in three woodlots associated with battle action at GNMP, and with woodlot regeneration. Specific species composition is considered a secondary objective (p. 10).

Reduction of deer numbers accomplished through elimination or protection of field crops (above) will help moderate the impact of deer browse on woodlot understories. Additional mitigation could be provided by selective removal of canopy trees to open light gaps; temporary fencing within selected woodlots to exclude deer; and temporary use of tree shelters to protect desirable seedlings and saplings such as oaks.

Other Benefits of a Landscape Management Plan

Reduction of food available to deer should provide a slow but permanent reduction in the Gettysburg-area deer population. This population reduction will improve safety in two ways. First, the frequency of deer-vehicle collisions will be reduced. Additional improvements in traffic safety could and should be achieved by vigorous enforcement of speed limits within the Parks. As in other units managed by the NPS, the primary responsibility for not harming park wildlife and other resources should lie with the visitors. A smaller deer population should also reduce the attractiveness of the site to poachers, thereby further protecting park visitors, local residents, and passersby.

Ending modern agricultural practices at GNMP will reduce applications of pesticides and fertilizers on Park lands and thereby improve water quality and reduce undesirable runoff into the Chesapeake Bay drainage.

b. See page 28 regarding fencing.

Finally, approaching the deer question through a landscape management plan will spare the Park the cost and controversy that will undoubtedly plague attempts to implement the current Preferred Alternative.

Likely Impacts of the Preferred Alternative

Given the limited resources available to the NPS, the agency's eagerness to pursue an expensive, controversial, and needless deer reduction program appears senseless.

According to the Draft, implementing the deer reduction program will require the intermittent closure of significant portions of the Parks for seven months in at least three consecutive years (p. 82). Some of these closures would occur during periods (October and April) of high visitation. Thus, visitor use would be significantly curtailed. c

According to the NPS estimate, a minimum of 387 deer would be shot in the first year alone, with comparably high numbers in each of the following two to four years (p. 176). (This estimate optimistically assumes that an additional 387 would be removed by hunting outside the Parks.) These deer would be shot with high-powered rifles, which are dangerous at distances of a mile or more, in a park traversed by highways and roads and dotted with private residences and commercial facilities. Adequately patrolling these areas during shooting sessions will be difficult to impossible. The official shooting program will also offer poachers additional opportunities to shoot deer in and around the Parks, endangering residents without necessarily arousing their suspicion. Finally, the shooting program may aggravate conflicts between the NPS and private landowners within and surrounding the Parks. d

The Draft almost surely underestimates the costs of the direct reduction. Enforcement is allocated $30,300 during the reduction phase (p. 176). By way of comparison, Monroe County, New York, and the New York State Department of Environmental Conservation collectively spent $9,700 for law enforcement in a 1993 bait-and-shoot in the 965-acre Durand-Eastman Park. This bait-and-shoot was carried out in five days of shooting over a one month period; 80 deer were removed. Extrapolating these costs to GNMP and ENHS using area, time spent shooting, or number of deer removed yields enforcement cost estimates ranging from $47,000 to $68,000, 55% to 125% above NPS estimates. e

The cost estimate also insufficiently accounts for transportation, processing, and inspection of carcasses, since these are excluded from two estimates used to calculate average costs. Excluding these two estimates produces an average per deer cost of $222.80 (vs. the $176 used in the draft). This adds $18,000 more to the annual cost of the direct reduction. f

Under these more realistic assumptions, the total annual cost of the reduction phase would range between $166,000 and $187,000, 64% to 85% above NPS estimates.

c. The text on page 82 has been changed to reflect that portions of the parks may be closed to visitors during the seven-month period. Most of the shooting would occur in November, December, and January (page 34) which is a time of low visitation. Page 34 also discusses the closure of Eisenhower NHS during those months. If the action is conducted when the parks are closed or on side roads and avenues between 10 p.m. and 6 a.m., no curtailment of visitor use would occur (page 55). In addition, most park visitors during that time of year remain in buildings or vehicles. For these reasons, any access restrictions imposed would not be expected to significantly impact visitor use.

d. The 773 deer referenced (387 shot in the parks and 386 taken by hunters outside the parks) is the total number to be removed from the parks using the 1994 mean population estimate minus the predetermined density. The total number of deer to be removed (773) was used to simplify the cost estimates of each alternative (page 163) by assuming the predetermined density would be reached in one year. In actuality, the predetermined density could likely not be reached in one year. We believe an average annual reduction of about 40 percent of the population over three years would be required to reduce the population to the predetermined density in three years (page 31).

e. Making cost comparisons with other agency or organization programs is difficult. We believe the enforcement cost estimates, as reported in the EIS, are practical for the parks.

f. As stated on page 163, the estimates are minimum costs associated with each alternative. In addition, page 164 states that no attempts were made to adjust the costs reported in the studies for comparison purposes. To do this would have required compensating for wage differences and current (1995) costs for equipment and transportation.

If public hunting outside the park is ineffective at reducing the Park population, and it proved necessary to remove 774 deer during the reduction phase (Alternative 2B), those numbers would rise to $240,000-$288,000. Note also that if annual reduction targets were not met, the reduction phase would be prolonged. This is a great deal of money for the NPS to spend in the current austere fiscal climate. g

Finally, the recommended population size target, 30 deer for the entire GNMP/ENHS complex, would produce such a low density as to make the animals functionally invisible to visitors. This loss would significantly diminish the experience of the many Park visitors who seek wildlife-viewing opportunities. h

Thank you for carefully considering our concerns.

Sincerely,

Allen T. Rutberg, Ph.D.
Senior Scientist
Wildlife and Habitat Protection

cc: Philip Brueck, Acting Director, Mid-Atlantic Region
Roger G. Kennedy, Director, National Park Service
George Frampton, Assistant Secretary for Fish, Wildlife, and Parks

g. If public hunting outside the parks was not effective, more deer would need to be killed in the parks. This would greatly increase the cost. If public hunting outside the parks was very effective, however, fewer deer would need to be killed in the parks. This would greatly decrease the cost.

h. Enhancing wildlife viewing opportunities is not a stated purpose of the parks.

Wildlife Management Institute

1101 14th Street, N.W. • Suite 801 • Washington, D.C. 20005
Phone (202) 371-1808 • FAX (202) 408-5059

ROLLIN D. SPARROWE
President
LONNIE L. WILLIAMSON
Vice-President
RICHARD E. McCABE
Secretary

Northeast Regional Office
Box 587 Spur Road
Stratford, NH 03590

RECEIVED
FEB 13 1995
SETT — EISE

February 8, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

The Wildlife Management Institute (WMI) was created in 1911 to promote the restoration, sound management and wise use of natural resources in North America. WMI staff have carefully reviewed the Draft Environmental Impact Statement (DEIS) for White-tailed Deer Management on the Gettysburg National Military Park and Eisenhower National Historic Site. As Northeastern Field Representative, I am coordinating the WMI response. We appreciate the opportunity to comment.

The National Park Service has correctly identified high densities of white-tailed deer as a significant threat to the vegetative community desired for the parks. To maintain the historical occurrence and distribution of vegetation, deer density must be lowered to and maintained at some threshold density. The DEIS states that 25 deer per square mile is the initial, i.e. experimental, desired threshold density. WMI believes that the stated initial deer density goal may be too high to allow revegetation of woodlots, but agrees with the experimental approach to management. If desired vegetative communities do not respond under pressure from 25 deer per square mile, further population reduction should be initiated as soon as possible. The DEIS does not include detail on the vegetative monitoring strategy that would be used to evaluate the impact of lower deer densities on vegetation. We assume that criteria have been developed that assess regeneration stocking level for the woodlots and acceptable agricultural depredation. Please include in the final EIS detail on your criteria for acceptable deer damage thresholds and on the manner in which you will monitor vegetation. a

Five alternatives representing six management actions are presented: (1) no action, (2) deer population management through capture and transfer, (3) deer population management through shooting, (4) reproductive intervention, (5) cooperative management and (6) the preferred alternative which is a combination of (3), (4) and (5).

WILDLIFE MANAGEMENT INSTITUTE

a. The methodology for monitoring the woodlot vegetation is discussed in Storm et al. (1989), pages 198-199. Criteria for acceptable regeneration is discussed in the woodlot management objectives (Appendix C). Crop success is measured by weight of harvest per acre and is compared to the Adams County average and standards set by the USDA.

ALTERNATIVE 1

The no action alternative would clearly continue the degradation of vegetation on the parks and WMI agrees with the exclusion of this alternative.

ALTERNATIVE 2A

Deer population management through capture and transfer would contribute to deer overpopulation problems in other parts of Pennsylvania. WMI agrees with the assessment of the Pennsylvania Game Commission that all suitable areas of white-tailed deer range are occupied at present and would thus be poor candidates for transplantation of park deer.

ALTERNATIVE 2B

Deer population management through shooting is a component of the National Park Service preferred alternative and WMI agrees that the action proposed would be an efficient method of population reduction and control. WMI understands that the enabling legislation outlawed hunting on the Gettysburg National Military Park and does not specifically condone hunting on the Eisenhower National Historic Site. We do not agree, however, with the decision to not evaluate controlled public hunting as a full alternative because of the lack of this legislative authority. Hunting can stand on its own as a viable alternative. If controlled public hunting is shown to be the best alternative, we trust that the National Park Service would then be able to enter the legislative arena for amendments to the enabling legislation backed up by a scientific evaluation of the merits of a public hunting program and a complete assessment of environmental impacts. If hunting is not shown to be the best alternative, future evaluations of deer management actions on Gettysburg and other National Parks would be better served. To not treat controlled public hunting as a full alternative ignores the numerous examples of successful deer management programs using controlled public hunts on socially sensitive areas like parks, arboretums, natural areas, watersheds, etc. Controlled public hunting is also cost-efficient and would save the National Park Service at least $147,000 during the reduction phase (DEIS Appendix I).

We sense some confusion regarding who would be the shooters in a direct reduction program. The DEIS speaks to NPS employees, but references were made at the public information meeting on January 7, 1995 towards the allowance of public volunteers. Please provide more detail in the final EIS on this issue.

b

Regardless of who does the shooting, population reduction should be targeted towards specific goals. The only goal stated in the DEIS was to lower deer numbers to an initial density of 25 deer per square mile. We suggest the following expectations should be considered within the context of the population reduction.

1. Deer population management through shooting should result in a deer population structure that would maximize dispersal and facilitate harvest on areas surrounding the parks.

c

b. Authorized agents may include NPS personnel, personnel from other federal agencies, or private contractors. Who will be chosen and how they will be chosen will be defined in the action plan if this alternative is selected as the final alternative in the Record of Decision. The discussion of volunteers at the January 7, 1995, public meeting referred to a formal "Volunteers in Parks" program which converts volunteers into non-salaried NPS employees.

c. The parks' goals are to meet the cropfields and woodlot management objectives. The deer density goal is directly tied to these goals (Appendix E).

2. Deer population management through shooting should result in a deer population structure that would minimize annual recruitment and in so doing minimize annual harvest requirements.

3. Because the public assigns a positive value to seeing mature antlered male deer, deer population management through shooting should result in a population structure characterized by an older age distribution in males.

A population model (available on request) was created to mimic the dynamics of the park deer population. The model tracks for each sex and age class all harvest and non-harvest mortality and natality. Model parameters were based on personal experience or were gleaned from the DEIS or from Pennsylvania Game Commission statistics. The pre-management park population was approximated by setting model parameters to produce ten years of a stable population numbering 850 deer. Non-harvest mortality within this population numbered 250 animals per year (see DEIS Appendix G). Sex ratio was 6:1 (DEIS page 36). Reproductive rates reflected deer populations in the Gettysburg area (DEIS page 50). With the above expectations in mind, and with the desired goal of lowering the population to 25 deer per square mile, various harvest strategies were investigated. Some level of compensatory mortality was assumed following initiation of legal harvest.

The optimal structure for the park deer population was found to be characterized by a 1:1 sex ratio, a young female age distribution and an old male age distribution. To create such a population structure in three years, female harvest rate needs to be at least 70%, not 40% as stated in the DEIS. Female harvest needs to be concentrated on older (> 0.5 year) animals. Antlerless harvest would number 400 in year 1, 170 in year 2, and 75 in year 3. Population size could then be stabilized at 80 +/- animals for 10 years or more with a minimal (5%) harvest of adult females. Low annual recruitment would be achieved because the high proportion of yearling females in the breeding population would lower average annual reproductive rates. Antlered male harvest rate needs to be 10% or less. Mature antlered males would be present in the population for viewing. The presence of mature males and the resulting stable breeding hierarchy would result in maximum dispersal of non-breeding males.

Please include in the final EIS additional detail on the harvest strategy. The statement that 40% harvest rate per year for three years will lower the population to 25 deer per square mile is not supported by any analysis in the DEIS. As stated, we believe 70% reduction is a more appropriate harvest rate. We are especially concerned that acknowledgement be made that deer harvest may be a necessary annual event and not a one-time reduction. The final EIS needs to outline the long-term management strategy for deer on the parks.

d

e

ALTERNATIVE 3

Reproductive intervention is a component of the preferred alternative but no scientific research has shown (1) the effect of reproductive intervention on white-tailed deer, or (2) that reproductive intervention is a viable population control on a free ranging population. No

d. Stochastic simulations were conducted by The Pennsylvania State University to determine the required mortality rate to reduce the deer population to 25 deer per forested square mile. The model used a simplistic approach using the best estimates of the current population structure, productivity rate, and mortality rate. The model assumed a closed population, however, which does not compensate for deer movement in and out of the parks. Based on 25 simulations using 1994 population estimates, an average annual reduction of 40 percent over a three-year period would result in a population of about 86 deer. Under this strategy, a maximum of 170 adult does and 153 fawns would be killed the first year. Age and sex data on the actual number of deer removed would then be used in the model to project the following year's removal rate. Further population modelling may be completed if the preferred alternative (Combined Management) is selected in the Record of Decision.

e. In the discussion of the preferred alternative (Combined Management) on page 42, it states that "these two alternatives would be conducted simultaneously and repeated annually . . . ." The long-term strategy is to maintain the deer population at a level that is in balance with the cropfield and woodlot management objectives (see Appendix E). As the EIS points out on page 31, this may require removing 30 to 40 percent of the population annually.

scientific research has shown that reproductive intervention in white-tailed deer is free of risks to non-target, including human, populations. The purpose of the DEIS is to "provide National Park Service decision makers, other officials, and members of the public with information on the environmental effects of several deer management alternatives" (page iii), but because a specific technique is not identified and referential scientific evidence is not cited, no assessment can be made of the impact upon the environment of reproductive intervention in a free-ranging deer population. Therefore WMI requests that Alternative 3 be dropped as a viable alternative.

f

f. See General Response #3: Reproductive Intervention.

ALTERNATIVE 4

WMI supports the concept of using controlled public hunts on properties adjacent to the parks. To aid in this endeavor, the National Park Service should be prepared to (1) release participating landowners from all liability except for gross negligence and (2) reimburse landowners for their granting of hunting privileges. Any population reduction conducted in the park (Alternative 2B) should be scheduled so as to maximize disturbance of deer within the park boundaries to cause dispersal of deer onto hunted areas. To facilitate the maintenance of an older male age structure, harvest of antlered males should be strictly regulated to total less than 10% of the antlered male population. As in other alternatives in the DEIS, this alternative is not supported by much detail. Have willing landowners been identified? How many? Is the potential combined acreage of land newly available for deer harvest large enough to realistically impact deer numbers on the parks? Has the Pennsylvania Game Commission agreed to assist in this alternative as an equal partner? Again, please provide more detail in the final EIS.

g

g. The NPS has no authority outside park boundaries concerning liability on privately owned lands or reimbursing landowners for hunting privileges.

h

h. The Pennsylvania Game Commission has offered to work with the NPS and private landowners to maintain and increase deer harvests on land outside the parks (see Pennsylvania Game Commission comment letter). Park personnel contacted some nearby private landowners to discuss the possibility of cooperative management (Alternative 4). We determined Alternative 4 to be a viable option through these meetings. At this time, no commitments have been made. We do believe the amount of combined acreage of private land that would be made available for deer hunting would have an impact on the deer population. Further investigation and planning is inappropriate until a decision is made by the NPS on the final alternative.

SUMMARY

In summary, WMI supports the efforts of the National Park Service to lower and control deer density on Gettysburg National Military Park and Eisenhower National Historic Site. WMI believes that the stated initial deer density goal may be too high to allow revegetation of woodlots, but agrees with the experimental approach to management. WMI requests that the National Park Service revise their preferred alternative by dropping reproductive intervention and adopting a preferred alternative that is limited to population reduction on park grounds and adjacent ownerships. Controlled public hunting should be evaluated as a full alternative. Population reduction strategies should be amended to include strategies producing specific age and sex structure of residual populations. Harvest rates should be adjusted to produced desired outcomes. The final EIS should contain more detail on the many of the alternatives discussed.

Sincerely,

Scott J. Williamson

8

THE WILDLIFE SOCIETY
5410 Grosvenor Lane • Bethesda, MD 20814-2197
Tel: (301) 897-9770 • Fax: (301) 530-2471

9 February 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

The Wildlife Society appreciates the opportunity to comment on the Draft EIS White-tailed Deer Management Plan for Gettysburg National Military Park and the Eisenhower National Historic Site. The Wildlife Society is the association of professional wildlife scientists and managers. Several experts on deer management in the northeastern United States have reviewed the DEIS on behalf of the Society. Our technical comments and recommendations on the document are summarized below.

General Comments

The structure of the document is confusing: the reader is required to shuffle back and forth through the text for parts of the discussion on a particular topic. For example, reproductive intervention is discussed in some form on several pages including 36-40, 62-63, 66, 69-70 and 80. Though the format of an EIS is to a great extent formalized, the document would benefit from topic consolidation to the extent permissible.

In general, too, the reviewer's efforts (from wildlife agencies in the region) to obtain copies for review from the NPS were unsuccessful even though several attempts were made. The only copy available was the one provided by TWS headquarters. Several individuals contributed to these remarks; having only one copy of the EIS made it difficult for multiple individuals to review the document and make comments. The TWS feels that in some cases the NPS's unwillingness to distribute copies upon request hindered the reviewing process and eliminated some agencies and individuals from that process. a

Specific Comments

pg. iv- The NPS ties its deer management goal to the narrow objectives essentially ignoring the impacts this approach is having on its neighbors. Its time for a change in attitude and policy. b

pg. v- Hunting in any form is here eliminated as an alternative, along with selling deer and giving landowners "rights" to the deer. The last two, not the last three, are illegal under c

RESPONSES

THE WILDLIFE SOCIETY

a. Approximately 350 copies of the draft EIS were mailed to agencies, organizations, and individuals. The address and phone number to contact for a copy of the document was in the letter inside the cover of the draft EIS. Additional copies were provided to requests made to this address and number.

b. The concerns of and impacts to nearby private landowners are discussed throughout the document.

c. Page v has been corrected.

Penn. law.

pg. 14,15,16- Though it is understood that certain legislation and policies prohibit hunting as a control option in most parks including Gettysburg, the increasing problems with white-tailed deer in many parks throughout the Northeast and the apparent inability of the NPS to react to this growing problem would seem to indicate that is may be time for a change in both policy and law.

pg. 21 - Though the Code of Federal Regulations, 1992 indicates that the NPS has the authority to manage wildlife within the parks without the approval of the state, such actions have lead, and may continue to lead, to an erosion of the professional relationship that should exist between agencies concerned with the conservation of resident wildlife resources.

pg. 27,28 - Again, the NPS states that it intends to exhaust all other possible alternatives before it attempts to change its governing laws, regulations, or policies. However, it does not hesitate to recommend that Pennsylvania change its laws or policies to solve a problem that is primarily the product of NPS policy. It is time for the NPS to become part of the solution. d

The negative impacts with which they are concerned pale in comparison with the current and potential impacts of the unmanaged deer populations inhabiting many eastern national parks.

pg. 30- Though on page 21 the NPS indicates that it is not bound by state law, here it seems to be rejecting a deer control option(s) on the basis that it against state law. This again raises the question of the extent of NPS authority to manage resident wildlife resources. e

pg. 30- Alternative 1-On the bottom of page 24, several options are rejected without further consideration based on the criteria listed. These same criteria would give cause to reject the No Action Alternative on page 30. Must the no action option be presented as an option to control the level of deer browsing in the park? Obviously its not an answer. f

pg. 31- Alternative 2 - It is stated that an annual reduction of 40 percent for three years would be required to reduce the deer population from its current level to the target density of 25 deer/sq.mi. of forested habitat. Even with little or no reproduction, this goal does not appear achievable in the time frame indicated given the population estimates presented. g

pg. 31- Alternative 2A- The NPS assigns the highest priorities to live trapping within parks for transporting elsewhere as a control option. Yet the high cost and the inability of most trapping efforts to remove enough deer to effect control has caused most wildlife managers to abandon this technique in most situations.

pg. 33- Binding a deer's legs is not recommended as a means of transport. h

pg. 34- Alternative 2B- Again, the NPS indicates its has the authority to shoot the deer within

d. The document states that Pennsylvania law would have to be changed to permit a particular activity (page 30); however, the document does not state that the NPS recommends changing Pennsylvania laws or policies.

e. See page 24 regarding the participation of Pennsylvania citizens and state law.

f. According to 40 C.F.R. 1502.14(d), a no action alternative must be included in an EIS. The no action alternative provides a basis for comparing the impacts of the action alternatives.

g. See Wildlife Management Institute comment letter response d.

h. Text on page 33 has been changed to read, "Deer may be hobbled . . . ."

the park. Does this authority extend to selling the venison, giving it away, etc? Some clarification is needed. i

- It is suggested that this management effort could increase highway safety problems. This is an unquantifiable risk and is not consistently presented where it may be appropriate, i.e., the section - Effects on Deer/Vehicle Collisions. Drop it completely or note in each case where it may be a potential risk. j

- Restriction of public access and roadway use can be minimized by limiting removals to times when the sites are normally closed.

- There appears to be little need to specify the sex of the deer to be removed. A total quota would be adequate.

- It is stated that shooters would be required to wear 250 sq. inches of fluorescent orange during daylight hours. We see no value in this if deer are to shot over bait sites. It may do nothing more than attract unwanted attention to control operations. The wearing of orange by other personnel on the facility during the action may be appropriate depending on time, location, etc.

- Expansion of shooting operations to field areas at night with the aid of lights would enhance control efforts and minimize public access conflicts. Including local, qualified individuals as agents may enhance local program acceptance.

pg. 35- Will silencers be available to the NPS for deer control? Unlikely. k

pg. 39- The Fire Island example can hardly be used as a guide to estimate man-days of effort to inoculate 731 wild, free ranging white-tails at Gettysburg. As the authors note, the Fire Island deer are essentially pets.

pg. 40- Given all the concerns and limitations expressed in the discussion under reproductive intervention, it is surprising that it would be a technique of choice. The fact that FDA approval is needed prior to use on a free ranging deer population needs to be more prominently pointed out. It is uncertain if or when such approval will be given. Currently, contraceptives are not available or practical for this purpose. l

pg. 40- Cooperative Management- The reviewers have long found the NPS's position as described in the first paragraph disturbing, i.e., the burden for correcting the problem (deer over-population) which the NPS is in a large part responsible for is passed on to others, usually their neighbors, to solve. The NPS creates narrowly defined objectives and ignores many of the broader biological considerations. It may be time for a change in attitude, policy and law.

i. The NPS is not subject to state regulation, but it is unlawful for any person to buy, sell, or barter, or offer for sale or barter any game or edible parts of game under Pennsylvania law (34 Pa. C.S. Sec. 2312). The only exception to this prohibition is for game raised under the authority of a propagating permit from the Commonwealth of Pennsylvania. Food service organizations can accept donations of meat which they in turn can give away.

j. Section 4.4.3 discusses in general terms the effects during the management action of each alternative on deer/vehicle collisions.

k. Silencers may be considered for use, but they would probably not be used due to reduced firearm efficiency. The lack of availability of silencers may limit their use.

l. See General Response #3: Reproductive Intervention.

pg. 41-It is unlikely that unarmed drivers will be able to drive deer from interior, no-hunting areas to exterior, hunting areas on a sustained basis. Attempts to use drives in this way will most likely result in driving the deer from one area of the park to other, no hunting areas within the park. In other words, it may just serve to move deer around within the park. Drives are most productive when used to drive deer within a smaller, hunting area, as part of a controlled hunting program. It may also be advisable to review the applicable State and Federal definitions or statutes on "hunting" to determine the legality of deer drives in this situation. m

- Increasing bag limits and season length on the periphery will have little impact if nothing is happening within the NMP/NHS. Individuals currently hunting near the NMP/NHS boundary may object to this approach if they see it as impacting on their hunting success.

p. 43 Table 1. Summary of Impacts and Appendix 1 - Cost Estimates- The numbers are presented in a manner that makes it difficult to compare total annual costs. We also had difficulty with the relative costs of Direct Reduction and Reproductive Intervention

-Darting with PZ: Darting deer would be considerably more difficult than shooting deer. A difference in the numbers to be "treated" may account for much of final total cost differential, but there may also be some shortcomings in the numbers. (This is true within the table and perhaps more glaringly on page 178 when maintenance phase costs are presented)

- Do any of the cost/deer figures given on page 169 include administrative costs which would duplicate the costs added in section A? If so, the actual total cost would be lower. n

- The need for dart recovery has not been considered. Darts which miss or fall from deer would pose a potential risk. This would increase labor and total costs of darting operations.

- Law enforcement needs for a darting operation should be considered. As with shooting options, park visitors will need to be kept clear of darting areas. This again will add to cost. o

pg.49-3.1- We doubt that the white-tailed deer is the "best-recognized large mammal in the world." Perhaps change the text to read: "...is one of the most widely distributed and most easily recognized..." p

-We believe that the term "migratory" has been used incorrectly, here, as these deer will most likely only move within their established feeding areas. q

pg. 50- Does the statement concerning female fawn productivity mean that 67% of those that breed have a single fawn and thus 33% have twins? We believe this to be incorrect. Clarify this statement. Also clarify the next, related statement which begins," Over 90%..." r

pg. 53- There are 114 private landowners occupying 1,696 acres within the boundary of the NMP and NIIS. The draft EIS does not indicate how NPS laws and regulations apply to these properties. Can deer currently be taken on these properties? The Pennsylvania Game Commission recently implemented a deer management program for suburban areas such as Gettysburg. The use of this tool could enhance the deer management efforts for NMP and NHS. s

m. See page 64 for the discussion on deer drives.

n. Costs are not duplicated.

o. See General Response #3: Reproductive Intervention.

p. The statement refers to deer in general, not specifically the white-tailed deer.

q. The term is correct and appropriate. Some deer migrate out of the part, remain out of the area during the summer, and return in the fall (Storm et al. 1989).

r. According to Pennsylvania Game Commission biologist Bill Palmer, 33 percent of the deer that bred as fawns had twins. Statewide reproductive data show 1.32 embryos per one-year-old deer which were bred as a fawn. Of the 90 percent of female deer that are bred at 1.5 years of age, 35 percent have single fawns.

s. Deer can lawfully be hunted on private property (with the permission of the landowner) within the boundary of the parks.

pg. 57- In Decker et al.'s final report (revised February 1990) it was concluded that, "Thus for every carcass permit issued, perhaps 6 accidents occurred." The number used here in the text should be five not three. t

pg. 70- Why should the hunters outside the park be expected to be less skilled? Documentation? u

pg. 78- The possibility that a rare species (particularly plants not preferred by deer) could benefit from the effects of high deer numbers is not mentioned. In the no action section, the NPS offers that in the long run a rare plant species preferred by deer may increase in abundance. Unless they can make a case for deer numbers declining, it is difficult to see how this statement can be justified. Some support should be given or the statement deleted. v

pg. 80- Though PZP vaccine apparently presents no direct hazard if consumed, the FDA's primary concern has been with the adjuvant. PZP is currently used with Freund's complete adjuvant which the FDA has not approved for animals that represent a potential human food source. w

pg. 82- The NPS assumes that large portions of the parks would have to be closed to visitors for extended periods of time. This needn't be the case if control operations are designed and scheduled to minimize conflicts. x

pg. 85- The authors apparently have little experience with deer hunting methodology. Driving deer is a common deer hunting technique, frequently employed without significant human mortality. y

- That a trapping effort might increase deer/vehicle collisions in and near the parks seems remote at best. z

pg. 87, 5- This discussion may benefit from distinguishing disturbance induced stress from social stress. The proposed actions may induce disturbance stress in some animals but the remaining animals my be freer of social stress. An exception may be that Reproduction Intervention may introduce some behavioral (social) stress. The No Action alternative would presumably maintain a higher level of social stress and vehicles would cause some disturbance stress. aa

pg. 147 Appendix E- The initial goal of the NPS is to reduce the deer population to an April density of 25 deer/sq.mi. of forested habitat (80 deer for 3.2 sq.mi. of forest). It has been suggested by one reviewer, that total acreage of undeveloped land may be a more suitable criteria to be used in expressing population goals and related parameters. When the total area of both NMP and the NHS (6,423 acres) is considered, the average density goal is 8 deer/sq.mi. If the area of the study site is used (11 sq.mi.), the density is 7.3. Since the Draft EIS indicates that "Park deer populations need to be kept at a level so that objectives for both cropfields and woodlots would be reached and maintained" (p.148), expressing the goal bb

t. The text on page 57 has been corrected.

u. Pages 35 states that "personnel highly skilled and trained in the use of firearms and public safety would shoot the deer" in the parks. The NPS would select only highly skilled and trained people for direct reduction in the parks. Hunters outside the parks would be of all skill levels and experience.

v. The deer population in the parks has been high for over ten years. If a rare plant could benefit from the effects of high deer numbers, any rare plant in the parks would have benefited from the high deer density and would no longer be rare.

w. See General Response #3: Reproductive Intervention.

x. We agree. In addition, the text on page 82 has been changed to read, "portions of the parks may be closed to visitors . . . ."

y. We agree that driving deer is a common hunting technique and point out on page 85 the possibility of injury or death associated with this. The NPS does not discuss at what level human mortality is "significant."

z. We agree.

aa. This has been added to the text.

bb. We prefer deer density expressed as deer per forested square mile.

density in terms of total undeveloped habitat may be more appropriate.

- It was also suggested, that a fall, post fawning population might provide a less confusing means of expressing intent. For example on pp. 148-149, it appears that a 40% reduction level is applied to the pre-fawning April population estimate. This approach fails to account for the impact of reproduction. It is recommended that a population model be developed for the NMP/NHS that will more closely represent the dynamics of the deer population. cc

pg. 169 Appendix I- Under the direct reduction alternative, the cost of handling and processing the venison is not considered. Costs could average $45-$50/deer processed. dd

pg. 172- c. Immunocontraceptive darts- costs include the purchase of 120 darts while calling for the treatment of 731 deer. If non-reusable, obviously more darts will be needed. Costs would increase accordingly. ee

Summary

The NPS continues to focus on narrow management objectives. The deer management problem is symptomatic of a larger, Service-wide problem: National Parks cannot be managed in isolation. The deer population, and the methods chosen by the Park Service to control it, impact landowners and agencies outside of park boundaries. The management objectives of the NPS in this case must not focus so narrowly on maintaining woodlots and cropfields, but must also recognize broader issues, which include the precedent which will be set for managing large herbivore populations on the east coast. The National Park Service continues to ask outside agencies to bear the brunt of management without explicitly recognizing the NPS's role in creating the problem. Finally, the NPS, in some cases, has hindered the review process by making it difficult for reviewers to obtain copies of the DEIS. Specifically, we are concerned that wildlife management agencies and wildlife professionals may not be adequately represented in the review process. ff

Thank you for the opportunity to review the Draft EIS.

Sincerely,

Thomas M. Franklin

Thomas M. Franklin
Wildlife Policy Director

cc: November population estimates were conducted for five years from 1987 to 1991. They were discontinued because of difficulties in locating deer in the wooded areas. In April, the deer move into the open areas to feed and are more easily counted. A simplistic population model was used (see Wildlife Management Institute comment letter response d) which did include reproductive rate in the determination of the three-year average annual reduction level.

dd. Carcass transport and processing costs are included unless otherwise indicated (see section B in Appendix I). The comma has been removed for clarity. Preliminary investigation at local processing facilities suggest $25 per deer to be the processing cost.

ee. Disposable or resuable darts could be used to deliver the vaccine. Dart and firearm costs would depend on the type of system used. The use of a disposable dart system could increase the cost by $2,000, whereas a reusable dart system could decrease the cost by $500. All costs provided are estimates. See General Response #3: Reproductive Intervention.

ff. Chapter 6 of the draft EIS is a list of who was sent a copy of the draft document or the executive summary with information on how to request a full copy. The names of organizations and individuals who subsequently requested a draft copy and/or sent comment letters were added to this list. Chapter 6 of the final EIS represents the combined list of agencies, professionals, and individuals who were involved in the review process. In addition, any interested parties who contacted the parks by phone or letter at the number or address listed on the first page of the draft EIS were immediately sent copies of the document. The NPS has not intentionally hindered the review process.

International Association of Fish and Wildlife Agencies

Organized July 20, 1902

Hall of the States • 444 North Capitol Street, N.W., Suite 544 • Washington, D.C. 20001
Telephone (202) 624-7890 • FAX (202) 624-7891

IAFWA Staff
Executive Vice President
R. Max Peterson
Legislative Counsel
Gary J. Taylor
Resource Director
Mark J. Reeff
International Resource Director
Donald E. MacLauchlan
Wildlife Diversity Director
Naomi A. Edelson
Counselor Emeritus
Jack H. Berryman
IAFWP Coordinator
Kirk S. Andries

Officers 1994-95
President
Larry J. Wilson
Wallace State Office Building
Des Moines, IA 50319-0034
First Vice-President
Jerry J. Presley
P.O. Box 180
Jefferson City, MO 65102-0180
Secretary-Treasurer
Robert L. McDowell
CN 400
Trenton, NJ 08625-0400
General Counsel
Glenn L. Bowers
221 Mountain Road
Dillsburg, PA 17019

Executive Committee 1994-95
Chairman
Duane L. Shroufe
2221 W. Greenway Road
Phoenix, AZ 85023-4312
Vice-Chairman
Wayne F. MacCallum
100 Cambridge St., Rm 1901
Boston, MA 02202
Arnold Boer
Fredericton, New Brunswick
Jerry M. Conley
Boise, ID
Herbert E. Doig
Albany, NY
Roger Holmes
St. Paul, MN
Bill Montoya
Santa Fe, NM
Richard Pierce
Columbus, OH
David Waller
Atlanta, GA

February 10, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
RD1
Gettysburg PA 17325

Dear Dr. Latschar:

Included herein are the comments of the International Association of Fish and Wildlife Agencies relative to the U.S. Department of Interior - National Park Service Draft Environmental Impact Statement on the White-Tailed Deer Management Plan for Gettysburg National Military Park and Eisenhower National Historic Site, November 1994. As a general comment, the Association believes that further consideration should be given to the use of regulated sport hunting as a proven effective and efficient means of managing the deer population on the two subject parks. In our opinion, the NPS preferred alternative lacks adequate substantiation of efficiency and proven effectiveness, legal certification, and simply transfers the problem to outside of unit boundaries. We do concur that cooperative management, especially with the Pennsylvania Game Commission and surrounding landowners, is absolutely essential to addressing the deer overpopulation.

The IAFWA, founded in 1902, is a quasi-governmental organization of public agencies charged with the protection and management of North America's fish and wildlife resources. The Association's governmental members include the fish and wildlife agencies of the states, provinces, and federal governments of the U.S., Canada and Mexico. All 50 states are members. The Association has been a key organization in promoting sound resource management and strengthening federal, state and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest.

As you are aware, an escalating white-tailed deer population is not unique to these units. Populations are, and have been, increasing throughout the Eastern United States and are causing similar problems where these populations are not managed. Scientific analysis of the problem and possible solutions by wildlife resource professionals continues to conclude that, in virtually all circumstances, a regulated public hunt is the most effective and efficient means of long-term population management. As I am certain that you

are aware, the Pennsylvania Game Commission, in which rests the statutory responsibility for white-tailed deer (and all resident wildlife) conservation in the State, stands ready to assist you in custom designing a managed public hunt of the subject properties to facilitate a long-term resolution of the deer overpopulation. We encourage you to continue to work closely with the Pennsylvania Game Commission in this endeavor.

The remainder of our comments are focused on a discussion of questions regarding the germane statutory authorities raised by the draft Environmental Impact Statement (EIS).

At page 14 of the draft EIS, it is asserted that "The National Park Service, however, has the authority to manage the deer in the parks in fulfillment of its enabling legislation, the Organic Act (16 U.S.C. 3)." This statement is far too broad and should be clarified in the final EIS. The authority vested in the Secretary by 16 U.S.C. § 3 is discretionary authority to provide "for the destruction of such animals and of such plant life as may be detrimental to the use of any of said parks, monuments, or reservations." Thus, where a predicate finding of detriment to use is properly made, Congress has authorized the Secretary to destroy such animals as may be detrimental. This is far from being authority to "manage the deer in the parks" as asserted in the draft EIS. The Secretary's authority to be less restrictive than state law permits with respect to wildlife found on units of the National Park System is limited authority granted for a specific purpose. It certainly does not constitute the type of comprehensive management authority over fish and wildlife exercised by the several states. Beyond the limited authority to destroy wildlife for the purpose of avoiding detriment to a park, the Secretary is not authorized to be less restrictive than state law permits except on units held in exclusive legislative jurisdiction, as indeed some units are.

The section entitled Policy and Legal Compliance, at pages 20-23, fails to refer to the Department of the Interior Fish and Wildlife Policy: State-Federal Relationships published at 43 C.F.R. Part 24. Section 24.4(1)(5)(ii) and (iii) thereof provides that agencies of the Department, including the National Park Service, shall consult with the States and comply with State permit requirements

> (ii) For the planned and orderly removal of surplus or harmful populations of fish and wildlife except where emergency situations requiring immediate action make such consultation and compliance with State regulatory requirements infeasible; and
>
> (iii) In the disposition of fish and wildlife taken under paragraph (i)(5)(1) or (i)(5)(ii) of this section.

43 C.F.R. § 24.4(i)(5)(ii), (iii). We are confident that the Pennsylvania Game Commission will cooperate with the National Park Service in issuing necessary permits to National Park Service personnel or their authorized agents to carry out appropriate direct reduction activity. We are

a

a. See General Response #1: NPS Legislative Authority.

b

b. See General Response #1: NPS Legislative Authority.

not aware whether Gettysburg National Military Park is held by the United States in exclusive legislative jurisdiction or merely in proprietorial jurisdiction. If the former, state law would probably not be applicable. See 43 C.F.R. § 24.4(g).

The presentation of immunocontraception in female deer as an alternative to steroids in the discussion of Reproductive Intervention (Alternative 3, pages 36-40) leaves the general impression that, but for FDA approval, use of immunocontraception is an acceptable technique. As made clear at a Symposium on Contraception in Wildlife Management held in Denver on October 26-28, 1993, much work remains before conclusions may be drawn as to utility, practicality, efficacy and potential consequences of new technologies in this area. For example, when immunocontraception vaccines are administered, their efficacy depends upon an effective immune response in the target animal. Animals with a stronger immune response may be most susceptible to sterilization, while animals with poorer systems may be unresponsive. Deployment of immunocontraception vaccines could shift the population gene pool toward immunodeficient animals with resulting increase in susceptibility to pathogenic organisms to the detriment of entire populations. Much research lies ahead before the techniques treated in Alternative 3 are deemed beneficial. And, in any event, the Secretary's authority under 16 U.S.C. § 3 to destroy detrimental wildlife may well be inapplicable to the extent an activity such as immunocontraception could produce consequences extending beyond individual animals and implicating entire populations. We strongly urge that adequate mention be made of the uncertainties of these techniques in the final EIS in order that the public not be misled. I would further direct your attention to the attached resolution regarding immunocontraception adopted by the Association in September 1994. A copy of this resolution has also been provided to the Director of the National Park Service.

C

c. See General Response #3: Reproductive Intervention.

In conclusion, it appears that the time is ripe to effect changes to both National Park Service policy and enabling law to facilitate the resolution of problems created by rapidly expanding deer populations on many eastern parks. The Association stands ready to cooperate with the National Park Service in reviewing its existing policies and making recommendations regarding necessary and appropriate changes.

Thank you for the opportunity to comment on the draft EIS.

Sincerely,

Gary J. Taylor/stkd

Gary J. Taylor
Legislative Counsel

cc: Mr. Donald Madl, Executive Director, Pennsylvania Game Commission
GJT\ltr\WPC\-GARY-\LATSCHAR.LTR

THE WILDLIFE LEGISLATIVE FUND OF AMERICA
To protect the Heritage of the American Sportsmen to hunt, to fish and to trap.

National Affairs Office
1155 Connecticut Avenue, N.W.
Suite 1200
Washington, D.C. 20036
[Entrance on M Street]
202/862-8364 FAX 202/659-1027

10

RESPONSES

THE WILDLIFE LEGISLATIVE FUND OF AMERICA

February 10, 1995

RECEIVED
FEB 13 1995
GETT — EISE

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

The following constitutes the comments of the Wildlife Legislative Fund of America (WLFA) concerning the National Park Service's (NPS) draft environmental impact statement (DEIS) regarding management of the white tailed deer population within Gettysburg National Military Park and Eisenhower National Historic Site.

The WLFA is an association of sportsmen's conservation organizations established to protect the heritage of American sportsmen, to hunt, fish and trap. Through its associated organizations, the WLFA represents an aggregate membership of more than 1.5 million sportsmen-conservationists.

The management dilemma the NPS faces in the Gettysburg and Eisenhower units is an early example of problems the agency will almost certainly again be confronted with in the future. Management objectives on units across the nation will be increasingly difficult to achieve unless the NPS employs an effective and efficient means of eliminating elements obstructing achievement of those objectives. NPS must embrace innovation as it designs pragmatic strategies to achieve management objectives.

Unfortunately, the DEIS and the NPS' preferred alternative lack both innovation and pragmatism. The Combination Management Alternative relies on undeveloped technologies, local landowner cooperation and carries with it a price tag.

One logical element of the preferred alternative is management through direct reduction. Employing personnel to shoot deer is a strategy that has proven effective in similar circumstances on other public lands. However, the NPS will be burdened with additional expense. How much would such a strategy cost the American taxpayer? While direct reduction of the herd is pragmatic, assigning the responsibility to NPS personnel lacks innovation. a

The Combination Management Alternative also prescribes increased hunting outside the parks. In the Population Management

a. See Appendix I for cost estimates.

chapter of the NPS' Management Policies guidelines, it is stated that the NPS prefers to encourage public hunting on lands adjacent to park units rather than in the units themselves. However, what assurances does the NPS have that State fish and game agencies and local landowners will cooperate? And if State management authorities and local landowners do cooperate, how effective are their efforts towards thinning populations within the units? Actions taken on adjacent lands will ultimately affect park lands, but to what degree? In crafting a management strategy, the NPS needs greater assurances than those proposed with State agency and local landowner participation.

b

The preferred alternative also employs immunocontraception as a means for reducing the herd size. While innovative, this strategy is in no way a practical means for addressing the problems which exist at the Gettysburg and Eisenhower units. Immunocontraceptive technologies are not yet fully developed and the consequences associated with sterilization have yet to be identified and understood. Furthermore, utilization of such technologies have not been approved by the Food and Drug Administration. To find Reproductive Intervention as an element of the NPS' preferred alternative seems notably out of the mainstream, if not illegal.

c

The WLFA is as much concerned with what was omitted from consideration in the DEIS as with what it did consider and ultimately NPS' preferred alternative. NPS failed to include in its range of options at least one effective and fiscally self-sustaining management option. NPS should consider administration of a controlled public hunt at each unit to address the burgeoning deer population.

d

The NPS could solicit local sportsmen to submit an application to participate in a controlled hunt to be conducted during Pennsylvania's firearm and/or bowhunting season. In all likelihood, the NPS would receive volumes of applications and a process of random selection could be employed to determine which applicants become potential participants. Potential participants would then attend a two-tiered course to sufficiently prepare them for the controlled hunt. All guidelines and safety considerations would be covered in a classroom setting before moving on to the shooting range, where potential participants must demonstrate accurate shooting capabilities. The NPS could embrace strict standards in determining which potential participants ultimately qualify as controlled hunt participants. All administrative and associated costs for employing local sportsmen as controlled hunt participants could be fully recovered through application and special license fees to be determined by the NPS. Unlike NPS' preferred alternative, this option would fully eliminate taxpayer burden.

b. The Pennsylvania Game Commission has offered to work with the NPS and private landowners to maintain and increase deer harvests on land outside the parks (see Pennsylvania Game Commission comment letter). Park personnel contacted some nearby private landowners to discuss the possibility of cooperative management (Alternative 4). We determined Alternative 4 to be a viable option through these meetings. At this time, full investigation into a cooperative agreement among all parties for Alternative 4 is not appropriate. Until the final decision is made and stated in the Record of Decision, a full action plan cannot be completed. Under the preferred alternative (Combined Management), Alternative 2B and Alternative 4 would be conducted simultaneously which would likely increase the effectiveness of each alternative.

c. See General Response #3: Reproductive Intervention.

d. See General Response #2: Hunting.

The WLFA is cognizant that hunting on units of the NPS is prohibited unless Congress specifies otherwise. However, hunting is generally permitted on various designated park lands, including National Preserves, National Recreation Areas, National Seashores and National Lakeshores. The WLFA does not advocate opening the entire System to hunting, but we are persuaded that the NPS should welcome additional tools that could be utilized to more efficiently and effectively achieve management objectives. Furthermore, the NPS should support policy modifications which would afford such additional tools should they present themselves in Congress.

In these fiscally conservative times, the NPS can ill-afford to employ costly and untested means for achieving management objectives, not only within these particular NPS units, but on units all across the nation. Burgeoning populations of game species on NPS units is a management obstacle that will not cease upon resolution of the Gettysburg and Eisenhower overpopulation dilemmas. Other unit managers will undoubtedly face similar problems and the NPS must seek innovative and practical strategies to achieve its management objectives.

The WLFA appreciates the opportunity to comment on the NPS DEIS and we will make ourselves available at any time to work with you in better conserving and managing NPS lands.

Sincerely,

Bill Horn

William P. Horn
Director of National Affairs
and Washington Counsel

February 9, 1995

RECEIVED
FEB 13 1995
GETT — FISE

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Tareytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

I am writing to voice my organization's opposition to the National Park Service Plan to manage the Gettysburg National Military Park deer population by killing deer. I am reiterating and expanding upon the comments made by our staff member, Craig Stark, at a recent public hearing on the subject.

Last Chance for Animals represents tens of thousands of members across the country, including citizens living in Pennsylvania. Our members feel a special connection to this issue because of our deep connection with Gettysburg history and our concern for human and animal life.

I oppose the suggested "harvest" of deer on several grounds at this time. I believe that the Draft Environmental Impact Statement is incomplete and contains various factual errors. I feel that the management objectives of the National Park Service are not served by a loss of life of this, or any magnitude. I recognize certain concerns regarding the effect the deer population is having upon vegetation, but I believe I speak for a vast majority of Americans when I say that more avoidable bloodshed on this historic sight would be a blemish on the face of our national history.

I believe that more hearings are necessary to fully represent the various legitimate interests that are involved in this issue. The law under which the historical park was enacted forbids hunting, and the spirit of this legislation would be flaunted if the current proposal to kill deer is implemented.

These are some of my organization's concerns, and as we further examine the legal aspects, I reserve the right to amend and expand our comments on this issue which is so close to our collective national psyche.

Thank you for your attention to this matter.

Very truly yours,

David Meyer, Executive Director

cc: Senator Arlen Spector, Senator Dianne Feinstein, Senator Barbara Boxer

8033 Sunset Blvd. • Suite 35 • Los Angeles, CA 90046
Last Chance For Animals
Office: (310) 271-6096 • Hotline: (310) 271-1409 • Petline: (900) 78-PET-THEFT • FAX: (310) 271-1890
LCA is a non-profit organization dependent soley on your tax deductible contributions.
To volunteer call LCA today!

LAST CHANCE FOR ANIMALS

RECEIVED
FEB 17 1995
GETT — EISE

February 13, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Tareytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

I am writing this letter to you as an addendum to Last Chance for Animals' response to the Draft Environmental Impact Statement for the Gettysburg NMP and the Eisenhower NHS. I wish to enumerate some of the criticisms our group has that have arisen from the report.

The report identifies the management objectives for the Gettysburg NMP. It states that "the landscape of the sites is critical to the interpretation of the events that took place in these parks" and to an understanding of the historical events. The report focuses on the effect of deer browsing, yet ignores other factors which radically interfere with a true historical view of the pre-Gettysburg battlefield. The report also contains numerous omissions which I shall discuss.

The report's Preferred Alternative (solution) is a mixture of Direct Reduction (park personnel shooting deer), Reproductive Intervention, and Cooperative Management (local hunters also shooting deer).

The Organic Act of 1916 provides for conserving "... the historic objects & the wildlife therein..." in our nation's National Parks. One of the objectives for the Eisenhower National Historic Site is to "assure for the visitor an atmosphere in which to experience the pastoral serenity...". Public hunting is not permitted at either the Gettysburg NMP of the Eisenhower NHS. It is for these and many other reasons to be enumerated that we oppose any action involving the shooting of deer. For clarity, I shall focus my objections regarding shooting the deer to a criticism of the Direct Reduction alternative.

The report fails to juxtapose the concern for the effect of deer browsing on management objectives with the various other ways in which management objectives are not being met. Certain non-native plant species have invaded most areas of the battlefield, but the report makes no recommendation about restoring historical accuracy in this regard. a

8033 Sunset Blvd. • Suite 35 • Los Angeles, CA 90046
Last Chance For Animals
Office: (310) 271-6096 • Hotline: (310) 271-1409 • Petline: (900) 78-PET-THEFT • FAX: (310) 271-1890
LCA is a non-profit organization dependent solely on your tax deductible contributions.
To volunteer call LCA today!

a. The EIS is proposing deer management, not management of non-native plants. Non-native plant species must be inventoried and monitored before management can begin. Preliminary research is currently being conducted on Japanese barberry by researchers at The Pennsylvania State University.

"Much larger field sizes are required to accommodate the use of modern farming techniques and machinery than what the 19th century farmers worked in the area which is now Gettysburg NMP. The cropfields on the battlefield are, therefore, not presently being maintained to their historic size and do not reflect historic field patterns." The report does not identify this as a major failure to meet management objectives.

b

Other potential sources for crop damage are not identified. For example, is there evidence that diseases or acid rain might be affecting park vegetation?

c

Blatantly missing from the report is a discussion of the natural circumstances that interfere with visitors interpretation of historical events far more than any deer browsing. For example, since the battle occurred in mid-summer, the long months of snow covered terrain provide a vastly different view of the features that shaped the Gettysburg battle. By comparison, deer browsing effects must be minuscule.

An April, 1994 survey estimated the study area had an average of 853 deer. April mean population estimates the previous 4 years were over 1,000 deer. No explanation is given in the report for this trend toward a lower deer population, and why it might not continue.

d

The report says that deer viewing & photographing are popular activities. "Many tourists and local visitors enjoy the quiet and visual aesthetics of the parks", "the sights & sounds of the management action would detract from some visitors' experiences at the parks. The reduction in the number of deer in the parks would eliminate the pleasure some people gain from viewing large numbers of deer." Although deer viewing and enjoyment is not itself a management objective for the parks, the objective of allowing for a historical interpretation of the events of these parks cannot be achieved without visitors. To the extent that the deer attract many visitors to the parks, their tangential role in achieving management objectives should not be overlooked. The report ignores this completely.

The report states that "visitors often pull off the road in undesignated locations where deer are spotted. In some places this has led to damage to road shoulders, monument berms, and vegetation, as well as concerns for traffic safety". This can never be totally eliminated, and putting up signs instructing motorists about where to stop would be a far more cost effective solution than shooting the park's deer.

b. The NPS has initiated preliminary research to prepare a historic landscape management plan to address nineteenth-century landscapes. The number of deer in Gettysburg NMP is not related to the field size or patterns of the 1,548 acres of cropfields.

c. Crops show evidence of browsing and deer are observed browsing in the fields.

d. See page 59 regarding temporary reduction in the deer population.

Various points of the report deal with deer health. Under the Environmental Consequences section, the report states that "the occurrence of severe winter weather at this time may result in high mortality of deer, especially young deer which could not successfully compete for food". The Direct Reduction alternative (hunting) would result in much greater mortality to deer.

In Table 1 Summary of Impacts, under Effects On Deer Population Management is a category called Health. Under the "No Action" alternative, the report states that without cropfield food source, deer health would decline. Yet under Direct Reduction, deer health is said to be good. This obviously does not refer to the ninety percent of deer that will be slaughtered.

Under Effects On Deer, No Action includes "malnutrition without crop fields" and the category entitled Stress says that stress "increases with high densities". Yet under Direct Reduction, stress is listed simply as "minimal". Our organization does not recognize as minimal the stress inflicted upon the ninety percent of the deer that will be slaughtered, nor the ten percent that manage to survive the months of shooting.

The report concedes that "deer in the parks are in good condition". It goes on to state that "as long as the parks maintain the cropfields in the parks, the deer will likely remain healthy even at higher densities."

The report also deals with the problem of deer/vehicle collisions. I am not aware that vehicles were present at the Gettysburg battle, yet the report makes no suggestions for reducing vehicle traffic.

The report states that National Park Service Policies (4:6) authorizes control of animal populations when they present a direct threat to visitor safety. This threat is however present throughout the entire region of the country. In fact, the report states that visitation to the parks is lowest during the months when deer population is highest.

Other alternatives, such as predator introduction, were not fully assessed and were rejected because of conflicts with National Park Service laws or regulations, or because they would result in substantial negative social or environmental impacts. **The Direct Reduction alternative is also in conflict with National Park Service law, and will have a substantial negative social impact.**

The report states that "movement [of deer] into the parks may be a result of hunting pressure outside the parks", and "increased shooting of deer on

e

e. See General Response #1: NPS Legislative Authority.

private land near the parks may cause deer to seek refuge in the parks...". If this is true, and we believe it is, then the reverse must also be true. Hunting pressure inside the park will cause deer to move out. The report states that even the use of repellents would cause a movement of deer to adjacent private lands. The park might be liable for damage and injury caused by migrating deer population off park land, yet this is not discussed at all in the report.

Under the dollar cost of No Action is a sum of $304,000 when the permitee program terminates. Since this cost is not present under the other options, we must assume that only if no action is taken will the permitee program terminate. But this had not previously been conclusively stated. In fact, the report states that "some permitees may no longer be able to participate in the agricultural program because of severe crop damage by deer". f

f. See pages 59 and 73 regarding discussion of termination of the permittee program.

The fact that permitees may withdraw is a potential and not actual cost. Yet under cost of Direct Reduction, no mention is made of the far greater potential cost of defending law suits by animal advocacy groups or by people injured during the course of the Direct Reduction action.

Under Effects on Human Safety, No Action would have no impacts. Direct Reduction lists that "people may be injured or killed by stray bullets". This possibility is not figured into the dollar costs of this alternative.

In the discussion of reproductive intervention, the report states that there are six times more female than male deer in the parks. Contraceptive treatment for 90% of the males would not effect the population. 70% of the fertile females must be treated to control the population growth. The report acknowledges that biased hunting of adult male deer may [must] be the reason for the discrepancy. But in the discussion of Direct Reduction option, no similar mention is made of targeting female deer populations. This is most puzzling, since the objective of limiting deer population renewal is equally served by sterilization or death of the animal. This leads us to believe that hunting interests, which, as has been noted, favor adult male deer, have been surreptitiously represented in this report.

Under Effects On Historical Resources, No Action has no impacts, yet Direct Reduction lists "possible damage from stray bullets".

Under Effects on Vegetation, No Action lists Woodlands as "probably not perpetuated". This has not at all been determined, and would greatly be affected by Pennsylvania State Game Commission policies.

Under Effects on Visitor Use, No Action lists "undernourished deer may be observed if food becomes scarce". This is theoretical, yet no mention is made of the much more concrete possibility of a major drop in visitors due to a national boycott of the Gettysburg NMP if the Direct Reduction plan is implemented.

Under Direct Reduction, the report does list that the "sound and sight of personnel shooting deer or the sight of injured or dead deer could disturb some visitors". Since most Americans are not hunters, and a majority of visitors to the park are from other parts of the country and may not be accustomed to hunting, the effect on visitors has likely been seriously understated.

Under No Action, Access to park lands would have no restrictions. Under Direct Reduction, large areas of the park would be restricted.

The real issue affecting deer population is human population and activities. The report states that in 1985, 50 deer were killed on highways within the deer study area. This increased to an estimated 150 deer in 1993. This must also be attributed to human population growth. The report sites that the Adams County population was 8,000 people in 1990, and is projected to grow to 104,000 by the year 2010. The report also says that "residential and commercial development is changing the park's surrounding landscape". "Within 20 years the deer population in the area grew so fast that in 1964, National Park Service and Pennsylvania Game Commission personnel met to discuss deer management strategies". It is clearly human population growth and game management practices that are the root causes of the increase in deer.

The report states that "the increase in single family homes in the Gettysburg area replaces deer habitats and generally reduces the amount of land available for hunting". Of course, it also creates a shortage of land for, and therefore an overcrowding of deer.

Since the report concludes that the introduction of predators would have a limited influence on the deer population, the absence of predators must not be the major factor in the population increase. Once again, we must conclude that human activities are at the root of interference with park management objectives.

Abraham Lincoln himself said, "I am in favor of animal rights as well as human rights. That is the way of a whole human being." I think he would be saddened at the shortsighted and brutal approach the Park Service is proposing to solve a very complex problem.

Last Chance for Animals finds the No Action alternative to be clearly preferable to the others discussed in the report. We also question the degree to which management objectives are truly being interfered with by deer browsing. In addition, we question the legality of shooting deer at these parks. Please include us on any further lists of recipients for Environmental Impact Statements or other official communications.

Thank you for your consideration of our comments.

Very truly yours,

David Meyer
Executive Director

South Mountain Farm

P. O. Box 38
McKnightstown, Pa. 17343

Ray & Mary Grimes, Owners
Phone: 717 334-1022

RECEIVED
JAN - 5 1995
ETT — EISE

January 2, 1995

Dr. John Latschar, Superintendent
Gettysburg National Park
RD #1
Gettysburg, PA 17325

Dear Dr. Latschar:

I will not be able to attend the Deer Management Meeting on January 7th due to having cattle at the Farm Show.

I would like to make some comments though because some of the comments I've heard sure gives me some uneasy feelings. I would hate to see the Park Service get prime time on the "60 Minutes" show.

First, I'm for managing the deer problem on the park but it's not going to be an easy task.

Here are some problems you will be facing:

1. You say there will be towers built to have shooters shooting downward. Well, they had better be portable because once you begin shooting, deer will soon learn to avoid those areas!

2. You say you will bait areas. Even so you will only get one or two killing shots before they disappear.

3. You say you will use lots of firepower. That will only lead to a lot of wounded deer running around for people to see.

4. You say you would encourage hunting on adjoining farms. That would be a total failure. Hartman's have their own hunting club, Martin's already have a tast of what the green tag area does and the Wolf's have their own hunters. Most of the other landowners will have their own reasons for not allowing hunting.

5. You say you will shoot at night. Once you start shooting deer, they will soon learn to survive by running every time a spotlight is played on them.

Now, let's set the record straight on deer damage. It's true deer are causing a lot of damage, but not all of it.

1. When a field is too wet to get machines in to harvest the crops on time, it's real easy to blame the crop damage and loss to deer.

2. If the Park Service would harvest the mature timber from the woodlots, you would do two things: a. you will receive thousands of dollars from timbersales and b. it would give new growth a chance to grow and those nasty little deer won't take all the blame for eating all the regrowth.

Last but not least, is the fact that a lot of farmers and orchard people would be content to have every deer in Adams County killed. Being there were no deer on Park lands during the Civil War, some are wondering of that might not be your final intent - to remove all deer from the Park. a

It might be brought out somewhere in you Management Plan to say that it is not the intent of the Park Service to eliminate the deer from the Park - only to manage the deer herd.

Thank you for your time and believe me when I say most of these comments come from someone who has done all of these things.

With warmest regards,

Ray Grimes

RG:wh

a. The intent is to control the browsing effects of deer in order to meet the parks' management objectives for the woodlots and cropfields (page 13). A management action is proposed to reduce and maintain the deer population at a predetermined density (Appendix E) that will result in a level of browsing that will enable the parks to meet their management objectives.

RECEIVED
JAN 23 1995
GETT — EISE

142 Briargate Lane
Madison, Alabama 35758
13 January 1995

Dr. John A. Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar;

Thank you for offering me the opportunity to comment on the Draft Environmental Impact Statement (EIS), White-Tailed Deer Management Plan (November, 1994). I will provide my comments in two parts. First, which Alternative I prefer with my reasons and concerns. Second, specific comments on the document. Additionally, I have provided as an Enclosure my Scoping Comments dated April 12, 1993, as I still feel that several of my scoping comments remain valid.

First, of the five alternatives presented in the brochure, I strongly support the Preferred Alternative, Alternative #5, Combined Management. There is no question that Gettysburg National Military Park (NMP) cannot support the present White-Tailed Deer population in the park, and that the deer numbers must be expeditiously and drastically reduced. The most effective and efficient measure to accomplish the immediate reduction of the herd is through Alternative 2B, Direct Reduction, which I recommend the approval of. Establishment of an integrated management plan (Alternative 4) to manage the deer population in and around the park is essential to a permanent solution. However, I have grave misgivings concerning the incorporation of the provisions of Alternative #3, Reproductive Intervention. I do not feel that this is a viable alternative, for a number of reasons provided in my specific comments. I would recommend that the Final EIS and the Record Of Decision (ROD) delete this component of the Preferred Alternative.

I have the following specific comments on the document.
1) General Comment. The photographs accompanying this document generally fail to support the purpose and need of the EIS. Illustrations that depict crop damage, garden damage, wood lot damage, vehicle damages from deer impacts should be used to visually support the purpose and need for the action. For example, Photos 7 and 8 on page 70 are well chosen and contribute significantly to a comprehension of the document.

a

a. Two photographs have been added (see page xv for the list of illustrations).

2) Page 1, Chapter 1, General Comment. The Purpose and Need Statement are well written, and provide an acceptable definition and identification of the purpose and need for this action. I support the assessment by the National Park Service that a White-Tailed Deer Management Plan is required for Gettysburg NMP and Eisenhower National Historic Site (NHS).

3) Page 7, Figure 3, "Location of Historic Wood lots", and Page 9, Paragraph 1.2.1. I am somewhat uncertain as to how Category A and Category B historic wood lots are defined, how the determination was made as to why three wood lots in particular are Category A, and how this Category definition relates to restoration. Please provide names, locations, and acreage of Category A wood lots. Please provide Category A and Category B wood lots clearly identified and located in appropriate Figure.

b

b. Further explanation of the woodlot categories and restoration are discussed on page 18 of Appendix C. Acreage and category identification of the woodlots have been added to Figure 3.

4) Page 14 and Page 16, discussion of hunting legislation. The legislative reason why hunting is forbidden on Gettysburg NMP is clear. However, for Eisenhower NHS, the concept that something is prohibited unless specifically permitted appears to be classic Federal Government bureaucratic nonsense. The Code of Federal Regulations (CFR) quoted do not carry the force of Federal Law, and in this particular case are guidelines only. There is no legislative mandate forbidding hunting at Eisenhower NHS, and public hunting at this site should not be automatically excluded for regulatory reasons only.

c

c. See General Response #2: Hunting.

5) Page 17, 3rd paragraph on page. Statement is made that "With the current level of deer browsing, protection of orchard seedlings would be required until the trees grow above deer browse height." This protection, which would not be historically accurate to the 1863 and Memorial Periods, would represent a visual and aesthetic impact to the historic landscape, and would interfere with effective historic site interpretation. This impact should be added to analysis beginning on page 71, Paragraph 4.2.2, "Effects on Certain Cultural Landscape Components, ALTERNATIVE ONE: NO ACTION".

d

d. The text on pages 17 and 73 has been changed.

6) Page 25, Paragraph 1, **Restore Predators.** The statement: "Although some studies have shown that predators do not limit deer numbers...." is absurd and biologically indefensible. Animal population numbers are <u>always</u> limited by a combination of the number of predators and food availability.

e

e. Refer to Connolly (1978).

7) Page 25, Paragraph 1, **Restore Predators.** I do not concur that this alternative should be rejected, based upon the information presented in this paragraph. The re-introduction of natural predators of White-Tailed Deer should be included and analyzed as a component of Alternative 5, Combined Management. I concur that Gettysburg NMP does not have a suitable habitat for Mountain Lions and Wolves, but I believe that Gettysburg NMP does have suitable habitat for some limited number of Bobcats. The statement is made that "Coyotes and black bear are present in small numbers in Adams County and do prey on fawn population. Their effect on the parks' deer population is unknown but probably minimal." No validation or reference for this statement is made, and without supporting study I would consider it to be speculative. If following a

f

f. According to park personnel, two bears were reported in the parks in the past 20 years. One bobcat was killed on a highway south of the park within the last year. Although no scientific study has been conducted, the effect of a limited number of predators on the deer population must be minimal, because the number of deer in the parks has remained high. Except for scattered wooded areas, the parks and surrounding area are mostly agricultural land. We disagree that this is suitable year-round habitat for bobcats.

comprehensive analysis of natural predators' effectiveness, permanence, and economics, it is determined that "natural predator deer population management" is not a viable strategy, then it could be removed from consideration. I believe that natural predators could make a contribution to a comprehensive deer management program, and provisions for the fostering and maintenance of natural predators' habitat should be incorporated into this plan following adequate environmental analysis.

8) Pages 25-30, I am in complete concurrence with the reasons provided for the elimination of Alternatives Considered but Eliminated #2, Deterrents; #3, Repellents; #4, Poison; #7, Conversion of Crop fields; and #9, Landowner Privilege.

9) Page 26, Alternative #5, Public hunting. Refer to previous statement #4. I do not concur that the laws that govern the National Park Service would be broken if public hunting were to be permitted at Eisenhower NHS. Admittedly, National Park Service regulations would be broken, but these are guidelines, not mandates. The third paragraph states certain requirements for adding regulations to the CFR. I would argue that this EIS, properly planned and executed, should fulfill all such requirements.

10) Page 28, Alternative #6, Fencing. I believe that the contribution of fencing should not be excluded from the Preferred Alternative, #5, Combined Management. I concur that non-historic fencing should not be utilized. However, the possible contributions of historic fences (e.g. 18th and 19th century fence types) to passive deer management should be discussed. Replacement and/or installation of all historic fencing on park could make some contributions to deer management, and should not be excluded from consideration and analysis.

11) Page 29, Alternative #8, Deer as a Commodity. I do not concur that this alternative should be rejected, based upon the information presented in this paragraph. To the best of my knowledge, actions and activities of the U.S. Government do not have to be in compliance with State Laws. The National Park Service could choose to supersede this law, and this deer management approach should be added to the Preferred Alternative, #5, Combined Management for consideration and analysis.

12) Pages 31-34, Alternative 2A, Capture and Transfer. I believe that this alternative should be moved into the "considered but rejected" category, for it has two significant and overwhelming flaws. First, where are the deer going to be moved to? To the best of my knowledge, there is not a single location in North American that needs any more White-Tailed Deer. There is no identified or viable prospective location for the transfer of these deer. Without a clearly defined, approved, and feasible transfer site, this alternative simply cannot be implemented. Second, even if the population in the park could be reduced through capture and transfer, there would still be no reduction in the park deer population. There are too many deer on the battlefield for two simple reasons- no predators, and a readily available food supply. Until predators are re-

g

h

i

g. The text on page 27 has been corrected. In addition, see General Response #2: Hunting.

h. While the NPS is not subject to state regulation of management activities regarding reduction of the deer population in the parks, Pennsylvania state law is in effect outside the parks. It would not be legal under Pennsylvania law for any private contractor to sell deer taken in such a program or for any person to buy a deer or deer carcass (34 Pa.C.S. Sec. 2312).

i. Although no suitable relocation sites were identified by the NPS and Pennsylvania Game Commission (see page 61), this alternative was fully considered because sites may have been found through public and agency review of the draft document.

introduced (either humans or animals), and until access to the food supply is curtailed (through encouraging additional off-park hunting and through historic fencing), deer will continue moving into the park. This alternative offers no permanent solution to the problem. In the vernacular, it is "treating the symptom, not the disease". Under this alternative, the National Park Service could capture and transfer on a permanent annual basis and still not reduce the population appreciably.

13) Page 34, Alternative 2B, Direct Reduction. Although regrettable, I am in complete concurrence of this course of action, and support its implementation. My mother lives on the northern edge the study area, and I am also a Civil War historian who is intimately familiar with the Gettysburg Battlefield. I have personally seen the severe adverse impact caused by the large deer population to the historic landscape and surrounding farms and gardens. This alternative is the most effective and efficient solution to this problem.

14) Page 35, third paragraph on page, first sentence in paragraph. Please review plans to use "high-velocity rifles". The use of rifled slugs in shotguns would be an acceptable alternative in most cases, and would minimize the potential for inadvertent human or domestic animal injury, or damage to historic structures.

15) Page 36, Alternative 3, Reproductive Intervention. This alternative is not feasible, and I believe that this alternative should be moved into the "considered but rejected" category for the following reasons:

- Even if the population in the park could be reduced through reproductive intervention, there would still be no reduction in the park deer population. There are too many deer on the battlefield for two simple reasons- no predators, and a readily available food supply. Until predators are re-introduced (either humans or animals), and until access to the food supply is curtailed (through encouraging additional off-park hunting and through historic fencing), deer will continue moving into the park. This alternative offers no permanent solution to the problem. In the vernacular, it is "treating the symptom, not the disease". Under this alternative, the National Park Service could sterilize deer on a permanent annual basis and still not reduce the population appreciably.
- page 37, first paragraph on page, last two sentences. I believe that to capture and perform surgery on six deer a day is overly optimistic. Additionally, how many "qualified technicians" does this entail? Where will this surgery be performed? How much equipment would be required? Where would it be installed? What are its utility and infrastructure requirements? This alternative lacks detail and definition.
- page 38, second paragraph on page, last sentence in paragraph. It is nice information that researchers are attempting to adapt this dart for deer use, but this has not yet been accomplished, and could prove impractical. It is speculative, and should be removed from discussion until it is a legitimate technology.
- page 39, third paragraph on page. The time frame of "29 days" to dart 731 deer on the park is wildly optimistic. Please provide an estimate of the number

j

j. See General Response #3: Reproductive Intervention.

of personnel, number of equipment, and training needed. What is the range of this blow gun? I suspect that getting within range of the deer on the hilly, wooded, rocky terrain of Gettysburg NMP would prove to be a difficult, slow, and manpower intensive task.

• page 39, last paragraph. It is nice information that researchers are attempting to adapt microencapsulated boosters for deer use, but this has not yet been accomplished, and could prove impractical. The technology is speculative, and should be removed from discussion until it is a proven alternative.

• page 40, last paragraph under alternative. Food and Drug Administration (FDA) approval for the implementation of this alternative is speculative and uncertain. It would certainly entail testing, and require considerable schedule time and expense to obtain FDA concurrence. Without such approval, the effective implementation of this entire alternative is precluded.

• Finally, this alternative implies that it is more humane, and less stressful to the deer, to pursue, trap, capture, cage, "hog tie" and blindfold, transport, handle, and operate on deer than to cleanly and swiftly kill them with a rifle bullet. I personally believe that this alternative is a far crueler, and much less considerate, alternative to the treatment of the animals in question.

16) Page 40, Alternative 4, COOPERATIVE MANAGEMENT. This alternative is an effective and efficient solution to the long term deer management issue.

17) Page 44, Table 1, 2A Capture and Transfer. The maintenance phase costs are badly underestimated. Refer to previous comment #12, the Park would never move into the maintenance phase. The reduction phase would be continuous.

18) Page 44, Table 1, 3 Reproductive Intervention. The maintenance phase costs are badly underestimated. Refer to previous comment #14, the Park would never move into the maintenance phase. The reduction phase would be continuous.

19) Page 46, Table 1 and page 68, sixth line on page. I do not recognize the term "myopathy". Please provide a layman's definition somewhere in EIS.

20) Page 47, Effects on Human Safety: No Action. Increased numbers of deer on the park, and increased contact with human beings, has the potential to result in increased human/deer incidents. Possible effects of increased spread of animal diseases to humans and domestic animals (e.g. rabies) and deer attacks on humans.

21) Page 50, third paragraph on page. Question statement that "Hunting is the major cause of mortality to deer in Pennsylvania." I had always thought that vehicle accidents were the major cause of deer mortality, please verify (particularly since only male deer are annually hunted in Pennsylvania).

22) Page 60, first paragraph on page, fifth line. Change to read: "land near the parks is likely to increase if deer move off...." Reason: more accurate statement.

23) Page 73, second paragraph on page, lines 1 to 7 of paragraph. Discussion beginning "Permittees farming..." and ending "...deer browsing losses." is redundant, and should be deleted from document.

24) Page 82, Alternative 2B, Direct Reduction-Shooting. I believe that there is an increase in park visitation during holiday periods (Thanksgiving, Christmas

k

k. Capture myopathy is a potentially fatal noninfectious disease related to struggling during capture (Chalmers and Barrett 1982).

l

l. According to Pennsylvania Game Commission records, approximately 395,000 deer are killed by hunters annually and about 45,000 are collected annually on roadways in the state.

m

m. The NPS wishes to be conservative.

through New Year, Easter). As a possible mitigation to impacts to visitors, preclude deer hunting during higher visitation holidays.
25) Page 84, Paragraph 4.2.2 Effects on Human Safety: No Action. Increased numbers of deer on the park, and increased contact with human beings, has the potential to result in increased human/deer incidents. Possible effects of increased spread of animal diseases to humans and domestic animals (e.g. rabies) and deer attacks on humans.
26) Page 86, Paragraph 4.5, Unavoidable Adverse Impacts. I agree that a reduction in the number of deer in the parks would eliminate the pleasure some people gain from the easy viewing of large numbers of deer. However, it should be clearly noted that Gettysburg NMP and Eisenhower NHS were not established, and are not funded by taxpayer dollars, to provide "deer viewing" parks. Large herds of free roaming deer would not have appeared on the agricultural and military landscape of 1863, and their presence detracts from the historic vista and interpretation of the events for which this park was established. I consider the reduction of the number of deer in the parks to be a positive, not an adverse, impact.

As a Cultural and Environmental professional, I would like to formally request that I be made aware of, and be offered the opportunity to continue to participate in and comment on all future White-Tailed Deer Management related analysis, documentation, and consultation performed in compliance with the National Environmental Policy Act and the National Historic Preservation Act. This request is made in accordance with the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act, specifically 40 CFR § 1500.2, NEPA Policy; and 40 CFR § 1506.6, Public involvement. In the case of the National Historic Preservation Act, this request is made in accordance with the Advisory Council on Historic Preservation's implementing regulations, 36 CFR § 800.1 (c) (1) (iv), Public participation; and 36 CFR § 800.14 (d), Coordinated public involvement.

Again, thank you for offering me the opportunity to comment on this Draft EIS. Please consider me to be, respectfully,

Your Servant;

Douglas R. Cubbison

cc: Dr. Walter L. Powell, Gettysburg Battlefield Preservation Association

Jan.26,1995

Supt. John Latschar
Gettysburg National Military Park
Gettysburg, Pa. 17325

RECEIVED
JAN 30 1995
GETT — EISE

Dear Supt. Latschar:

In reply to the National Park Service request for public comments on the draft Environmental Impact Statement concerning the white-tailed deer management plan for Gettysburg National Military Park and Eisenhower National Historic Site I wish to offer the following:

Last fall I gave to you a personal study of the agricultural program at Gettysburg National Military Park with emphasis placed on the Pickett's charge area and adjoining fields. In my comments I will utilize figures from that study as well as additional information provided in the draft EIS.

The document "Economic Value of Agriculture Program at Gettysburg National Military Park and Eisenhower National Historic Site" open[illegible]th the statement, "The primary purpose of the agricultural program at GNMP and ENHS is to recreate and maintain the historic scene and character of these two National Park areas. ... From a cultural perspective, the primary landscape features within GNMP include historic field sizes, clusters of historic farmsteads, historic circulation networks, and the

1

BARBARA PLATT

Most of the issues presented are covered in the document.

vegetative textures, massing and patterns within the historic network."

Four paragraphs later is the statement "that an overpopulation of deer adversely affects the National Park Service's long-term ability to perpetuate economically viable agriculture and may eventually adversely affect the ability to achieve and perpetuate the desired historic appearance (color, texture and pattern) of cropfields."

In "Managing Culturally Significant Landscapes in the National Park System-Gettysburg National Military Park and Eisenhower National Historic Site" section 5.0 "Alternative Solutions Examined by NPS to Make the Agricultural Program More Viable" states that "NPS has already concluded that the number of white-tailed deer and the damage they cause is seriously threatening the viability of the agricultural program. 'Deer impacts will need to be mitigated if the Service wishes to accurately represent the historic, rural agrarian landscape' (GMP Evaluation of Alternatives, p.17) In fact the agricultural program at present does not accurately represent the historic landscape, but there is no doubt that, given the agricultural program is committed to commercial agriculture, it is seriously threatened by damage caused by the deer."

This is, without question, the bottom line and the National Park Service needs to publicly state whether it

a

a. See page 11.

is committed to historic accuracy or economically viable agriculture.

I would also call attention to the document "Management Policies", US Department of the Interior, National Park Service, 1978. Under the heading "Management of animal populations" is the statement "Natural processes shall be relied upon to regulate populations of native species to the greatest extent possible. Unnatural concentrations of native species, caused by human activities, may be regulated if those activities causing the concentrations cannot be controlled." I believe that human activities ie. the agricultural permittee program, has led directly to the increase in the deer population on the battlefield. The raising of corn, wheat, alfalfa and other crops attractive to deer, on a large commercial basis,could be expected to attract increasing numbers of deer to the area. To my knowledge there has been no effort made to determine the effect on the deer population if the core area were to be planted in grasses.

In fact the alternative of reducing the deer herd in the parks by converting the areas of high deer density to grasses less attractive to deer than grain crops, has been dismissed out of hand as evidenced by the statement, "Although the interspersion of various colored grasses may simulate historic field patterns, the desirable vegetation features of height and texture would not be attained....This

b

b. See General Response #4: Cropfield and Woodlot Management.

option ...cannot be considered as an alternative to active farming or deer management." (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots 1992). Yet the draft EIS states that "Planting grasses of different colors and textures in the agricultural lands could create checkerboard field patterns to give the appearance of different agricultural crops. This would eliminate the existing deer damage to agricultural crops." (pp 29).

The dismissal of grasses as an alternative because this "does not support the management objectives nor the goals for cropfield appearance at GETT/EISE..." (Management Alternatives) is an indefensible argument since the current appearance of the cropfields in no way resembles the 1863 landscape. The draft EIS states on pp 11 "Much larger field sizes are required to accommodate the use of modern farming techniques and machinery... The croptields on the battlefield are, therefore, not presently being maintained to their historic size and do not reflect historic field patterns."

C

c. See General Response #4: Cropfield and Woodlot Management.

The arguments for deer reduction have been based on the assumption that there will continue to be an "economically viable" (a term used in park documents) agricultural program on the battlefield with its' requirements for large, contoured, drained fields unlike anything seen on the battlefield in 1863. Either the park service will opt to

restore the battlefield to its historic appearance with small field sizes and extensive fencing in the core area or it will continue the present non-historic agricultural program. It cannot do both.

Aside from the "economically viable" vs the "historically proper" agricultural landscape I have a concern over the misconception the public may have about the number of farmers being adversely affected by deer. Page 11 of the draft EIS mentions that there are 15 agricultural permittees engaged in farming on the two parks. However no distinction is made between those holding permits for cropland and those holding permits for pasture land. Nor is more than passing mention made that only 2 permittees,(of the 11 holding cropland permits) received a waiver of fees due to deer damage.

d

d. A new farm was added to the Eisenhower NHS agricultural program in 1994. Currently (1995), there is a total of 16 permit holders for both Gettysburg NMP and Eisenhower NHS; 5 are for pasture only, 5 for cropfields only, and 6 for both pasture and cropfields.

The statement is made (pp 59 draft EIS) that some of the permittees would "probably" quit within the next 2 to 3 years and replacements "probably" could not be found. Since only 4 of the permittees farm large areas of the parks and only two of these raise crops logic would suggest that only these latter two might quit.

The statement is then made that "National Park Service personnel would have to take over farming to maintain the agricultural landscapes of the parks." This is quite misleading. Only if the decision is made to continue the large commercial, non-historic appearance of the core areaof

the battlefield would this action be necessary. If, as has been stated, the park service plans to restore the core area of the battlefield to its' 1863 appearance through the restoration of historic fencing and the resulting small fields, then the current farming practices would not be possible. In this case the permittee farming the 636 acres in this area of the park would most probably find it necessary to relocate elsewhere. Should this occur only the permittee at ENHS would remain in the area of highest deer population. Although larger field operations are appropriate to this area so is electric fencing and its use would provide the permittee sufficient protection to continue operation. Current estimates by professionals in the field indicate that properly installed and maintained electric fencing 5 1/2 feet high will deter 90-95 percent of all deer.

It is significant that on page 60 of the draft EIS is the statement "As long as the parks maintain crop fields in the parks, the deer will likely remain healthy even at high densities". Here the crucial word is "cropfields". If those croplands within the core area were converted to grass and/or crops not attractive to deer there is every reason to expect the deer population would react negatively.

Safety:

The matter of visitor safety is one of extreme concern to me. The park has no perimeter fencing and therefore no way to prevent access to the park from any point on its boundary. Only access from roads could be adequately controlled. Even here patrolling, to ensure access is limited or prevented, can in no way assure adequate visitor safety, there are always those-as past experience has shown-who will ignore both barriers and warning signs. Patrolling at night away from roadways would be extremely difficult yet the draft EIS indicates that night hunting would be utilized. Identification of hunters during night time hours would be difficult if not impossible. The use of bait stations too, as mentioned in the draft EIS, could prove to be potentially dangerous since there would be no way, other than the constant on site presence of rangers, to assure that would-be poachers would not locate and utilize the bait stations prior to any approved hunting. Poaching is an on going problem for park personnel and the use of bait stations would only exacerbate it. The presence of two hunters killing deer on the battlefield in the belief that it had already been opened for hunting, gives only a small indication of the problems connected with hunters who have gained access to battlefield land. To assume that all members of the hunting public would refrain from entering the park simply because they are not among the selected hunters is naive.

e

f

e. See page 35 regarding shooting deer in the parks at night. Alternative 4 discusses hunting outside the parks which would not occur at night.

f. See General Response #2: Hunting.

Furthermore the cost of additional rangers to patrol the park would be significant. The estimate for 3 additional rangers as quoted in the draft EIS is $10,500 for one hunting "season". Not only is this estimate conservative but the question arises whether 3 rangers, no matter how skilled, can adequately patrol park boundaries, control roadway traffic in the hunting area, and assure that all hunters are properly registered. Access to GNMP is possible from any point on its perimeter and to patrol the limits of the areas to be hunted would also put those on duty in danger from stray bullets.

Despite the statement that "personnel highly skilled and trained in the use of firearms would shoot the deer with high-powered rifles" (pp 35, draft EIS) there is still danger to the public. Even skilled marksmen can and do miss. High powered rifles can kill at a range of 1 mile or more. The danger is admitted on pp 84 of the draft EIS: "Individuals in the parks or on private land adjacent to or in the parks could be injured or killed by stray bullets. The possibility of this occurring would be expected to be extremely low, because safety zones would be established and enforcement personnel would restrict access..." However given the lethal range of high-powered rifles the question becomes one of safety zone size. To extend a safety zone to even the minimum range of such weapons would extend it beyond the boundaries of the park and onto private land.

Also on pp 84 of the draft EIS is the statement: "Participants in the shooting could be injured or killed by stray bullets. The possibility of this occurring would also be expected to be extremely low,... Human safety would be increased by the wearing of fluorescent orange when day shooting occurred..." It should be noted that only the hunters are likely to be wearing fluorescent orange. Nor is anything said about safety during night hunting. Yet on pp 35 of the draft EIS is this statement: "Deer would be shot during the day and nighttime hours. Shooting deer at night would improve efficiency and cost effectiveness, because deer move into open fields and closer to roadways at night. Night shooting would be conducted only at bait stations." Presumably these bait stations would necessarily have to be in open fields and close to roadways.

The use of silencers, as suggested on pp 35 of the draft EIS "to reduce disturbance to people" could very well increase the danger to visitors since no shot sounds would be heard to alert them to the presence of hunters.

Hunting during the months of October and April should not, in the interest of public safety, be acceptable under any circumstance. Figures provided in the draft EIS show that visitation on the battlefield is generally higher in April and October than it is in September. Thus to conduct any type of hunting activity in the park during those months increases the danger to the public. Visiting groups scatter

throughout the park, scholars roam the entire park at all seasons (visibility is best after leaf-fall). All of these individuals will be at risk during any hunting activity.

Woodlots:

Much is being made of protecting woodlots from deer browsing. However figures presented in the draft EIS are misleading. The table on pp 133 gives the impression that 387 acres of woodlots would have to be fenced and a cost estimate is presented for the installation and maintainance of electric fencing for this entire area. Aside from the fact that electric fencing would be the worst possible alternative in terms of both safety and maintainance the statement directly beneath the table reads: "an open understory is desired (in the first three woodlots listed) and woodlot fencing may not be necessary as long as the acceptable characteristics of height of overstory, coniferous/deciduous ratio, and native species are being perpetuated;" Yet no adjustment is made to the cost estimate based on this statement. Since the cost estimate is $160 per acre elimination of this 180 acres would reduce the cost by $28,800. In addition 4 of the remaining woodlots are within pastures currently being grazed by cattle. These account for 57 acres. Damage to these woodlots is far more likely to be done by cattle than by deer. If this 57 acres is also removed from the initial 387 acres there would remain only 123 acres of woodlots in 4

different areas which might require fencing at a cost of $19,680, not the $61,920 given in the draft EIS pp 133.

The argument is also made that "Any fencing, whether chain link, woven wire, or electric, would impede visitor access..." There is however, a type of fencing which avoids this problem. By using Virginia "worm" fencing, which is compatible with the historic scene and already in use on the battlefield, deer can be excluded from selected woodlots while still permitting visitor access. Such fencing requires no posts and can be removed and reused in other locations. Entrances can be constructed in a double "L" configuration which will deter deer from entering the fenced area but will permit human access. Although more expensive to purchase, at $9.19 per lineal foot, there is no maintainance except to replace the occasional broken rail. A fence 5 1/2 feet high, properly constructed, should repel all fawns and virtually all adult deer. Another advantage to this type of fencing, aside from its adaptability, is the fact that it can be erected by volunteer groups such as Boy Scouts, working under the guidance of park personnel.

g

g. See page 28 regarding fencing.

Cost:

The cost of the deer study to date, the additional costs involved in the alternatives recommended, the continuing "maintainance" costs, and the costs of any potential litigation, should be of great concern to the public. Figures provided by NPS staff show that, as of

August 1994, deer study costs were $387,849 exclusive of salaries. Since one person has been employed full time to write the draft EIS and at least 4 staff members have, for the past several years, spent portions of their time on matters related to the deer study, it is reasonable to estimate that the expenditure for salaries related to deer study activities has reached or exceeded $50,000. Thus the total expended to date seems likely to have reached at least $437,849 and probably is approaching the half million dollar level. It is impossible to estimate court costs should litigation be pursued by those opposed to herd reduction by the methods selected by the NPS. However it is reasonable to assume that such costs would reach into the thousands of dollars.

On page 170 of the draft EIS the estimated cost of administering alternative 2B-direct reduction-is given as $155,509 for one year. On page 178 the cost of alternative 5-the stated preferred alternative-is $101,351. Why the cost of this alternative, which combines alternatives 2B, 3 and 4, is less than the cost of 2B alone is unclear. However the important factor is that this estimate is for one year only. If additional years are needed to reach the

desired herd reduction level then the $101,351 cost will continue in ensuing years. On page 163 of the draft EIS it is stated: "It may take several years to reduce the deer population to the predetermined density." Therefore it is reasonable to anticipate that the $101,351 will be an annual expenditure for "several years". If two additional years were required to reduce the herd to the predetermined size the cost (including money already spent) would rise to $741,902 or $959.76 per deer.

By comparison it would cost $107,549 to fence, with Virginia worm fence, the 123 acres of woodlots at greatest risk. This would be a one time only expenditure and is approximately the same as the cost for one year of herd reduction under alternative 3 and nearly $50,000 less than the cost of alternative 2B alone.

It has also been shown that should the 636 acres of cropland currently farmed in the core area of the battlefield be converted to grass the cost of mowing this area twice a year would be either $14,271.84 using the GNMP division of Natural Resources cost estimate of $10.22 per acre, or $8904 using the Penn State Extension figure of $7 per acre per mowing. In either case the cost would be dramatically less than that given for either alternative. It would also be less than the combined maintainance costs of alternative 2B and 4 as given on pp 178 of the draft EIS.

Even when added together the cost of mowing and the one year cost of fencing is less than the one year cost of alternative 2B and, using Extension figures, only about $9000 more than the one year cost of alternative 5. Furthermore, as stated above, the cost of fencing ($101,549) is a one time expenditure whereas the cost of alternatives 2B and 5 will remain high so long as either alternative is utilized.

One additional concern needs to be addressed when considering the alternatives for reduction of the deer herd at GNMP. There is at least one organization exerting continuing pressure to open the national parks to hunting. To initiate a direct reduction program in GNMP, even using selected personnel, would provide the "foot in the door" to hunting in national parks that this group so ardently seeks. Thus a precedent set at GNMP could make it even more difficult to retain the "no hunting" policy at other national parks. This should be avoided at all costs.

Please understand that I am not opposed to reducing the deer herd at GNMP but I am strongly opposed to the alternatives put forth in the draft EIS. There is no empirical evidence to indicate that non-lethal alternatives such as conversion to grass coupled with woodlot fencing, would not achieve the same results. Until this or a similar approach has been tried and the results objectively evaluated I can see no justification for the utilization of

any of the alternatives outlined in the draft EIS deer management plan for Gettysburg National Military Park.

Sincerely,

Barbara Platt

Barbara Platt

905 Belmont Rd.

Gettysburg, Pa. 17325

NORTH AMERICAN HUNTING CLUB
LIFE MEMBER

RECEIVED
FEB - 2 1995
GETT — EISE

January 30, 1995

Dr. John Latschar
Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

I wish to give you my comments on the management plan being considered on the National Battlefield for the white tailed deer. Being a land owner adjacent to the Eisenhower Farm I am not convinced as stated before that you have 1,000 deer in the park or 90 deer per square mile as stated in the population estimates in the past.

I have been a land owner for 23 years in the Eisenhower area. I remember the deer herd crossing Business Rt 15 at the Peach Orchard back in the early seventies that required your rangers to stop traffic and set out flares to let the deer cross. In the past few years I have never seen the deer in the south area of the battlefield in large numbers as it was back then. The most I have counted in one field lately was approximately 30 or 40 across from Business Rt 15 and Confederate Ave. In my fields on the same day when the deer were out because of a weather change I would see approximately 15 to 25 deer. If there were 90 deer to the mile I have not been able to see that many at one time in any of the fields along Business Rt 15 and Confederate Avenue the entire 4 miles into town. I believe you do not have a true estimate of how many deer you have in the Park.

I observed your fenced-in test area at the corn field along Confederate Avenue with much interest. It's true the deer ate the corn down around the outside area that was not fenced. I would like to express that this was not a valid test of crop damage done by deer. I noted your small corn field was the only corn planted for the 1994 season in all of the farms along Business Rt 15 and also Confederate Avenue. Since this was the only corn in this South area, I think this was a very poor test. I also have wooded areas on my 185 acres and I do not see the kind of damage to small trees or undergrowth as has been stated. Upon inspection of your wooded area along Confederate Avenue I do not see the damage that is so often spoken of in this area. What I have observed during the very hard winter we had last year and some winters in the past, the deer did do damage to a lot of the evergreen trees in my area. It is a known fact you will not have much new growth in mature wooded areas unless some of the older trees are cut.

a

a. The deer exclosure is not a test of crop damage but a demonstration area that shows and informs the public of the effect of deer browsing in the park. The plot is not used to monitor deer damage (see Animal Protection Institute comment letter response d).

I do not agree with shooting the deer day and night at bait stations. This practice is illegal and I do not believe you should be above the Game Laws for Pennsylvania. I do not believe the question asked at your last meeting on how you would keep from sterilizing deer, to keep them from reproduction, on other people's land was a foolish one as stated. I want to go on record as being highly upset at such a suggestion and feel this would infringe on my right to have deer freely reproduce on my property. I am a member of Wild Life Forever and I should hope you would not resort to such measures. If you are convinced you have pocket areas with many deer then you should work very close with the PA Game Commission to resolve it. b c

I am a hunter and I have allowed hunting on my property. Perhaps in the areas you are most concerned about you should encourage the Game Commission to allow hunters in some areas surrounding the Battlefield to harvest more than one deer and to allow hunters to take buck or doe. If this was allowed I am sure the deer herd could be kept under control instead of relying on hard winters to thin the deer herds. Hunters have access to these areas but many of then do not harvest a deer because they can shoot only bucks during rifle season and have not been able to get a doe permit. The season should be open with hunters' choice and then many more deer would be harvested. The deer are very important to a lot of families in this area because they provide a source of meat for the winter. d

I hope a responsible decision will be made. Let's not loose sight that a lot of visitors enjoy seeing the deer in this area. e

Sincerely,

Linwood P. Kern

PA Game Commission

b. The game laws in Pennsylvania are directed at hunting. Shooting deer in the parks (Alternative 2B) would not be hunting.

c. See General Response #3: Reproductive Intervention.

d. See Alternative 4.

e. Enhancing wildlife viewing opportunities is not a stated purpose of the parks.

PERKINS COIE

A LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS
607 FOURTEENTH STREET, N.W. · WASHINGTON, D.C. 20005-2011
TELEPHONE: (202) 628-6600 · FACSIMILE: (202) 434-1690

GUY R. MARTIN
(202) 434-1650

February 6, 1995

BY FEDERAL EXPRESS

Dr. John Latschar
Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, Pennsylvania 17325

Re: DEIS on White-Tailed Deer Management Plan

Dear Dr. Latschar:

These comments on the draft environmental impact statement ("DEIS") on the National Park Service ("NPS") white-tailed deer management plan for the Gettysburg National Military Park ("GNMP") are submitted on behalf of Sylvester M. Brown. As the owner of Brown's Ranch, which is private property located within the exterior boundaries of the GNMP, Mr. Brown is directly affected by the NPS proposed plan. Mr. Brown's purpose in submitting these comments is to ensure that his property rights, personal privacy, and the safety of individuals who are on his property are all protected under the plan ultimately adopted by NPS. Mr. Brown appreciated the effort put forth by Mr. Hal Greenlee and Dr. Bert Frost in meeting with his personal representative to discuss the GNMP's preferred plan.

Mr. Brown recognizes that there is a severe deer over-population problem in the Gettysburg area and that the resulting browsing is damaging park resources, as well as personal property and crops. Public safety problems also have been created as a result of deer collisions with vehicles. It is also Mr. Brown's understanding that current deer population levels far exceed those of the 1860's. For all of these reasons, Mr. Brown believes it is appropriate to undertake appropriate measures to reduce the deer population in the vicinity of the GNMP. Mr. Brown is aware that the deer management program will take several years to implement.

[16316-0001/DA950230.026]

In addition to this general comment, Mr. Brown has three specific points he would like to emphasize. First, with respect to the discussion in DEIS on the prohibition on hunting in the GNMP, Mr. Brown notes that this prohibition does not apply to his private hunting practices on his private lands. It is Mr. Brown's position that, because these lands are privately owned, they are not subject to the hunting prohibition. Moreover, Mr. Brown is now in the process of finalizing a conservation easement agreement with NPS. If this agreement is entered into and an acceptable purchase price is offered by NPS, Mr. Brown will transfer certain of his property rights in the Brown's Ranch to NPS. The current easement agreement specifies that Mr. Brown would retain these hunting rights upon execution of the agreement. Mr. Brown specifically requests that the decision-making record on the deer management plan reflect that Mr. Brown will be allowed to retain his personal hunting rights on his property. a

Second, Mr. Brown wishes to address concerns over access to his property by others for hunting purposes. Mr. Brown does not intend to authorize the general public to have access to his property for hunting purposes. Indeed, the current draft of this conservation easement agreement with NPS would prohibit such a result, as hunting by other parties would be expressly prohibited. Mr. Brown is willing to cooperate with NPS, however, to allow hunting on his property by his invited guests in a manner that would advance the goals of the NPS plan. If Mr. Brown's invited hunting guests reach their bag limits before the end of the season, Mr. Brown would be willing to consider a request from NPS to allow additional hunters onto his property. In making this offer, Mr. Brown emphasizes that he will at all times insist upon the authority to decide who may hunt on his property and under what conditions. b

Finally, Mr. Brown requests that NPS take all necessary steps to ensure that his property and the safety of individuals on Brown's Ranch property are fully protected when the plan is being carried out. In particular, Mr. Brown requests that a "zone of fire", such as NPS discusses on page 41 of the DEIS, be established around his property to ensure that hunters will direct their shooting away from his property. Mr. Brown would be pleased to consult with NPS in establishing this zone or developing alternative safety precautions.

a. This concern will be addressed separately in ongoing negotiations regarding the conservation easement.

b. The NPS can not force private landowners to allow access to hunters. The NPS would, however, encourage private landowners to allow additional hunter access to their land when action is taken within the parks. A cooperative agreement that would meet the needs of all the parties would be sought if the preferred alternative (Combined Management) or Alternative 4 (Cooperative Management) is chosen as the final alternative.

Mr. Brown appreciates the opportunity to submit these comments. If you have questions, please contact me or Don Baur (202) 434-1621.

Very truly yours,

Guy R. Martin

cc: Sylvester M. Brown

GRM/DCB:cdm

PAUL WISLOCKY

RECEIVED
FEB -8 1995
GETT — EISE

1516 McCormick Drive
Mechanicsburg, Pa 17055
February 6, 1995

Dear Mr. Latacka,

I'm writing concerning the article in the Patriot News on December 4, 1994.

As a hunter and law abiding citizen, I'm very disappointed and disturbed that you would ever consider a reduction plan for deer at bait stations where deer would be concentrated and then ambushed day and night from October through April.

This practice is ILLEGAL and I do not believe that you should be above the Pa. Game laws. a

I'm also opposed to the idea of sterilization as there could be questions and even law suits concerning the meat of such animals later harvested on adjoining properties. b

I hunted adjacent properties next to the National Battlefield a good number of times. I did not get a deer.

During buck season, I passed up a spike buck as I wanted to save my tag for muzzleloader season.

During muzzleloader season I passed up several

a. See General Response #1: NPS Legislative Authority.

b. See General Response #3: Reproductive Intervention.

possible shots because I didn't have a clean killing shot. I try to be a good sportsman and it deeply troubles me when I read your suggested solutions. Please think this through."

Here are several suggestions:

1. Why not issue extra tags for areas near the park so that more deer are taken? If I would have had an extra tag I believe my hunting in rifle season would have been different. **c**

2. Why not open some of the Battlefield up for hunting on a controlled basis? You could limit the number of hunters so that you would keep things in control, and you would see those deer scatter in a hurry. Increased hunter access is the key and a special tag or permit could be issued. **d**

3. If you can't permit limited hunting, just have several people walk through those pockets of woods or ride on ATV's and the deer will still move out. Just do it during regular hunting season and the deer will be thinned out by the hunters on the adjoining properties. That's why we buy hunting licenses — to hunt the deer, not to have you ambush them at bait stations. **e**

c. See Alternative 4: Cooperative Management.

d. See General Response #2: Hunting.

e. See Alternative 4: Cooperative Management.

4. You could issue a special buck or doe permit, good for the management area surrounding the park and solve a good bit of your problem as well. In other words, hunters choice, one permit is good for a deer of either sex.

5. Perhaps you are not aware of how the licensing system works. Since I enjoy hunting muzzleloader season (after Christmas) when I can get some exercise and have a good reason to be out in the woods, I must not get a doe license.
If I harvest a buck, then I cannot go muzzleloader hunting. The only exception is if I'm lucky enough to get a bonus license for doe. I want.
If you issued an extra management tag, then I could harvest an extra deer.
If you are worried that everyone would want one; limit it to muzzleloading.

The State Correctional Institution is a large prison at Camp Hill Pa. They have a similar problem and have never allowed hunting. In 1994 they allowed archery hunting on saturdays only and in 1995 will expand it to archery and muzzleloading only and just on saturdays. There is excitement among the hunters, the officials seem pleased and by adding muzzleloading, they are sure to increase the deer harvest.

Sincerely,
Paul W[illegible]

LAW OFFICES
GOLDBERG, KATZMAN & SHIPMAN, P.C.

RONALD H. KATZMAN
HARRY B. GOLDBERG
F. LEE SHIPMAN
PAUL J. ESPOSITO
NEIL HENDERSHOT
J. JAY COOPER
THOMAS E. BRENNER
DAVID C. MILLER
JAMES M. SHEEHAN
MICHAEL A. FINIO
JOHN A. STATLER
APRIL L. BYRNES-KUTAY
GUY H. BROOKS
JEFFERSON J. SHIPMAN
ARNOLD B. KOGAN
JERRY J. RUSSO
KAREN FEUCHTENBERGER
MICHAEL J. CROCENZI
DREW GANNON

320 MARKET STREET
STRAWBERRY SQUARE
P. O. BOX 1268
HARRISBURG, PENNSYLVANIA 17108-1268
TELEPHONE (717) 234-4161
FAX (717) 234-6808

ARTHUR L. GOLDBERG
OF COUNSEL

YORK OFFICE:
119 E. MARKET STREET
YORK, PA. 17401
(717) 843-7912
(CORRESPOND TO HARRISBURG OFFICE)

RECEIVED
FEB 13 1995
GETT — EISE

February 10, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

Please be informed that I am representing an animal welfare organization, Last Chance for Animals, in all matters pertaining to the White-Tailed Deer Management Plan to be implemented in and around the Gettysburg National Military Park and the Eisenhower National Historical site. These comments are written pursuant to your requirement that all comments be postmarked no later than February 10, 1995.

At this juncture, you should have received correspondence from the Executive Director of LCA, David Meyer, generally detailing the concerns of the organization. You may assume that this letter encompasses LCA's concerns and comments. However, I would like to briefly expand on one element of that letter. In reviewing the statutory provisions surrounding the formation of the Gettysburg National Military Park, the legislature is extremely clear about its intention to prohibit further killing on this battlefield. The legislature was equally clear in its intention to preserve all elements of this battlefield as they existed in 1895. These strictures against defilement and violence have remained in tact for 100 years. It seems to me that it is unnecessary to now challenge congressional intent by authorizing a mass kill, particularly when non-violent alternatives are available.

As such, LCA is requesting to delete alternative 2(b) and alternative 4 from consideration until such time as the National Parks Service can demonstrate that non-violent alternative 3 fails. In other words, why promote killing in a sacred area if it is not necessary and we have no data at the present time to suggest that

a

a. See General Response #3: Reproductive Intervention.

it will be necessary. I suspect that, by proceeding in this manner, the National Parks Service will save itself from defending the inevitable litigation that will be filed on behalf of all those interested entities that oppose violence on the battlefield.

Thank you for accepting these comments and I would appreciate it if you would include my name, on behalf of Last Chance for Animals, on your mailing list for the distribution of the final environmental impact statement and the final deer management plan. If this is not possible, I wold appreciate it if someone from your office could let me know.

Very truly yours,

Guy H. Brooks

GHB/dlh
cc: Mr. David Meyer

THE LONE STAR HUNTING CLUB

The Lone Star Hunting Club



of Fulton, Huntingdon, & Bedford County, Penna.

Preserving for the Future

February 9, 1995

RECEIVED
FEB 13 1995
GETT — FISH

From: The Lone Star Hunting Club, Pres.- Vice President
To: Gettysburg National Military Park
ATTN: Superintendent
Subject: Whitetail Population

The Lone Star Hunting Club, Inc. is interested in offering the Gettysburg National Military Park a possible site for a transfer program. a

The Lone Star Hunting Club of Fulton, Huntingdon, and Bedford Counties, Inc. is a non-profit organization established July 2, 1992 in the Commonwealth of Pennsylvania.

The Club was organized to preserve and protect traditional recreational activities such as hunting, camping, hiking and wildlife management for future generations, by leasing or owning land for such purposes.

The Lone Star does not discriminate because of race, color, religion, gender or age. Our membership limit is guided by the amount of acreage owned or leased to successfully manage the wildlife populations within our property.

The Lone Star currently holds 8300± contiguous acres, with no fences to obstruct the movement of wildlife. We currently have approximately 800 acres of fields planted with a variety of grasses including clover. The property contains no domestic livestock of any type.

The Lone Star leases property which is prime habitat for all wildlife and currently support good populations of whitetail deer, black bear, turkey, grouse, squirrel, coyote, hawks, owls, etc.

The Lone Star would be willing to offer whatever assistance we could, in capturing and relocating whitetail from Gettysburg.

We would also offer our property as a potential site for a transfer program upon inspection by Representatives from the Park.

The Lone Star feels that a relocation program would be in the best interest of the park and the people.

In closing, we would like you to understand that we do not hope you would proceed with a program just so we would have large whitetail bucks to harvest during hunting season. We already have a good healthy herd of whitetail that we do our best to manage, and do so under all Game Commission Regulations. We would be happy to help transfer female deer only if needed to help the Park with its population problem.

Respectfully;

Harry J. Hedge Jr., Pres.

Shannon R. Hedge, V.P.

Home 717-532-4540
Office 717-532-4311

a. See the Pennsylvania Game Commission comment letter.

JERRY SANDERS

February 9, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, Pa. 17325

RECEIVED
FEB 1995
GETT — EISE

Dear Dr. Latschar

After attending the meeting on Jan. 7 regarding the Draft Environmental Impact Statement for the White Tailed Deer Management Plan I felt the park has already made the decision of direct reduction. However I thought I should take this opportunity to express my feelings and opinion.

First, Cattle have been allowed to graze throughout Gettysburg NMP and Eisenhower NHS for years. How can it be said that deer are destroying vegetation when cattle do the same. I realize it's easier to manage the herd but I think they are just as destructive and cause more pollution than the deer. How can we let one animal do this and not the other?

Why can't crops be grown that aren't as appealing for deer to feed on? This would encourage the deer to move to other areas. I think this would be worth a try at least for a few years.

a

a. Cattle are presently grazed in 2 of the 26 historic woodlots. Plans have been completed and funding requested to replace the historic fencing and exclude cattle from these 2 woodlots. In addition, historic fence lines will be reconstructed to exclude cattle from impacted stream channels and wetlands when planning is completed and funding obtained. Cows can be controlled by historic fence types and styles, whereas deer cannot.

b

b. See General Response #4: Cropfield and Woodlot Management.

It might not be historically correct but the park would survive. This would have less impact than the undergrounding of Utility lines on RT 15 or the proposed sewer and water hook up that will eventually happen in the parks.

I don't think the deer should be killed. They are innocent animals and have just as much right to be here as we humans do. I am aware of the posters displays videos and surveys that have been performed since the deer study began. One only has to read protection minutes of the M.T.M. every week to get some idea of damages caused by people who are supposed to know better. The deer don't play by our rules. They are only trying to survive.

In closing, I must say it will be a sad day for me if and when the action of "direct reduction" is taken.

Sincerely,

Jerry Sanders

CRAIG STARK

NATIONAL HERSHEY ASSOCIATION
P. O. Box 655
Hershey, PA 17033
(717) 566-2738

February 10, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park and
Eisenhour National Historic Site
Gettysburg, Pennsylvania 17325

Dear Dr. Latschar:

Thank you for the opportunity to present the following perspective relevant to the proposed implementation of the National Parks Service's deer population reduction program. Because I have personally had the unpleasant task of having to kill deer for their economic damage to Appalachian Nurseries, I am sympathetic to the difficult position which the Park Service is presently facing in the fields around Gettysburg.

I do not stand in opposition to your plan to preserve the natural environment of the park. However, as a conscious citizen, the proposed solution invokes the following concerns. After reviewing the NPS Drafted Environmental Impact Statement, I have come to the conclusion that this document, serving as the academic justification for the proposed population reduction action, is deficient in scope. In simpler terms, I contend that this document is too narrowly focused towards treating the symptom of the problem, and unnecessarily ignoring the cause.

It is my understanding that what you are proposing to do is to kill hundreds of animals who are innocently damaging the natural balance in the park. Should there not be room in this study to include a philosophical and a historical analysis before the NPS proceeds in resolving this threat against natures' preservation? After all, what was the fundamental intent behind the creation of this national monument? Why did Congress see fit to specifically protect the animals from the hunt and to also prevent the destruction of every "tree, bush and shrub"? These are questions which I consider relevant to this problem which have not yet been academically addressed.

a

a. We believe our philosophical analysis has been discussed. See pages 1 and 5 for the purpose of creating the parks. Refer to the Organic Act for the intent of Congress.

One century ago, Congress created the Gettsyburg monument in the spirit of symbolism. During the past one hundred years many changes have occurred but the law has emerged specific concerning the Gettysburg Battlefield. The interpretation of this monument is intended to, and was designed "in the larger context" to enhance and preserve our collective understanding of American history.[16 USCS 430g-9.] Words within the law invoke concern about this issue relevant to "the causes and consequences...including the effects..." of the Gettysburg history on all the American people.

There may be found here, a deep sense of symbolism in how the NPS has determined it must now act in order to preserve the park. The proposed action may well be viewed by future historians "in the larger context" as being part of a far larger conflict then the one which transformed these farmlands into killing fields in 1863.

For the collective benefit of the lesson our nation might learn here, I am asking you to expand your agency's position to include the entire truth about this symbolic issue of slaughtering deer on the Gettysburg Battlefield. Should it not be more thoroughly explained by the men and women who are qualified to do so, that the true scope of this present conflict at Gettysburg is global in nature? Between the historians, sociologist and biologist it should be portrayed in your explanation to the American people that the real warring factions engaged here are clearly between the progress of civilization and the preservation of nature. The deer, like the park itself, is little more then a symbol as President Lincoln so eloquently said in his historic dedication of this monument. As a simple symbol, the deer has served my family for centuries as the emblem atop our Coat of Arms. I can't help but feel remorse as I expect to bear witness to this noble creature being herded to the alter, and then "harvested" by managment's hand as a symbolic sacrificial lamb.

I do not wish to prolong or complicate this difficult task before you. However, in keeping with the power of symbolism recognized and used by our Founding Fathers I wish to share this perspective. Beneath the Great Seal of The United States of America there lies an inscription which embodies the Founders wishes. It is easily seen by anyone who turns over and reads the back side of the almighty US dollar. NOVUS ORDO SECLORUM is simply the inscription beneath a symbol whose meaning has become lost in the present day. The literal interpretation of these Latin words reveal several translations among which can be found " New Order for Successive Generations of Man and Animal in Coexistence."

I hope you will reconsider your position and allow for another public hearing on this issue once the Drafted EIS is complete. I believe the current draft is deficient of socialcultural and economic conditions which are contributing factors to the present problem. Furthermore, I believe that the Pennsylvania Game Commission's recent public hearings concerning the statewide deer management problem may be of benefit to the final EIS.
I appreciate your consideration by expanding your perspective to include my concerns.
Sincerely,

Craig Stark

Craig Stark

RECEIVED
FEB 17 1995
GETT — EISE

February 14, 1995

Supt. John Latschar
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, Pennsylvania 17325

Dear Mr Latschar:

I would like to comment upon the proposal of the National Park Service to shoot the Park's oversized deer herd during the months of October through April. The article in the Civil War News relative to this new plan indicated that while shooting is underway, access to large portions of the park would be restricted.

My husband and I visit several Civil War battlefields every year, and those visits usually take place in the off months such as October and/or April. I'm sure we are not the only ones whose visits to Gettysburg would be at best substantially curtailed, and at worst rendered dangerous by the proposed plan. I also wonder how much good your plan would do inasmuch as deer will always be able to enter the park through its borders, even if you are successful in decimating the herd that is there now. It does not seem fair to those of us who try to visit the park during the off season to essentially foreclose such visits in this manner.

If this plan spreads to other battlefields the only safe time to visit them would be in the summertime. In effect you might as well close them for the rest of the year. Since I believe a contemplative visit to these parks is impossible in the presence of crowds of other people, I would request that you re-think this plan and find another way of dealing with Gettysburg's deer population.

Very truly yours,

Kathleen Managhan

Kathleen Managhan

KM/ce

a

a. See The Humane Society of the United States comment letter response c.

RESPONSES TO LETTERS 23-34

The following individuals offered comments in their letters which required a response. The response to their comments is the same. To conserve resources, the response is given below and their letters follow.

Allen, Dorothy L.
Brown, Abe
Drish, Dianne
Dwingo, Antoinette
Edwards, Jack
George, Kay
Horowitz, Judith and Martin
Kalata, Denise
Less, Len
Moore, Patricia
Morwick, Jean A.
Swanson, Pat
Walsh, Eileen

a. See the responses to the Animal Protection Institute comment letter.

RECEIVED
JAN 30 1995
GETT — EISE

572 Doyle Avenue
W. Homestead, PA 15120

January 24, 1995

John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Mr. Latschar:

I am writing with regards to the National Park Service's plan to cull the deer herd at the Gettysburg Battlefield and Eisenhower Farm Historic Site.

First of all I am sick to death of Pennsylvania's attitude toward the deer herds that we are responsible for cultivating. The Pennsylvania Game Commission originally loved the idea of hunting deer--it was touted as a great new way to bring in money! Now, many years later, when the healthy balance of diverse wildlife has been interrupted or completely destroyed, the deer herds are looked on as nothing more than a nuisance.

Who is responsible for allowing the deer's natural predators to dwindle down and in some cases, such as the wolf, to become extinct in Pennsylvania??

We have an obligation and a responsibility to handle this situation in an intelligent and humane way. Why not introduce predators such as coyotes and red fox that will help replicate the ecological balance of wildlife that was present in 1863? Why can't you include plants that are considered non-preferable by deer? Why not use 1863 cropping methods in field sizes that match the 1863 landscape utilizing the minimum security County Jail work projects to till and harvest the crop fields on both the farm and the battlefield? Why, for once, can't we, Pennsylvanians try a more creative, natural approach to culling deer herds? -- Something we can all be proud of.

I want a management program that determines overpopulation of deer by monitoring the actual impact of the deer on the habitat and what the habitat will carry, NOT ON AN ARBITRARY NUMBER SET AS A MANAGEMENT OBJECTIVE. When monitoring shows excess deer exist, ALL OTHER ALTERNATIVES HAVE FAILED, then as a controlled conservation tool--NOT AS A SPORT HUNT--only specifically certified marksmen should shoot the number needed to restore the balance.

Thank you for hearing my comments.

Sincerely,
Dianne Drish
Pat Swanson

RECEIVED
JAN 30 1995
GETT — EISE

Dear sir,
please revise your arbitrary population level of 25 deer per acre. revise your landscape in the crop fields to include plants that are considered non-preferable by deer. Please introduce predators such as coyote or red fox that will help replicate the ecological balance of wildlife that was present in 1863.

Thank you for your time.
Sincerely also

RECEIVED
JAN 26 1995
GETT — EISE

316 Old Forest Road
Wynnewood, Pa. 19096
January 21, 1995

John Latschar, Superintendent
Gettysburg National Military Park
R. D. #1
Gettysburg, Pa. 17325

Dear Superintendent Latschar,

We support a healthy balance of diverse wildlife in the park at Gettysburg and the Eisenhower farm. We are totally against culling the deer as a sports hunt. We do not consider hunting a sport.

The animal rights organizations have suggested many sensible alternatives which we will not list. We're sure you're aware of the other paths to control the situation. The overpopulation of deer should be determined by monitoring the actual impact of deer on the habitat and not on an arbitrarily set number as a management objective. API (Animal Protection Institute) has excellent suggestions for alleviating the deer problem. Please look at our viewpoint before taking hasty action. Thank you.

Sincerely,
Judith and Marlen Horowitz

RECEIVED
JAN 30 1995
GETT — EISE

EILEEN WALSH
237 Roycroft Avenue
Mt. Lebanon, PA 15234

January 18, 1995

Mr. John Latschar
Superintendent
Gettysburg National Military Park
Gettysburg, PA 17325

Re: Gettysburg Battlefield and Eisenhower Farm

Dear Mr. Latschar:

As a Pennsylvanian I was saddened to learn that the above-referenced areas are sites where deer will be culled because land leased by farmers is planted with crops attractive to them. I sympathize with any individual whose livelihood is threatened by whatever force. I would like to suggest a few steps you might take to prevent the destruction of these living, sentient animals whose livelihood, in turn, has been taken by us.

Instead of destroying these wonderful woodland creatures, could you not attempt a program to return the area to the state it was in in mid-nineteenth century? How would you do this?

- Obviously, re-introduce the predators from that era.
- Plant crops not attractive to deer.
- Encourage area farmers to take steps to protect their crops from deer.

Gettysburg Battlefield was not pristine when it was the site of bloody battles during the Civil War, and it doesn't have to be today. First, we must serve and preserve the animals now dwelling there in the absence of cannons and the cries of the dying, dressed either in gray or blue. In the memory of these Americans who have gone before, who made the "ultimate" sacrifice for a principle they thought embodied the truth, I urge you to think long and hard about the lives of these animals. Should an over abundance still inhabit the area when all avenues have been tried, please do not dishonor the ground by a sport hunt -- have only highly qualified marksmen perform the onerous task and distribute the meat as food.

I wish you well in the performance of your awesome responsibilities and implore you be gentle to the beautiful woodland creatures in your charge.

Sincerely,

Eileen Walsh

693 Hammond Street
Chestnut Hill, Massachusetts 02167

RECEIVED
JAN 23 1995
GETT — EISE

January 20, 1995

Mr. John Latschar
Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Re: Plan to cull deer herd

Dear Sir:

You probably feel like you're caught between a rock and a hard spot on this one. The farmers want all the deer killed and us animals lovers want you to protect them. Even I know that too many deer concentrated in one spot isn't good for the deer, though. Would you consider the following compromises?

- introduce coyotes and red fox to balance the wildlife something like it was in 1863.
- plant and maintain woody underbrush as browse in the woodlots and wooded areas in non-critical battle sites.
- include plants in crop fields that deer don't consider favorite foods.
- increase the deer population level of 25 per acre to the surrounding areas' density levels of 35 per acre.

Mr. Latschar, history is important to you. How about using horse drawn plows in the fields, just like our forefathers did in 1863? I drive through Pennsylvania at least once every year and I'd love to come back to your park next year to see the history and the deer that you've preserved.

Best wishes,

Kay George

Mr Latschar
Regarding the culling of the deer herd at Gettysburg battlefield + Eisenhower farm Historic site.
I support a healthy balance of diverse wildlife and want a program that monitors actual expert report on habit instead of an arbitrary # your #'s are 25 per acre areas near are 38 per acre
when no threat does exist try such things as plants deer don't favor, 1863 cropping methods and predators
If it proves useless halting please don't make it a sport hunt
Use specially certified marksmen
Respectfully
Sincerely
Len Lear
3243 Eastview
Bethel Park pa 15102-1255

RECEIVED
FEB 10 1995
GETT — EISE

RECEIVED
JAN 27 1995
GETT — EISE

January 24, 1995

John Latschar, Superintendent
Gettysburg National Military Park
RD 1
Gettysburg, PA 17325

Dear Mr. Latschar:

I deplore the anticipated culling of the deer herd at the Gettysbury Battlefield. There has been quite enough killing!

I realize that all of Pennsylvania has a large population of deer, many of which are getting into areas where they come into a clash with the humans, who have also overrun appropriate areas! I believe many things can be done to alleviate the problem without resorting to killing. One is to bring back coyotes and foxes. They have been sorely missed since humans extirpated their natural predators many years ago. Another is to plant plants that deer don't care for, rather than those yummy ones that are present in so many areas. Also, especially in the Gettysburg area, in would be preferable to use the old-fashioned, horse-drawn plows. Then, at the end of the season, bits would be left in the fields for the deer to feed on during the winter. Finally, I believe your goal of 25 deer per acre is low. Besides the above, birth control methods would also be a good plan.

I hope you will reconsider the death warrant.

Sincerely,

Patricia Moore

Patricia Moore
414 Kathmere Road
Havertown, PA 19083

Jan 21, 1995

John Latschar, Superintendent
Gettysburg National Military Park
RD.1
Gettysburg, PA 17325

Dear Superintenddent,

I have just read that the National Park Service is preparing to cull the deer herd at the Gettysburg battlefield and Eisenhower Farm Historic Site in Pennsylvania. I am strongly in opposition to this cull..

I want the National Park Service to know that I support a healthy balance of diverse wildlife, where you could introduce predators such as coyotes and red fox that will help replicate the ecological balance of wildlife that was present in 1863.

I would like to see a management program that determines overpopplation of deer by monitoring the actual impact of the deer on the habitat snd what the habitat will carry, not on any arbitrary number set as a management objective.

I urge the Park Service ASAP to revise their landscape in the crop fields to include plants that are considered non-preferable by deer, and plant and maintain woody underbrush as browse in the woodlands and wooded areas that are of less importance to the interpretation of the battle.

When monitoring shows excess deer exist, and there is no alternative, then as a controlled conservation tool---NOT AS A SPORT HUNT ---- only specially certified marksmen should shoot the number needed to restore the balance.

Sincerely,
Jean A. Morwick
35 Hatherly RD.
Scituate, MA 02066

RECEIVED
JAN 25 1995
GETT — EISE

RECEIVED
FEB 10 1995
GETT — EISE

ANTOINETTE DWINGA
842 LIBRARY AVE
CARNEGIE PA 15106

FEBRUARY 6, 1995

JOHN LATSCHAR, SUPERINTENDENT
GETTYSBURG NATIONAL MILITARY PARK
R.D. 1
GETTYSBURG, PA 17325

MR. LATSCHAR:

I AM ALARMED TO HEAR THAT THE NATIONAL PARK SERVICE PLANS TO CULL THE DEER HERD AT THE GETTYSBURG BATTLEFIELD AND THE EISENHOWER FARM HISTORIC SITE.

I BELIEVE THAT YOU SHOULD REVISE YOUR ARBITRARY POPULATION LEVEL OF 25 DEER PER ACRE. YOU SHOULD CHANGE THE LANDSCAPE IN THE CROP FIELDS BY INCLUDING PLANTS WHICH DEER DON'T CARE FOR. PLANT AND MAINTAIN WOODY UNDERBRUSH AS BROWSE IN THE WOODLOTS AND WOODED AREAS WHICH ARE LESS IMPORTANT TO VISITORS' INTERPRETING THE BATTLE.

INTRODUCE PREDATORS, SUCH AS RED FOXES AND COYOTES, TO THE PARK. THE PREDATORS' PRESENCE WILL CREATE AN ECOLOGICAL BALANCE WHICH WAS THE SITUATION IN 1863.

A GOOD MOVE WOULD BE TO USE HORSE-DRAWN PLOWS TO CULTIVATE THE FIELDS WHOSE SIZES CORRELATE WITH THE LANDSCAPE OF 1863. THIS WOULD CREATE A REALISTIC, HISTORIC LANDSCAPE.

I WOULD LIKE TO SEE A HEALTHY BALANCE OF DIVERSE WILDLIFE AT GETTYSBURG, AN AREA OF OUR

STATE WHICH HAS LONG BEEN SPECIAL TO ME AS A STUDENT OF THE WAR BETWEEN THE STATES. I WOULD WANT TO SEE A MANAGEMENT PROGRAM WHICH DETERMINED DEER OVERPOPULATION BY MONITORING (ONE) THE ACTUAL IMPACT OF THE DEER ON THEIR HABITAT AND (TWO) WHAT THE HABITAT WILL SUPPORT. I DO NOT AGREE WITH SETTING AN ARBITRARY NUMBER OF DEER AS AN OBJECTIVE.

I HAVE READ OVER THE PAST MONTHS THAT THE PARK SERVICE HAS KILLED SWANS IN A WESTERN PARK; A SHOCKING AND UGLY EVENT; SO I AM NOT SURPRISED THAT YOU PEOPLE WANT TO KILL DEER AT GETTYSBURG. "MANAGEMENT" MEANS KILLING AT WILL.

IF YOU CHOOSE TO KILL DEER AS THAT SELF-GIVEN PRIVILEGE, THEN CERTIFIED MARKSMEN SHOULD SHOOT THE NUMBER OF THESE DEFENSELESS ANIMALS DEEMED THE OVERPOPULATION; THIS SHOULD NOT BE A SO-CALLED SPORT HUNT.

FOR THE ANIMALS;

Antoinette Dwinga

RECEIVED
JAN 23 1995
GETT — EISE

6312 Stanton Avenue
Pittsburgh, Pa. 15206
January 17, 1995

Dear Mr. Latschar,

I urge the National Park Service, in preparing to cull the deer herd at the Gettysburg Battlefield and Eisenhower Farm Historic Site in Pa. to:

- revise the arbitrary population level of 25 deer per acre.
- revise your landscape in the crop fields to include plants that are considered non-preferable by deer.
- plant and maintain woody underbrush as browse in the woodlots and wooded areas that are of less importance to the interpretation of the battle.
- introduce predators such as coyotes and red fox that will help replicate the ecological balance of wildlife that was present in 1863.
- use 1863 cropping methods (horse-drawn plows) in field sizes that match the 1863 landscape. (Horse-drawn plows provide a realistic historic atmosphere, as opposed to big machinery tilling and harvesting.) Contract with Youth Authority programs or minimum security County Jail work projects to till and harvest the crop fields on both the farm and the battlefield.

I support a healthy balance of diverse wildlife. I want a management program that determines overpopulation of deer by monitoring the actual impact of the deer on the habitat and what the habitat will carry, not on an arbitrary number set as a management objective. When monitoring shows excess deer exist, and there is no alternative, then as a controlled conservation tool - (NOT AS A SPORT HUNT) - only specially certified marksmen should shoot the number needed to restore the balance.

Thank you,

Sincerely,
Dorothy L. Allen

John Latschar, Supt.
ttysburg Nat Military Park
). I
ttysburg, Pa. 17325

Feb. 05, 1995
P.O. Box 182
Maurertown, Va.
22644

RECEIVED
FEB - 9 1995
GETT — FISE

ear Mr. Latschar,

Congratulations to you taking over the job of Park Supt. from your predecessor, Mr. Jose Cisneros, who I understand was transferred to Big Bend Nat. Park in Texas by Mr. Roger Kennedy, N.P.S. Director, after the Gettysburg Park Land Deal scandal, involving Gettysburg College and the N.P.S. This was a most unfortunate incident, and it seems that the preponderance of blame rests upon Gettysburg College, and its treasurer, Mr. Wm. Van Arsdale, the official responsible for the land deal negotiations. I am a Civil War Buff myself, and have studied and been to the battlefield park many times, and it upset me very much to learn what happened, and how it affected the terrain of the first day and railroad cut.

Now, this letter is not about the land deal issue, but about the matter of the N.P.S. proposal to cull the current deer herd population at the Park and Eisenhower Farm to 25 deer per acre. As a concerned citizen, and a member of A.P.I. (Animal Protection Institute) I have been notified to write you personally concerning this matter of the

deer herd proposal, and maybe suggest some alternatives to addressing this unpopular plan as it now stands. Before I continue further, I would like to point out, as I understand it, that surrounding areas to the Park list a density of 38 deer per acre, so why can't this same number, instead of only 25, be sustained at the Park and Eisenhower Farm?

Alternatives

1. I understand that the N.P.S. leases crop fields to local farmers, who, in turn, complain of cash-crop losses due to deer. So, why don't the N.P.S. stop this leasing of crop fields to farmers who plant crops that deer favor to eat, or else have the N.P.S. demand, that contingent upon leasing, the farmers revise the landscapes so as to include plants or crops that deer no longer prefer.
2. The N.P.S. attempts to maintain wooded areas and lots in a condition that resembles the size, trunk diameter, canopy, and species diversity as it was at the time of the battle in 1863. Why can't the N.P.S. plant & maintain woody underbrush and growth in these woodlots and wooded areas for the deer to browse, that are of less importance to the interpretation of the battle.
3. Why can't the N.P.S. use 1863 cropping methods (horse-drawn plows) instead of big machinery planting and

harvesting, which would give a more realistic, historic look and atmosphere to the fields. Perhaps Farm Youth programs, or minimum security county jail workers could be induced to till and harvest the crop fields on both the Farm and Battlefield.

4. If practical, introduce predators, such as fox or even coyotes, that will help replicate the ecological balance of wildlife that was present in 1863.

I support a healthy balance of diverse wildlife, and the N.P.S. should also do so. I would like to see a management program that determines any overpopulation of deer by monitoring the actual impact of the deer on the habitat, and what the habitat will support and sustain, not on an arbitrary number, such as 25, set as a management objective figure. When monitoring shows excess deer to exist, and there is no alternative, then as a method of conservation control, only specially certified marksmen be allowed to shoot the number needed to restore the necessary balance. If such be the case, the cull not to be sport hunt, which would make the situation worse in the eyes of the public, and make a travesty of the entire matter, defeating any motives that necessitated the killing of any excess deer. Thank You.

Yours Truly,
Jack Edwards

RECEIVED
JAN 23 1995
GETT — EISE

January 19, 1995

John Latschar, Superintendent
Gettysburg national Military Park
RD #1
Gettysburg, PA 17325

Dear Mr. Latschar:

I am writing this letter to you in reference to the proposed culling of the deer herd at the Gettysburg Battlefield and the Eisenhower Farm Historic Site.

Once again it seems the powers that be are putting the cart before the horse in an attempt to accomplish a very "easy solution to a complex problem. It is much easier to "shoot them all" rather that think of alternate solutions to the problem of the deer. Thank goodness our forefathers did not practice or think the same way that the people in power do today, or there would be no wildlife at all anywhere today, both predators and prey alike. Solutions to this problem are available however, but they require a little bit of work and maybe that is the problem. No one wants to "work".

First and foremost a management program should be started that would determine fairly the overpopulation of deer in a particular area, and the measures that need to be taken to "manage that population". Controlled conservation by certified marksmen, not a sport hunt by your average hunter is an extreme method but one that may become necessary, if alternate methods fail.

Other methods of managing the population should also be considered such as:

1. Introduction of natural predators to the area that will help replicate the ecological balance (such as what was present in 1863)

2. Plant and maintain woody underbrush as browse in the woodlots and wooded areas (such as was present in 1863). The deer then can feed on this and will leave farmers crops alone, if that is their complaint. Money from this can be gotten, I am sure from one of state's many conservation programs, if they are in fact interested in true conservation.

Again, I ask you to examine the alternatives, and instead of shooting first and then questioning later, why don't we do the logical thing and question first and shoot only as the last resort, after trying everything else.

Sincerely,
Denise Kalata
Denise Kalata

APPENDIXES

APPENDIXES

A Management Objectives for Gettysburg National Military Park 109

B Management Objectives for Eisenhower National Historic Site 111

C National Park Service Document Entitled "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots" 113

D The Scoping Process 145

E Process Used to Arrive at Deer Density Goal 151

F Park Visitation Records 155

G Number of Deer Killed for Crop Damage and on Highways Within and Near the Parks 159

H Deer Mortality Rates by Capture and Transfer Methods. . 163

I Cost Estimates 167

J Comment Letters on Draft EIS Requiring No Response . 183

Appendix A

MANAGEMENT OBJECTIVES FOR GETTYSBURG NATIONAL MILITARY PARK

The management objectives for Gettysburg National Military Park and Gettysburg National Cemetery are based on the units' establishing legislation, past management history and objectives, and on their long traditions of commemoration, preservation, and interpretation. These objectives serve to guide park management in fulfilling the purpose of both areas.

GETTYSBURG NATIONAL MILITARY PARK

Adjacent Lands

Promote conservation of the important features of the Gettysburg Battlefield Historic District--including certain structures, lanes, fields, farmsteads, landforms and other landscape features that influenced the Battle of Gettysburg--which are necessary for maintaining the rural, agricultural, and memorial character of Gettysburg and conveying to the visitors why, where and how the battle occurred.

Interpretation and Visitor Use

Using the battlefield setting as the primary interpretive resource, interpret the Battle of Gettysburg (and its impact on the community and the country) in the context of the Gettysburg campaign, the Civil War and U.S. history; the significance of Lincoln's Gettysburg Address, and the events surrounding the creation and dedication of the Soldiers' National Cemetery; and the commemoration and monumentation of the Gettysburg Battlefield by battle veterans and contemporaries and up to the present.

To manage all public use and activities to assure for the visitor an atmosphere in which to contemplate the acts and deeds of the Battle of Gettysburg.

Landscapes

To manage the park as a memorial landscape which not only reflects the pre-battle 1863 rural agricultural environment but includes those superimposed post-battle elements (monumentation, avenues, interpretive devices, facilities, etc.) which are necessary for commemoration and visitor understanding of the battle. No restoration of structures or landscape elements may create an anachronism; that is all elements must have coexisted during a single historic period.

Essential landscape features may include:

Structures
Fence lines
Field Size
Wetlands
Wet Areas
Waterways and Springs
Boulders
Orchards (structure)
Woodlands
Woodlots
Roads and Traces
Ditches
Vegetation Characteristics (height/texture/location)

Appendix B

MANAGEMENT OBJECTIVES FOR EISENHOWER NATIONAL HISTORIC SITE

The management objectives for Eisenhower National Historic Site are based on the unit's establishing legislation, and past management history and objectives. These objectives serve to guide park management in fulfilling the purpose of the area.

Resource Management

Preserve significant features of the cultural landscape to reflect the general character of the Eisenhower farm at the time of its donation to the National Park Service in 1967.

Interpretation

Interpret the Eisenhowers' life at Gettysburg, as well as General Eisenhower's life and career, using their home and farm, and associated Gettysburg sites, as the primary stage.

Public Use

Manage all public use and activities to assure for the visitor an atmosphere in which to experience the pastoral serenity of the presidential retreat and retirement farm.

Collections

Manage and develop a collection of artifacts and equipment needed to interpret Eisenhower's life at Gettysburg.

Setting

Promote conservation of the setting of Eisenhower National Historic Site so that visitors can experience the historic, scenic, rural and agricultural character of the farms during the period of the Eisenhowers' occupancy, 1950-69.

Appendix C

NATIONAL PARK SERVICE DOCUMENT ENTITLED "EVALUATION OF ALTERNATIVES FOR MANAGING THE APPEARANCE OF CROPFIELDS AND WOODLOTS"

EVALUATION OF ALTERNATIVES FOR MANAGING THE APPEARANCE OF CROPFIELDS AND WOODLOTS

NATIONAL PARK SERVICE
GETTYSBURG NATIONAL MILITARY PARK
EISENHOWER NATIONAL HISTORIC SITE

January 1992

APPROVED: _____ DATE: 1/7/92

JOSE A. CISNEROS
Superintendent
Gettysburg National Military Park
Eisenhower National Historic Site

CONCUR: _____ DATE: 1/30/92

LORRAINE L. MINTZMEYER
Regional Director
Mid-Atlantic Region
National Park Service

TABLE OF CONTENTS

Introduction..... 1

Management Alternatives for Managing the Appearance of Cropfields 2

Acceptable Cropfield Appearance..... 2

I. **Presentation of Cropfield Alternatives**..... 3

A. Agricultural Permittee/Leasing System..... 3

B. National Park Service Staff Farming..... 8

C. Custom Farming..... 10

D. Fencing Croplands..... 12

E. Conversion to Grasses..... 14

II. **Evaluation of Alternatives for Managing the Appearance of Cropfields**..... 14

A. Agricultural Permittee/Leasing System..... 14

B. National Park Service Staff Farming..... 14

C. Custom Farming..... 15

D. Fencing Croplands..... 16

E. Conversion to Grasses..... 17

Summary..... 17

Management Alternatives for Restoring and Maintaining (Perpetuating) the Important Characteristics of Park Woodlots..... 18

III. **Presentation of Woodlot Alternatives**..... 19

A. Fencing Woodlots..... 19

B. Exotic Cover Removal..... 21

C. Selective Overstory Cutting..... 21

D. Direct Seeding..... 21

E. Supplemental Planting..... 22

IV. **Evaluation of Alternatives for Restoring and Maintaining (Perpetuating) the Important Characteristics of Park Woodlots**..... 23

A. Fencing Woodlots..... 23

B. Exotic Cover Removal..... 23

C. Selective Overstory Cutting..... 23

D. Direct Seeding..... 24

E. Supplemental Planting..... 24

Summary..... 24

Appendix 1 (Objective Crop Percentages)..... 25

References..... 26

INTRODUCTION

A strategy for the development of a deer management plan for Gettysburg National Military Park (GNMP) and Eisenhower National Historic Site (ENHS) has been initiated by the National Park Service (NPS). This strategy has been designed to confront the resource management problems associated with the high population of white-tailed deer on both National Park Service units. One step of the development process includes the evaluation of options for managing two important resources critical to the interpretation and understanding of the Battle: cropfields and woodlots. A second step is likewise an evaluation of options to address the landscape management objectives for the Eisenhower Farms. The perpetuation of these resources is threatened by the existing deer population; thus creating a conflict between deer and park management objectives.

The management objective for landscapes at Gettysburg National Military Park states that *"the Park will be managed as a memorial landscape which not only reflects the pre-battle 1863 rural agricultural environment but includes those superimposed post-battle elements (monumentation, avenues, interpretive devices, facilities, etc.) which are necessary for commemoration and visitor understanding of the battle. Essential features may include: structures, fence lines, field size, wetlands, wet areas, waterways and springs, boulders, orchards, woodlands, woodlots, roads, trees, ditches, and vegetation characteristics (height/texture/location)."*

Similarly, the management objective for resources at the Eisenhower National Historic Site is to *"preserve significant cultural resources and features of the cultural landscape to reflect the character of the Eisenhower farm at the time of its donation to the Park Service in 1967."*

MANAGEMENT ALTERNATIVES FOR MANAGING THE APPEARANCE OF CROPFIELDS

Acceptable cropfield appearance:

Agricultural cropping at Gettysburg National Military Park is used as a means to support the National Park Service's primary goal of preserving significant battlefield cultural landscape features. The significant features provide an agricultural setting in which historic events can be interpreted.

From a cultural perspective, the primary landscape features within GNMP include historic field sizes, clusters of historic farmsteads, historic circulation networks, and the vegetative textures, massing, and patterns within the historic landscape.

From an interpretive perspective, the desirable cropfield within the GNMP should reflect historic field patterns and contain crops compatible in general appearance with those of the historic period. Generally, the same crop species are desirable, however, varietal differences will be acceptable. Acceptable structure exists when seventy-five percent (75%) of the plants in a field progress throughout the entire growing season and reach a stage of maturity where harvest is possible (i.e., ears of corn or grain heads must be present), unless uncontrollable, environmental conditions such as drought or storms prevail. Desirable crops for Gettysburg NMP include corn, oats, sorghum, wheat, barley, rye, hay and other historic crops planted in the same relative percentages as existed during the historic period. Other crops such as alfalfa, soybeans, and milo may be planted in limited acreage as necessary (e.g., to complete a rotation, use of crop management strategies - legumes producing nitrogen).

Fields of lower interpretive or historic significance could have more than 25% damage or be planted in permanent grass; however, the NPS would need to mow these areas twice annually to keep them open and free of weeds and woody vegetation. Periodic rotations to other crops will be necessary when the stand grows thin or weedy. The 216 acres of park croplands designated as having low interpretive and historic significance are located in areas where the least crop damage from deer has occurred. Since this acreage represents only a small percentage of the total crop acreage it is not distinguished in the following analysis.

Comparatively, appropriate crops for Eisenhower NHS will include historic species (corn, milo, soybeans, small grains and various species of hay) planted in patterns similar to those that existed during the historic period. Again, varietal differences will be acceptable. Unless impacted by uncontrollable environmental conditions, seventy-five percent (75%) of the plants in a field must grow from seed and reach a stage of maturity where harvest is possible.

It was concluded at the Management Objectives Workshops for Gettysburg NMP that an overpopulation of deer adversely affects the National Park Service's long-term ability to perpetuate economically viable agriculture and may eventually adversely affect the ability to achieve and perpetuate the desired historic appearance (color, texture and pattern) of cropfields.

Damage to crops would be a consideration only if the resultant appearance was in conflict with the above management goals for color, texture and patterns. If browsing causes plant damage in excess of 25%, the structure of that crop will be stunted and the appearance will be unacceptable. This scenario is now occurring and has been documented through photographs and research (Storm et al., 1989). Browsing is a behavior which continues through the whole growing season and impacts the entire plant from emergence to maturity, not the fruit (seed) alone.

For example, while it is historically preferable to grow corn on GNMP, it has become impossible to successfully grow this crop on the southern end of the battlefield, due to total destruction by deer. Farmers have been forced to plant an alternative crop, milo, at both Gettysburg and Eisenhower. With this major turn to milo, cropfield patterns on the Military Park are now incompatible in general appearance with that of the historic period. Even with this change, deer have adjusted and developed a taste for milo grain which now serves as a food source. (See Appendix I for Crop Percentage Objectives)

While an active agricultural cropping system is important to interpreting certain features of the landscape, there are various alternative methods that could be employed to achieve the desired goal. This section will examine and explain each agricultural cropping alternative.

I. Presentation of Cropfield Alternatives

A. Agricultural Permittee / Leasing System

Traditionally, agricultural pasturing and cropping by private farmers through a lease or special use permit arrangement have been used as tools in maintaining the rural agricultural setting necessary for interpretation of historic events at both Park areas.

In 1990, under the Agricultural Permittee System, approximately 1640 acres of the GNMP and the ENHS were cropped by local farmers who held either a Special Use Permit (SUP) or a Historic Lease. The farmers paid a fee of $11.25/ac. for the croplands covered by a SUP and $12.00/ac. for the Historic Lease at ENHS Farms 1 and 2. The permittees are responsible for all elements of an active farming program, including the necessary farming equipment and materials, as well as the harvest and disposal of the produce. This mutually beneficial and cooperative arrangement indirectly contributes to the local economy.

Agricultural activity, permitted by the 1897 enabling legislation for Gettysburg, has been used to maintain the open portions of the battlefield landscape for at least a century. Although the agricultural permittee program has generally been successful in maintaining the open landscape, new concepts with regard to restoring cultural landscapes require that current agricultural practices be modified to institute changes such as the reconstruction of fences to establish historic field sizes. The Eisenhower Farms also remain in agriculture in continuation of the President's historic use of the lands.

Although the program has proven to be a cost beneficial and management efficient program for maintaining the landscapes at both GNMP and ENHS, serious problems have arisen in recent years in regard to the negative impact of white-tailed deer on the crops, especially in the southern end of the park. Several permittees have shown that they have incurred losses or are just breaking even on their crop production efforts. The impact of the deer has increased to the point where permittees indicate that they are reluctant, if not unwilling, to renew their permits unless actions are taken to reduce the effect of deer on their crops. Current permittees have been cooperating with the park in hopes that actions will be taken to address their loss of crops.

From an Integrated Pest Management perspective the white-tailed deer population has exceeded the damage and economic thresholds for the farmers. It may be difficult to replace current permittees who choose not to renew their leases/permits.

Permittees currently operate on an 8-year crop rotation cycle, and on average 50% of the total farmed area is in hay, 25% in corn or milo, and 25% in small grains. In 1990, this system generated a total of $18,720 in fees for the use of 1640 acres of cropland. An additional 289 acres of farmland at East Cavalry Field were added to the program in 1991. However, to temporarily mitigate the current situation, an Interim Deer Management Plan was prepared and allowed for the waiving of permittee fees in 1991 for those farmers who proved at least a 15% loss in production attributed to deer damage.

Two permittees qualified for waivers in 1991 as they had losses in excess of 15% in 1990. Fees were waived on a total of 1,023 acres, the non-hay portion of this acreage (50%+) suffered measurable losses of 15% or more. With this waiver in effect, the NPS only received $7,000 in permittee cropland fees for 1640 acres in 1991. Although permittees received this waiver, they may be compelled to buy comparable produce to that which they will likely lose in order to serve their own needs. Permittees view this as only a short-term arrangement and have indicated that they will not accept it as a permanent solution.

The collected fees are utilized within the Park to defray the costs of the total agricultural program. The fees collected are retained within the Park and used along with other operating funds to draft and renew permits; conduct soil tests of agricultural lands; maintain pastures and open areas; repair, inspect, and install conservation structures; restore and maintain orchards; and reconstruct historic agricultural fencing. Currently the Park issues permits for croplands to 11 permittees (all local farmers) having positive working relationships with the Park. This system has provided flexibility in management for both the Park and the permittees. Additionally, it allows the Park to place special conditions upon the permittees pertaining to crop or pasture management. The size and expenses of operating this program may vary as new management plans to restore fields to their historic acreage are implemented.

It is estimated that the annual cost to administer the croplands portion of the agricultural permit program is about $25,000 and includes inspections, meetings, soil testing, billing, permit revision, integrated pest management coordination, and some operation of government tractors and machinery.

Pastures, as differentiated from cropfields, have been excluded from all calculations and considerations. Deer utilize pasture lands frequently; however, their impact is mitigated through pasture management and adjustments in livestock numbers.

The U.S.D.A. Soil Conservation Service has cooperated with the National Park Service to formulate soil conservation plans for most of the Park farms. Conservation structures such as grassed waterways, diversions, and field tiles have been installed by the National Park Service. The Soil Conservation Service's primary goal behind the construction and use of conservation devices is "to control erosion and sedimentation from agricultural land and to conserve the water resources of the land." (Local SCS office; 16 U.S.C.; 590(e)(g)(h)) The installation of conservation structures was initiated to comply with NPS policies (Management Policies 4:9, 4:20). New structures must undergo compliance review in accordance with NPS cultural resource policy prior to installation and construction. The establishment and maintenance of conservation structures are necessary factors of an active cropping program and have been considered integral parts of each alternative and not included in calculations.

The yield and value of the crops produced fluctuates annually. Yields vary due to seasonal and annual variations of weather; wildlife impacts; weed, insect, and disease outbreaks. Value is determined by crop quality and the market price as determined by the economy at harvest. Often, in a year when yields are below average, prices are up--basic supply and demand. Using a five year average of crop prices and the yields for each crop in a "good" year (using the five year best yield) and the yield for each crop in a "poor" year (using the five year worst yield), value estimates for good and poor years were calculated using the objective crop percentages for fields at ENHS (Tables 1 & 2) and GNMP (Tables 3 & 4).

In an excellent year for all crops (an ideal situation with little or no crop damage) using the stated management objective and average market prices, there is a potential gross crop value of $336,899 for 8 permittees on 1640 acres. In a poor year for all crops (a situation with environmental damage-drought) at average prices, gross crop value could drop to $221,320. Many variables are involved and in any one year prices could exceed or drop below those mentioned above. **Gross crop value is not necessarily the price a farmer receives for all crops sold, but the sum of any crops sold plus the value of those crops used as feed or forage for livestock.** The actual cash value of feed or forage is not realized until livestock or dairy products are sold. Hay crop value constitutes a major portion of the values shown above. In general, hay is not considered a cash crop and its primary value is not a monetary one. Hay is generally used as a forage crop for livestock within an individual permittee's own farm operation. Often grain crops produced by a farmer (e.g., corn and barley) are ground/milled and used as livestock feed on the home farm. In years when dry weather prevails and the corn crop is not likely to produce a harvestable grain crop, farmers will often cut the corn plants for silage. Silage, in general, is not a marketable commodity, yet has value as a feed/forage within a farming operation. Without the monetary value of hay calculated into the above figures, cash crop values in a good year on park land may yield $163,395, while in a poor year yields may drop to $94,957.

EISENHOWER NATIONAL HISTORIC SITE

Gross Crop Values for Target Crop Percentages
(Refer to Appendix I)

Table 1: Excellent year for all crops. (5 yr. best yield & 5 yr. ave. price)

CROP	ACREAGE	YIELD	AVE. VALUE	GROSS VALUE
Corn	135.45	98 bu/A	$2.53/bu.	$ 33,583.47
Wheat	32.27	55 bu/A	$3.16/bu.	$ 5,608.53
Barley	32.24	58 bu/A	$1.75/bu.	$ 3,272.36
Oats	32.24	68 bu/A	$1.69/bu.	$ 3,705.02
Hay*	154.80	2.65 T/A	$83.80/Ton	$ 34,376.44
TOTALS	387.00	****	****	$ 80,545.82

* 1 cutting of hay per year.

Table 2: Poor year for all crops. (5 yr. worst yield & 5 yr. ave. price)

CROP	ACREAGE	YIELD	AVE. VALUE	GROSS VALUE
Corn	135.45	51 bu/A	$2.53/bu.	$ 17,477.11
Wheat	32.27	36 bu/A	$3.16/bu.	$ 3,671.04
Barley	32.24	49 bu/A	$1.75/bu.	$ 2,764.58
Oats	32.24	47 bu/A	$1.69/bu.	$ 2,560.82
Hay*	154.80	1.93 T/A	$83.80/Ton	$ 25,036.42
TOTALS	387.00	****	****	$ 51,509.97

* 1 cutting of hay per year.

Reference - USDA/NASS/PASS, 1989-90.
Years used for data (1985-1989)
Adams County Yields

GETTYSBURG NATIONAL MILITARY PARK

Gross Crop Values for Target Crop Percentages
(Refer to Appendix I)

Table 3: Excellent year for all crops. (5 yr. best yield & 5 yr. ave. price)

CROP	ACREAGE	YIELD	AVE. VALUE	GROSS VALUE
Corn	313.25	98 bu/A	$2.53/bu.	$ 77,667.21
Wheat	78.31	55 bu/A	$3.16/bu.	$ 13,610.28
Barley	78.31	58 bu/A	$1.75/bu.	$ 7,948.47
Oats	156.63	68 bu/A	$1.69/bu.	$ 17,999.92
Hay*	626.50	2.65 T/A	$83.80/Ton	$ 139,126.86
TOTALS	1253.00	****	****	$ 256,352.74

* 1 cutting of hay per year.

Table 4: Poor year for all crops. (5 yr. worst yield & 5 yr. ave. price)

CROP	ACREAGE	YIELD	AVE. VALUE	GROSS VALUE
Corn	313.25	51 bu/A	$2.53/bu.	$ 40,418.65
Wheat	78.31	36 bu/A	$3.16/bu.	$ 8,908.55
Barley	78.31	49 bu/A	$1.75/bu.	$ 6,715.08
Oats	156.63	47 bu/A	$1.69/bu.	$ 12,441.12
Hay*	626.50	1.93 T/A	$83.80/Ton	$ 101,326.35
TOTALS	1253.00	****	****	$ 169,809.75

* 1 cutting of hay per year.

Reference - USDA/NASS/PASS, 1989-90.
Years used for data (1985-1989)
Adams County Yields

B. National Park Service Staff Farming

Another alternative would be for the Park to farm the land with government employees and government owned farm equipment. All crops would need to be harvested or mowed at least once annually to control weeds and pests and to reduce the amount of tillage necessary to establish the next crop in the rotation. Standing crops, as opposed to harvest residue, would require additional tillage to break down plant material that would otherwise interfere with the next seeding operation. Grain crops such as corn and the small grains may generate revenue similar to that discussed in section IA, assuming a market or outlet for these grains can be found. Federal legislation enables parks to sell items produced from interpretive programs and utilize the proceeds to offset the costs of presenting those programs. Therefore, any crops grown could be sold as a byproduct of living history and the revenues returned to the park to defray the costs of production.

Many of the expenses for this alternative would be one time initial start-up costs. The total first year farming costs would be approximately $518,099 and will include acquisition of equipment, buildings, personnel, supplies and other services. Annual operating costs for succeeding years will total $239,819 including personnel costs and supplies/services. The expense of NPS farming could fluctuate as management plans to restore field sizes and locations to their memorial appearance are implemented or as additional land is acquired. Listed on the following page are the costs associated with implementing and operating this alternative for the first year. Again 1640 acres were used to calculate all costs. A variation of this alternative would be for the NPS to assume farming responsibilities for only those acres where the heaviest deer damage is occurring, which is approximately 1,023 acres. In this instance, some of the NPS supply and service costs would be less; however, the equipment investment would remain nearly the same, posing the dilemma of whether to farm the remaining land (617 acres) by permit or go ahead and incorporate them into the NPS operation.

The personnel that are listed in this alternative are additional federal employees that would be needed if the 1640 acres were to be actively farmed by the government. The present staff would not be able to absorb a farming operation of such magnitude. An NPS-operated farm program would be a new and complex workload. The additional staff would be a necessity since the farming operations need to be performed consistently and concurrently over the entire acreage within limited time frames.

The equipment now owned by the National Park Service is not of the size, design, nor horsepower to adequately perform the necessary farming operations. The current inventory is most useful for orchard maintenance and landscape projects.

If the National Park Service were to take over active farming on parkland using government equipment and employees, the deer situation would still need to be resolved, since the impact on cropfield appearance would remain in conflict with park objectives.

Table 5:

FIXED IMPLEMENTATION COSTS - FIRST YEAR	
Equipment --- 1991 Local (PA.) Prices	
Used Equipment	
-Tractors	
(1) 4WD 120-160 Hp.	32,000.00
(2) 80-120 Hp.	40,000.00
(1) 60-80 Hp.	17,000.00
New Equipment	
-Square Baler w/ kicker (1)	12,000.00
-Hayrakes (2)	5,600.00
-Brushhog - 8ft. (2)	5,200.00
-Harrow (2)	4,200.00
-Grain Drill (2)	13,780.00
-Corn Planter (1)	16,700.00
-Disk - 13ft. (2)	12,300.00
-Chisel Plow - 9ft. (2)	5,900.00
-Haybine (Pull-type) (2)	16,000.00
-Sprayers (2)	6,000.00
-Moldboard Plow - 4 or 5 bottoms (2)	12,000.00
-Trailers - flatbeds (1)	4,000.00
-Truck w/ Grain Bed	20,000.00
-Rack Wagons - 8' by 8' by 18' (4)	5,600.00
Equipment Storage Buildings (possibly in Guinn Woods)	
-2 Equipment Storage Buildings	50,000.00
TOTAL IMPLEMENTATION COSTS	**$278,280.00**
VARIABLE OPERATING COSTS - ANNUAL	$101,846.00
Personnel (Additional Federal employees)	
-(1) Full-time Maintenance leader - WL-6	
-(1) Full-time Maintenance worker - WG-6 (1 mo.furlough)	
-(4) Seasonal Laborers - WG-3 (May-Oct.)	
-(1) Seasonal Ranger for pest scouting, monitoring, etc.	
Overtime (Late Hours or Weekends)	15,000.00
TOTAL PERSONNEL COSTS	**$116,846.00**
Supplies	
-Fertilizer(Lime-twice/8 years)	34,935.00
-Pesticides	5,300.00
-Seed	14,760.00
TOTAL SUPPLIES	**$54,995.00**
Other Services	
-Custom Combining Work	17,548.00
-Transportation, Fuel	50,430.00
Repairs, Misc. Supplies (e.g., oil twine, lubricants, etc.)	
TOTAL OTHER	**$67,978.00**
ANNUAL OPERATING COSTS:	**$239,819.00**
TOTAL FIRST YEAR FARMING COSTS :	**$518,099.00**

C. Custom Farming

In a custom farming arrangement, the Park would hire contractors and their machinery to complete all tillage, planting, spraying, and harvesting operations necessary to establish the desired crop patterns. The contractors would be responsible for their own fuel and repairs. Meanwhile, the Park would agree to supply all materials such as seed and fertilizer. Contractors would be hired on a seasonal basis due to the variability of an 8-year crop rotation. Using the acreage (1640) currently being cropped under the agricultural program (excluding East Cavalry Fields), costs are estimated to be $155,488 annually to implement custom farming. Itemized costs are listed on the following page. The amount and expense of custom work needed would fluctuate as management plans to restore field sizes and locations to their memorial appearance are implemented or additional land is acquired. Grain crops such as corn and the small grains may generate revenue similar to that discussed in section IA, assuming a market or outlet for these grains can be found. As explained on p. 8, crops grown could be sold as a byproduct of living history and the revenues returned to the park to defray the costs of production.

It should be noted that, other than the combining of corn and small grains, it may be difficult to hire local custom operators for some of the other processes. In some areas individuals own combines and possibly other equipment and are available for hire along with their machine. In Adams County, custom work other than small grain harvest may be available through local farmers who have completed their own work at home. However, this system may not be dependable, since times for planting, spraying and harvesting are critical and the work at home comes first. It may be possible to find an operator willing to harvest crops and accept the crop in lieu of cash.

In addition to the above costs, contract administration, transportation, disposal, and storage costs (should crops be harvested) must also be considered. Harvesting the crops is necessary because additional mowing, tilling and herbicide treatments would be necessary if no harvesting were to occur. Additionally, unharvested crops would not be compatible in general appearance with those of the historic period and may even appear unsightly to the public as well as impede interpretation. Transportation and storage are included since the Park will be responsible for the produce. Disposal of the corn and small grains would depend on whether or not a market can be found. The hay produced could be difficult to market due to the mass amount involved. Currently, the hay produced is either used by the permittees or sold through markets that are already established by the permittees.

If the National Park Service were to take over active farming on parkland using custom services, the deer situation would still need to be resolved, since the impact on cropfield appearance would remain in conflict with park objectives.

Table 6: **Custom Farming Costs For GNMP and ENHS - 1640 Acres**

Hay (established): 781.3 acres			
-Mowing/conditioning	$9.10/ac	=	7,109.83
-Raking	$4.90/ac	=	3,828.37
-Baling (large round bales 1070 lbs./bale avg.) Adams County average 4400 lbs./ac. or 4.11 bales/ac. * 781.3 ac. * $5.50/bale		=	17,661.29
			$28,599.49
(*Hayfields will require either a second cutting or mowing annually for weed control.*)			
Corn: 448.7 acres			
-Fertilizer (NPS)	$24.00/ac	=	10,768.80
-Seed (NPS)	$17.00/ac	=	7,627.90
-Disk	$10.70/ac	=	4,801.09
-Minimum Till	$ 9.20/ac	=	4,128.04
-Weed Spraying & Material	$ 8.50/ac	=	3,813.95
-Combining	$21.40/ac	=	9,602.18
			$40,741.96
Oats: 188.87 acres			
-Fertilizer (NPS)	$21.15/ac	=	3,994.60
-Seed (NPS)	$13.00/ac	=	2,455.31
-Spring Plowing	$11.40/ac	=	2,153.12
-Disking	$10.70/ac	=	2,020.91
-Harrowing	$ 7.50/ac	=	1,416.53
-Drilling	$ 9.20/ac	=	1,737.60
-Combining	$21.40/ac	=	4,041.82
			$17,819.89
Wheat/Barley: 221.13 acres			
-Fertilizer (NPS)	$37.00/ac	=	8,181.81
-Lime (NPS)	$ 5.00/ac	=	1,105.65
-Seed (wheat & hay seed)(NPS)	$25.00/ac	=	5,528.25
-Fall Plowing	$11.40/ac	=	2,520.88
-Disking	$10.70/ac	=	2,366.09
-Harrowing	$ 7.50/ac	=	1,658.48
-Drilling	$10.10/ac	=	2,233.41
-Combining	$21.40/ac	=	4,732.18
			$28,326.75
TOTAL CROP EXPENSES:			**$115,488.09**
Transportation, Storage, Etc. Costs			$20,000.00
Contracting & Supervision Costs			$20,000.00
TOTAL ANNUAL COSTS CUSTOM FARMING OPTION:			**$155,488.09**

Reference: USDA/NASS/PASS, 1989-90

D. Fencing Croplands

Recognizing the deer population as having a definite adverse effect on essential landscape features (Management Objectives-GNMP, 1990 & Management Objectives-ENHS, 1991), another cropland management alternative might be to exclude deer by fencing the cropfields. As an example, an estimate for electric deer fencing was prepared for the entire Eisenhower NHS cropfields. The total first year fencing construction costs for Eisenhower would be approximately $52,823.75. A summary of the calculations and associated costs is listed on the following page. The Eisenhower cropfields represent only 387 acres out of the 1640 acres (1990) of cropfields at GETT/EISE. Using the 387 acres of cropfields (Eisenhower 1,2,3) as a basis, we can calculate a rough estimate of the expense required to enclose the remaining 1253 acres of park cropland: ~$200,480 or about $160 per acre. The estimate would certainly be much higher on these remaining lands which encompass networks of roads and lanes. Gate setups and additional corner structures add significant expense to a fence construction project of this type.

Mowing would be necessary mainly to eliminate the chance of grounding due to contact with vegetation. Additionally, a 3 foot wide strip along the entire length of the fence would need to be sprayed with herbicides to kill all vegetation. Inspections would have to be conducted at least once per week if not more often to check for wire damage, fallen trees, grounding, animal entanglements, vandalism, and operation of the electric fence charger. These costs would be approximately $8,600 annually.

If damage has occurred, immediate repair will be necessary. Repairs of these types of fences will generally require the work of two staff. The time and materials involved will vary with the type of damage and will be an additional annual expense. Ideally, fencing such as this can last up to 20 years, if properly maintained.

Several other types of deer-proof fences were examined including non-electrified chain link fence and non-electrified welded wire fence at least eight feet in height. The chain link fence costs approximately $5.00/ft. for materials while the welded wire costs $1.50/ft.

Table 7:

Fencing Style: 6-wire, 5 ft. high, every other line electrified. Need 15' between new fence and historic fence to discourage jumping by deer. Need 5' between new fence and crops for turning and weed control. 4 mowing passes.

-Eisenhower Farm # 1

9,350ft * $1.75/ft to construct =	$16,362.50
Mowing - Approximately 1 hr. mowing time/mile 7.08 mi. (total dist. of 4 mowing passes) * 1 hr. = 7.08 hrs. * $30/hr. = $ 212.40 Mowing should be done at least 4 times per year * $212.40 =	$ 849.60.

-Eisenhower Farm #2

6,860ft * $1.75/ft to construct =	$12,005.00
Mowing - Approximately 1 hr. mowing time/mile 5.20 mi. (total dist. of 4 mowing passes) * 1 hr. = 5.20 hrs. * $30/hr. = $ 156.00 Mowing should be done at least 4 times per year * $156.00 =	$ 624.00.

-Eisenhower Farm #3

13,975ft * $1.75/ft to construct =	$24,456.25
Mowing - Approximately 1 hr. mowing time/mile 10.59 mi. (total dist. of 4 mowing passes) * 1 hr. = 10.59 hrs. * $30/hr. = $317.70 Mowing should be done at least 4 times per year * $317.70 =	$ 1,270.80.
Total Construction:	**$52,823.75**
Annual Mowing Costs:	$ 2,744.40
Annual Inspection Costs (Once per week, 8 hours @ $10/hr.)	$ 4,160.00
Herbicide Costs: (To keep a 3 ft. wide band free of vegetation beneath the fence.)	$ 1,720.00
TOTAL First Year Fencing Costs for Eisenhower:	**$61,448.15**

Note - The $30/hr. figure for mowing includes labor, equipment, fuel and lubricants.

E. Conversion to Grasses

The final alternative in cropland management is to convert all agricultural lands to mixed grass species, hay or sod. A mixture of various grass species could create the desired checkerboard field patterns. Establishment will take time and would need to be completed in association with other crops (i.e. small grains). Some rotation with other crops would be necessary 5-7 years after the initial establishment to remove the old grass crop and establish a new pure stand. After several years a grass stand will become mixed with weeds and other grasses and some tillage will be necessary to renovate the field. This option would require mowing 2 times per year to control establishment of woody plants and prevent the invasion of noxious weeds. The estimated annual cost for mowing 1640 acres twice a year is approximately $39,360 (Interim Deer Management Plan, 1991).

II. Evaluation of Alternatives for Managing the Appearance of Cropfields

A. Agricultural Special Use Permits

The agricultural permittee/historic leasing program, remains a viable management option for the cropfields. Flexibility, cost effectiveness, and a workload and equipment inventory spread out among eleven permittees are the primary reasons for continuing to utilize this program.

Additionally, since it is a current program, implementation costs are eliminated and operating costs are comparable to prior years. While this is the recommended alternative, it may not be available as a future option without the reduction of the deer population level. Due to the local publicity generated by the high deer population and because the Pennsylvania Game Commission (PGC) crop damage\deer control program is not applicable on NPS lands, the Park has no waiting list of potential agricultural permittees.

Therefore, if no measures are taken to reduce deer impacts and the current permittees either cancel or decline to renew their lease/permit, and other farmers are not interested, then the NPS will be forced to implement one of the other agricultural options, without any assurance of achieving our management objectives.

B. NPS Staff Farming

If a deer population of normal or controlled levels existed in the parks, the NPS farming alternative could be implemented since it would then satisfy GNMP and ENHS management objectives. Initially, it would take some time to acquire the necessary equipment, thus delaying the complete implementation of this alternative. The Park Service would be compelled to utilize other alternatives for some length of time until all of the additional equipment had been procured. There would also be difficulty in managing such a large acreage of cropfields, in the case of machinery malfunction, with only a limited amount of equipment and labor. The major disadvantages to this system are the initial expenses associated with obtaining equipment, hiring staff, time management, and repair and upkeep of an extensive machine inventory.

Labor difficulties would play a significant role, as farming is labor intensive, timing is critical and late night hours and weekend work--as is a common practice among local farmers--will certainly be necessary. Certain farming operations must be completed within a narrow window of time. For example, plowing for corn must be completed at a time when the conditions are right: soil temperature warm enough for germination, soil moisture which allows equipment to operate efficiently and correctly, planting early enough to allow the seed the appropriate number of growing days to reach maturity. Other factors limit specific farming activities to a particular week or day. For example, if it has rained for several days and then stops; the forecast calls for three days of sunshine and another week of rain and the growing season is getting short; those three days will have to be used very wisely. The first day may be a drying day and the second and third days must be used for planting, possibly working 14 - 16 hours per day.

Necessary storage for crops and machinery will pose a problem. Historic barns are scattered throughout the Park and could be used for some equipment storage; however, the lack of a centralized facility for storing equipment and materials would generate logistical, safety, and protection problems.

Establishing markets will take time. Farmers establish markets through long associations with grain dealers, cattle feeder operations, horse breeders and boarders, race tracks, and mulch hay buyers such as mushroom growers. The National Park Service cannot assume that markets used by their permittees would be available as outlets for government produce.

If the NPS were to begin farming such an expansive area of cropland, the U. S. Government would be putting itself in the position of competing with local farmers. Since the Government could accept lower prices on crop sales than local farmers, the NPS may cause the prices to plummet locally. Farmers who rely on crop sales for their earnings would likely view the Government as an unnecessary competitor.

If the National Park Service were to take over active farming on parkland using government equipment and employees, the deer situation would still need to be resolved, since the impact on cropfield appearance would remain in conflict with park objectives.

C. Custom Farming

Again, if a deer population of normal or controlled levels existed in the parks, the custom farming alternative could satisfy GNMP and ENHS management objectives. However, the park might find it difficult to implement since custom work, excluding combining, is not readily available in south central Pennsylvania. Unlike the West and Mid-West where custom farming businesses which work on contract are available, similar businesses are not commonplace in this region of the country. Lack of available services would force park management to select an additional alternative to supplement available custom services. Even if enough contractors could be hired to complete all the desired work, it is likely that many would need to travel from other areas, thus elevating the costs of this alternative. A second disadvantage of this system is the lack of direct control over the timing of agricultural activities that must be performed within limited time frames.

Additionally, the Park would be charged with the responsibility of finding a market for their grain crops and for storing these crops and possibly hay if no immediate market should be found. As the National Park Service currently has none of its own livestock, stored hay may carry over from year to year posing a disposal problem as the next season approaches. Another option would be to mow the 781 acres of hay twice annually and leave the hay crop lay. Regular mowing would be necessary to keep these fields free of weeds and woody vegetation. Baling could be done on an annual rotational basis among fields to produce some sellable hay crop. Hay fields would still need to be kept in rotation with other crops, unless a grass/hay crop is significant to interpretation and must be retained in grass. Although not included in the cost calculations, additional staff would be necessary to ensure resource protection through close monitoring of custom operations and to deal with harvested crops.

If the National Park Service were to take over active farming on parkland using custom services, the deer situation would still need to be resolved, since the impact on cropfield appearance would remain in conflict with park objectives.

D. Fencing Croplands

Practically, fencing, whether electric or non-electric (which must be at least 8 ft. in height), may seem to be a viable solution. However, it would be a major cultural and interpretive detriment at both the Gettysburg NMP (with its 1863-1900 setting) and the Eisenhower NHS (with its 1950-1969 setting). On the GNMP, the construction of electric fencing would add non-historic elements to the historic scene (Electrified Fencing for Deer Management, 1991). On the ENHS, there was limited use of electric fences during the historic period. However, these fences were designed for cattle management and would not adequately exclude deer. The style of fencing needed to exclude deer would be a major visual distraction in both parks. In addition to fencing, devices for deer similar to cattle guards would need to be used on roadways. The construction of such devices on the main roads in the Park would eliminate or severely reduce bicycle and pedestrian use of park roadways and trails.

In addition to the interpretive and cultural arguments against fencing, the vast road network (8 major roads and many connecting avenues and farm lanes) in the Park, makes it impractical to fence all the cropfields on the GNMP and ENHS. Any major fencing project would not only impede visitor accessibility, a management objective of the Park, but would also create a potential safety hazard for visitors. Partial fencing of certain cropfields, would only concentrate the deer population on unprotected areas and on roadways, both undesirable situations. Additionally, park staff through some means would have to remove the deer from within the area being fenced.

Electric fencing is not 100% effective. Larger deer will attempt to jump these fences and may succeed or become entangled and damage the fence. Should the fence become damaged from limbs or entanglements some deer will inevitably find the opening and it would be necessary to remove these animals and make repairs. For non-electric fences which span long distances, deer often create "tunnels" under fences by continually pushing and bending or snapping the wire.

Essentially, it is not feasible to erect any type of fencing on the GNMP or ENHS that would practically and effectively exclude deer and still be culturally acceptable. The parks were set aside to preserve the scenes, cultural resources and settings associated with historic events. The construction of deer fencing would interfere with interpretation and management of these resources. Additionally, the safety factors and maintenance issues offer further justification for selecting a less intrusive alternative.

E. Conversion to Permanent Hay/Grasses

Although the interspersion of various colored grasses may simulate historic field patterns, the desirable vegetation features of height and texture would not be attained. Grass species indigenous to local soils are approximately the same in height (3-4 ft.) and do not offer the texture and appearance characteristic of corn and sorghum fields. For example, definite patterns and textures are created by contrasting golden wheatfields against taller, green leafy corn plants interspersed with hay fields and cultivated barren soil in a state of continuing transition. This option does not support the management objectives nor the goals for cropfield appearance at GETT/EISE and can not be considered as an alternative to active farming or deer management.

Summary

By some method other than a wide-scale deer fencing program, deer impacts will need to be mitigated if the Service wishes to accurately represent the historic, rural agrarian landscape through permittee, custom or staff farming. Since the fencing option is unacceptable from a cultural and interpretive perspective, control of the deer population is a necessary factor for implementing the agricultural options and maintaining crop structure within the acceptable 25% damage level.

Because of its flexibility and cost-effectiveness the agricultural permit program remains the preferred option for maintaining the cultural landscapes of both park areas. Therefore, the desired cropfield appearance can only be obtained through deer reduction efforts and the continuation of the flexible, cost-efficient agricultural permittee program.

MANAGEMENT ALTERNATIVES FOR RESTORING AND MAINTAINING (PERPETUATING) THE IMPORTANT CHARACTERISTICS OF PARK WOODLOTS

Appendix C

Woodlots and vegetation characteristics are among the identified landscape features essential to the historic scene. Prior to July 1863, wooded areas belonged to local farmers who utilized the trees for lumber, fence material, firewood, furniture, tools, and so on. On July 1, 1863, the wooded areas, like many other features assumed a new military function. Fighting took place in a few and the remainder were used for shelter, and the movement or positioning of troops. Perpetuation and restoration of woodlot characteristics is an element of the management objectives for Gettysburg National Military Park.

Specifically, the NPS has concluded that the important characteristics for which woodlots should be managed are: height of the overstory, density of the understory and mix of deciduous vs. coniferous trees. Additionally, woodlots should be managed with native/historic species when practical (Gettysburg Management Objectives, 1990).

Although the full extent of the deer impact on the woodlots is now just beginning to be recognized there are definite indications that if no protective action is taken, the natural perpetuation and preservation of their important characteristics will be impossible. A recent study of the woodlots by Penn State has determined that there is an absence of saplings in the smaller diameter classes, and that this deficiency is attributed at least partially to the browsing pressures of deer (Fairweather & Cavanaugh, 1990).

In order to evaluate management alternatives it was necessary to classify park woodlots into two categories: (1) Those associated with significant battle action, and (2) those significant to battle movements and positions. Park historians have determined that Culp's Hill, Herbst Woods, and Rose Woods were sites of significant battle action and are located in areas assessed as high priority for restoration. These woodlots should be restored to reflect their historic appearance as part of an active battlefield. The height of overstory, density of the understory, mix of deciduous and coniferous species, and native species are the important factors in preserving these woodlots.

Generally, in those three woodlots in which significant battle action occurred, the understory will be kept fairly open as it likely was during the time of the battle. These stands should be managed in such a manner that trees of various size classes will be present in approximately the same percentages as those woodlots of the memorial period. This information will be derived from the analysis of historic photographs and records from the memorial period. Preliminary evaluation of historic photographs indicates that an average of 25% of the trees in these woodlots were composed of trees 1-4" in diameter, 35% were in the 5-8" class, 30% were in the 9-12" class, and trees over 13" made up about 10% of the woodlots. Extensive vegetative manipulation and intensive management will be necessary factors in restoring these areas.

It has been suggested that browsing deer serve to keep some woodlots open as they were historically. However, deer browsing is uncontrollable and those seedlings and saplings which may be desired for recruitment into the woodlot structure by park managers are typically the preferred food species of deer. Browsing can result in the death or severe stunting of seedlings and the death, stunting, or deformation of older saplings.

The remaining woodlots (as identified in Table 9) served primarily as screens for army movements and positions and are best interpreted and preserved as topographic features. Height of the overstory, mix of deciduous and coniferous species, and native species are the important factors in perpetuating these woodlots. Maintaining the historic density of the understory in these stands is of lesser importance. These woodlots will be perpetuated through the use of a model for sustaining uneven-aged diameter distributions within a wooded area. The target numbers cited below are for an ideal stand structure based on silvicultural principals and current stand structures (Karish, 1991).

Table 8:

Total Number of Trees Per Acre Per Tree Size Class

Size Class (DBH)	Trees Per Acre (TPA)
1-4"	618
5-8"	153
9-12"	37
13"+	13

Without deer pressure the three open woodlots could be managed through a combination of natural regeneration, protection/selection of individual trees, supportive plantings, hand cutting, herbicides, mowing, controlled grazing, control of non-native species, and the removal of downed materials as needed.

The remaining woodlots could be managed through natural regeneration, control of non-native species, and selective removal of downed materials and overstory canopy. Individual woodlot management prescriptions were outlined in Penn State's woodlot restoration report (Fairweather & Cavanaugh, 1990).

This section evaluates alternatives for coping with deer and perpetuating park woodlots.

III. Presentation of Woodlot Alternatives

A. Fencing Woodlots

Since the criteria on which the woodlots are managed are dependent upon the species composition and the regeneration, then an obvious alternative might be to fence the woodlots and exclude the deer. Using the same fencing costs for agricultural lands the following estimates were developed.

-Fencing Style: 6-wire, 5 ft. high, every other line electrified.
-Average Cost to Install: $1.75/ft. or $160/acre
(Materials & Labor)
-Maintenance Inspections: $1.00/acre
-Weed Control:
To control vegetation in a 3 ft. band underneath fence. $11.00/acre

Fencing estimates were developed for the woodlot areas covered in the Penn State Woodlot Study and Culp's Hill. These estimates are indicative of average costs associated with fencing wooded areas and could be used to calculate fencing costs for additional wooded areas.

Table 9:

Estimated Woodlot Fencing Costs

Woodlot	Acreage	Estimated Cost
Culp's Hill	125	$ 20,000.00*
Herbst	22	$ 3,520.00*
Rose	60	$ 9,600.00*
Codori-Trostle	12	$ 1,920.00
Trostle	14	$ 2,240.00
Biesecker	33	$ 5,280.00
McMillan	8	$ 1,280.00
Pitzer-Sherfy	49	$ 7,840.00
Rummel	27	$ 4,320.00
Spangler	28	$ 4,480.00
Patterson	9	$ 1,440.00
TOTALS	**387 Ac.**	**$ 61,920.00**

* An open understory is desired and woodlot fencing may not be necessary as long as the acceptable characteristics of height of overstory, coniferous/deciduous ratio, and native species are being perpetuated; however, individual trees may need to be protected.

Annual costs for maintenance inspections and weed control for a fenced boundary of 387 acres is calculated to be $20,124 and $4,257, respectively.

Inspections would have to be conducted at least once per week if not more often to check for wire damage, fallen trees, grounding, animal entanglements, vandalism, and operation of the electric fence charger. If damage has occurred, immediate repair will be necessary. Repairs of these types of fences will generally require the work of two staff. The time and materials involved will vary with the type of damage and will be an additional annual expense.

B. Exotic Cover Removal

To encourage additional regeneration in the woodlots, one alternative is to remove and stump treat the exotic non-historic cover, such as japanese barberry and multi-flora rose, with herbicides.

While some of these plants may have been introduced to the battlefield during the memorial period for various reasons, they have become pests which compete with existing, desired vegetation and regeneration for growing space, moisture, nutrients, and light. Although most of the invading species are at low density levels now, they are present in most of the Park's wooded areas and it is expected that due to their reproductive and growth rates that they soon will be rivals for understory dominance in many of the wooded areas (Fairweather & Cavanaugh, 1990). In many cases their adaptive growth abilities allow them to gain a competitive advantage over the natural vegetation.

Currently, the only approved herbicides that would be applicable to the woodlot situation are Round-Up, priced at $82.25/gal., Garlon 3A at $76.25/gal., and Garlon 4 at $101.00/gal. Although this alternative would not deter deer browse it would provide the opportunity for more desirable vegetation to become established. However, even with additional plant establishment, woodlot characteristics could not be perpetuated without integrating other management actions.

C. Selective Overstory Cutting

Selective cutting of overstory would open growing space and allow for more light, nutrients and moisture to reach the forest floor. Undoubtedly, this would result in increased growth and vigor of the remaining vegetation, however the extent of this increased growth has not been fully determined.

D. Direct Seeding

Seeding the woodlots directly is yet another method of establishing the regeneration needed to perpetuate the important woodlot characteristics. In the seeding process, a planting bar is used to create a slot in the soil in which an acorn, nut or other seed is deposited. There are several advantages to direct seeding: seeding can be done over a longer season than seedling planting; a person can seed more area per day than he/she can plant with seedlings; and a person can control what species of seed is distributed over an area.

Certain requirements are necessary if adequate regeneration is desired through direct seeding. The requirements are as follows: seeds must be adequately protected against bird and rodent depredation; seeds must be sown on suitable sites and covered to the proper depths; competing vegetation must be adequately reduced before and controlled after seeding occurs; and the seedlings must be protected against wildlife damage (Direct Seeding in the Northeast, 1965).

E. Supplemental Planting

Rather than rely on natural regeneration or germination of planted seeds, an alternative in woodlot management is to supplement natural regeneration. By contrasting the target total number of trees per acre in the 1-4" size class with the actual number of trees per acre per woodlot from the woodlot study, the following table is generated for use as a guide in establishing a target number of trees per acre (TPA) in those woodlots where height of overstory, coniferous/deciduous ratio and native species are the prime concerns. The target number allows for adequate natural recruitment into the upper diameter classes to meet ideal stand objectives. The target TPA could be used for similar woodlots after evaluation to determine actual and deficit TPAs.

Table 10:

Target Number of Trees Per Acre vs. Actual Number of Trees Per Acre for 1-4" DBH

Woodlot	Target TPA	Actual TPA	Deficit
Codori-Trostle	618	100	-518
Trostle	618	212	-406
Biesecker	618	284	-334
McMillan	618	380	-238
Pitzer-Sherfy	618	371	-247
Rummel	618	396	-222
Spangler	618	354	-264
Patterson	618	260	-358

Clearly, supplemental plantings are needed to compensate for the lack of recruitment of seedlings into the upper diameter classes for the woodlots in the second management category. However, obtaining saplings of the desired species and size could be difficult and expensive. Generally, a balled and burlap sapling, 1.25" dbh will range from $30-50.00 per tree and a bare root sapling of the same size would cost between $5.00-10.00 each, depending on the species. Similarly, current prices show that a 2" sapling in a wire basket costs between $60-80.00 per individual, again depending on the species (Planting and Price Lists, 1991). Since the average height of a 1" sapling is 7-10', branches would be above the deer browse line, and no protective devices would be required.

Another variation of silvicultural plantings would be to use seedlings instead of saplings. Seedling costs range from $0.30-0.50 each per 1000 individuals, depending on the species. Volunteer groups such as scouts are readily available to plant of seedlings of this size; a reasonable expectation based on volunteer participation is about 3,000 seedlings annually. Most of the major nurseries carry the species endemic to the battlefield woodlots. Considering the present deer population and the height of most of these seedlings (<6 ft.) it would be necessary to protect the seedlings with some type of sheltering device. Tree shelters (such as Tubex) average $4.00 each; but prices are flexible depending on the total number ordered.

IV. Evaluation of Alternatives for Restoring and Maintaining (Perpetuating) the Important Characteristics of Park Woodlots

A. Fencing Woodlots

Fencing alone will not solve the park's woodlot management problems. Deer play a definite destructive role in the woodlots, however, some canopy thinning and exotic species removal may also need to be conducted. Although fencing would protect the Park's wooded areas, it would only serve to force the deer pressure onto other unprotected areas and roads. In addition, the construction of any type of deer exclusion fence on the GNMP would seriously detract from the historic scene and would overwhelm interpretation efforts to the point where the focus would be the fence and deer instead of the landscape and battle action. Any fencing, whether chain link, woven wire or electric, would impede visitor access especially in those woodlots which contain roadways, avenues, or trails. Additionally, the construction of electric fences around the woodlots would not only limit visitor access to those areas but also create a potential safety hazard (electric shock) to visitors.

B. Exotic Cover Removal

Non-native/non-historic plants should be identified and removed as a supportive measure. On an individual woodlot basis, removal and treatment of these plants should result in successful control of problem species. National Park Service policy (4:12) offers guidance on management of these populations and allows control in situations where species disrupt the accurate presentation of a historic scene, and interfere with natural processes and the perpetuation of natural features or native species. This option should be used in conjunction with other measures to reduce adverse impacts to understory individuals of native tree species.

C. Selective Overstory Cutting

It has been suggested (Fairweather & Cavanaugh, 1990) that selective cutting may be a necessary management component for the maintenance and perpetuation of the important woodlot characteristics. The opening of the canopy may encourage increased growth of plants under normal pressures, however the current large deer population is one of the major factors inhibiting seedlings from reaching the stage when the light and nutrients will be beneficial (second or third year). Any increased vegetative growth or vigor may stimulate growth of the deer herd or at least augment the food supply for the existing deer population. In woodlots where the impact is greatest, new seedlings are usually consumed or deformed by deer the fall after emerging. Lack of recruitment into the sapling stage has been documented in Penn State's White-Tailed Deer Research and in the Woodlot Restoration Research. In addition, some cutting or thinning of historic trees (those dating to the Battle) may be a necessary element of such a selective cutting program.

D. Direct Seeding

It has already been established that both wildlife and competing vegetation pose serious barriers for a successful direct seeding operation in the Park woodlots (Fairweather & Cavanaugh, 1990). Therefore, at this time, the requirements needed for a successful direct seeding operation are not present. For those individuals which germinate and emerge, recruitment into a second growing season without destruction or deformation is unlikely with the current population of deer. As mentioned in IV C., any increased vegetative growth or vigor may stimulate growth of the deer herd or at least augment the food supply for the existing deer population.

Although it may be possible for some of this type of planting to occur, it seems infeasible to expect any wide-scale operation designed at reaching the target number.

E. Supplemental Planting

Planting large balled trees would require hundreds of tractor-augured holes 2-3' wide and 2-3' deep, which would be not only time consuming (average 1 hole/hr.) but would also require cultural compliance and archeological investigation prior to starting such an effort. This option may be useful in those woodlots where an open understory is appropriate.

The seedling option could be used in conjunction with other measures to establish individuals for possible recruitment into the overstory. This option may be useful in those woodlots in the second management category. Tree shelters would provide adequate protection from deer; however the presence of such shelters in the woodlots may detract from the overall historic scene if used in abundance.

Summary

Although each silvicultural alternative might somewhat offset the impact of the deer on woodlots, the pressure on regeneration and young growth is so extensive that these alternatives would likely not be able to compensate at current deer levels. Even in combination, one could only expect a marginal success rate as the deer impact would still be present and increasing each year. These actions alone may spur growth of the deer population or increase the quantity of food available for the existing population. At the management objectives workshop for GNMP, it was "concluded that deer adversely impact the ability to perpetuate important woodlot and woodland characteristics." (Gettysburg Management Objectives, 1990) Their impact influences the future management and perpetuation of park woodlots by affecting the current status of the resources. Ideally, the most effective woodlot management scenario would be a combination of the previously presented alternatives (Fairweather & Cavanaugh, 1990). But as indicated, even this approach would be ineffective at perpetuating the historic characteristics unless the deer impact is reduced.

Reduction of the deer population, natural regeneration and a combination of silvicultural techniques should be relied upon to perpetuate the desirable woodlot characteristics to the extent necessary for preservation of the cultural landscapes and the interpretation of history.

APPENDIX 1

Objective Crop Percentages on Landscape

I. GETTYSBURG NATIONAL MILITARY PARK

	Current	Objective[a]
Corn	~ 7% (All north end)	~ 25%
Grass/Hay[b]	~50%	~ 50%
Small Grains[c]	~28%	~ 25%
Milo (Sorghums)	~10%	~ ≤10%[d]
Soybeans	~ 5%	~ ≤ 5%[e]

a) These percentages represent an average within a 6-8 year crop rotation; the figures may vary in any given year +- 10%. Corn will not be grown more than 3 years within a rotation cycle.

b) Alfalfa, which did not become widespread until the later 1800s, should not represent more than 5% of the total in any one year. Alfalfa is a beneficial legume that may be included in a rotation by individual farmers.

c) Small grains may include oats, wheat, rye or barley.

d) Sorghums (e.g. broom corn), milos, millets, buckwheat: These crops would be acceptable but should not represent more than 10% of the total croplands in any one year.

e) Soybeans - Should not represent more than 5% of the total in any one year. Soybeans were not popularized until 1889-1920. Soybeans are beneficial legumes and may be desired one year within a rotation cycle by individual farmers.

II. EISENHOWER NATIONAL HISTORIC SITE

	Current	Objective[f]
Corn	0%	~ 35%
Small Grains	~31%	~ 25%
Hay[g]	~21%	~ 40%
Milo (Sorghum)	~43%	~ ≤10%[h]
Soybeans	~ 5%	~ ≤10%[h]

The most common crop rotation from 1959-1966 was Oats, Barley, Hay, Corn (1 yr. each). Modern rotations are on a 6-8 year cycle with hay representing about half of the entire cycle. Corn will not be grown more than 3 years in any 6-8 year cycle for a strip/field.

f) These percentages represent an average within a 6-8 year crop rotation and the figures may vary in any given year +- 10%.

g) Hay - Grasses (Bromegrass, Orchardgrass, Timothy, Trefoil)
Legumes (Alfalfa, Clovers)

h) Milo (sorghum) and soybeans were included in the rotations of several fields; individually they should not represent more than 10% of the total crops planted during any one year within a 6-8 year rotation.

REFERENCES

Abbott, H. G. ed. 1965. Direct Seeding in the Northeast - A Symposium. University of Massachusetts, Amherst. 127 p.

Fairweather, S.E. and C.M. Cavanaugh. 1990. Identification, Restoration, and Maintenance of Historic Woodlots at Gettysburg National Military Park. Technical Report NPS/MAR/NRTR - 90/049. NPS - Mid-Atlantic Region.

Freund, R.P. 1990. Worksheets on Potential and Deer Damage Impacts to Farm Crops at Gettysburg NMP and Eisenhower NHS. Penn State University, Cooperative Extension Service, University Park.

Gettysburg National Military Park. 1991. Crops Rationale.

Hartley, R. 1959-1966. Personal Farm Records.

Karish, J. 1991. Draft Report on Woodlot Appearance Characteristics. 10 p.

Misc. Nursery Planting and Price Lists. 1991.

Storm, G.L.; R. H. Yahner, D. F. Cottam, G. M. Vecellio. 1989. Population Status, Movements, Habitat Use, and Impact of White-tailed Deer at Gettysburg National Military Park and Eisenhower National Historic Site, Pennsylvania.

U.S. Department of Agriculture, Pennsylvania State University and University of Maryland Extension Service Publications.

U.S. Department of Agriculture - National Agricultural Statistics Service; Pennsylvania Agricultural Statistics Service, Pennsylvania Department of Agriculture. 1989-1990. Crop and Livestock Annual Summary.

U.S. Department of the Interior - National Park Service. 1987. Eisenhower National Historic Site, General Management Plan.

U.S. Department of the Interior - National Park Service. 1988. Management Policies.

U.S. Department of the Interior - National Park Service - Mid-Atlantic Region. 1991. Interim Deer Management Plan. 6 p.

U.S. Department of the Interior - National Park Service - Mid-Atlantic Region. 1991. Management Objectives for Eisenhower National Historic Site. 1 p.

U.S. Department of the Interior - National Park Service - Mid-Atlantic Region. 1990. Management Objectives for Gettysburg National Military Park.

Appendix D

THE SCOPING PROCESS

In compliance with regulations of the National Environmental Policy Act (NEPA) (40 CFR 1501.7), a Notice of Intent was published on August 21, 1992, in the Federal Register. It announced the intent to prepare an environmental impact statement to help decide the best alternative to meet woodlot and cropfield standards which could not be achieved due to deer browsing. A second notice published on January 28, 1993, announced the public information and scoping meetings.

A February 2, 1993, news release announcing two public meetings was sent to over 300 groups and individuals. The mailing list (Chapter 6) included members of the public, interested groups, elected officials, county commissioners, and state, federal, and local government agencies. The announcement was also sent to several magazines, newspapers, and radio and television stations. Information about the meetings was available in Gettysburg NMP's Visitor Center and Cyclorama.

About 130 people attended an informational meeting held at the Gettysburg Junior High School on February 27, 1993. This initial meeting was held to answer questions and provide information relating to park management objectives and the effects deer are having on the parks' ability to achieve these objectives. The scoping meeting, held on March 27, 1993, at the same location, was attended by about 195 people. People attending the second meeting were invited to participate in work groups. These groups identified the issues and concerns which people had concerning the high deer density in the parks and the proposed deer management program. In addition, 49 written comments from individuals and groups were received within the following three months.

These meetings were not the first time that information had been provided to the public about park management objectives and the effects of deer on these objectives. Since 1985, several steps have been taken by park

managers to inform the public of the management issue at Gettysburg NMP and Eisenhower NHS. At least 50 articles have been printed in 8 newspapers, including a national newspaper, and 7 articles were printed in 3 magazines. In addition, this issue has been the topic for 8 television programs, 3 radio programs, 6 news releases, and 16 presentations to a variety of interested groups.

N1615

November 2, 1993

Memorandum

To: Michele Batcheller

From: Natural Resource Management Specialist

Subject: Deer EIS - Steps Taken by NPS to Inform Public

As you requested, here is a list of steps we have taken to inform the public about the deer EIS process.

NEWSPAPER ARTICLES:

THE HANOVER EVENING SUN:
Battlefield is home for too many deer, 02/06/89, Lisa S. Buckwalter
Gettysburg park lists new objectives, 09/18/91, David Perlis
Gettysburg area farmers battle park deer herd, 01/17/91, T.W. Burger
Battlefield deer population is still climbing, 02/06/93, T.W. Burger

THE GETTYSBURG TIMES:
Deer hunters: return radio collars, 12/04/85, T.W. Burger
She ruined my day, 02/15-16/86, B.J. Small
Editorial, Humankind isn't kind to animals, 02/25/86, James A. Kalbaugh
The Gettysburg Deer Study, submitted 03/27/86, Gerald Storm and Richard Yahner
Deer study at halfway point, 11/26/86, T.W. Burger
Meeting "The Monster" - again, 12/5-6/87, B.J. Small
No easy solution in sight or battlefield deer problem, 1989, T.W.Burger
What should be done about the deer on the battlefield?, 01/24/90, Street Beat
More Study, 02/24/90, B.J. Small
Battlefield deer damage controls eyed, 03/12/90, Bobbie Platt
Yes, if at all, 06/16/90, B.J. Small
The buck eats here, 08/11/90, B.J. Small
Field file, 10/27/90, B.J. Small
Help make the management plan work: get your deer, 11/29/90, Thomas E. Piper
Don't pick up that battlefield deer!, 03/26/91
Deer linked to pickup truck crash, 06/27/91
No deercision, 07/91, B.J. Small
Letter to the editor - Deer herd, Park must do something, 07/15/91, Robert D. Barnes
3 women attacked by whitetail buck, 11/20/92
3 lucky women and a whitetail, 11/21/92, B.J. Small
Park takes its deer problem to the public, 03/01/93, B.J. Small
Battlefield, Eisenhower Farm deer herd grows from 720 to 1,600 in 5 years, 03/01/93, Pat Nevada
Public has say in Park's deer solution, 03/02/93, B.J. Small
Still Studying, 03/10/93, B.J. Small
Motorcycle hits deer on Emmitsburg Road, 07/26/93

THE HARRISBURG PATRIOT:
Deluge of deer, 01/13/90, Jeffrey B.Roth
Park deer chewing up Gettysburg, 03/07/93

THE LANCASTER SUNDAY NEWS:
Deer damage at Gettysburg, 1991, Jack Hubley

THE PHILADELPHIA INQUIRER:
Deer herd imperils Gettysburg's fields, 03/24/89, Deborah Baker
Deer invade Gettysburg farms, 1989, Beth Arburn Davis
In Gettysburg, a battle over field's condition, 09/06/90, Beth Arburn Davis

THE ROCKLAND COUNTY JOURNAL NEWS - NY:
Herd of 1,250 deer ravishing Gettysburg, 06/18/89, Steve Gossett

USA TODAY:
Whitetail deer become red-flag issue, 11/23/90, Linda Kanamine
Battling animal overpopulation, 03/25/93, Ben Brown

THE YORK SUNDAY NEWS:
Oh, Deer! Military park studying animals on its lands, 10/13/85, Jeffrey B. Roth
Addressing the deer problem, 02/16/86, Jack Hubley
Gettysburg faces battle with deer, 05/28/89, Martin Sipkoff
Study: Hunt could solve park's deer problem, 01/28/90, Martin Sipkoff
Battlefield Deer at Gettysburg are reducing forest and farm to stubble, 05/06/90, Jack Hubley
Deer overrunning park, 01/05/92, Martin Sipkoff
Gettysburg residents up in arms over deer, 02/28,93, Patrick De Lany

UNKNOWN:
Deer eating seedlings at Gettysburg, ?, Associated Press
Famous battlefield faces deer problem, ?, Associated Press
Season ready to open on corn-fattened deer, 1991, Thomas Piper
Abundant deer affecting ecology, 1992, Associated Press
Abundant deer affecting flora, fauna of forests, 1992, Associated Press

MAGAZINE ARTICLES:
THE CIVIL WAR NEWS:
Oh Deer: Buck Attacks Park Visitors, 01-02/93, Deborah Fitts
Public Hears of Damage From Gettysburg's Deer, 04/93, Deborah Fitts

PENNSYLVANIA WILDLIFE:
When Deer Become Unbearable, Volume VII, No. 3, Jack Hubley
Regeneration at Gettysburg, Winter 1990, Brian C. Avery
Gettysburg National Military (Deer) Park, May-June 1990, Jeffrey B. Roth
Gettysburg National Park: History Lost to Whitetails, Volume X, No. 4, Julie Lalo

SPORTS AFIELD:
Too Many Deer in Eastern Parks, 12/91, Kit Harrison

TELEVISION PROGRAMS:
WVIA/Scranton (Channel 44), 01/02/89, video
Pittsburg station, 01/01/89 & 01/07/89
WITF (Channel 33), 01/14/89
WQLN/Erie ((Channel 54), 11/20/89
WPSX/University Park (Channel 3), 11/08/89
WHYY/Philadelphia (Channel 12), 12/14/89, video
WLVT/Allentown (Channel 39), 12/17/89
WGAL/Harrisburg (Channel 8), Hal Greenlee on 03/09/93

NEWS RELEASES:
Public meeting on Management of White-Tail Deer on 02/27/93 - Kiwanis Club of Chambersburg - The Weekly Bulletin, 01/93
Three-year Study of Park Deer Completed, 01/12/90
Public Informational and Scoping Meetings on White-Tailed Deer Management Program, Federal Register, 01/28/93
National Park Service Schedules Meeting on Deer Impacts, 02/02/93
National Park Service Holds meeting on Deer Impacts, 02/93
Second Deer Meeting, 03/10/93

RADIO PROGRAMS:
WITF FM, Hal Greenlee interview with Janelle Stilson to air on 02/26/93 on National Public Radio
WSBA radio, York, Mac Heebner interview with Dave Brady on 02/26/93
WINK - 104 FM, Hal Greenlee interview with Don Harrington on 03/11/93

PRESENTATIONS:
Wildlife Society, Pennsylvania State University Student Chapter, University Park, PA, 03/11/87, Hal Greenlee
Audubon Society, South Mountain Chapter, Gettysburg, PA, 1988, Hal Greenlee
Fish and Game - McSherrystown, McSherrystown, PA, 1988, Hal Greenlee
Fish and Game - Adams County, Ortanna, PA, 1988, Hal Greenlee
Fish and Game - Littlestown, Littlestown, PA, 1988, Hal Greenlee
Pennsylvania Wildlife Federation Annual Conservation Forum, Millersville University, PA, (800 attendees) 03/11/89, Hal Greenlee
Hunter-Trapper Education Instructors Course administered by the PA Game Commission, York Springs PA, 04/11/89, Hal Greenlee
Rural Mail Carriers Association - Adams County, Gettysburg, PA, 10/21/89, Hal Greenlee
Soil Conservation Society - North Maryland Chapter, Annual Meeting, Gettysburg, 1989, Dan Huffman
Fish and Game - York/Adams, Hanover, PA, 1989, Hal Greenlee
Lions Club, Cashtown, PA, 1990, Hal Greenlee
American Association of Retired Persons, Gettysburg, PA, 1990, Hal Greenlee
American Association of Retired Persons, Biglerville, PA, 1990, Hal Greenlee
Trout Unlimited, Vienna, VA, 1991, Hal Greenlee
Ladies Garden Club, Taneytown, MD, Spring 1992, Ed Wenschhof
Rotary Club, Chambersburg, PA, 1992, Hal Greenlee

VIDEOS:
Protecting a Sacred Place: The National Parks at Gettysburg - shown at the February 27, 1993 deer EIS informational meeting.

EXHIBITS:
Six exhibits were developed and displayed at both deer EIS scoping meetings. We intend to also display them in the Cyclorama Center in Gettysburg NMP. The topics concern the following topics and how deer impact them:

1. Cropfields - management goals and objectives
2. Farm Crops
3. Woodlands - management goals and objectives
4. Forested Ecosystems - seeds, browsing, antler rubbing, stress
5. Restoration of the Farm Woodlots
6. The NEPA Process

HANDOUTS:
"Cropfield Management Objectives and Standards"
"The Deer Population at Gettysburg NMP and Eisenhower NHS"
"Effects of Deer on Crops at Gettysburg NMP and Eisenhower NHS"
"Effects of Deer on Forested Ecosystems"
"The NEPA Process"
"Restoration of the Farm Woodlots at Gettysburg NMP"
"White-Tailed Deer at Gettysburg NMP and Eisenhower NHS"-an interpretive brochure
"The White-Tailed Deer Population at Gettysburg NMP and Eisenhower NHS"
"Woodlot Management Objectives and Standards"

PUBLIC MEETINGS:
February 27, 1993 - Informational meeting
March 27, 1993 - Meeting to solicit input on the public's concerns

Hal Greenlee

Hal Greenlee

Appendix E

PROCESS USED TO ARRIVE AT DEER DENSITY GOAL

The precise density of deer that would result in an acceptable level of browsing that would allow Gettysburg NMP and Eisenhower NHS to meet their landscape management objectives is unknown. The National Park Service has decided, therefore, to set an initial deer density goal and to monitor the effects of browsing in the parks' cropfields and woodlots. The deer density goal would be raised or lowered based on the comparisons of the effects of that level of browsing with the cropfield and woodlot objectives. Through time, the National Park Service would learn which deer density would have an acceptable level of browsing on the cropfields and woodlots of Gettysburg NMP and Eisenhower NHS as stated in the *Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots* (1992). To establish the initial density goal, the National Park Service examined the effects of known deer densities on croplands and forested areas.

The Pennsylvania Game Commission reports that the 10-year average over-wintering deer density for Adams County is 38 deer per square mile of forested land. Although some farmers on private land in Adams County have high crop losses due to deer, most farmers can successfully grow crops. Some farmers, however, shoot deer under the Pennsylvania Game Commission's Crop Depredation Program in order to reduce crop losses. It may be possible for the parks to meet their cropfield objectives if the deer density in the parks was reduced to the same deer density as the rest of the county.

The population estimate of the number of deer in the parks would continue to be based on April surveys conducted in the deer study area (Figure 5). This 11-square mile study area has 3.2 square miles of forested land (Storm et al. 1989). Applying the estimated Adams county deer density of 38 deer per square mile of forested land to the forested land of the study

area would result in a desired April population goal of 122 deer for the study area. The formula is:

38 deer/sq.mi. forest x 3.2 sq.mi. forest study area = 122 deer/study area

The National Park Service examined the available literature to determine the relationship of deer densities to the regeneration of tree seedlings. There are only a few controlled studies on how vegetation responds at different levels of deer abundance. The data are site specific, but they provide the National Park Service with a starting point. A deer density study in a northern hardwood forest in New York reported that seedlings could grow when the deer density was reduced from 27 to 17 deer per forested square mile (Behrend et al. 1970). Earlier studies, also in northern hardwood forests, reported successful regeneration at densities of 16 and 20 deer per forested square mile (Bramble and English 1948, Bartlett 1958). Northern hardwood forests, however, are mostly maple and beech which are not the dominant species found in the parks. The Pennsylvania Game Commission has conducted long-term research studies in the oak/hickory forests in central Pennsylvania. They found that a winter population of 20 deer per square mile of mature forest allowed seedlings to grow (Drake and Palmer 1991). Applying this density to the forested land in the study area would mean a desired April population goal of 64 deer in the study area. That formula would be:

20 deer/sq.mi. forest x 3.2 sq.mi. forest study area = 64 deer/study area

Park deer populations need to be kept at a level so that the objectives for both cropfields and woodlots (Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots 1992) would be reached and maintained. The National Park Service has decided the initial April deer density goal will be 25 deer per square mile of forested study area for the alternatives that propose to control the number of deer in the parks. At this density, the study area would have an estimated population in April of about 80 deer. This is an initial density goal which through monitoring may be modified to determine a final deer density goal suitable for the

maintenance of the landscapes of the parks. Due to personnel limitations, time restrictions, effectiveness of the action, movement of deer into the parks, and deer productivity, it may take 3 or 4 years to achieve the initial density goal. The population would be maintained at the initial density goal of 25 deer per square mile until the results of the monitoring of the woodlots and cropfields determines that a change in this initial density goal is required.

The decision to make any adjustments to the deer density goal could not be made until the deer density has been maintained at the density goal for 4 to 5 years. The woodlots, cropfields, and deer population would need to be monitored 4 to 5 years at the initial deer density goal to see if the landscape management objectives are being met at the reduced deer density. The extent of deer browsing to cropfields could be detected the first year after reaching the deer density goal. Any change in the effects of deer browsing to the growth and survival of tree seedlings, however, would not be known for at least 4 years. It takes approximately 4 years to determine if tree seedlings have become successfully established (Todd Bowersox, Professor of Silviculture, The Pennsylvania State University). A poor seed crop, severe drought, or other environmental factors could affect the establishment of the seedlings in the woodlots and extend the length of the monitoring period.

If it is learned at the end of this monitoring period that the woodlot and cropfield objectives are still not met, the deer population goal would be lowered below 25 deer per square mile. If the objectives are met at 25 deer per square mile, the deer density goal may be increased to see if the objectives could still be met at a higher density. The level of adjustment of the deer density goal in either direction from the initial density goal would relate to how close the conditions of the woodlots and cropfields are to the objectives. In this way the balance between the density of deer in the parks and the management objectives could be found.

Appendix F

PARK VISITATION RECORDS

VISITATION PER MONTH
GETTYSBURG NATIONAL MILITARY PARK

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1987	24451	29653	63786	163182	175131	177052	209929	193194	122673	156595	65293	28708	1,409,647
1988	26413	32046	61356	148837	183735	209471	282496	194655	139249	168863	62408	29415	1,538,944
1989	30367	33523	65981	145565	177465	189356	216489	191897	132663	158554	61917	23351	1,427,128
1990	32692	37805	65936	134444	161558	149997	191294	163958	122450	154138	76409	27361	1,318,042
1991	28958	35285	83221	137720	183861	182939	211594	192720	134362	174483	80824	31873	1,477,840
1992	26535	36155	64068	119959	186473	178604	178278	171792	160647	172944	61174	27749	1,384,378
1993	31578	24957	56260	108195	216782	233996	227295	165779	103112	199972	83276	34651	1,485,853
1994	18624	27719	75208	127893	239365	286678	291724	201374	132773	215638	89964	41972	1,748,932

EISENHOWER NATIONAL HISTORIC SITE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1987	116	942	2835	10648	13080	14559	19833	18658	14405	18713	3053	1448	118,290
1988	141	807	2368	10924	13005	15679	19286	16892	15336	18282	3641	1795	118,156
1989	0	941	2859	10538	12948	15225	17963	17381	14344	17482	3111	1016	113,808
1990	145	1173	3067	10263	12737	16314	17728	17298	15372	17449	4129	1261	116,936
1991	174	783	3080	10041	13309	14233	16252	15847	14174	15882	3726	1756	109,257
1992	248	910	2111	8691	11586	12432	15116	14668	12243	14576	2850	948	96,379
1993	313	489	1450	9027	12150	12141	14396	14646	11737	15500	3015	1110	95,974
1994	107	427	1771	9781	13839	15910	16358	16425	14792	17663	4243	1513	112,829

September 7, 1994

Appendix G

NUMBER OF DEER KILLED FOR CROP DAMAGE AND ON HIGHWAYS WITHIN AND NEAR THE PARKS

COMMONWEALTH OF PENNSYLVANIA
P. O. Box 3753
Gettysburg, PA 17325
June 06, 1994

Appendix G

SUBJECT: Deer Data

TO: Hal Greenlee, N. P. S.

FROM: L. D. Haynes, WCO
Dist. 4-01-2

My district consists of the southern half of Adams County. Within that area the data is as follows:

Road-killed Deer

1993	414 deer
1992	353
1991	421
1990	364
1989	337
1988	391
1987	394
1986	334

Deer which I and my deputies disposed of, and those which were utilized by the general public under our permit system.

(I estimate that approximately 125 to 150 of these deer were killed by vehicles in the vicinity of the Battlefield. This estimate might have a large margin of error associated with it due to our system of record keeping, and because an unknown number of deer are not reported to us by the public, and because some of the deer probably move away from the vicinity of the road and die and are never found.)

Crop-killed Deer

1993 total -	60 deer
1992	88
1991	117

(51 of these deer were killed on farm land in the vicinity of the Battlefield.)

Other Deer—This includes those deer shot illegally or my mistake, those killed by fences and dogs, those dying from injuries or starvation, etc.

1993 total - 68 deer. (15 of these deer were from the vicinity of the Battlefield.)

Additional Deer—Found by Jerry Storm, Hal Greenlee, the rangers, by PGC personnel, and others.

1993 total - 57 deer. (These were all found in the vicinity of or on the Battlefield. They all died from weather related conditions.)

Please note that the above figures are for my entire district, with a separate breakdown for those deer on or near the Battlefield.

Appendix H

DEER MORTALITY RATES BY CAPTURE AND TRANSFER METHODS

Mortality Rates for Different Capture Methods.

Capture Technique	n	Mortalities	Mortality %	Reference
Box Trap	251	7	2.7	Wood 1944
Box Trap	28	0	0	Hawkins 1967
Box Trap	2035	[c]	2.1	Palmer et al. 1980
Box Trap	19	0	0	Diehl 1988[a]
Box Trap	285	8[b]	2.8	Bryant et al. 1990
Box Trap	32	2	6.25	Allen 1958
Corral Trap	260	42	13.9	Hawkins 1967
Rocket Net	17	[c]	23.5	Palmer et al. 1980
Drive Net	144	3	2.1	Silvy et al. 1975
Drive Net	345	1	0.3	Beasom et al. 1980
Drive Net	430	43	0.9	Sullivan 1991
Drop Net	175	12	7.4	Conner et al. 1987

[a] Pisgah-clover trap.
[b] Died or euthanized due to injury in the trap.
[c] Not reported.

Appendix I

COST ESTIMATES

Cost estimates for those alternatives that propose to manage the number of deer in the parks are dependent on the number of deer to be treated, captured, or killed. The exact number of deer that would need to be treated/captured/killed to reduce the population to the predetermined deer density is not known. It may take several years to reduce the deer population to the predetermined density. Alternative 3 Reproductive Intervention would take the longest, possibly 8 to 10 years, before the population approached the predetermined density. In the meantime, the remaining deer in the parks would continue to reproduce. Deer would also continue to move in and out of the parks from private land.

Maintaining the deer population at the predetermined density in later years would cost much less than the initial reduction phase, because there would be fewer deer to remove or treat annually. Approximately 40 percent of the reduced population (54 deer) would have to be removed annually in Alternative 2A Capture and Transfer, Alternative 2B Direct Reduction, and Alternative 4 Cooperative Management to keep pace with reproduction. Alternative 3, Reproductive Intervention, might require treating approximately 70 percent of the fertile females in the population to maintain the population at the predetermined level. The development of computerized deer population models specific to the parks would provide a more accurate estimate.

To simplify the cost estimates, each alternative has been examined as if the predetermined density would be reached in one year and the number of deer was the same as the 1994 mean population estimate. Therefore, the number of deer used in the cost estimates is the difference between the April 1994 mean population estimate (853) and the initial deer density goal (80) or 773 deer.

The estimates are <u>minimum</u> costs associated with each alternative. Annual costs would be expected to decrease as the number of deer to be treated, captured, or killed decreased and the efficiency of the operation increased. As the number of deer in the parks or the number of untreated deer decreased, however, the time required to treat, capture, or kill a deer would be expected to increase.

The National Park Service would need to develop talks and displays to inform visitors to the parks about deer-related management policies, park management objectives, and ecology. These programs would be needed for all alternatives, therefore, costs associated with creating and setting up the programs are not included in the cost totals.

Monitoring of the woodlots, cropfields, and deer population would continue to occur. Costs associated with monitoring would be similar for all the alternatives. Costs associated with media coverage and inquiries, press releases, and interpretive support at the parks would be similar for all the alternatives. Monitoring and public information costs are, therefore, not included.

All National Park Service labor costs are based on a General Schedule level 9 salary with benefits, which is $18.13 an hour (1994). Costs for the alternatives were estimated from previous efforts and studies. Unless stated, labor costs reported in each study referenced was based on the minimum hourly wage rate at that time. The cost of the studies referenced are not precisely comparable. For example, the cost per deer reported for one study may cover only labor and travel, whereas, another study may also include equipment, administrative costs, and monitoring in the total figure. No attempts have been made to adjust the costs reported for each study for comparison purposes.

ALTERNATIVE 1 NO ACTION

Costs of the No Action Alternative are expected to be minimal as long as the permittees continue to farm the agricultural croplands. If the National Park Service were to take over the agricultural program, the cost to the government would increase dramatically. Staff time would be required to handle complaints regarding deer damage and deer/vehicle collisions.

A. Annual cost to handle complaints regarding deer damage and deer/vehicle collisions (approximately 70 incidents a year).

Public Information Officer to handle complaints - 1 percent of time:	$ 450
Traffic accident investigation/deer disposal - 40 minutes each, 1 Park Ranger:	950
TOTAL	$1,400

B. Income from Agricultural Special Use Permit fees	$ 20,981
Fees waived because of crop losses greater than 15%	- 10,839
TOTAL Income lost due to program termination	$ 10,142

C. Staff farming would be required to maintain the cropfields when the Agricultural Special Use Permit Program terminates. Cost estimates are taken from the "Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots", 1992 (Appendix C). These figures are based on the maintenance of 1,640 acres of cropfields.

(1) Equipment purchase and storage	$ 278,280
(2) Annual operating cost (personnel)	$ 116,846
Supplies (fertilizer, pesticide, seed, etc.)	54,995
Fuel, repairs, transportation, custom combining	67,978
TOTAL ANNUAL operating costs	$ 239,819

D. Income generated from the produce assumes there is a market for the crops and that 75 percent of the crops grown could be harvested (25 percent would be lost to deer browsing).

ANNUAL INCOME generated from produce $ 225,000

TOTAL COSTS FOR ALTERNATIVE 1 INITIALLY (A) $ 1,400

TOTAL COSTS WHEN AGRICULTURAL SPECIAL USE PERMIT PROGRAM TERMINATES AND PARKS MAINTAIN CROPFIELDS (A + B + C1 + C2 - D) = $ 304,641

TOTAL MAINTENANCE COSTS (A + B + C2 - D) = $ 26,361

ALTERNATIVE 2A CAPTURE AND TRANSFER

Cost is dependent on habitat, deer density, equipment, and the knowledge and experience of the handlers.

A. The following studies provided cost estimates per deer. Included in the cost is capture equipment, personnel (which may involve veterinarian assistance), and travel unless otherwise indicated.

Capture Technique	Cost/deer	Reference	# Deer
Box Trap	$400 1st year 273 3rd year	Bryant and Ishmael 1990	285
Clover Trap	570	Ishmael and Rongstad 1984 (Labor and travel only)	2
Rocket Net	50	Anderson and Stoebe 1973	11
Drop Net	28	Conner et al. 1987 (Labor only)	117
Drive Net	523	Ishmael and Rongstad 1984 (Labor and travel only)	5
Dart Gun	179	Ishmael and Rongstad 1984 (Labor and travel only)	6
Clover and Panel Traps Drop and Tangle Nets, and Chemical Immobilization	450	Clark et al., unpubl. rep., 1982	215
Box Trap Box and Corral Trap Box Trap	781 1st year 1253 2nd year 560 3rd	Frank Drummond*	27 14 8

* Transactions of the Urban Deer Symposium held at the 55th Midwest Fish and Wildlife Conference.

Using the average of the above cost figures and the number of deer to be removed (according to 1994 mean population estimates) results in

$ 461/deer X 773 deer = $ 356,353

** The annual maintenance phase would require the removal of approximately 54 deer which results in

$ 461/deer X 54 deer = $ 24,894

B. Income generated from previously waived permittee fees $ 10,839

TOTAL COSTS FOR ALTERNATIVE 2A:

REDUCTION PHASE (A - B) $ 345,514

MAINTENANCE PHASE (A - B) $ 14,055**

ALTERNATIVE 2B DIRECT REDUCTION -- SHOOTING

A. Enhanced law enforcement would be needed during the shooting to ensure restricted public access. The management action would be conducted for varying periods of time during October through April. The salary of 1 Park Ranger for 8 hours a day, 7 days a week for 4 weeks is the basis for the estimate.

Law enforcement patrol - 3 Park Rangers	$ 10,500
Blockades, traffic cones, salary for setup	800
2 special event teams for crowd control- 7 members/team	13,000
Additional personnel to support special event teams	6,000
TOTAL	$ 30,300

** Maintaining the deer population at the predetermined density would probably not require special event teams. Enforcement maintenance costs would be

Law enforcement patrol - 3 Park Rangers	$ 10,500
Blockades, traffic cones, salary for setup	800
MAINTENANCE TOTAL	$11,300

B. The following studies provided cost estimates. These estimates include administrative costs, ammunition, wages, bait, carcass transport and processing unless otherwise indicated.

# Deer	Cost/deer	Reference
34	$ 74	Ishmael and Rongstad 1984 ($3.65 hr, bait, travel, and equipment)
181	46	Peter Jordan * (wages, bait, travel, and equipment)
39	286 1st year	Frank Drummond *
20	243 2nd year	
44	222 3rd year	
95	195 1st year	Michelle Stradtmann *
167	168 2nd year	

* Transactions of the Urban Deer Symposium held at the 55th Midwest Fish and Wildlife Conference.

Using the average of the above cost figures and the number of deer to be removed (according to 1994 mean population estimates) results in

$ 176/deer X 773 deer = $ 136,048

** The annual maintenance phase would require the removal of approximately 54 deer which results in

$ 176/deer X 54 deer = $ 9,504

C. Income generated from previously waived permittee fees $ 10,839

TOTAL COSTS FOR ALTERNATIVE 2B:

REDUCTION PHASE (A + B - C) = $ 155,509

MAINTENANCE PHASE (A + B** - C) = $ 9,965**

ALTERNATIVE 3 REPRODUCTIVE INTERVENTION -- STERILIZATION OR CONTRACEPTION

Documented costs are few at present because this approach is still in the experimental phase. Total costs would depend on the number of deer that need to be treated and the frequency with which treatments need to be applied. The cost associated with surgical implantation and sterilization is much greater than darting deer with an immunocontraceptive. Darting deer eliminates the need to capture the deer for treatment, which reduces the time and labor required.

Only fertile animals need to be treated. The number of fertile animals in the population is unknown, therefore, all animals are considered fertile. The exact number of male and female deer in the population is unknown. Research has shown there were 6 times more female than male deer in the study area in 1987 (Storm et al. 1989). Using the 1994 mean population estimate (853 deer) and assuming the sex ratio has stayed the same over time results in 731 female and 122 male deer.

Agricultural Special Use Permit fees would continue to be waived until permittees have less than 15 percent crop losses in a field because of deer browsing. The deer population may not be reduced to the predetermined density for 8 or more years; therefore, income generated from waived permittee fees is not included in the cost estimates for reducing the deer population. Income generated from previously waived permittee fees is used for the maintenance cost estimates. $ 10,839

A. STERILIZATION - Unlike treatment with contraceptives, surgical sterilization would be a one-time, permanent treatment. The average cost per deer ($461/deer) for the different capture methods in Alternative 2A were added to the cost for surgery reported by the reference. Only one sex would need to be sterilized.

Treatment	Cost/deer	Reference
Surgical sterilization (male)	$ 527	Elizabeth Frank*
Surgical sterilization (female)	597	Elizabeth Frank*

(1) $527/male deer X 122 male deer = $ 64,294

(2) $597/female deer X 731 female deer = $ 436,407

* Transactions of the 55th Midwest Fish and Wildlife Conference.

** The maintenance phase would require sterilizing fertile deer that had migrated into the parks. It is not known how many deer would need to be treated; therefore, cost estimates are not known.

B. SURGICAL IMPLANTATION - This has not been tested on male deer. Cost includes capture.

Treatment	Cost/deer	Reference
MGA implants (steroid) (If effective for 2 years)	$ 600	Plotka and Seal 1989 (labor and equipment only)

$600/deer X 731 female deer = $ 438,600

** The maintenance phase would require treating approximately 70 percent of the females, after the population is reduced to the predetermined density, which results in

$600/deer X 70% (40) female deer = $ 16,800

C. IMMUNOCONTRACEPTIVE DARTS - At least two teams of 3 would be needed to treat the deer twice in one month.

6 people X $18.13/hour X 8 hours/day X 30 days =	$ 26,107
2 dart guns ($500/each) and 120 darts ($300 total) =	1,300
TOTAL equipment and labor	$ 27,407

Treatment	Cost/deer	Reference
PZP (immunocontraceptive) (For 2 doses)	$ 50	Jay Kirkpatrick (personal communication)

$50/deer X 731 female deer = $ 36,550

TOTAL for immunocontraception = $ 63,957

** The maintenance phase would require treating approximately 70 percent of the females, after the population is reduced to the predetermined density, which results in

$50/deer X 70% (40) female deer	=	$	1,400
3 people X $18.13/hour X 8 hours/day X 10 days	=	$	4,351
Maintenance phase TOTAL for immunocontraception	=	$	5,751

D. Income generated from previously waived permittee fees $ 10,839

TOTAL COSTS FOR ALTERNATIVE 3:

STERILIZING MALE DEER (A1)	=	**$ 64,294**
STERILIZING FEMALE DEER (A2)	=	**$ 436,407**
MAINTENANCE COSTS USING STERILIZATION (A - D)**	=	**UNKNOWN**
SURGICAL IMPLANTS (B)	=	**$ 438,600**
MAINTENANCE COSTS USING SURGICAL IMPLANTS (B - D)**	=	**$ 5,961**
DARTING WITH PZP (C)	=	**$ 63,957**
MAINTENANCE COSTS DARTING WITH PZP (C - D)**	= +	**$ 5,088**

ALTERNATIVE 4 COOPERATIVE MANAGEMENT -- PRIVATE LANDOWNERS, PENNSYLVANIA GAME COMMISSION, AND NATIONAL PARK SERVICE

A. Enhanced law enforcement would be needed to restrict public access in areas where shooting or deer drives would occur. The salary of 1 Park Ranger for 8 hours a day, 7 days a week for 4 weeks is the basis for the estimate.

Law enforcement patrol - 3 Park Rangers	$ 10,500
Blockades, traffic cones, salary for setup	800
2 special event teams for crowd control - 7 members/team	13,000
Additional personnel to support special event teams	6,000
TOTAL	$ 30,300

** Maintaining the deer population at the predetermined density would probably not require special event teams. Enforcement maintenance costs would be

Law enforcement patrol - 3 Park Rangers	$ 10,500
Blockades, traffic cones, salary for setup	800
MAINTENANCE TOTAL	$11,300

B. Staff time to organize a "controlled" public hunt with the Pennsylvania Game Commission and to coordinate with private landowners.

4 people/$18.13 hour/8 hours a day/5 days a week/4 weeks $ 11,600

** The maintenance phase would be expected to require less staff time

1 person/$18.13 hour/8 hours a day/5 days a week/4 weeks $ 2,900

C. Assuming volunteers would carry out the drive, staff time would be needed to organize personnel and deer drive effort.

1 person/$18.13 hour/8 hours a day/5 days a week/3 weeks $ 2,175

D. Income generated from previously waived permittee fees $ 10,839

TOTAL COSTS FOR ALTERNATIVE 4

REDUCTION PHASE	(A + B + C - D)	=	$ 33,239
MAINTENANCE PHASE	(A** + B** + C - D)	=	$ 5,536

ALTERNATIVE 5 COMBINATION MANAGEMENT -- A COMBINATION OF ALTERNATIVE 2B DIRECT REDUCTION AND ALTERNATIVE 4 COOPERATIVE MANAGEMENT

This alternative proposes that Alternative 4 Cooperative Management and Alternative 2B Direct Reduction be used simultaneously to reduce the deer population in the parks to the predetermined density. As a result, the time and costs associated with this alternative would be expected to be somewhere between the two alternatives. Attempts would be made to maximize the number of deer killed outside the parks. The number of deer that would be killed in the parks is not known, however, half of the total number of deer to be removed was used for estimating the cost. The maintenance phase is discussed separately.

A. Enhanced law enforcement would be needed to restrict public access in areas where shooting or deer drives would occur. The salary of 1 Park Ranger for 8 hours a day, 7 days a week for 4 weeks is the basis for the estimate.

Law enforcement patrol - 3 Park Rangers	$ 10,500
Blockades, traffic cones, salary for setup	800
2 special event teams for crowd control- 7 members/team	13,000
Additional personnel to support special event teams	6,000
TOTAL	$ 30,300

B. Staff time to organize a "controlled" public hunt with the Pennsylvania Game Commission and to coordinate with private landowners.

4 people/$18.13 hour/8 hours a day/5 days a week/4 weeks $ 11,603

C. Assuming volunteers would carry out the drive, staff time would be needed to organize personnel and deer drive effort.

1 person/$18.13 hour/8 hours a day/5 days a week/3 weeks $ 2,175

D. Using the average of Alternative 2B cost figures (2) and half of the total number of deer to be removed (according to 1994 mean population estimates) would results in

$ 176/deer X 387 deer = $ 68,112

E. Income generated from previously waived permittee fees $ 10,839

Either or both of the alternatives would be used for maintaining the deer population at the predetermined density once it was reduced.

A ** Maintaining the deer population at the predetermined density would probably not require special event teams. Enforcement maintenance costs would be

Law enforcement patrol - 3 Park Rangers	$ 10,500
Blockades, traffic cones, salary for setup	800
MAINTENANCE TOTAL	$11,300

B ** The maintenance phase would be expected to require less staff time to organize the "controlled" public hunt outside the parks

1 person/$18.13 hour/8 hours a day/5 days a week/4 weeks $ 2,900

D ** The annual maintenance phase would require the removal of approximately 54 deer by Alternative 2B Direct Reduction in the parks or Alternative 4 Cooperative Management (hunting outside the parks).

1. If removed by Alternative 2B the cost would be:

$ 176/deer X 54 deer = $ 9,504

2. If removed by Alternative 4 there would be no additional cost.

TOTAL COSTS FOR ALTERNATIVE 5:

REDUCTION PHASE (A + B + C + D - E) $ 101,351

MAINTENANCE PHASE USING ALTERNATIVE 2B DIRECT REDUCTION

(A** + D**1 - E) $ 9,965

MAINTENANCE PHASE USING ALTERNATIVE 4 COOPERATIVE MANAGEMENT

(A** + B** + C - E) $ 5,536

Appendix J

COMMENT LETTERS ON DRAFT EIS REQUIRING NO RESPONSE

Letters 35 through 243, which are shown in this appendix, do not require a response. See Chapter 7, section 7.1.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

MAR 2 3 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Re: Draft Environmental Impact Statement White-Tailed Deer Management Plan for Gettysburg National Military Park/Eisenhower National Historic Site

Dear Dr. Latschar:

Thank you providing the Environmental Protection Agency, Region III (EPA) the opportunity to review the above referenced project. EPA has the responsibility and obligation under the National Environmental Policy Act of 1969 (NEPA) and Section 309 of the Clean Air Act to review and comment on Environmental Impact Statements (EIS). Based on our review of the subject document, EPA has rated the proposed management plan, LO (Lack of Objections). A copy of our rating system is enclosed for your information.

We believe that the range of alternative actions described in Draft EIS are adequate and would serve the purpose of the action. EPA would, however, reiterate a comment in the DEIS which states that reproduction intervention techniques, as proposed, are subject to Food and Drug Adminstration approval and thus may not be a feasible alternative within the timeframe for which the management plan is to be implemented. Therefore, you may wish to include an alternative in the Final EIS which uses the combination of Alternative 2B and 4 only.

Should you have any questions regarding our comments, please direct them to Susan McDowell. She can be reached at the above address (mailcode 3ES43) or 215/597-0355.

Sincerely,

Roy E. Denmark, Jr.
NEPA Review Coordinator

cc: Michele Batcheller, NPS

Enclosure

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for the EPA fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate
EPA does not believe that draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment.

FOR IMMEDIATE RELEASE
CONTACT: ED WILKINSON 677-4477

THE ADAMS COUNTY FARM BUREAU SUPPORTS THE NATIONAL PARK SERVICE FOR TAKING THE INITIATIVE TO DEVISE A MEANINGFUL METHOD TO REDUCE THE DEER HERD WITHIN THE GETTYSBURG NATIONAL PARK AND HELP ALLEVIATE THE PROBLEMS AFFECTING THE SURROUNDING FARMS WHO ARE TRYING TO GROW CROPS.

THE BUREAU ALSO SUPPORTS THE GAME COMMISSION FOR ITS INVOLVEMENT IN ASSISTING TO BRING FORTH MEAINGFUL ALTERNATIVES AND ADVOCATING THE REDUCTION OF THE DEER HERD WITHIN THE PARK.

THE ADAMS COUNTY FARM BUREAU DOES NOT HAVE A PARTICULAR PLAN TO BE IMPLEMENTED BUT SUPPORTS ANY PLAN INITIATED THAT IS FEASIBLE AND ECONOMICALLY SOUND THAT WILL PRODUCE RESULTS IN BRING ABOUT THE REDUCTION OF THE DEER HERD.

RECEIVED
JAN 25 1995
GETT — FISE

ADVISORY COMMISSION
GETTYSBURG NATIONAL MILITARY PARK
POST OFFICE BOX 1080
GETTYSBURG, PENNSYLVANIA 17325

January 18, 1995

Dr. John A. Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dr. Latschar:

The Gettysburg National Military Park Advisory Commission reviewed and discussed the Draft Environmental Statement for the White-Tailed Deer Management Plan during the January 12, 1995 public meeting.

By majority vote the Commission passed a resolution supporting Alternative 5 as the appropriate management plan for the NPS to implement to effectively reduce the deer herd residing on the Gettysburg National Military Park and the Eisenhower National Historic Site to the optimum number of animals.

Sincerely,

Gerald R. Bennett
Chairman, GNMP Advisory Commission

cc: Advisory Commission members

RECEIVED
JAN 23 1995
GETT — EISE

BLAIR COUNTY FEDERATION
OF
SPORTSMEN'S CLUBS
RD 3, BOX 342
ALTOONA, PA 16601-9216
814-944-1474

January 19,1994

An Independent Federation
Affiliated with the National Rifle Association of America
Putting People First
The Wildlife Legislative Fund of America
The Pennsylvania Federation of Sportsmen's Clubs
Unified Sportsmen of Pennsylvania

Dr. John Latschar, Superintendent
Gettysburg National Park
R.D. # 1
Gettysburg, Pa. 17325

Dear Sir:-

I have received a copy of the Draft Environmental Impact Statement- White-tailed Deer Management Plan for GettysburgNational Military Park and Eisenhower National Historic Park.

This document is very complex, and seems to cover all of the bases. ?

On behalf of the National Rifle Association, the Pennsylvania Rifle & Pistol Assoc. and the Sportspersons of Pennsylvania i: submitted written testimony in regards to the Deer reduction goals for the above Deer management problems.
WE are in favor of Alternative 4. Cooperative Management--Private Landowners, Pennsylvania Game Commission, and National Park service. A controlled public hunt.

The bottom line is. we must reduce the deer herd and we hope to implement thie program in 95 ? I want to play an active part in this project. EG= I would like to sit in on as many of your meetings as possibe, and I wouls also like to spend some time with ypur Park Rangers in the field, so that I can have first hand knowledge of just what we are trying to accomplish.

Very truly yours,
Donald W. Elder
Sportsmens Advocate

RECEIVED
FEB 21 1995
GETT — EISE

DORIS DAY ANIMAL LEAGUE

Board of Directors
Doris Day
President
Terry Melcher
Vice President
Secretary
Jacqueline Melcher
Treasurer
Holly Hazard
Executive Director
Edgar Haber
Advisory Members
of the Board
Bob Hope
Roe McClanahan
Martina Navratilova
Public Affairs
Director
Linda Dozoretz

February 14, 1995

Jose A. Crisneros, Superintendent
Gettysburg National Military Park
PO Box 1080
Gettysburg, PA 17325

Dear Superintendent Crisneros:

I am writing in reference to the Draft Environmental Impact Statement, White-Tailed Deer Management Plan for Gettysburg National Military Park and Eisenhower National Historic Site, which was sent to the Doris Day Animal League by one of our Pennsylvania members.

On behalf of the over 4,000 Pennsylvania members of the Doris Day Animal League, I oppose the "preferred alternative" of shooting deer inside and outside the park, including scaring deer out of the parks in order to allow local hunters to kill them. The report states, "These two alternatives would be repeated as needed and appropriate, annually from October through April until the number of deer required to reach the predetermined deer density was removed." The inherent fallacy in this type of "management" should be obvious – as deer are killed, others from outside the area will move in to claim the habitat. The "predetermined deer density" will not be reached unless immuno-contraceptives are used within a confined population of deer. This means that the boundaries of the parks must be secured to prevent additional, untreated animals from joining the herd. Certainly, it will be ineffectual and inhumane to continually bait and kill the deer.

We hope you will reconsider and focus on reproductive intervention. At a minimum, if it is determined that a number of deer must be killed, this should be done by professional sharpshooters within the boundaries of the parks only.

Thank you for your attention to this matter.

Sincerely,

Holly E. Hazard
Executive Director

Suite 100 • 227 Massachusetts Avenue, N.E., Washington, D.C. 20002 • 202/546-1761 Fax: 202/546-2193

Printed on recycled paper

40

FRIENDS OF
THE NATIONAL PARKS
AT GETTYSBURG, INC.

P.O. Box 4622, 10 Lincoln Square
Gettysburg, PA 17325-4622

RECEIVED
FEB 10 1995
GETT — EISE

February 10, 1995

Dr. John A. Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar,

After due consideration of the alternatives for action presented in the Environmental Impact Study of the GNMP/EIS Deer Herd, the Board of Directors of Friends of the National Parks at Gettysbirg voted unanimously to support Alternative #5. This action was taken at our January 28, 1995 Board meeting.

We feel this alternative is the most feasible of those presented and we commend you on the thoroughness of the scientific study done in preparation for the EIS.

Good luck with your implementation of Alternative #5. Please call on FNPG if you need assistance in any way.

Sincerely,

Alan E. Hoeweler
President

AH/cd

Telephone 717-334-0772 Fax 717-334-3118

41

RECEIVED
JAN 30 1995
GETT — EISE

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION
P. O. BOX 1026, HARRISBURG, PENNSYLVANIA 17108-1026
EXECUTIVE DIRECTOR

January 24, 1995

John Latschar, Superintendent
National Park Service
Gettysburg National Military Park
P.O. Box 1080
Gettysburg, PA 17325

Re: ER #84-0780-001-I
Draft Environmental Impact Statement: White-Tailed Deer Management Plan, Gettysburg National Military Park & Eisenhower National Historic Site, Adams County

Dr. John Latschar:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. Our comments are as follows:

We have reviewed the draft EIS for the Whitetail Deer Management Plan. We agree that the preferred alternative, a combination of direct reduction, reproductive intervention, and cooperative management, as discussed in the EIS, should be implemented to help control the deer population in the parks.

We agree that all shooting should be conducted by trained marksmen in order to minimize the potential for damage to historic structures, tablets, statues, and monuments. Gettysburg National Military Park contains more outdoor sculpture than any other historic site in this state, and more care should be taken to avoid damage caused by stray bullets.

If you need further information in this matter please contact Mark Shaffer at (717) 772-0924.

Sincerely,

Brent D. Glass

BDG/ms

IDA
IN DEFENSE OF ANIMALS

16 February 1995

Gettysburg National Military Park
R.D. #1
Gettysburg, PA. 17325

Dear Sir or Madam:

On behalf of the 65,000 members of In Defense of Animals, I am writing to express our concern regarding some of the proposed plans for managing the deer population within the Gettysburg National Military Park. I am aware that many different options have been, and continue to be considered for controlling the deer population in the park, but there seems to be a very vocal group of hunters lobbying for the instigation of a public hunt. As an organization devoted to protecting the welfare and habitat of animals, In Defense of Animals is adamantly opposed to the hunting option, *particularly* when viable humane options exist.

One might argue that controlled hunting may provide administrative ease, but this method is not without serious consequences. Like the tule elk at the Point Reyes National Seashore, many of the deer in Gettysburg National Military Park are docile and accessible to hikers and wildlife observers. How can hunting these animals be considered a *sport*? Even if one agrees with hunting, which we do not, where is the "challenge" in shooting a defenseless deer that will literally *walk right up* to a hunter? In addition, there would be a certain number of deer who will suffer long, painful deaths as a result of the poor marksmanship of some hunters. And how many park visitors will be placed at risk of injury from stray bullets? Finally, there is the subject of the surviving deer. Following a hunt, these animals would no longer be visibly accessible, let alone physically approachable, for park visitors. The park, once a place to enjoy nature in a serene environment, would take on the atmosphere of a killing field.

We currently have a similar situation here in California concerning a herd of tule elk located at the Point Reyes National Seashore. Despite pressure from sport hunting groups and the California Dept of Fish and Game, the National Park Service ("NPS") has postponed making a decision on a method for population control pending additional studies. The NPS is conducting studies on the population census and range carrying capacity, and IDA is conducting studies on the presence or absence of disease and on wildlife contraception.

As human beings continue to encroach on wilderness habitat and decimate many of the predators that help to ensure a natural balance, the problems associated

with wildlife management will continue to escalate. Techniques for addressing wildlife management in a responsible and humane fashion do exist. Wildlife contraception holds great promise as a viable and humane alternative to culling. One type of wildlife contraception that has proven to be both safe and effective is porcine zona pellucida (PZP). PZP, an immunocontraceptive vaccine, is made with organic compounds, appears to have little or no side effects, and can be administered remotely by dart. This method has been tested on various species of ungulates all across the United States with great success. If you have any questions about wildlife contraception, or any of the other humane alternatives for wildlife management, please do not hesitate to contact me at 415-453-9984, or the Wildlife and Habitat Protection Section of the Humane Society of the United States at 202-452-1100. Thank you for your consideration, and for inviting public comment on this important issue.

Very sincerely,

Barbara Pedersen

Barbara Pedersen
Program Coordinator
Tule Elk Project

Marion County Humane Society

Board of Directors
James T. Woolridge, D.V.M., President
Georgia Dooley, Vice President
Barbara H. Warner, Secretary
Mary Frances Luckett, Treasurer
Herb Brock
Doris Brown
Peter Jones
Susan Lowry Kleinhart
Joe Bernard Raley

Advisory Board
James L. Averitt
James D. Cook, D.V.M.
Edith A. Day
Hailey Daugherty
Salem M. George, M.D.
Gene Lanham
Theodore H. Leavitt
John C. Pelt, D.M.D.
John W. Ratliff, M.D.
Monroe Reynolds
John S. Smith

RECEIVED
FEB 10 1995
GETT — EISE

1955 Baltimore Pike
Gettysburg, Pennsylvania 17325
Feb. 5, 1995

Dear Staff:

Regarding the growing deer population at the Gettysburg National Military Park, we strongly oppose opening the Park to hunting. Most people oppose hunting on public land.

A humane solution to the problem of deer over-population is a deer contraceptive program. We strongly urge that one be implemented without delay.

Thank you,

Sincerely,
Marion Co. Humane Society
Barbara H. Warner, Secretary

CUMBERLAND VALLEY SPORTSMEN - CONSERVATIONISTS ASSOCIATION
Cumberland County Affiliate of the Pennsylvania Federation of Sportsmen's Clubs, Inc.
10 Ridge Avenue, Carlisle, PA 17013

RECEIVED
FEB - 1 1995
GETT — EISE

January 24, 1995

Dr. John Latschur, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschur,

The Environmental Impact Statement for management of the deer population in Gettysburg National Military Park was reviewed at the January 23 meeting of the Cumberland Valley Sportsmen-Conservationists Association. We are the Cumberland County affiliate of the Pennsylvania Federation of Sportsmen's Clubs.

We support Alternative 5, the combination management approach, as the most effective. As sportsmen, we are concerned about this serious problem and welcome any opportunity to assist with the solution.

We commend you and your staff for preparing a thorough analysis and we appreciate the opportunity to review and comment on the report.

Sincerely,

Tim Wickard
Secretary

RECEIVED
DEC 21 1994
GETT — EISE

Unified Sportsmen of Pennsylvania
P. O. Box 687
Harrisburg PA 17108-0687

December 19, 1994

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, Pa. 17325

Dear Dr. Latschar:

Unified Sportsmen of Pennsylvania is the largest sportsmen's organization in the state. In reference to the Whitetail Deer Management Plan, we wish to make the following comments.

Alternative 5 is the preferred plan of the Unified Sportsmen, however we recommend that the use of contraceptives be discouraged. For many years the harvesting of deer by hunters has proven successful and inexpensive. The consumptive use of deer harvested by hunters is generally approved of by the public at large. The use of contraceptives is extremely unpopular with sportsmen, is expensive and has no proven track record. We also have some other serious concerns relative to contraceptives for controlling deer populations when the deer are not contained in an enclosure.

Unified Sportsmen of Pa. is especially interested in caring for the total concerns of Gettysburg National Park and hope that the deer population within the park can be brought under control as soon as possible.

If you have any questions please call me at 717-898-8834.

Sincerely,
N. Charles Borgiano
N.Charles Borgiano, PhD
Exec. Vice-President

The following form letter was received from the listed individuals. Signatures are on the original letters which are on file at the park. Interpretation of the signatures may not be accurate.

Benson, W. C.
Brenner, Kurt M. and Masier, Ken
Buckheit, David L.
Christine, Sr., Kevin C.
Conaway, Randy A.
Connor, Ed
Dunworth, Robert
Friedl, Michelle P.
Gies, Timothy A.
Ginther, Roger
Goetz, Jerry
Hollobaugh, Walter R.
Howard, Adam
King, Robert
Lenge, Kevin J.
Lynfeller, David B.
McClusky, Donald J.
Ness, Brian G.
Ness, Jr., Richard A.
Ness, Sr., Richard A.
Pease, Steven
Puzz, Norman
Rhines, Mark
Schatz, Steve
Schneider, Michael J.
Schneider, Rodney J.
Scrimshaw, Wayne A.
Shoffner, Michael D.
Singer, Allan
Stambaugh, Todd E.
Stone, Carl E.
Swartz, Keith

February 7, 1995

Mr. John Latschar
Superintendent
Gettysburg National Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Mr. Latschar:

As a Pennsylvania Taxpayer and Hunter in the Forests of Northern Pennsylvania, I am opposed to bringing in sharp shooters or the other so-called solutions such as sterilization or annihilation to reduce the Deer Herd on The Gettysburg Battlefield.

I am for Trapping and Transferring the Deer upstate to the Northern Counties where the Deer Herds are scarce -- which is one of the points of the Environmental Impact Solutions Study.

Sincerely,

2/8/95

Dear MK Superintendant;

1995

Thank you for a copy of the Deer Survey. I believe the best method of regulating the deer population in the park is hunting. A controlled hunt should be held every year where a carefully selected percentage of the existing population (i.e. sex age ect.) should be killed. This percentage should be reevaluated every year before the hunt begins. Continuing this process every year will not only eliminate the current problem, but will prevent it from ever happening again.

These hunts should be carried out by intelligent, experienced and professional people who can best execute quick humane kills. The animals should then be processed and donated to the local needy in Pennsylvania.

I am certain that with minimal research, local processers can be found to package the meat propperly at no or little cost. There are also many "sportsmans" organizations that would be willing to aid in the transportation and donation to the less fortunate.

I do not want to take up your time with a letter about the positive impact of hunting as it relates to population dynamics and wild life management. I think you have a pretty straightforward problem with only one logical solution to solve it. I think this is a very serious situation that needs to be remedied immediately by methods that have been proven to work. We do not know enough about the long term effects of birth control and the sterilization surgery and trapping methods are a waste of time and money.

I sincerely hope the hunting option is adopted and can be put in motion before mother nature begins to solve the problem in a more drastic, devastating and wasteful manner. The numbers reported in the survey tell me it will not be long until this begins to happen.

In closing, I can only say, please count my letter as one vote for hunting. Thank you for your time and best of luck in the future.

Hoping the truth will prevail,

Charles E. Anderson

Charles E. Anderson
Life member of NRA, Life member of the World Bowhunters, member of: National Trappers Association, Putting People First, Wildlife Legislative Fund of America (WLFA), & Pennsylvania Federation of Sportsmans Clubs.

Mr. & Mrs. Dale C. Anderson
4 W. Confederate Avenue
Gettysburg, PA 17325

RECEIVED
DEC 19 1994
GETT — EISE

December 15, 1994

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

Welcome to Gettysburg. 10 years ago when we first moved to Gettysburg, into a home on two acres which adjoins the National Park, one of the things I most looked forward to (in addition to restoring the home) was landscaping and gardening those two acres. Over the years we have spent over $10,000 on decorative plantings, and each year we worked diligently on improving a large plot for a vegetable garden.

As it turned out, I derived the most enjoyment from the vegetable garden. Each year we were able to successfully plant, coax to maturity, then harvest more and different crops. It was a lovely place to spend the summer evenings, putter and enjoy.

Those days are long gone. For four years now, we haven't attempted a garden. What remains of our decorative plantings isn't worth mentioning. No matter what we plant, or how we attempt to protect it, failure is the result. The only things which really grow and prosper on our land are your deer.

This personal note is our reply to your EIS regarding deer overpopulation. Frankly, we believe the problem has been subjected to study and consideration years beyond the time when solutions ought to have been implemented. Please consider this as an emphatic vote for your alternative 2B...immediate and direct reduction of the deer herd, never again to be allowed to reproduce uncontrolled. The damage done to Park and town and the tremendous resentment it creates against the Park must come to an end.

We would dearly like to reclaim the use of our own domain for our own use. We realize this is a new problem to you, which will take time to fully understand and overcome. Please understand that we have lived with this plague for years and would more than appreciate your leadership in ending it.

Sincerely,

Dale C. Anderson
Debra P. Anderson

February 8, 1995

Dear Superintendent:

I have read all the articles concerning the deer herd population in the park and I have still come to the same conclusion to take "NO ACTION"! I believe nature will take care of itself.

Commercial exploitation and population demands for hunting will speed up the destruction of the deer as well as the underbrush and trees. Pleading ignorance of these vital and fragile ecosystems will eventually spell "Global Disaster".

Extinction which reminds us that temporary abundance does not guarantee the white-tailed deer survival. An example was of the Passenger Pigeon, a very colorful bird which the only way to find about the pigeon is to look it up in an encyclopedia because of humans over hunting and developing the woodlands they are extinct. So please try to understand that a temporary abundance does not guarantee survival of the species.

Extinction is caused by humans whether hunting, developing, destroying habitats, use of pesticides or polluting our water. An example would be the Bald Eagle, because of the use of DDT. We as humans are to blame.

We soon have to start to take responsibility for our actions, and stop taking the easy way out. Sometimes our good intentions that we felt in our heart gets lost because of the power, money and the influence people have on us. We all worship in church what God says, but we don't worship what he created for us.

People tend to have arrogant and ignorant views that God created the world just for us. I find it ironic that the battlefield would want more blood shed from a place that fathers, sons and brothers died for a nation to be free.

As a National Park, I would think that would be the last place you would want to destroy the deer because it is an inconvience to humans. We should all learn to respect & appreciate wildlife.

One of many solutions to the problem would be not to farm the land for at least 2 years, the deer would eventually leave.

I also have a comment to the people concerned about the deer starving, I hope they are also concerned with the deer that have arrows and bullets in them. Also comments about inner breeding, which there has never been a reported case with wild animals. Domesticated animals in a captive enviroment may inner breed.

I do hope the National Park will consider another open meeting before making a final decision.

Sincerely, Lisa K. Baumgardner

Dr Latcher,

I can only think of a few times when I pick up a pen to write about our game in this state but for sure this is one time I will be heard!

Deer and the areas they live in this state are paid for and kept by sportsman like me and if the deer in your area are not take by a pool of hunters pick by some fair way then will be much trouble.

I am sure maybe even Bow Hunters could help with the problem and their must be a fair way to give the ones that buy a license to get a chance at one of those deer and do it safely minded at the same time.

In my mind a controled hunt even with firearms would remove, or maybe just move some deer to cruet the problem.

I really fel this is a feunt that must be shared with all the hunters in the state Using a doe only day could be the right answer to the problem maybe every other year or maybe this first year let bow hunters take two deer. There are many moves better then mine, please look for them.

Joseph (Dog) Eaker

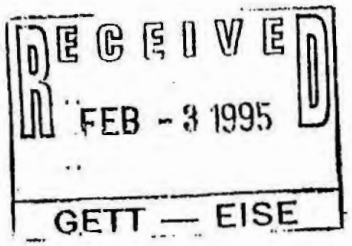


To whom it may concern,

I think that bringing hunting into your park would be a terrible insult to the park and the American public (the vast majority of whom do not hunt).

Sincerely,

Matt Ball

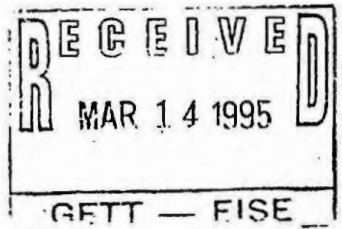


DEAR SUPERINTENDANT —

WHY IN THIS WORLD WHEN INNOCENT WILD ANIMALS "INTERFERE" WITH THE PROJECTS OF MEN DO THEY KILL THEM?!! KILL! KILL! KILL! TO TAKE THAT RECOURSE IS NOT ONLY APPALLING IN ITSELF, IT ALSO PUTS YOU ON THE SAME PLANE AS THE SLAYERS OF THE RAIN FORESTS.

DON'T KILL! — RELOCATE!

VEHEMENTLY — BARBARA BANCO



1/7/95

Dear Dr. Katschar,

The purpose of this letter is to inform you that I am absolutely opposed to organized hunting on the Gettysburg battlefield.

I frequently visit Gettysburg and am a member of the "Friends" of Gettysburg and the APCWS. While I strongly believe in preserving historic battlefields, I also believe in respecting wildlife and coexisting peacefully with nature.

Surely there's another viable alternative to →

the mass slaughter that has been proposed. The deer in Gettysburg are so tame and used to the presence of human beings — it hurts my heart to visualize these deer only a few shall feet from the muzzle of a gun, looking at the hunter with innocent eyes and then getting blown away — wounded, hurt, wounded and suffering.

Let the guns be forever silent on the Gettysburg battlefield.

Sincerely,

Gwendolyn Langdon Barach

RECEIVED
- 9 1994
EISE

Dr. John Latschar,

Regarding the potential reduction of the herd of deer in Gettysburg:

- I feel the Pennsylvania (LICENCED) hunters who have not already filled their deer tags for 1994 should have an opportunity to be involved in the "humane" taking of the deer that need to be reduced. This could be done via high-powered rifles at designated hunting sites & times that would be strict & very found as to the number of hunters at the site & time. This would be very similar to how the State assigns "Goose Blinds" at 2 sites in the State (1 is PYMATUNE RESERVOIR) each year during Goose season. If the "deer hunt" was very organized & found & a "lottery" system was used to select the hunters to be used at the designated sites & times, we could accomplish a win-win situation where the hunters would be glad to assist & process the deer themselves for personal use or to donate the food if they chose to do so. In this fashion the [redacted] would be limited to only the

(OVER)

administrative costs to setup the selection of PA hunters, the sites & times to hunt.

I feel comfortable in saying that the 1994 Pennsylvania hunters who bought a hunting license & have not filled their deer tags for the year would be glad to assist in this effort & would be a welcome inexpensive asset to the State's goal to reduce the deer herd.

* [redacted] as a possible one in your attempt to reduce the herd.

Thank you,

Gregg Batary

4 WADSWORTH DRIVE

E. BERLIN, PA 17316

Mr. & Mrs. Gregg Batary
4 Wadsworth Drive
East Berlin, PA 17316

RECEIVED
JAN 31 1995

1182 DRUCK VALLEY RD
YORK, PA. 17402
JAN 29, 1995

Dear Superintendent,

A CONTROLLED HUNT IS THE BEST ANSWER TO GETTYSBURG PARK DEER PROBLEM. It is both effective and inexpensive.

The Pa game commission has been involved in a number of successful deer reduction programs, for example, MET ED'S Muddy creek, Pinchot park and Middle Creek wildlife sanctuary. Various procedures were used.

Usually a limited number of hunters are allowed to hunt antlerless deer thru a lottery drawing of applications. The hunt could be slated to coincide with the normal 3 day state antlerless deer season to put some hunting pressure on the area surrounding the park. The park should be closed to the normal public for safety and to improve public opinion. The experience of the Pa Game Commission could be used for harvest and number of permits. Park maps can show hunting areas and "off limit areas". If it is felt that deer would congregate in "off limit" areas. Hunters without guns could be used on a volunteer basis. Hunters who pi[illegible] deer could be utilized.

(OVER)

If desired the meat could be donated to some worthy cause. Obviously hunters would be easier to obtain, if allowed to keep the meat.

I personally would be interested in such a program. The one thing I did not like about past programs is that they are not sufficiently publicized and they are started too late so an individual may not be able to participate even though he is interested. After the first year a much smaller program every few years could keep the deer under control.

Yours truly

Alfred J. Birko

RECEIVED
FEB - 6 1995
GETT — EISE

Gettysburg National Military Park
R.D. #1
Gettysburg, PA 17325

Dear Manager:

I am extremely concerned to hear that your military park is considering initiating a very disturbing precedent by allowing deer to be killed on your facilities.

As you are aware, all military parks are managed without any hunting whatsoever. The idea of permitting, indeed endorsing, gratuitous slaughter engenders precisely the attitude that is antithetical to the one that we would like to see our youth adopt. Sentient life, be it deer or human, is not to be taken cavalierly.

There are two obvious remedies for your population problems. You may try to re-locate some deer to non-hunting preserves or utilize deer contraceptives. Perhaps both alternatives can be combined. At any rate, any combination of these methods is far superior to one which results in needless carnage.

I strongly encourage you to follow the honorable and ethical course of action.

Thank you.

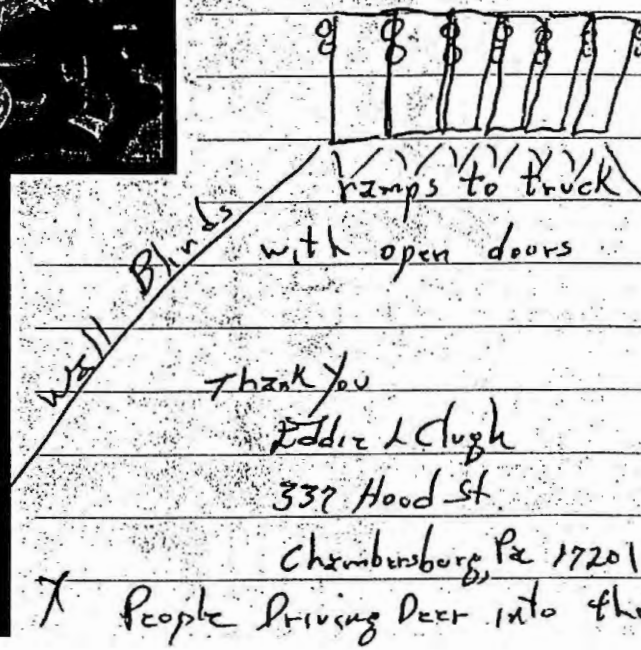
Sincerely
Dr. Mark H. Bernstein
Dr. Mark H. Bernstein
215 Leland St.
Austin, TX. 78704

RECEIVED
DEC - 7 1994
GETT — EISE

Dear Sirs,

I too ~~wanted~~ to get in on the hunt at Gettysburg, but if you choose to Transport the deer to another location that would be OK too. The reasons I'm writing is to suggest a way to relocate the deer, easy. Use 18 wheelers to ~~herd~~ Run the deer up into ~~a~~.





Thank you
Eddie Clugh
337 Hood St
Chambersburg, Pa 17201

People Driving Deer into these

89

January 27, 1995

Gettysburg National Military Park
R.D. #1
Gettysburg, PA 17325

RECEIVED
JAN 31 1995
GETT — EISE

To Whom It May Concern,

I am in support of a deer contraceptive program rather than opening the military park to hunting. I know that sport hunting special interest groups such as the Congressional Sportsmen's Caucus are pushing to open more of our national park service lands to hunting. If the Gettysburg National Military Park is opened to hunting it would set a disastrous precedent for National Military Parks across the country.

Deer contraception is the only method that will solve the problem and be humane to the animals also. I would like a reply from you regarding the likihood of this method to become the treatment of choice for the situation in the park. Thank you very much.

Sincerely,

Sandra E Boss

Sandra Boss, R. N.
615 San Dieguito Dr.
Encinitas, CA 92024

90

RECEIVED
DEC 12 1994
GETT — EISE

DEAR SIRS:

I WOULD LIKE TO MAKE A COMMENT ON THE PROPOSED DEER REDUCTION ON THE BATTLEFIELD. IN YELLOWSTONE NATIONAL PARK THERE IS A HUNT HELD TO REDUCE THE NUMBERS OF ELK BY DEPUTILING ALL THOSE PARTICIPATING IN THE HUNT. IF THIS COULD ALSO BE DONE IN GETTYSBURG THIS WOULD GIVE ACCESS TO HUNTING IN THE PARK, THERE COULD BE A PUBLIC DRAWING HELD FOR PERMITS WITH A MODEST PERMIT FEE TO HELP PAY FOR THE COST OF ADMINISTERING SUCH A HUNT. ONLY PROPERLY LICENSED HUNTERS WOULD BE ALLOWED TO HUNT. THE HUNT COULD BE A PRIMITIVE WEAPONS HUNT WITH A SHOT ACCURACY TEST GIVEN TO ALL PARTICIPANTS. NO ONE SHOULD BE ALLOWED TO KILL A BUCK DEER BEFORE KILLING AN ANTLERLESS DEER WITH PROPER TAGS. SMALL AREAS OF THE PARK COULD BE CLOSED ON ANY GIVEN DAY OF THESE HUNTS THIS HUNT COULD BE SUPERVISED BY PARK RANGERS AT ALL TIMES. I THINK THE HERD SIZE COULD BE REDUCED AND PA. SPORTSMEN WOULD BE MORE THAN HAPPY TO PARTICIPATE IN A HUNT SUCH AS THIS.

THANKS FOR HEARING OUR COMMENTS!

Ricky L Bracale

12/1/94

Dear Sir,

I agree with the NPS on alternative 5 to reduce the deer population on and around the Battlefield. For years, myself, like many other deer hunters have never been able to find a private land owner that will let you hunt.

Thank you.

Sincerely
William H. Brady
7 Dougherty Drive
Hanover, Pa.
17331

RECEIVED
DEC - 5 1994
GETT — EISE

RECEIVED
DEC 27 1994
GETT — EISE

December 22, 1994

John Latschar, Supertintendent
Gettysburg National Military Park
RD#1, Gettysburg,Pa. 17325

Sir.,

Few simple pleasures remain.
One has been the long time tradition of driving to the Gettysburg National Military Park in the early dawn or dusk of evening to witness the appearance of deer.
These deer have outwitted the hunter and found sanctuary at Gettysburg.
Suddenly the Park Service has an imagined crisis and their reaction is predictable--shoot to kill.
Landowners outisde the Park boundaries are claiming crop damages.
Simple. Pay them off.
The Park Service is a wealthy bureaucracy.
Every bureaucracy has an agenda, the Park Service is no different.
This agenda dictates the damage claims within the Park be exaggerated and are probably just that--gross exaggerations.
How soon they forget.
The "clear cutting" of Little Round Top and Devil's Den by the Park Service a decade ago did far more damage than the deer.
The deer at Gettysburg are as much a part of the place as the High Water Mark and Tom's Tower.
The shoot to kill order is just a smoke screen.
Spite. That is the real crisis.
George Stewart's book "Pickett's Charge" contains a Yank's account of amused fellow soldiers to scared bunnies darting about during the Confederate bombardment prior to Pickett's Charge.
Even under the stress of actual battle these soldiers appeared not to have shot the rabbits in spite.
If only the Park Service and their so-called "authorized agents" could show such professionalism.

Sincerely,
James E. Bradley
James E. Bradley
taxpayer
1104 N. Second Street
Harrisburg,Pa. 17102

Gettysburg Park
R.D. #1
Gettysburg, PA 17325

RECEIVED
FEB 10 1995
GETT — FISE

To whom it may concern:

In the matter of the over population of deer on the battlefield park area;

It is appreciated that the park will accept public input on this matter.

Both the animal rights activist and the hunter should agree that all life deserves a certain degree of respect.

At this point if it is clear that the over population is harming the area (crops) and that the deer do not have sufficient food (other than crops) to sustain themselves, than measures should be taken.

Option #1: To remove the deer to a different location where the population is lacking, perhaps northern Pennsylvania. The Game Commision could be helpful in advising. Surely hunters would hate to see all that game go to waste.

Option #2: To hunt the deer population with a bow and arrow, not fire arms. It would be more traditional and less hazardous. A special license issued for the hunt could fund the park for present and future management of the deer population.

It is unfair to bait the deer for a mass kill even if it is done with sharp shooters (who will cost money). Donation of the meat to those who need it does not justify the kill.

Simply because this problem has been ignored for so many years, does not give us the right to slaughter the herd.

As for sterilizing the remaining part of the herd to prevent the problem in the future, it is also a drastic strategy. We would like to preserve the battlefield, not change the face of it. To make it void of the deer herd (which could happen if over controlled) would remove a major characteristic of the park. Sterilization is over control. Possibly a supervised hunt every two years could be used in the management program.

A management program was and is needed in the future.

C. M. Brogan

THE HUNTERS WIDOW

A lifeline for the partners of hunters, fishermen & outdoorsmen.

RECEIVED
FEB 13 1995
GETT — FISE

February 1, 1995

Dr. John Latschar
Gettysburg National Military Park
97 Taneytown Rd.
Gettysburg, Pa. 17325

Dear Dr. Latschar,

This letter is in response to solicited comments on the draft environmental impact statement concerning the white-tailed deer management plan.

Statistics show that over 25 million Americans visit soup kitchens, food pantries and other feeding programs in our country. Of this 25 million over 5 million are children under the age of 12 years old.

Particularly during the winter season these food programs often run short of meat. This shortage of food has a devastating effect on our children. The "silent hunger" epidemic we have in our country causes our children to be slightly underweight with symptoms of frequent headaches, fatigue and irritability. When the evening meal consists only of soup and crackers because the refrigerator is empty and the food stamps have run out, these children become tired and angry and have a difficult time trying to be productive at school. As for the parents, it to often it becomes a matter of "heat or eat". During lasts years brutal winter, poor parents spent much of their money just trying to keep their homes warm.

This on going problem effects us all and particularly now with the cut backs and underfunding of government programs. We need to look carefully at every opportunity to do what we can to join the fight against hunger.

The white-tailed deer management plan appears to provide an opportunity, with the help of the venison donation programs in your area, to make a difference. Ken Brandt, Executive Vice President of PRUA (Pennsylvanians for the Responsible Use of Animals) said that in 1993 hunters donated more than 70,000 pounds of deer and served "nearly 170,000 needy individuals in PA." Timothy F. Whelan, South Central Pennsylvania Food Bank director, said he "eagerly anticipates the program each year", as they serve 280 charitable agencies in a 16-county area.

I appreciate the opportunity to comment on this matter.

Sincerely,

Susan Brower

RECEIVED
DEC 12 1994
GFTT — FISE

12/5/94

Dr. John LaTschar

In regards to the Antilean Kittatiny Deer Population.

The Erection of Shooting Stations 8 or 10 ft above ground would serve the purpose of eliminating Stray Shots weather it be Rifle or Bow.

The Station can then be moved or stored for use Again.

Have Hunters draw for Stations then Receive harvest tickets. Would they must take a doe before they can take a Buck, this way doe will be Taken not passed up.

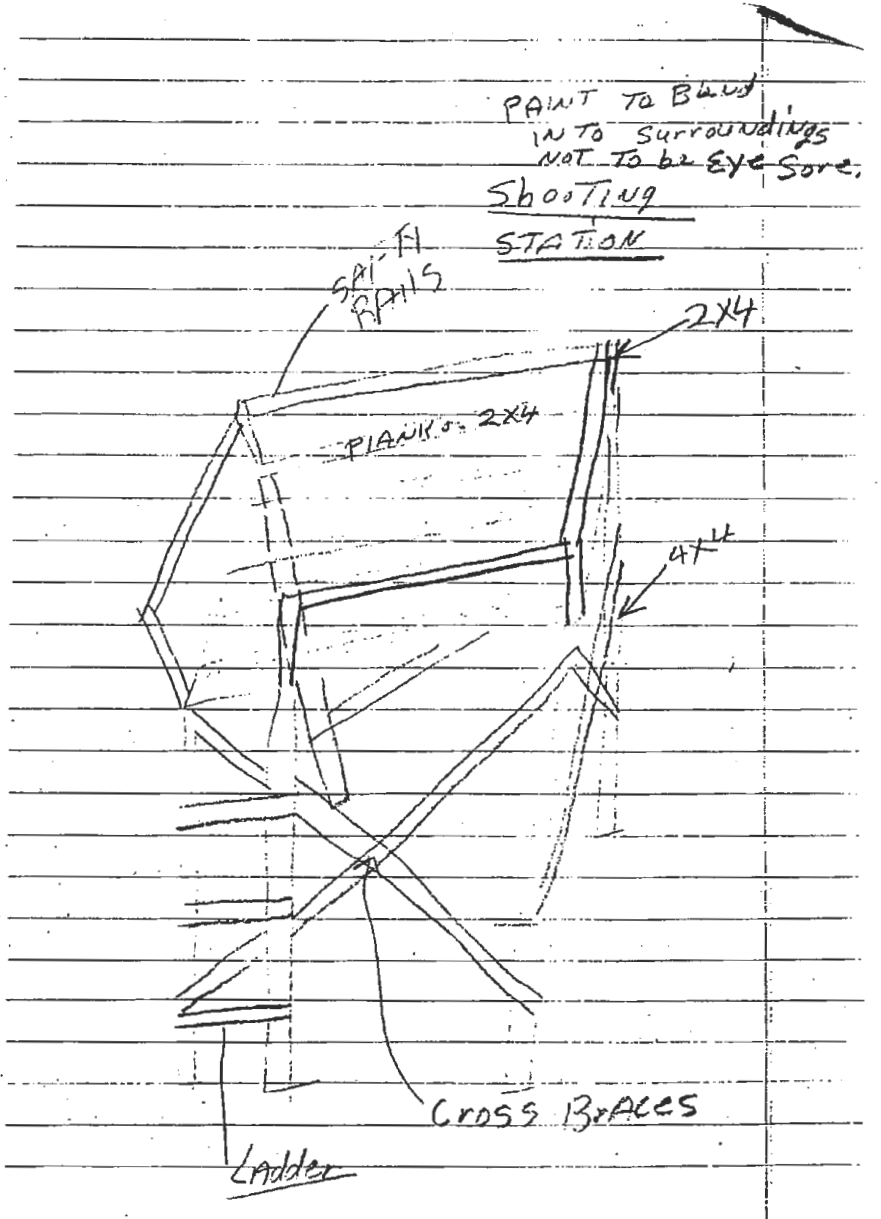
There Should not be any Speed Licenses to be bought, this will help in getting hunters to participate in the hunt.

The trapping program I favor over the Sterilization because if the deer are sent to the Northern counties this will help the herds not to have low Breeding.

If you would like to go into more depth on the above please feel free to call anytime between 5:00 PM to 9:30 PM WK days or anytime on Sunday. Saturday I am taught to get about.

Ph 717-865-4724 Kirby Bucher

(over)



DEC - 9 1994
GETT — FISE

96

Dr John Latschar
Superintendent,
Gettysburg National Military Park
R.D. 1 Gettysburg, PA 17325

DEAR DR. Latschar:

I'm writing Concerning the article in the Sunday Patriot News Concerning the Battle Field Deer Hunt,

An Idea,

People could apply to a Lottery & those who get picked could pay a Fee Appropriate for the occasion. This could be a Shotgun, Muzzle Load, or Bow Hunt. It does'nt need to be Rifle Unless this would be best.

Thank you for the opportunity to make a Suggestion. (over)

My Address: John D. Castellani
100 W. Colonial AVE
Myerstown, PA 17067

97

December 29, 1994

Dear Dr. John Latschar:

As an archer, rifleman and black powder hunter, I read most articles that have anything to do with deer or deer hunting. I recently read an article in the Sunday Patriot-News by Mr. Gleason. This brings to mind a lot of past time hunting talk about what if Gettysburg would open their park to hunters. How would they do it?

Well, let's talk. Speaking for a lot of friends and all the black powder hunters in Pennsylvania, the thought of having park service personnel or anybody else just shoot the deer for quick management is not going to settle to well in the stomachs of hunters. Deer hunting is a long past tradition, to just shoot game is unheard of.

My suggestion is to open the park to flintlocks or at least let them have the first crack at hunting the park. Why? Well, let's remember anybody wishing to hunt the flint lock season gives up a doe license and ends up hunting late season. Archers have first choice, the less crowded woods and the rut. And rifle season, well, let's just say get out there, get seated, pour your coffee and shoot the first frantic buck running for his life that comes by (and it works for most people). The black powder hunter, on the other hand, is dealing with snow, spooked deer and just less desirable conditions.

It sure would be nice to have a crack at a nice buck, or just hunt a more populated deer area with the flintlock. I realize that not all black powder hunters could be there. All in all, it's just my suggestion. However, you would have more than needed flintlockers at your door for permits.

And if you ask me, hunting with black powder in or around the battle field just keeps with tradition.

Sincerely,
Jeffrey Clippinger

RECEIVED
JAN 17 1995
GETT — FISE

98

RECEIVED
JAN 18 1995

January 16, 1995

Dr. John Latschar, Superintendent
GETTYSBURG NATIONAL MILITARY PARK
R. D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

In re: White-Tailed Deer Management Plan

As a resident of the Gettysburg area for these past nine years, eight of which, residing on the (formerly) Allen farm on Emmitsburg Road (adjacent to the Heritage Resort), I am extremely familiar with size of the Deer population in the National Park and the resultant problems.

First, I was totally amazed by the additional fencing installed by the NPS on both sides of Emmitsburg Road. When the project first was initiated, I observed to the NPS personnel that the fence would add, substantially, to the number of Deer/Vehicle Collisions, due to the animals leaping the fence and landing in front of oncoming traffic. I submit my observation was both valid and substantiated.

I was most disappointed that I wasn't in a position to attend the recent meeting, held on a Saturday, pertaining to the Deer problem. I understand (and would expect) the Animal Rights activists are most upset by and opposed to the idea of eliminating the animals through a "hunt". I've had occasion to browse through the November 1994 Environmental Impact Statement Draft and, in considering a "hunt", I too am most concerned over the prospects of guns , be they rifles or shotguns, being used. It would seem to me, utilizing the bait station idea, employing archery in the early morning hours, before the visitors begin touring, would be a very viable option. This would certainly eliminate the potential of damage to any of the monuments by firearms, in addition to the possibility of human endangerment in any of the surrounding area.

Based on the previous expense the NPS has realized in attempting to monitor this problem, in addition to the damage being caused by the animals to both the natural habitat and the planted crops, and finally, the terrible suffering imposed on the animals themselves when their food source is depleted due to over-population, especially if we get hit with some winter weather such as we experienced last year, I see no other practical way of realizing control of the situation, short of harvesting a large number of the animals. Additionally, with the plan to give the meat to local food service organizations, another benefit is realized.

To consider the other alternatives, i.e., trapping and transferring (and the horrendous costs the last time it was tried), or the cost of sterilization (which is totally ludicrous), is to ignore the suffering imposed on the very animals opponents to a "hunt" would hope to save.

I'm personally convinced that a special time period of early morning bow hunts, for highly qualified, specially licensed hunters, with the aid of bait stations is the least expensive, least dangerous to the Park and surrounding environs and most efficient way of dealing with this tremendous problem.

Very truly yours,

Paul A. Church
240 Ridgewood Drive
Gettysburg, PA 17325

Ph.: 334-0788

RECEIVED
JAN 31 1995
GETT — EISE

Scott Clouser
420 North Lime Street
Elizabethtown, PA 17022
717-367-3941

January 29, 1995

Gettysburg National Park Service
R.D. #1
Gettysburg, PA 17135

Dear Sirs,

Recently I viewed the news report on the over abundance of deer in the Gettysburg National Park. My suggestion for alleviating the problem is to sell permits for a controlled one week long archery or muzzle loader hunt over a five year period. This will not only help to resolve the problem of too many deer but also bring in revenue for the administering of the program.

Therefore everyone benefits. The hunters get to practice their sport. The deer population is reduced. The fiscal problem is not made worse. The animal rights people should be satisfied. The insurance companies will be grateful for reduced claims. Farmers will have less crop damage.

None of the other solutions offered will garner as many good results as the one put forth in suggestion. Thank you for your time and consideration.

Yours truly,
Scott Clouser

Scott Clouser

RECEIVED
FEB -6 1995
GETT — EISE

Carolyn Conrad
92 Fahrnau Mill Rd.
Hanover, PA 17331
Jan. 30, 1995

To Whom It May Concern:

In reference to the overpopulated deer issue. I feel you should capture the critters & transport them to other areas.

I'm an animal lover & I believe that transferring the deer would be advantageous in solving our problem as well as bringing benefits to the area where the animals are taken.

Thanks for asking & good luck with your decision regarding these very beautiful animals.

Sincerely,
Carolyn B. Conrad

RECEIVED
MAR - 7 1995
GETT — EISE

JAMES CRAIG
114 GREEN LAWN DR.
NEW ALBANY, INDIANA
47150

DIRECTOR
GETTYSBURG NATIONAL MILITARY PARK
R.D. #1
GETTYSBURG, PA 17325

DEAR DIRECTOR,

I URGE YOU IN THE NAME OF HUMANITY NOT TO ALLOW DEER HUNTING IN GETTYSBURG NATIONAL MILITARY PARK, THERE HAS BEEN ENOUGH BLOOD, SUFFERING AND DEATH ON THIS GROUND.

INSTEAD WHY NOT TRAP THE DEER AND RELEASE THEM IN WILDERNESS AREAS, OR PUT OUT FOOD WITH A CHEMICAL IN IT TO MAKE THEM STERILE.

PLEASE DON'T LET KILLING FOR THRILLS BECOME A PART OF THIS HALLOWED GROUND.

THANK YOU FOR YOUR TIME.

A FRIEND OF THE ANIMALS,
Jim

— MESSAGE — Jan. 26-95

Dear Sirs:

In response to the problems with the deer in our National Pk. at Gettysburg- Anesthitize the deer and put them in wooden areas where they'd have a chance to survive- Then there'll be plenty of deer for our children to hunt at the right place & the right time- Signed Concerned"

READING, PA 195
PM
28 JAN
1995

— ADRESS —
Military Rd —
Rd #1
Gettysburg
Pa

RECEIVED
JAN 30 1995
GETT — EISE

RECEIVED
FEB 22 1995
GETT — EISE

Feb. 22, 1995
Harrisburg, PA.

ear Superintendent,

A while back I saw an article about
he deer population density in your parks,
hen my grandson brought me a pamphlet
from Gettysburg on the damage and control
roblems of a large deer herd.

Being an ex-biology-ecology teacher,
here's my opinion. I would suggest
trapping and transfer after sedation to
Micheaux State Forest by National Guard
helicopter. This might reduce the panic
and trauma the deer would experience.
After the density has been reduced, apply
fertility control methods. This is expensive
but humane. Maybe sportsman clubs,
historic societies, and private individuals
would help financially.

Sincerely,
Burnell A. Crist

MEMBER PENNSYLVANIA OUTDOOR WRITERS ASSOCIATION
RECEIVED
DEC 21 1994
GETT — EISE

Bob D'Angelo
30 Cedar Lane
Stewartstown, PA 17363
(717) 993-3866

ACTIVE MEMBER OUTDOOR WRITERS ASSOCIATION OF AMERICA

December 19, 1994

Dr. John Latschar, Superintendent
Gettysburg National Military Park
RD #1, Gettysburg PA 17325

Dear Mr. Latschar,

I am an outdoor writer here in York County with active memberships in the Outdoor Writers Association of America and the Pennsylvania Outdoor Writers Association. I work for the Pennsylvania Game & Fish magazine as well as several smaller publications.

I have an opinion on a possible solution to the deer problem in the Gettysburg National Military Park. Why not have a drawing for permits to allow archery hunting in the park from October through January. You could charge a $10 application fee and use the funds for monument and park upkeep. I'm also a Civil War reenactor and realize the importance of preserving the park and its history. I know for a fact that applicants, particularly archery hunters, would have no problem paying a $10 application fee for a chance at one of the trophy bucks roaming the park. With a 95 day hunting season and 25 hunters daily nearly $25,000 could be generated. Given a 25 percent success rate, nearly 600 deer could be removed from the park.

Could you keep me informed as to what the park decides to do for the deer problem. If public hunting is involved in the solution it would make a good story in one of the outdoor publications that I write for.

Sincerely,

Bob D'Angelo

Bob D'Angelo

RECEIVED
JAN 30 1995
GETT — EISE

January 27, 1995

Gettysburg National Park
Gettysburg, Pa. 17325

Dear Mr. Superintendent,

My vote is for "Controlled shooting" with proper licenses to reduce the deer herd at the park.

Also would like to suggest donating the meat to the food banks.

Yours truly
Linda Daugherty
8 Clemson Drive
Camp Hill, Pa. 17011

RECEIVED
FEB - 9 1995
GETT — EISE

8 February 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Rd.
Gettysburg, PA. 17325

Dr. Latschar,

I very recently received a copy of the Deer Management Plan for the National Military Park and the Eisenhower Site. After reading the alternative actions, and being an avid deer hunter, and being a Civil War buff of Gettysburg, I would support Alternative 4 to get the kill outside the Park. Controlled shoots in the park at bait stations can be uncontrolled when deer start to move from bait stations when the shooting starts.

Also, a comment on the 2A Alternative (Good Plan but possibly costly) plan of capture and transfer. The use of Sportsmen organizations from areas where deer populations are low could be involved to possibly reduce the cost of the capture and transfer.

Thank you,
Dwayne Deem
1479 Shumaker Rd.
Manheim, PA. 17545

RECEIVED
JAN 13 1995
GETT — EISE

January 9, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Rd.
Gettysburg, PA 17325

Dear Dr. Latschar:

I have recently moved to the Keystone state from Florida and find the wildlife here to be exquisite. I had lived in Florida for 22 years and had seen, first-hand, what happened to the Everglades National Park when man interfered with nature & wildlife. When I read in the Gettysburg Times what was planned for the deer on the battlefield I recognized this as another Everglades disaster.

Around 1985 the ***Everglades National Park*** was beginning to overflow with excess water and to remedy the problem a committee decided to import malalucca trees to absorb *some* water. The catastrophic consequence was that the malalucca trees absorbed far more water than anticipated and the Everglades became dangerously dry. They thought the summer rains would remedy the problem, however, that year the summer rains did not come. The Everglades was so dry and the summer heat so unbearable that when lightning struck it ignited a devastating brush fire which killed vegetation and the endangered Florida black panther. After the fire many people thought it had also killed the malalucca trees. However, much to everyone's surprise, the trees not only survived but began to reproduce at an astonishing rate. After many unsuccessful attempts at destroying the trees, the committee was then forced to hire a chemist to concoct a poison to kill the trees. This finally helped control the malalucca trees. All this trouble could have been avoided. The unusually dry summer would have evaporated much of the excess water thereby eliminating the problem by the hand of nature.

Upon first visiting Gettysburg in July, during the re-enactment, my fondest memories are of driving at dusk over the battle field in search of deer. This seems to be enjoyable both to myself and my family who recently visited Gettysburg in December. It is my belief that when you live in an area for too long you take the simple things for granted(e.g. seeing a deer).

It is my understanding that the deer are feeding on the crops of farmers and that many complaints have been made that they are losing money as a result. It would sincerely surprise me if the farmers of Gettysburg produce any significant amount of product for this to be a problem. Any amount of loss is subsidized by the great government of these United States. This further leads me to wonder what these farmers ulterior motives are. Could it be that there might be a prize buck on the battlefield and when the shooting begins this buck just might run off the safety of the battlefield? At any rate please consider the motives of people's actions.

In closing I ask you to take great care and thought in making your decision. The last thing you want is regret.

Thank you for your time and consideration.

Sincerely, Jennifer Deisselberg

RECEIVED
JAN 27 1995
GETT — EISE

THEODORE S. DOWNS
158 CANTERBURY TURN
LANCASTER, PENNSYLVANIA 17601

1/25/95

Superintendent
Gettysburg Military Park
Gettysburg, Pa.

Dear Sir,

I viewed your deer overgrazing problem on WHAL-TV 8 evening news tonight. Seeking a rapid solution would be easy 50 years ago, but now I realize you must be very concerned about public opinion and criticism.

My suggestion is to save taxpayers money by eliminating hearings, meetings, studies and the expense of moving the deer.

A controlled hunt has been used successfully in other areas with similar problems. This hunt will make the sportsmen happy by extending their hunting season. You'll save taxpayers money and then donate the venison to food kitchens which by all reports are swamped by hungry homeless and needy people.

Remember, no matter what you do you will offend some persons or groups. You can't please everyone. The most difficult decision you will have is making a decision.

Good luck with your dilemma of the 90's.

Sincerely,

Theodore S. Downs

RECEIVED
FEB 13 1995
GETT — EISE

RD 2, Box 307H
Howard, Pa. 16841
February 6, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, Pa. 17325

Dear Dr. Latschar:

We are in receipt of the Draft Environmental Impact Statement- White Tailed Deer Management Plan and have reviewed the alternatives that were addressed. We strongly advocate the choice of Alternative #1- no action. We have spent many weeks and much money in Gettysburg and one of the reasons for this is the deer population within the park. The deer add to the natural beauty and peacefulness of the park. It escapes us as to why they are considered a "problem." The destruction of these animals will only bring bloodshed to this honored ground. We would think the destruction caused by human beings is a much greater threat to the park- litter, air pollution, vandalism, exploitation.

At the very most we would advocate for Alternative #3 but these measures would need to assure cruelty-free procedures with the utmost respect shown for these animals.

Many throughout the nation are now aware of the DEIS and are watching to see how Pennsylvania treats its wildlife. We can assure you that if the deer are killed or harmed in any way we will no longer spend our vacations in Gettysburg and will do all that is possible to encourage others to do the same. The fact that the animals would be "processed" and given to food service organizations does nothing to make the killing of the deer a favorable alternative.

It is time Pennsylvania treat its wildlife with respect and not destruction and exploitation.

We anxiously await your decision.

Sincerely,

Marion Dennis
Marion Dennis

Beth Dennis
Beth Dennis

RECEIVED
JAN 30 1995
GETT — EISE

Dear Park Service,

What is happening with the over-population of the white tail deer should not be difficult to figure out.

These deer are so abundant because in so many places (in the lower 48 states) man virtually wiped out the deer's natural predators, mainly the Wolf and mountain lion. And hunting these deer 1 time a year for 2 weeks does not help the problem. In fact the problem with killing more deer is that, when man shoots deer for so called sport or for population control, he always wants the biggest, strongest, and most beautiful deer. The problem with this is that it does not weed out the sick and old, so they reproduce a weaker and less intelligent breed.

When the Wolf and mountain Lion were abundant, they controlled this problem.

The wolf and Mountain Lion would seek out the week and old deer for food for the pack. And the Mountain Lion for themselves and their young.

So the problem has been caused by man himself, and his greed for land, and mythical hatred of wolves and Mountain Lions.

"If you would like my opinon", let me suggest it. I suggest either moving the deer to areas where their is a little more wilderness, and where Mountain Lions can be found, and where Wolves can be found. This will give them natural prey, to feed upon, because I'm sure you have herd stories recently told of Wolves attacking sheep, and Mountain Lions getting a bit to close to people and Children. "The reason is simple," people are developing closer & closer to their natural habitats, And as soon as a Wolf or Mountain Lion attacks the farm animal, "to survive", mans greedy reaction is to kill the animal thats hungry and has young.

"Another suggestion" is to reintroduce the Wolf back in to certain areas of the lower 48 that are not heavily populated. "And by the way" "Wolves do not attack man." Do your home work and you will learn this.

I'm sure that either one of these suggestions will help the deer population, but they will take time, effort, and down right Intelligence and compassion to achieve this. I honestly think and know this will benefit our wildlife situation, and put ecology in its proper order.

And if you need physical help or Information about doing this; I would be honored to help you accomplish it.

Thank You

phone #
717-774-4747
Sidney Dowling
Concerned Citizen

RECEIVED
DEC - 9 1994
GETT — EISE

HG-111

Charles P. Gilbert
112 Mont Alto Road
Fayetteville, Pa. 17222

December 8, 1994

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Sir,

Received your report November 29th concerning the over population of deer at Gettysburg NMP. I am retired and willing to help if some solution is implemented.

This is a problem as one couple at the meeting last year stated the deer are eating crops needed for livestock and infringing on the farmers livelihood.

I enjoy hunting and the last several years deer season was very dull contrary to reports of the Pennsylvania Game Commission. Few deer were seen by myself and many other hunters experienced the same.

I am in favor of Alternative 2A (with PGC approval) to remove the deer to public hunting land. If this would prove to be a problem, then the PGC could issue more antlerless permits, thus resulting in additional revenue.

If Alternative 2B is decided, donating the meat to needy organizations would also be a good idea. Any plan you adopt will be fine and as I said, I will be glad to help.

Sincerely,

Charles P. Gilbert

Charles P. Gilbert

RECEIVED
FEB 10 1995
GETT — EISE

Feb. 9, 1995

Sir,

Being an avid and concerned hunter, I feel compelled to share my views on the deer management for the Battlefield;

Alternative #1 No Action

It makes sense to me that No Action has caused the need for positive action.

Alternative #2A Capture + transfer

I feel this method would be to expensive and traumatic for the deer. Also what are the consequences on the environment where these animals are relocated?

Alternative #2B Direct reduction - Shooting

Bringing in sharp shooters or any kind of gun fire on the Battlefield, would just like a fire under all the anti's hunters, anti guns, animal rights groups and would definitly give them more fuel to shoot these deer at night. One good reason, I feel, not to shoot these animals at nite, is that you can't fire a weapon at a target safely + accurately under artificially lit conditions.

Alternative #3 Sterilization

No way do I feel that introducing chemicals of any kind, to these animals, is the answer, no matter the reason. Drugs are definitely not the answer. I've read many articles concerning sterilization and there have not been any positive results. Problems like the female deer aborting months early, the bucks dropping their antlers prior to rut, + many more adversed reactions.

Another thought will the chemicals break down, will they be passed on to animal or human. Plus the cost of researching these problems would be enormous.

Alternative #4 Coop Management

This is the only way that I see that would be feesable, humane, and safe, but with the tool of Bowhunting. This type of hunting has worked else where and I feel it will work in a positive manner on the Battlefield. Refer to the articles I've sent from the 94 Oct/Nov issue of "Bowhunter" magazine. The opportunities are endless, from all standpoints, with this concept.

I would like to say in closing, that I personally would like to be a part of this deer reduction plan, either through in the harvest of these animals or suggestions from a concerned and experienced hunter.

Sincerely

Don Duncan
13475 Sunrise Dr.
Blue Ridge Summit, Pa. 17214
1-717-794-5112

RECEIVED
FEB - 2 1995

To ~~whom it may~~ concern,

When I heard about the problem of deer in and around Gettysburg and some of the solutions that you were considering I remember reading an article in one of my magazines about Hunting and contraceptives. I found the article and I'm sending it along to you so that it might help you in your decision.

If you do decide on hunting and I hope its Bowhunting, the hunters involved in the hunt must first come and sign up in person at Gettysburg. If selected, they will receive a card that will be punched out for each deer they check in. I would suggest though that you and the Game Commission get together and come to an agreement that the deer that are harvested on Gettysburg does not go against the regular state wide hunting license. If it would go against the regular hunting license it could deter alot of hunters from leaving their favorite hunting spots and farms. For Example: at the Aberdeen proving grounds Military base in Aberdeen Maryland, they allowed you to take three deer on the base and you could still go hunting statewide under normal conditions.

What ever your decisions are I wish you good luck and hope you choose Bowhunting.

Thank you,

Larry S. Dunn

RECEIVED
DEC 13 1994
GETT — EISE

12/11/94

DEAR SIR:

I READ AN ARTICLE BY J. GLEASON IN THE SUNDAY PATRIOT NEWS [12/4/94]. I BELIEVE YOU WOULD GAIN FROM THE PROGRAMS TO REDUCE THE DEER HERD IN NORTHUMBERLAND (CHESTER CO.). IN SHORT, HOLD A LOTTERY FOR LICENSED PA RESIDENTS / NON RESIDENTS. AND CLOSE THE PARK FOR 1 DAY.

YOU WOULD PROBABLY FIND LOTTERY APPLICATIONS IN EXCESS OF THE DEER POPULATIONS. A LARGE POPULATION OF "FREE" HUNTERS EXIST IN PENNSYLVANIA. THEY ARE CALLED HUNTERS, AND MANY WOULD APPLY FOR A CHANCE AT A DEER HERD CONSIDERED A NUISANCE IN GETTYSBURG.

I FEEL THAT MOST HUNTERS ARE RESPECTFUL OF PROPERTY & WOULD FEEL PRIVILEDGED TO HUNT ON A NATIONAL BATTLEFIELD SUCH AS GETTYSBURG. SHOTGUNS ONLY COULD LIMIT ANY CONCERN FOR STRAY BULLETS. ANY DEER RULES SUCH AS IN THE SOUTHEASTERN COUNTIES OF PA WOULD ALSO ALLOW MORE TARGET OPPORTUNITIES.

PLEASE INCLUDE THE DOE RESIDENTS, YOU WILL DO MUCH FOR PUBLIC OPINION. ANOTHER PROGRAM

THAT YOU COULD STUDY IS THE [illegible] MIDDLE CREEK WATERFOWL AREA LOTTERY. I DON'T KNOW IF A WATERFOWL HUNTING PERMIT THIS LOTTERY IS AVAILABLE TO ANY WHO APPLY & HAVE THE REQUIRED LICENSES. THE CHOSEN, CAN BRING GUESTS & ARE ASSIGNED A BLIND.

THE PA GAME COMMISSION CAN [illegible]

[illegible]
6 BLACKSTONE CT
CAMP HILL, PA 17011
717-732-9434

Dear Dr. Latscher, 12/6/94

I do not agree with the "proposed" alternative of shooting deer in the park. I prefer that the park transfer them to other locations or use reproductive intervention.

killing is inhumane, be it human or another animal species. I prefer taking the decent ~~approach~~ of trapping deer to live.

RECEIVED
DEC 07 1994
GETT — EISE

I ~~do~~ appreciate your consideration.

Sincerely,
Linda Fay
1260 Lumber St.
Middletown, PA 17057

Park Superintendant

To help solve your deer problem I think you have to look at the following. Three solutions and in this order.

1. A Controlled hunt inside the park
2. Hunting outside the park.
3. A capture & release program.

These three over a period of time will reduce the deer herd. I also know it will ruffle a few feathers, but its the only solution. Its the least expensive way and could generate some revenue for the park.

Sincerely,
Dick Eitnier

RECEIVED
JAN 30 1995
GETT — EISE

MR RICHARD D EITNIER
5340 HAMMOND RD
NEW HOLLAND PA 17557-9595

REC 117
JAN 30 1995
GETT — EISE

Dear National Park Service,

I just heard of your problem with your over abundance of deer. You also included a list of alternatives that you will be dealing upon to deal with the problem.

I agree the park needs to be preserved to the fullest. I'm a big History Buff and tour your park at least once a year. Being from Lancaster County I take full advantage of the battlefield being as close to my home.

Your situation is becoming very common in area where hunting is prohibited. Chester County is another area that is similar that it has too many deer. Regards to what the Game Commission argues; the deer population on State Grounds is in "Trouble" since they started issuing bonus tags, "which means" any hunter can take up to three deer per season it has fallen it's toll. The problem is the private areas where deer are a problem in many cases but great pressure to allow public hunting. Do not tags or kills in State Grounds due to easy access for public hunting. So in essence the deer are not on the grounds that can sustain them. The Commission won't admit this due to the risk of giving up the bonus system which adds up to millions of dollars that could be lost if hunters do not make the purchase. And if they are told the deer aren't there tags won't be bought.

Being an avid hunter I began the noticed decrease drastically. The past year I've hunted 15 full days in the Tuscarora State Forest in Perry County. During this time the total number of deer I seen was twelve. During 1991 and 1992

I've seen over 100 deer in the two years combined and got a buck four years straight from 1988-1992.

The last year have had some good suggestions but please stay clear of the sterilization idea. The chemicals used are not proven enough and your deer will interbreed with deer outside the Historical Park's range. The results the drugs administered could be devastating to the deer throughout the area.

I favor the capture and relocate to some of your deer herd to State Grounds that are in trouble with too few deer. The two Counties that top the list would most likely be Snyder and Union Counties. These Counties in many reports are hunting for deer and could use more to satisfy hunters and the local businesses that depend on hunters coming into these areas. You probably are thinking, "This guy must hunt in these areas and have some stories". The truth is I've never hunted there. All my hunting is in Perry and Potter Counties and I'd be out there not too far behind the Counties I mentioned earlier.

My first opinion was to have a short, particular archery season and if the above is not an option it's the route I would take. Let me suggest the following if you do Choose a shot...

1. — Use archers that are qualified
2. — Don't have a drawing, you'll be overrun with blood thirsty people that are only in the sport to kill and your town will have thrones of them flocking to Gettysburg.

3. — Chose a dozen ares that have taken a minimum of three deer with a bow before.

4. — Have the deer that are killed cleaned and left until after dark to be taken away so not to disturb the anti-hunters.

5. — Make a rule that deer cannot be removed on top of vehicle they must be concealed for the same reason as #4

6. — Doe only should be hunted that's what controls the population

7. — Have the hunt in Early October before the rut takes place and deer are in their natural routes to food and not running will as they will be in Nov. due to hunters pressing them.

8. — Don't publicize the days you will be doing it and notify the media after it is completed.

9. — Have a secret drawing if you take it to the public hunters.

10. — Enforce doe only it will not based on the presence you receive and will interest hunters that want to help for the right reasons, not to hang big bucks on the wall.

I hope I've been some help and if you would like to talk to me call me at 717 668-3594. If you do go with a private hunt I can organize a group that are Sportsmen in the best area of the world and would be very happy to help the hungry. But please try to relocate the deer to areas that need them. We need to preserve the great tradition we have in Pennsylvania and who knows maybe someday Grandkids will be able to go deer hunting someday the way it's going right now it doesn't look good. The Almighty Dollar is taking over.

Sincerely,
Chad Enck

Chad Enck
68 N. Hazel St.
Manheim PA. 17545

RECEIVED
JAN - 3 1995
GETT — EISE

31 Dec 94

60 WINDBRIAR LN.
GETTYSBURG, PA 17325

Gettysburg National Military Park
RD 1
Gettysburg, PA 17325

Dr. John HARTSCHER

As a resident for over six years in the immediate Gettysburg area, I have seen the destruction caused by the deer first hand. Primarily, it has been in my small garden where nothing is safe. I have also witnessed it with some of my shrubbery too.

I would like to see the deer population reduced to a level where the deer live pretty much off the wilds of the woods. The probably means braing the deer population down drastically but it would probably would be for their own good. We need to strike a balance with nature and human habitation in the area.

So since we lack any real natural predators, we need to find an artificial way of bring this fluke of natural into balance.

I recommend bow, muzzle-loader, and rifle to reduce the population. A lottery system to allow hunters on to the federal land to reduce the herd. Finally, some of the meat could be donated for the public good ie food banks etc.

We need action to solve a truely destructive problem in the park as this also affects the woodlands in their regenerative process too.

Sincerely
Tim Frare

RECEIVED
JAN 30 1995
GETTYSBURG NATIONAL MILITARY PARK

Jan. 26, 1995

Gettesburg Park Service:

I saw the announcement about the over population of deer. I believe the best solution ~~would~~ would be to truck them to the mountains. My husband used to go deer hunting at Potter County and he often said there weren't enough deer. Some bad winters cut down on the herd a lot, so I believe the answer would be to relocate them and also let hunters thin the herd and donate some of the meat to shelters to feed the poor. Some birth-control would help only for a time and it would really be an expensive operation because it would have to be an on-going operation. Let the hunters trim them down and re-locate them is the best solution. Also the problem would not be allowed to get out of hand. Farmers cannot lose their crops because of the deer.

Mary S. Fichtner

RECEIVED
JAN 12 1995
GETTYSBURG NATIONAL MILITARY PARK

To whom it may concern,

My opinion, for what it's worth, is this — messing with nature is a bad thing. The sterilization idea is ludicrous. Baiting deer that have become somewhat used to people, to be shot, is sacrilegious. You say relocating is too expensive. Why didn't anyone look into this a long time ago when it wouldn't have been such a project? It pains me, the attitude humans have toward wildlife. Wouldn't the world be a better place if we used these ideas you have for deer for all the real undesirables we have in our communities — drug dealers, rapists, murderers etc.?? Has anyone approached the Wildlife Federation for any alternative solutions??

I do appreciate though, that you have asked for public opinion.

Mrs. Cindy Fedorchak
Littlestown Pa.



RECEIVED
FEB -7 1995
GETT — EISE

February 4, 1995

Dr. John Latschar;

Re: Proposed use of sterilization drugs to "control" Gettysburg National Park deer.

I am writing on behalf of our extended family, all Adams County natives, their spouses, and children. We all depend upon hunting and fishing to supplement our food supply. We also garden extensively. This lifefstyle is a necessity due to the local economy, tax burden, and also due to a preference for unadulterated food. We would consider it a direct threat to our health and well-being if the deer which happen to pass through the park would be treated with any kind of hormone or toxic substance. I personally would consider filing a class action suit if there were traces of anything of the sort in venison we would use.

Please rethink this approach to deer control! My husband and relatives and friends have shot deer with Park tags in quite a range away from the park...near Emmitsburg, and in other directions. You cannot predict the range of these animals, or constrain them. There are so many competent, careful and needy hunters in this county, it would be a sin to defile or waste this important and healthful food source without giving those who are proven stewards of the earth a chance to harvest the deer in a safe and controlled hunt. The meat could even be offered to the homeless or charity.

We will be all watching the results of your studies, and no matter what the EIS may conclude, if you use contraceptives, inevitably there will be environmental repercussions. The regional Sierra Club and several other organizations would be alerted to your thoughtless and inconsiderate approach to this matter. I sympathize with the farmers, but they must consider sustainable agriculture and the health of the county population!

Guardedly,

Andrea M. Fissel

Andrea and Steve Fissel
965 Blackhorse Tavern Rd.
Gettysburg, PA 17325

February 13, 1995

Dear Park People,

Please use deer contraception as a means of population control. Love animals, don't shoot them!

Thank you,

RECEIVED
FEB 23 1995
GETT — EISE

Marc Dreligh
P.O. Box 39
Cochranville, Pa
19330

RECEIVED
JAN 30 1995
GETT — EISE

1-28-95

Dear Park People,

I'm writing in response to the deer population problem.

I'm 40 yrs. old, I went hunting with my dad before I was allowed a gun, I trap, hunt, fish, etc. and I have a degree in 'Wildlife & Conservation'.

I'll address the alternatives of deer control as I see it, and as many and most of the people I know see it.

Sterilization - too costly, unproven, and a real good joke.

Trap & Transfer - too costly, many of the deer would die from stress, and who really needs more deer?

Regulated shooting - this sounds ok, its the cheapest, surest method. Donating the meat to food banks is also a good idea, but it would leave out the - Pennsylvania sportsman, I imagine federal employees would do the culling.

My Opinion - We have regulated doe hunts here at Jacobus on Kain County Park (shot-gun only), we also have bow hunting as regulated by the state. Something similar shouldn't be too difficult, even an extended bow season on your park would help. Daily sign ups to hunt so you know whos there, a deer kill report paper, and perhaps an extra deer permittance per hunter, or two.

Some have said that the disabled veterans who hunt should have first crack, that would be nice.

To keep the meat or donate, should be an individuals choice.

Once hunting pressure is applied to your area, those deer will soon start moving off the park and onto huntable areas, so you may not have to do as much culling as you expected.

Well, thats my opinion, especially a disabled veterans hunt with shotgun, and an extended archery area, bow hunting is your 'safest' bet.

Don't listen to the salad eatin' 'anti's', they're a minute percentage in it for big money, they get donations from people who believe in Bambi and Thumper, they're big business.

Do it with regulated hunts, its cheapest, and its what 98% of the people want.

Thank you,
Todd Forbush
6 Wildasin Dr.
Jacobus, Pa. 17407

Sir: in response to the Hbg. Patriot article;

My personal suggestion is to Live Trap the deer + take them to remote/wooded areas for release. Hunters would then have a chance to harvest some. Others might improve the resident deer. Sincerely,

Galen C. Frantz
R2 Box 1800
Lebanon PA 17046-8729

Dec 7-1994

RECEIVED
DEC 13 1994
GETT — EISE

Dr John Latschar - Superintendent
Gettysburg ~~National Military~~ Park

Dr Latschar —

Let's ~~stop~~ beating around the bush and beat the deer herd into Nets!

~~Identify~~ the deer trails and erect 40-50' enormous Nets at ~~strategic~~ locations. Drive the herds into these Nets by employing town's people and interested parties in groups of 100 or more. The fawns in the area could be butchered, wrap-packed the meat for distribution to Soup Kitchens - hospitals and the poorer members of Society.

Please! let's not allow the Queers (the animal rights activists) to intervene with our human endeavor to assist the fawns and the poor in their hour of Need -

Cordially
Raymond Allen Frey, Jr
1577 Bon Air Road
York, Pa 17403
717-843-7629

c.c ~~Stephen~~ C. Frey, M.D.
Gettysburg, Pa

On a very recent trip to walk the battlefield, we did in deed, see many deer. Although a beautiful animal to look at, and the fawns are so cute in the Spring, I agree there are too many. I know that you are thinking of many options to help with the problem. I for one am not a hunter, but has a 2 day bow/arrow season been considered? There would be minimal damage, if any, to the monuments and buildings, plus no one could complain of stray bullets or gun shots. Would it be possible to close off the battlefield to the public for a couple days to accomplish something like this. Capturing and relocating the deer would just give another area the same problem.

A beautiful day to you!

RECEIVED
JAN 19 1995
GETT — EISE

Eric Garyon
1432 Hughes Shop Rd.
Westminster, MD 21158

127

Dear Mr. Latschar,
Here is our resolution about the "Deer Problem" IN Gettysburg

Thomas J. GLUSASKAS - Transport Deer
Thomas G. GLUSASKAS - Transport Deer
Thomas G. GLUSASKAS JR. - Transport Deer
maryann GLUSASKAS - Transport Deer
180 Chapel Rd Extd. #1 + #2
Gettysburg, PA 17325
717-337-2217

128

The North Shore Animal League saves abandoned dogs and cats, and finds them new homes.

POST CARD

HBG. PM 1 JAN 95 RECEIVED FEB 6 1995 GETT — EISE

Old Glory USA G For U.S. addressees only

My Choice:
Capture & Transfer
To Our Land

Mary Gouffer
180 Village Dr.
Marysville, PA 17053

ph. # 957-3945

Gettysburg National Park
R.D. #1
Gettysburg, PA 17325

NORTH SHORE ANIMAL LEAGUE, PORT WASHINGTON, NY

G7PC-26

129

Re: Deer Control 1-26-95

I am in favor of any, or all, below mentioned.

1 - Capture and transfer

2 - Controlled Shoot (meat to go to FOOD BANKS)

3 - Sterilization.

You may not care for my opinion but it is nice to be asked.

Thank you,

Claire S. Kupp
57 Country Club Rd
Carlisle, Pa 17013-8887

RECEIVED JAN 30 1995 GETT — EISE

Ms Jane S Gargallo
2883 Columbine Ct
Thousand Oaks CA 91360-1423

PETA

3/9/95

RECEIVED
MAR 17 1995
GETT — EISE

energy | motivation | balance

Dear Mr. Latschar

I'm writing to urge yu to please do not kill the deer at your park. To kill innocent animals just so that the park will be in the same physical state as during the battle is ~~ronsense~~. ~~Life is not static.~~ Nor will ~~it~~. Please be a part of preserving life, and make your own history.

TO: Dr. John Latschar
Superintendent
Gettysburg Nat'l Military Park
97 Taneytown Rd
Gettysburg, PA 17325

RECEIVED
FEB - 8 1995
GETT — EISE

MRS. GEORGE C. GEISLER
2411 YALE AVE.
CAMP HILL, PA 17011

February 2, 1995

Superintendent
Gettysburg National Park
R.D. #1
Gettysburg, Pa. 17325

Re: deer herd

Dear Sir:

My husband and I are advocates of trapping and transferring the deer to the upper tier counties.

It was done in Blair Valley, Maryland, during the 1960's & was quite successful.

Respectfully,
Christine Geisler

RECEIVED
JAN - 3 1995
GETT — EISE

RODALE INSTITUTE RESEARCH CENTER
611 Siegfriedale Road, Kutztown, Pennsylvania 19530
PHONE: 610-683-1400 FAX: 610-683-8548

Cyane Gresham
Dec. 29, 1994

Superintendent
Gettysburg NMP/Eisenhower NHS
97 Taneytown Road
Gettysburg, PA 17325

I had the pleasure of visiting Gettysburg National Military Park for the first time on December 26, 1994. The organization, sensitivity, and hard work evident in the presentation of the site were truly impressive. I am writing in reponse to the folder entitled "White-Tailed Deer", and also because of observed effects of the deer.

It has become clear that White-Tailed Deer have become a significant problem in many urban, suburban, and rural locales. Shenandoah Park, the parks of Philadelphia, and even rural Pennsylvania are some of the places where the damage has been documented. Some of the problems I am aware of include: deforestation, alteration of forest composition, spread of Lyme disease, and auto collisions. Deer obviously have become well adapted to thrive in a many conditions and do not have sufficient natural controls.

Possible solutions mentioned in your brochure are: "trapping and transfer; fertility control; fencing; repellents; planting crops less attractive to deer; and reduction of the herd by deputized marksmen, rangers, and/or public hunt". I would like to give comments and feedback on your proposed solutions:

1) Trapping and transfer: this is a temporary measure which only transports the problem somewhere else. In short, it is expensive and would not really solve the problem.

2) Fertility control: this has been toyed with in some of the Philadelphia parks. To my knowledge, it is prohibitively expensive.

3) Fencing: this safeguard does not solve the problem, although it prevents some of the damage. Fencing of some sort is probably necessary for growth of small seedlings. I have included information on new low-cost deer fencing.

4) Repellents: repellents are temporary and not effective if deer are really hungry. In addition, it requires labor and some degree of expense. Unrealistic for large areas, such as the whole NMP.

5) Planting less attractive crops: not effective if deer are really hungry. Limits the management options in what may be unacceptable ways if historical accuracy is desired.

Printed on Recycled Paper 10% Post-Consumer Waste

6) Reduction of the herd by deputized marksmen, rangers, and/or public hunt: This is the only realistic, effective, affordable alternative. For control of deer damage, the unacceptably high numbers of deer must be lowered in a conscious, humane way. Otherwise, the numbers will be lowered by disease, starvation, and cars.

Through this letter I want to communicate my full support for control efforts of deer relying on deputized marksmen, rangers, and public hunting. Obviously, safety should be a top priority. "The Bambi reflex" will cause opposition to such culling, but you should know that there is support for your efforts. If I can help in any way with documentation or support, please feel free to get in touch. Thank you for all the hard work which goes into this important place.

Cyane Gresham

RECEIVED
JAN 27 1995
GETT — EISE

January 26, 1995

Dr. John A. Latschar
Gettysburg National Military Park
Eisenhower National Historic Site
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

WGAL television studio broadcast a story last night about the park and the herd of deer that are living at it. Viewers were advised the Park Service is considering various options to "protect" the farmland and park trees from the deer. Some of the choices were: a controlled hunt at the park (the meat could be given to food banks); out of season hunting in the areas surrounding the park; sterilization of the deer; moving the deer to areas outside the park; and doing nothing about the deer. It is my understanding that the Park Service's position is the historic value of the park is being hurt by the deer; and the park cannot support the herd which has grown to 700 - 800. I believe it was stated the park can support about 130 deer comfortably.

I have visited Gettysburg many times. I have been to the park. I have seen farmland, some woodland, monuments, and a cemetery. I have seen the waxed figures and the old clothing that commemorate a battle our country will never forget. I have seen other human visitors to the park. I have not seen the living, breathing, gentle deer that are causing the Park Service concern.

Death is everywhere at Gettysburg. <u>It is a bleak reminder of our failure to communicate without doing battle</u> - without killing human beings. It is a reminder that it was human animals that destroyed each other, trees, the land, and other living creatures not involved in our battle. Horses, dogs, cats, cows, and many other creatures suffered and died because of our human war. Deer died too. We destroyed a habitat - a home to many living creatures. We polluted water. We destroyed trees. Our cannons and other weapons took our lives and the lives of many who share this planet with us.

The Park Service should protect our heritage. I suggest that our heritage is more than old weapons and monuments of rock and steel. It is more than the dry decay of death. Our heritage is more than memories of battles that we fought. It is the constant flow of life for us and our companion animals. It is birth. It includes the joy of watching gentle beings living on, and using, the land they have inherited with us.

Is there any reason the Park Service cannot provide food on park land for the deer? Could the park service not grow corn for the deer to eat? While I support food banks for our hungry human brothers and sisters, I do not believe a "controlled hunt" of shy and unarmed creatures is the solution. We can feed the hungry in our country by other means. There are numerous restaurants in Gettysburg and other areas that could donate leftovers instead of throwing t food out. We can share with our neighbors. Americans waste a great deal of food.

Killing deer who have sought refuge from the surrounding area is not the bes solution. Our companion animals are consistently losing ground on our plane The loss of habitat due to the construction of highways and other roads, housing, malls, parking lots, and our other projects that "civilize" nature immense. The Park Service admitted that many deer at the park are killed by automobiles.

<u>We are the guardians of planet Earth and all her inhabitants.</u>

Let us not choose death again. Let us choose to respect and protect life. These deer remind us that even after pain and death, nature renews itself wh given the chance. We are reintroducing wildlife into our other parks. We a trying to put back what we were not wise enough to protect before. We must have a sense of our responsibilities to other living creatures. Monuments a not feeling animals with a will to live.

<u>"I am life that wills to live in the midst of life that wills to live,"</u> said the great clergyman, philosopher, physician, and scholar, Albert Schweitzer. Please consider the deer and their will to live.

The signatures listed below are votes against killing (hunting) the deer and against moving the deer unless the only other option you consider is killing them. Moving them could lead to their deaths. The signatures listed below are votes against sterilization of the deer as that does not seem to be a viable alternative. How would the Park Service keep new deer from entering the park? Would the sterilization program be a continuing practice to inclu the new deer, too?

<u>Our suggestion is that you find a way to coexist with the deer; to protect them, and to protect us, as they are a part of our heritage, our legacy, our inheritance.</u>

Sincerely,

Eileen Mary Gropp
P.O. Box 211
New Kingstown, PA 17072

Donald A. Metra

Lin Graham

Copy to:
President William Clinton
The National Park Service
The National Geographic Society
People For The Ethical Treatment of Animals
The American Humane Society
Mr. Hal Greenlee

RECEIVED
DEC 13 1994
GETT — EISE

ADELINE GRASSI
BOX 39
BARNVILLE PA 19506

December 9, 1994

Dear Dr. Latschar,

The idea of baiting deer at night, blinding them with lights, and blasting away in a mass slaughter must be abhorrent not only to those of us who are sickened by any abuse of animals, but also to the responsible hunter who believes in a fair fight.

I understand there are several alternate plans to remove the deer from the Gettysburg National Park. My choice would be removing them to an alternate location where deer are not too populous. This probably would take time and money. What of that? Doesn't anything worthwhile do so? If people want to roam around an area where a dreadful bloody battle occurred, let them pay for it!

I sincerely hope you use a humane procedure in solving this "problem". Thank you for your attention.

Sincerely,

Adeline Grassi

RECEIVED
MAR - 6 1995
GETT — EISE

Feb. 1995

Dear Sir:

The killing off of our deer population must stop! All living creatures, great and small deserve to live on this earth. Plants and crops cannot be placed above our wildlife.

Hunting is not a sport it is a pleasure to persons with a cruel streak in their makeup!

Plant species that are not desirable to the deer. Implement some kind of sterilization project but no more guns or arrows! Enough violence!

Sincerely
Mrs Helen Harvey
6966 Silverwood St
Phila Pa 19128

RECEIVED
FEB - 2 1995
GETT — EISE

Dr. John Latschar, Superintendent
Gettysburg National Military Park
Route #1
Gettysburg, PA 17325

Dear Superintendent:

Needless to say, I am so glad to find a qualified person in this position, who is willing to take action on the various proposals, that were initiated at the meeting we had nearly two years ago. As I recall, the consensus at that time, was, to have hunters (Adams County) participate in reducing the deer herd.

I can remember, some 30 years ago, of having asked the Park Superintendent, as to why the bowhunters could not be given permission to hunt on the Battlefield. His reply was, "It would take an act of Congress to do that!" Now (I note on page six that, "the National Park Service has the authority to manage the wildlife in the parks, without the consent of the state and by methods contrary to state law.

With this kind of authority, my first thought is, "what are we waiting for?" I definitely am not in favor of any type of reproductive intervention, or capture and transfer. That would open the door to all types of "animal rights" groups.

Since hunting has always been the preferred way of controlling the deer in Pennsylvania, let's continue this method. Do it with as little fanfare as possible. Adams County bow hunters should be used exclusively -- they are our deer. To use rifles, or guns of any type, would certainly raise problems among the citizens and tourists. You will obviously get reports of stray bullets, additional noise, danger to civilians, etc. The list is endless. So "Keep it Simple."

With archers, there will be no noise, no strays, no damage to monuments, etc. In fact, most archers retrieve their arrows. What I'm saying is, do it right the first time, and avoid the critics. I would thoroughly enjoy bagging a deer with "Property of U.S. Government" tattooed on the right flank. I would also pay a minimum fee for this privilege -- or even "Paint a cannon."

(3)

So without fanfare, or undue publicity, the deer herd could be controlled in a legitimate manner, and the average citizen, or tourist, who could cause a problem, would not be aware of the herd's reduction. Again, "Keep it Simple."

Sincerely,

Charles A Heintzelman

Mr. Charles A. Heintzelman
1454 Granite Station Road
Gettysburg, PA 17325

In regards to your handling of the deer population, please choose deer contraception. It is clearly the best option.

Thank you

Diane Heitzman

RECEIVED
FEB - 8 1995
GETT — FISE

RECEIVED
JAN 30 1995
GETT — EISE

Jan. 26, 1995

Dear Sir:

I'm writing in response to the Battlefield deer population question. My family and I would like to see the deer captured and transfered to another county in Pennsylvania. We are aware they would need to be moved far away to prevent return, so I would suggest that the Pa. Game Commission be involved in this process. I'm certain between the National Park Service and the Pa. Game Commission there should be enough funds and manpower to complete this mission. My family and I are avid hunters but still have a great respect for wildlife and their rite to survive and reproduce.
We would not agree to shooting or sterilizing the deer or opening the Battlefield for any kind of hunting. Thank you

Sincerely,
The Heller Family
Ron, Cindy Tammy
Kurt & Bonya
Heller

RECEIVED
FEB - 9 1995
GETT — EISE

Superintendent,

I have visited the battlefield more times than I can count. It is so important to preserve the area as close to the way it was in 1863.

Please send me a copy of the report on the Deer problem. Feel free to include a bill for postage.

I very much want to help retain the fields as they are — please let me know what I can do.

Respectfully,
Robin Hemperly

Robin ~~Mc~~ Hemperly
15 N. Goodwill St.
Myerstown, PA 17067

140

January 25, 1995

RECEIVED
JAN 30 1995
GETT — EISE

Dr. John Latschar
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

RE: White-tailed Deer Reduction

Dear Dr. Latschar:

After reading a summary of the proposed reduction methodology for the white-tailed deer, I believe that relocation (Alternative 2A) would be the most humane approach. You are calling for a MASS execution. Why have you waited until hundreds of deer may lose their lives. There is no excuse, as far as I am concerned, to mass murder OR introduce chemicals into these innocent animals. My God - they come to the park, as you say, for safety. You also mention that, "the remaining woodlands are maintained in a natural state". Well, if they were really kept in a "natural" state, there would be NO human intervention. I believe that we should have respect for these animals and their right to be. Take them far away, deep into the mountains where they can be free to live and die - naturally.

Another option might be to let the deer stay where they are. Then the one million annual visitors could get a double lesson. They could see how man creates chaos when he tries to control his fellow human beings in war AND ALSO when he tries to control the nature around him.

I hope the deer don't have to die. They haven't done anything wrong - WE HAVE. When will we start to do what we know is right. When will we start to follow our hearts and STOP following our wallets.

Forever Trying,

Claire

Claire Hillary-Prins
4608 Upper Beckleysville Road
Hampstead, MD 21074

245

Here's a novel idea -

Gettysburg deer herd may be cut by 90%

Shootings, sterilization promised

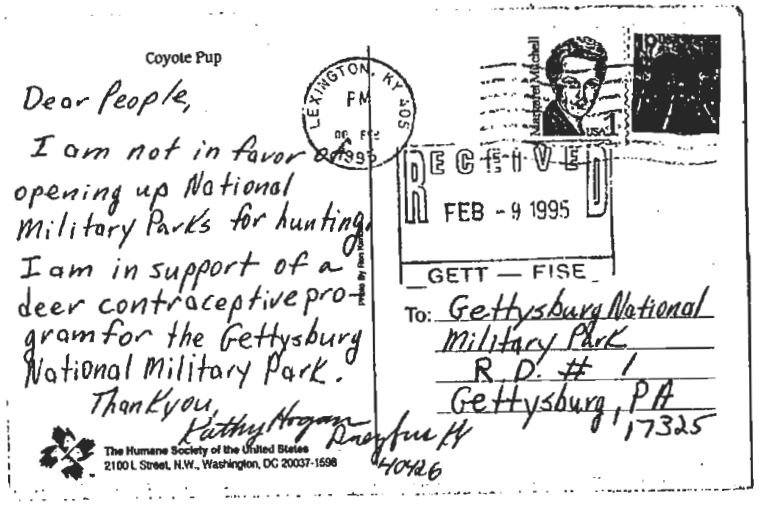
RECEIVED
JAN 11 1995
GETT — EISE

let's kill the living
to preserve the dead.

Ethnic cleansing.

Claire Hillary-Prins

1



Coyote Pup

Dear People,

I am not in favor of opening up National Military Parks for hunting. I am in support of a deer contraceptive program for the Gettysburg National Military Park.

Thank you,
Kathy Hogan Drayton SC 29434

The Humane Society of the United States
2100 L Street, N.W., Washington, DC 20037-1598

LEXINGTON, KY 405 FM DEC 1994

RECEIVED FEB - 9 1995 GETT — FISE

To: Gettysburg National Military Park
R.D. # 1
Gettysburg, PA 17325

RECEIVED JAN 13 1995 GETT — FISE

To whom it MAY CONCERN.

My FRIENDS AND I FEEL THAT A PROPER, AND VERY INEXSPENSIVE solution TO THE OVERPOPULATION OF THE WHITETAILED DEER IN THE NATIONAL military PARK OF GETTYSBURG. WOULD INVOLE THE Following.

THE PERMISSION OF 200 HUNDRED HUNTERS, "HUNTERS ARMED WITH BOW'S". PURCHISING A PERMIT OF TWENTY FIVE TO ONE HUNDRED DOLLARS, AND ALLOWING TWO DEER PER TAG. LIKE TWO DOE, OR TWO BUCK, OR A BUCK AND A DOE, WOULD KNOCK DOWN THE POPULATION DOWN CONCEDERLY.

WHILE IN THE PROCESS GIVING EXTRA FUNDS TOWARDS THE RESTORATION OF THE PREVIUS DAMAGE DONE BY THE DEER HERD.

WE BELIEVE ALSO THAT [redacted] RESIDENTS FROM YORK AND ADAM'S COUNTIES SHOULD ONLY BE ABLE TO PURCHASE A PERMIT SINCE WE ARE THE SURROUNDING CITISENS OF THE AREA!

WE FEEL THAT ANY OTHER WAY WOULD BE A WASTE OF MONEY AND TIME & good FOOD!

THANK YOU FOR YOUR TIME & CONCEDERATION

SINCERLY Craig S. Hoover 1/10/95

Craig S. Hoover

RECEIVED
FEB - 8 1995
GETT — EISE

2100 apostolic Sq D2
Phila., Pa. 19146
2-6-1994

Gettysburg National Military Park
P.O. Box 97
Jaunetown Road
Gettysburg Pa.

Dear Director:

I hope you are in good health and that things are well with the Park Service. Please consider my plan for management and reduction of the deer herd on the Park and adjoining Eisenhower Historic Site.

open the area to permit deer hunting with Bow and arrow and flintlock rifle in the first month of the year and second month if necessary.

allow flintlock rifle hunters two days per week and archers two days per week.

Require an entry pass selected by drawing. Those who get an entry pass must pass a proficency test with the bow or rifle they will use.

No visitors during this time should be permitted. However if a hunter needs help to get a deer out they can get help.

allow no first time deer hunters. We want a quick one shot kill.

No trophy hunting, hunters must take the first deer in good range tag and bleed the animal and get out with it.

also gut piles in park should be prohibited. Those wanting to clean out their deer should bring trash bags and carry out their guts. We want no complaints.

Hunters must come to the area for an orientation before the hunt. This way they will know where the safety Zones are and where they can hunt.

The fee for entry pass should defray all cost.

This is basicly what I have to offer. I hope this situation works out alright whatever you decide and that it will not be a burden to you and the other Park workers.

sincerely yours
Alvin Jackson

8780 Lodge Lane
Cottondale,Alabama 35453
March 17,1995

John Latschar
97 Tarryton Road
Gettysburg,Pennsylvania 17325

Dr. Latschar:

I am told that the park service is proposing to "harvest" - i.e.slaughter - the Gettysburg deer,because of their negative effect on the vegetation.

So,you would add to.and compound,the sense of a place that is held in honor - because of what? - because of the slaughter of men and animals that took place there,years ago.

I suggest,Dr.Latschar,that there should be no more killing at Gettysburg. If you cannot appreciate the esthetic beauty of live deer grazing peacefully over the graves of the dead,then those living creatures should be humanely removed,alive,to a place of sanctuary.

Yours truly,

Eleanor L. Jones

RECEIVED
MAR 20 1995
GETT — EISE

RECEIVED
DEC - 7 1994
GETT — EISE

12-05-94

JOHN LATSCHAR
SUPERINTENDENT
SHERMANS DALE, PA.

GETTYSBURG BATTLE FIELD BELONGS TO ALL PENNSYLVANIANS.
WHAT I WOULD LIKE TO SEE TO BE FAIR TO PA. HUNTERS.
#1- HUNTERS APPLICATION WOULD BE ON A LOTTERY BASIS.
#2- HAVE A DEADLINE FOR APPLICATIONS.
#3- HAVE A VALID PA. HUNTING LICENSE.
#4- CHARGE A FEE OF $5.00 TO HAVE YOUR APPLICATION ENTERED.
#6- ALL APPLICATIONS MAILED IN A STANDARD ENVELOPE 3 7/8 x 6 1/2"
#6- NO RETURN ADDRESS ON OUTSIDE OF ENVELOPE.
#7- NAME, RETURN ADDRESS AND PHONE # INSIDE.
#8- THE NUMBER OF HUNTERS FOR A SPECIFIED DATE WOULD BE DRAWN FROM LOTTERY AND NOTIFIED 1 WEEK IN ADVANCE.
#9- IF YOU ARE LUCKY ENOUGH TO B DRAWN YOU HUNT ACCORDING TO PA & PARK REGULATIONS.
#10- IF YOU DONT GET DRAWN THE MOST YOU LOOSE IS $5.00
#11- NO REFUNDS.
#12- MAKE CHECK PAYABLE TO GETTYSBURG MILITARY PARK
#12-A- ALL EXTRA MONEY FROM NAMES NOT DRAWN WILL GO GETTYSBURG MILITARY PARK ACCOUNT.

P.S. ALL DEER TAKEN WOULD BE DONATED TO FOOD BANKS TO FEED THE HUNGER.

THANK YOU.
ROBERT E. JONES
R.R.#1 BOX 12
SHERMANS DALE, PA 17090

PHONE (717) 582-2557

RECEIVED
FEB - 6 1995
GETT — EISE

January 27 1995

Dear Sir

We, the undersigned, wish to state our position on the so-called "Deer problem" in Gettysburg Military Park. We reside in Bonneauville and have as much interest in preserving the park as anyone. Rarely a day goes by that we don't wander through contemplating the awesome events that occurred there.

We are mindful of the problem but we believe it would be unconscionable to massacre, by any methods, innocent creatures simply because they are there -- particularly since these creatures, by our own actions, have become semi-domesticated. We do not want to see any more innocent blood shed in this hallowed ground and, therefore, strongly advocate sterilization as the most humane method of control.

Sincerely,
Kathryn A. Jones
Leona T. Pellegrino
Dorothy H. Cornelius

P.S. It was my understanding that the herd would be reduced by attrition if the sterilization method is used. Is this correct?

JAN 27 95

Dear Park Superintendant,

I think the park should allow hunters to go in and shoot the deer. People could eat the deer meat just specify only hunters that are going to eat the meat are allowed to go & shoot the deer.

It would cost too much money if you used birth control or moved the deer. Hunting would be almost cost free except an ad to run to notify hunters. Muddy Run has a deer shoot that keeps down their deer population.

If people don't want all the noise it could be archers only.

We eat Deer meat & it is better for you than beef. My husband would register to hunt there. Thank-you for taking the time to ask for your input.

Sincerely

Mary Jane Kline
32 N Church St
Quarryville PA 17566
717-786-4041

I got your address from ch. 8 news.

JANUARY 10TH, 1995

DR. JOHN LATSCHAR, SUPERINTENDENT
GETTYSBURG NATIONAL MILITARY PARK
R.D. #1
GETTYSBURG, PA 17325

RECEIVED
JAN 17 1995
GETT — EISE

DEAR SIR,

I AM WRITING IN REGARD TO THE PROPOSED WHITETAILED DEER MANAGEMENT PLAN FOR THE BATTLEFIELD. I HAVE BEEN A RESIDENT MY ENTIRE LIFE. I HAVE SEEN MANY DEER KILLED BY VEHICLES AND LEFT GO TO WASTE. I SUBMIT THE FOLLOWING OPINIONS BASED UPON KNOWLEDGE OBTAINED THRUGH READING ABOUT SIMILAR PROBLEMS AT OTHER PLACES (YOUR PROBLEM IS NOT UNIQUE; OTHERS HAVE DONE THESE SAME STUDIES. IF YOU WANT FACTS, I CAN GET THEM FOR YOU); A LIFETIME SPENT STUDYING DEER AS A HOBBY; AND GOOD OLD COMMON SENSE.

(1) CAPTURE AND TRANSPER - VERY EXPENSIVE AND DOESN'T WORK. ± 80% OF DEER DIE WITHIN FIRST YEAR. WHAT PREVENTS RE-POPULATION?

(2) REPRODUCTION INTERVENTION - VERY EXPENSIVE AND DOESN'T WORK. CONTRACEPTIVES THROUGH BAITING, SURGICAL IMPLANTATION AND/OR INJECTION WOULD BE IMPOSSIBLE TO PERFORM ON THE MAJORITY OF THE HERD TO BE EFFECTIVE (NOT TO MENTION COSTS). STERILIZATION HAS NOT BEEN PROVEN TO BE EFFECTIVE NOR HAS IT BEEN PROPERLY TESTED. STERILIZATION DRUGS REQUIRE MULTIPLE APPLICATIONS, WHICH IS IMPOSSIBLE TO DO TO WILD ANIMALS. THERE ARE ALSO TOO MANY UNKNOWNS - WOULD (TREATED) DEER MEAT BE SUITABLE FOR HUMAN CONSUMPTION? HOW WOULD IT AFFECT DEER THAT COME AND GO, IN AND OUT OF THE PARK FROM OUTSIDE HERDS, WHERE THOSE DEER CAN BE HARVESTED LEGALLY? DOES IT AFFECT THEIR MEAT?

(3) DO NOTHING AT ALL - WHY WAS TAX MONEY SPENT ON STUDIES, HEARINGS, ETC. IF SOMETHING ISN'T DONE? THE PROBLEM WON'T GO AWAY.

(4) INCREASED HUNTING PRESSURE OUTSIDE PARK - HOW CAN THIS BE DONE ON POSTED, PRIVATE PROPERTY WITHOUT THE GOVERNMENT SPENDING MONEY?

(5) SHOOTING DEER WITH PARK PERSONNEL OR AUTHORIZED AGENTS IN DESIGNATED AREAS - IF GOOD ENOUGH FOR THOSE INDIVIDUALS, WHY NOT OPEN IT TO PRE-QUALIFIED HUNTERS AND CHARGE MONEY? HUNTERS HAVE ALWAYS PAID FOR CONSERVATION. REDUCING THE NUMBERS ENSURES A HEALTH HERD THAT WILL BE ABLE TO SUSTAIN. PRE-QUALIFICATION OF HUNTERS PRECLUDES THOSE SLOBS WHO SHOULDN'T EVEN HAVE A HUNTING LICENSE. CHARGING FEES HELPS OFFSET ANY COSTS INCURRED, AND IF THE PROGRAM IS PROPERLY IMPLEMENTED, THE TAXPAYERS WON'T EVEN NEED TO FOOT ANY OF THE FUNDING; THE PROGRAM CAN BE COMPLETELY SELF-SUPPORTING. DONATING THE MEAT TO FEED THE HUNGRY SHOULD BE MANDATORY.

WHY WASN'T OPEN HUNTING EVEN CONSIDERED AS AN ALTERNATIVE? IF IT TAKES AN 'ACT OF CONGRESS', LET'S GET THE WHEELS TURNING. OTHER MILITARY INSTALLATIONS (LETTERKENNY) ALLOW HUNTING. WHY COULDN'T PORTIONS OF THE BATTLEFIELD BE OPENED, ESPECIALLY TO BOWHUNTING. SUBURBAN AREAS OF PENNSYLVANIA HAVE RECENTLY IMPLEMENTED SUCCESSFUL PROGRAMS (I CAN OBTAIN ARTICLES AND VIDEOS IF YOU'RE INTERESTED.)

WHY NOT ASK WILDLIFE MANAGERS AND BIOLOGISTS WHAT THEY RECOMMEND? WHY NOT ASK LOCAL RESIDENTS IN DOOR-TO-DOOR OR QUESTIONNAIRE SURVEYS? PEOPLE DON'T HAVE TIME TO ATTEND OVERCROWDED MEETINGS AND NOT BE HEARD. INSTEAD OF ANOTHER GOVERNMENTAL AGENCY SPENDING TAX MONEY FOOLISHLY, WHY NOT IMPLEMENT A SELF-SUPPORTING PROGRAM TO SOLVE THE PROBLEM? REDUCE THE DEER HERD TO 200-300 AND YOU WON'T HAVE A PROBLEM. THE PARK SERVICE HAS BEEN BUYING PROPERTIES AGAIN OVER THE PAST FEW YEARS. TOURISTS HAVEN'T LAID CLAIM TO THESE YET. WHY NOT PUT OUT BAIT STATIONS, CHARGE HUNTERS $20 FOR ANTERLESS DEER, $50 FOR ANTLERED DEER, SHOOT DEER, AND FEED THE HUNGRY (OR ANYONE WHO SIGNS A WAITING LIST)? YOU HAVE A NATURALLY RENEWABLE MEAT SUPPLY AND AREN'T EVEN CONSIDERING USING IT? HOW WASTEFUL CAN THE AMERICAN GOVERNMENT GET? IF YOU NEED HELP, PUT THE WORD OUT AND YOU'LL BE SWAMPED WITH SPORTSMEN GROUPS VOLUNTEERING. EMPLOY THE UNEMPLOYED AND WELFARE RECIPIENTS. SET UP PORTABLE MEAT PROCESSING PLANTS ON BATTLEFIELD PROPERTY WITH RESTRICTED ACCESS. THAT'S AN EFFORT TO NOT OFFEND ANIMAL RIGHTS ACTIVISTS. I, FOR ONE, AM TIRED OF BEING DICTATED TO BY SPECIAL INTEREST GROUPS WHO DON'T CONTRIBUTE OR REPRESENT HOW THE MAJORITY OF AMERICANS FEEL.

IF YOU ARE SINCERE IN OBTAINING PUBLIC IMPUT, BRING THIS MATTER UP ON A NATIONAL VOTING BALLOT AT ELECTION TIME; BUT REMEMBER, THIS HAS NOTHING TO DO WITH THE WELFARE OF THE DEER HERDS ON ANY OF AMERICA'S BATTLEFIELDS. THIS IS PUBLIC OPINIONS. FOLLOW THE ADVICE OF YOUR PAID WILDLIFE MANAGERS AND BIOLOGISTS. I'M SURE THEY'LL TELL YOU REDUCTION OF THE HERD BY HUNTING METHODS IS THE ONLY VIABLE SOLUTION TO THIS PROBLEM. BESIDES, I DON'T LIKE TO SEE VERY PALATABLE MEAT WASTED; I HAVE A REAL PROBLEM WITH THAT.

IF YOU HAVE QUESTIONS OR COMMENTS, PLEASE CALL ME AFTER 5:30 PM AT 717-642-8236.

SINCERELY CONCERNED
ABOUT THE HEALTH OF
ALL DEER HERDS,

Michael K. Kennedy

MICHAEL K. KENNEDY
1025 WAYNESBORO PIKE
FAIRFIELD, PA 17320

Jan 26/95

Controlled hunt & meat
given to food banks
seems a sensible solution.

RECEIVED
JAN 27 1995
GETT — EISE

Rhoda Kingston.
Emigsville PA.

From: Arthur Kennell
2332 Bullfrog Rd.
Fairfield, Pa. 17320

January 2, 1995

RECEIVED
JAN - 4 1995
GETT — EISE

To:
Dr. John Latschar, Supt.
Gettysburg National Park
Gettysburg, Pa. 17325

Dear Dr. Latschar:

I am writing this letter concerning an article that appeared in the Gettysburg Times, Nov. 29th, 1994 about the tri-fold plan to control the deer population.

First, my background. I am an avid bird watcher and belong to the National Audubon Society, American Bird Assoc. and a consultant for American Birds which am called about birding in the area when people visit this area. In 1986 thru 1989 my wife and I did the atlasing for all of Adams County for the Pennsylvania Breeding Atlas. I also do volunteer work for the Cornell Lab. of Ornithology for migratory birds in danger or threatened.

My concern is the habitat, which we have or do not have in the Gettysburg National Park. The over abundant number of deer we have here have devastated the balance of nature here. In the 19 forties when other people did bird surveys, the park was one of the best birding places in the county because of the natural habitats and the quiet or the natural care of the maintenance of the park.

Alot of visitors who come here are disappointed when they can look through a woods and see nothing but tall trees and no underbrush. When I am called about birding in the park, I tell them about the conditions and they are astonished by the conditions that exist today.

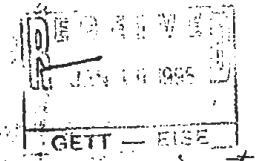
It will take years to provide any habitat for alot of birds which do not have a chance for survival because of the increase in building and more people moving into the area. The park should be restored where it could provide natural habitats and provide the people to see birds and other creatures that were here during the battle. So, the deer should be removed and I hope that the problem can be solved.

More on my background. I was employed by the Gettysburg Country Club for twenty three years as golf course superintendent and caddied for the late President Eisenhower. I have been told that I spent more time on the golf course with "Ike" than anyone. I played golf with him after he was out of office and when the putting green was restored after Mrs. Eisenhower passed on, I rebuilt the green. I hunted on the farm when "Ike" was living and he often told me how he hated to see the deer feeding on his alfalfa fields. I am sure if he were living today, something would be done about this situation.

Anyhow, these are some of my ideas and would like to meet you concerning some of my concerns. I know you are busy but maybe at your convenience some time we could discuss some of the birding matters etc. Thank you for your time.

Respectfully,

Arthur Kennell



Ickesburg, PA
Box # 93
RD#1 17037

Gettysburg National Park
RD# Gettysburg PA 17325

Dear Dr. Latschar!

In response to the Patriot News article on Dec 4, 1994, entitled "Deer hunt would cut battlefield herd", I can understand the farmers dilemma, but I am appalled at the preferred alternative plan that would reduce the population by shooting deer in the park. Even worse, deer would be shot during the day and night from Oct through April.

During the hunting season of '94' there were days when I preferred to carry a flourescent type lantern after sunset in order to take my dog for a walk. I felt that I faced serious hazards by living near the Tuscarora Mt and listening to the fusillade blasts of rifles from early dawn to dusk, but I was confident that this too would come to pass as darkness descended. It is disquieting to think that this aspect of safety as well as an undisturbed period would be abandoned in favor of overkill.

According to some hunters, deer are scarce in other areas of the state where there is a considerable amount of hunter access. Transporting these animals to other locations would not only be in the economic interests of farmers but would improve the image of the "sport". Ironically, dedication to humanity has always been one of America's assets. Input regarding this plan, so far, has been mostly negative. I conclude that blitzing the white tails could be considered a brutal act of disrespect and incivility toward PA's most beautiful and harmless creatures, since America started here (Phila) why not be model Americans.

Sincerely,
Thelma Kleckner

12245 Crewe Street
North Hollywood, CA 91605

March 16, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Tareyton Road
Gettysburg, PA 17325

Dear Dr. Latschar:

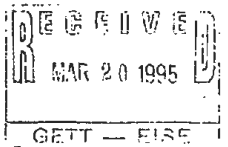
We are writing to ask that you stop the plan to "harvest" the deer at the park. We feel certain that were he alive, Abraham Lincoln would prefer that the deer be spared.

Please save these gentle creatures from being killed.

Very truly yours,

Mr. & Mrs. Milton Knopoff

Mr. & Mrs. Milton Knopoff



RECEIVED
FEB 13 1995
GETT

Dear Superintendent of Gettysburg
National Parks,

Hunting and fishing are the sports of my life.

To hear about the idea of birth control for the deer population on the Gettysburg lands is outrageous. If the doe are injected with this birth control they may travel to other areas and not be able to breed. Therefore, those areas will lessen to a great degree in deer population soon enough. Also, this form of control may lead to ill traits in the deer or deformed fawns. In addition, I find it difficult to believe that the human race would go so far to interfere with nature for their own benefit. Another means of control is needed.

Since this news has come about, I have formed an idea. Allow hunting on the land. One day for archery, one for rifle and doe, and another day for muzzle loader for doe only. Furthermore, trappers should be able to be on the land too. The hunters of our country truely respect their rights and I'm sure they would take care to not leave behind noise, litter, and whatever else of pollutants. Along with these ideas, I'd refer the idea of regulated permit hunting to insure no pollution.

Recently, on the news I heard that ideas and opinions where requested on the subject of the deer population on the Gettysburg National Parks. My freedom to share my ideas, sugestions, and strong feelings on the issue are being sent to you to hope that something else will be concluded, instead of the birth control idea.

Sincerely,

Mr. Vincent J. Knapp Jr.

2/8/95

154

Dear John Latscher,

I think you should not kill the deer because they have a living and they deserve to live.

RECEIVED
FEB -7 1995
GETT — EISE

sincery
Susan Lemmers

155

RECEIVED
JAN 26 1995
GETT — EISE

1541 N. Ryker's Ridge Rd.
Madison, IN 47250
January 21, 1995

Superintendent John Latschar
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

As President of the Jefferson County Civil War Round Table and as the natural resource manager at U.S. Army Jefferson Proving Ground, I am interested in obtaining a copy of the Draft EIS: Whitetail Deer Management Plan. Having managed a deer hunting program for 12 years, I am acutely aware of the impact caused by growing populations of deer and the emotions generated when hunting is being discussed. Indiana has experienced similar controversy in conducting management hunts in our state parks.

My comments will additionally be submitted to the board of The Friends of the National Parks at Gettysburg which I hope will have influence on their position. Thank you for sending a copy.

Sincerely,

Ken Knouf

Kenneth G. Knouf

RECEIVED
JAN 24 1995
GETT — EISE

2296 Bullfrog Rd.
Fairfield, PA 17320
January 23, 1995

Dr. John Latschar
Superintendent
Gettysburg National Military Park
Gettysburg, PA 17325

Dear Superintendent Latschar:

I am writing to you to express my views regarding the Battlefield deer situation.

It appears to me that the Battlefield deer herd is naturally depleting itself. At a meeting at the Cyclorama in 1988, a member of the deer study group estimated the deer herd at 1200. Now it is estimated at 850 (Gettysburg Times, November 29, 1994). This appears to be an encouraging trend.

It would be my hope that the deer herd could be controlled by some manner other than hunting. I believe that allowing hunting on the Battlefield would present a serious safety problem to Adams County residents, as well as tourists. I also believe that it is not a good "image" for National Park Service personnel to be involved in the slaughter of animals on Park Service land -- particularly animals that have been protected and made to feel safe for years on this same land.

I am enclosing a copy of an article from a recent issue of the magazine published by the Humane Society of the United States (HSUS News, Winter 1995, Vol. 40, No. 1). This article deals with the successful use of immunocontraceptive vaccine in free-ranging white tail deer on the Fire Island National Seashore in New York. It would be my hope that this type of action could be taken on the Gettysburg National Military Park rather than resorting to any type of hunting on National Park Service land.

Thank you for considering my views.

Sincerely yours,
Sara M. Laser

Sara M. Laser
2296 Bullfrog Road
Fairfield, PA 17320

RECEIVED
FEB - 1 995
GETT — FISE

PENNSYLVANIA DEER ASSOCIATION, INC.

Jan. 28, 1995

Dr. Latschar;

Having just read the summary of the environmental impact statement on the white-tailed deer management plan at the Gettysburg National Military Park and the Eisenhower Historic Site, I am writing to express my personal opinion and my opinion as 1st. Vice-President of the Pa. Deer Assoc.

The problem of over population of deer at both of these sites has been ignored for too long. Therefore somewhat drastic measures need to be implimented as soon as possible. I see no viable alternative except Alternative 2-B. Deer numbers must be reduced and maintained at suitable levels as soon as possible. Continued population control should then be carried out through the use of controlled hunting , (archery, shotgun, etc.) within the park. Also the raising of crops on or adjacent to the park areas should be discouraged as this leads to supporting a large deer population by creating an artificial food supply.

I wish you the best of luck in resolving this problem.

Sincerely;

William R Lingafelt

William R. Lingafelt
195 Pt. View Lane
Lilly, Pa. 15938

FOUNDED TO PROMOTE THE WISE MANAGEMENT OF OUR DEER RESOURCE FOR THE BENEFIT OF DEER, PEOPLE, AND THE LAND THEY BOTH SHARE

RECEIVED
JAN - 9 1995
GETT — FISE

AlliedSignal
AEROSPACE

01-02-95

Mr Barry Walze
1908 8th Ave
Manchester, NJ 08757-2945

Dr. John Latschar Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, Pa. 17325

Dear Sir,

After reviewing the White-tailed deer management plan, I would like to place my vote with this letter for alternative 2B.

I would gladly submit my services at no cost to anyone knowing the fee would be donated for a worthy cause.

I agree with the choice of high powered rifles, but if at all possible the use of flash powder civil war muskets would add to the historic significance of the area.

Respectively,
Barry Walze

P.O. Box 74
Arendtsville, Pa. 17303
February 10, 1995

Mr. John Latschar
Gettysburg National Military Park
P.O.
Gettysburg, Pa. 17325
Dear Sir:

In regard to the over-population of deer in the Battlefield, we would like to state that the deer are an enjoyment of the area. It is very peaceful to be able to drive slowly and see the deer grazing or running through the fields.

On the other hand, I do not, or my husband, find much enjoyment in seeing the "visitors" getting on or breaking off heads, guns etc. from the Monuments, running their dogs, having picnics wherever they happen to feel like it and in general not being very Considerate for the Hallowed Ground. I find the people more of a detriment than the deer.

This area is notorious for not caring about animals ie - shooting pigeons, doves, Cats - shooting cows with bows & arrows or having your picture in the paper because you shot a "Many pointed buck." Hogwash!

Do you think the deer were not in the park at the time of the Civil War? They were here before.

Whenever we have visitors, we take them on a tour of the Battlefield and the deer are always enjoyed.

Let us keep it that way.

Very truly yours,
Richard & Phyllis Leahy

RECEIVED
MAR 22 1995
GETT — EISE

March 14,

To whom it may Concern,

This letter is in regards to the problem of deer population. I think deer are beautiful animals that are very gentle and calm. The overpopulation is a problem that needs to be taken care of but I believe deer should be helped and saved.

First, I think there should be more fencing put up along turnpikes, especially in highly populated areas such as Strongsville. Whistles should be freely distributed to motorists to scare off deer from going in the street. This will eliminate collisions that are both dangerous to deer and motorists. They should have more parks that help deer and still have wandering privileges. I think that killing deer is a sportless inhuman and is a poor excuse to reduce overpopulation. I think carrying dead deer on your car should be stopped since it a terrible sight to see for children riding down the road. This is not the answer to overpopulation. Killing never is in any wild life.

Could you please forward any answers they have come up with.

Jenny Loar
7788 Oakview
Broadview Hgts, Ohio
44147

RECEIVED
DEC - 7 1994
GETT — EISE

6 Dec 94

Dear Dr. Satschar

I very much appreciate your concern for the deer population, the problems and hazards associated with it and how we, the public, feel towards your reduction plans. Please allow me to offer my comments.

I very much oppose distroying their lives and would implore you to use all resources possible to spare them. I am very much in favor of reproduction intervention and/or relocating them to other areas. I would gladly donate money to this cause or assist in fund raisers.

Thank you for your concern.

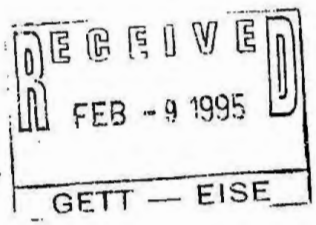
Jackie Boggs

2-6-95

About the growing deer population in Gettysburg Nat. Military Park!

We are against Sharp-shooters

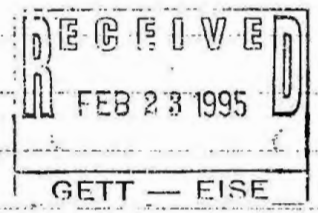
We favor opening the Park for hunting. Most true hunters eat their game.



To Whom it May Concern,

I am writing in response to which course of action should be taken to control the deer population at Gettysburg National Military Park. I feel that a deer contraceptive program is the best and most humane way to handle this problem.

Sincerely,
Vicki Maddix



RECEIVED
JAN 27 1995
GETT — EISE

January 26, 1995

Supervisor
Gettysburg National Park
Gettysburg, PA 17325

Supervisor,

In response of public feeling on the deer situation in the Gettysburg National Park, I am for keeping all the deer alive and in a safe environment.

I am in favor of two of the suggestions combined.

1. Sterilization of some of the deer
2. Transferring a majority of them to a safe and well provided for area.

Please do not destroy them, unless it is absolutly the only and last method to correct this problem.

Thank you for your attention.

Sincerely,

Janet M. Magee

Janet M. Magee
646 Fourth St.
Lancaster, PA 17603

RECEIVED
FEB 10 1995
GETT — EISE

ROBERT MALLETTE
96 BELMONT RD.
GETTYSBURG,PA.17325

DR.JOHN LATSCHAR;

I AM A RESIDENT OF ADAMS COUNTY,CUMBERLAND TOWNSHIP AND I AM WRITTING TO TELL THAT I AM ALSO OPPOSED TO ANY KIND OF BIRTH CONTROL FOR OUR DEER POPULATION.WE DO NOT KNOW WHAT WILL SHOW UP YEARS DOWN THE ROAD AND THERE ARE TO MANY PEOPLE IN THE WORLD THAT ARE HUNGRY AND COULD USE THAT MEAT.IF THERE ARE TO MANY DEER ON THE BATTLEFIELD THEN I FEEL THEY SHOULD BE KILLED BY HUNTERS IF POSSIBLE AND THE MEAT PUT INTO THE FOOD BANK.

I WOULD ALSO LIKE TO ADDRESS THE LAND ALONG THE MUMMASBURG RD.THAT WAS RELANDSCAPED AND THE TRACK MOVED FOR THE GETTYSBURG COLLEGE.I FEEL IT SHOULD BE LEFT THE WAY IT IS RIGHT NOW AND NO MORE MONEY SPENT TO CHANGE IT BACK THE WAY IT WAS.IF ANYTHING PUT A LARGE FRAMED PICTURE AT AN APPROPRIATE PLACE SHOWING THE LAND AS IT LOOKED DURING THE CIVIL WAR AND LEAVE THE LAND THE WAY IT IS NOW.THANK YOU VERY MUCH FOR YOUR CONSIDERATION.

Robert Mallette

ROBERT MALLETTE

Feb. 11, 1995

Katie,

my vote to bring the deer population down in Gettysburg Military Park is to 1. Controlled shoot and give meat to needed places.
2 Extented hunting

I love wildlife & I don't like to see them get hit on the road or starve. God put the deer here for food for man as well as for their beauty.

Frances F. Martin
11 Harden Court, apt. 2
Lancaster, Pa.
17602

RECEIVED
FEB 15 1995
GETT — EISE

2/6/95

To whom it may concern,

Regarding the subject of killing the deer over at the Gettysburg national park; I'm very much opposed to it. I enjoy going for walks over at the parks and being able to see the deer is a thrill for me. They're so beautiful.

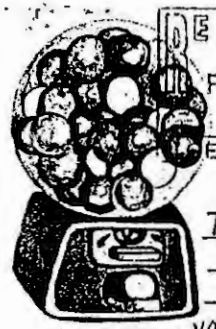
I read in The Civil War News, that if they are going to be killed it would "involve killing hundreds of deer in baited areas of the battlefield." In my opinion, how unfair luring them in, then taking their life away from them.

To make it short and sweet — if you're counting votes on whether people are for it or against it — my vote is: I'm against Killing the deer.

Thank you for reading this.

Charlene McNeillie
791 Crains Gap Road
Carlisle, PA 17013

RECEIVED
FEB -8 1995
ETT — EISE



Tasha

To whom it may concern,

I'm not thrilled with your idea of killing deer. They don't deserve to be killed. What did they do to you? The deer are the best thing about the whole park! The deer are the only reason I come there! Gettysburg is the only place where I can get really close to the deer without scaring them! There's probably less deer there than you think!!! I think that by the year 1998 which is 3 years from now, the deer will be endangered!!! It is so rare to



Tasha

see a deer to me. At Gettysburg, however, well that's about the only place I see a deer!

If you do kill them I ~~guarantee~~ guarantee you'll regret it, big time!!! I'll bet that the deer are the second largest attraction in Gettysburg besides the importance of the battle! Your idea stinks!!!

Sincerely,

Tasha
McNeillie
Age 9 1/2

James P. McGuigan
218 Georgetown Circle
Hanover, Pa 17331
(717) 630-8574

December 6, 1994

Editor
Letters To The Editor
The Evening Sun
135 Baltimore Street
Hanover, PA 17331

Dear Editor:

I would like to address the deer problem at the Gettysburg National Military Park that was reported in the Evening Sun ("*NPS prefers three-pronged attack on deer herd*") on November 30th. It was reported that the NPS have offered 6 proposals, I have a 7th. Why not hold a lottery among holders of current hunting licenses? Require those hunters whose application was selected in the lottery to pay a nominal fee, say $20.00 dollars to hunt that day only. Limit the hunt to bows only to protect the monuments on the park and more importantly, any nearby residences. This type of hunt has been proven effective in Bucks County, Pennsylvania at Tyler Park. There are no negatives to this plan. There are no costs involved to burden either the NPS or taxpayers, it in fact generates revenue. This is something that none of the existing 6 plans can claim. Deer relocation costs money. Sterilization of deer costs money. These two facts are what led the people at Tyler Park to consider a public hunt. The article also stated that "Alternative 2" and "Alternative 5" would allow "*NPS personnel or authorized agents*" to shoot deer inside the park. If "NPS personnel or authorized agents" are considered capable to do this, why not the licensed hunters of Pennsylvania who support wildlife conservation every year through license and equipment purchases? It is obvious that we, as licensed hunters, have been left out of the equation despite our yearly commitment to Pennsylvania's wildlife.

Sincerely,

James P. McGuigan

Cc: Dr. John Latschar, Superintendent, Gettysburg National Military Park

James P. McGuigan
218 Georgetown Circle
Hanover, Pa 17331
(717) 630-8574

RECEIVED
DEC - 9 1994
GETT — FISE

December 6, 1994

Dr. John Latschar
Superintendent
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

Enclosed please find a copy of a letter I sent to Hanover's Evening Sun newspaper regarding the proposals for thinning the white-tail deer herd on the Gettysburg Military Park. I would appreciate it if you would take my opinions into consideration as I don't anticipate being present at the public hearing in Gettysburg on January 7th.

Sincerely,

James P. McGuigan

J.P.Mc.
Attachments

26 JAN 95

SUBJECT: DEER OVERPOPULATION AT GET. NAT. PARK

TO: SUPERINTENDANT - GETTYS. NAT. MILITARY PARK.

FROM: ANDREW J. MULBERIN
RR #2 BOX 118
SEVEN VALLEYS, PA
17360-9621

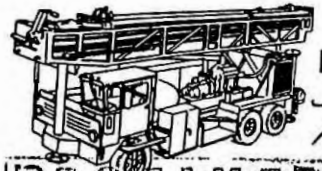
RECEIVED
JAN 30 1995

GETT

I THINK THERE SHOULD BE A CONTROLLED HUNT WITH MEAT DONATED TO NEEDY AGENCY'S OR WHO YOU SEE FIT.

RESPECTFULLY,
Andrew Mulberin

P.S. I WOULD VOLUNTEER TO HELP IN ANY CAPACITY.



~~R.E. JACKSON WELL DRILLING~~

To Whom it concern! —

RECEIVED
JAN 31 1995

GETT

We just feel that you folks sedate the deer and transport the deer to a forest close-by. At least they have a little chance before they are killed. We have deer here near our house which we enjoy. We are not hunters in this neighborhood as useless killing are not appreciated by us.

2 votes

[redacted]

Deer survey

RECEIVED
FEB -7 1995
GETT — EISE

February 5,1995

Dear Dr. John Latschar,

A friend of mine called to inform me about the deer problem at the battle field at Gettysburg. I'd like to make a positive suggestion.

It only seems fitting to me as a sportsman, and military minded person, the park is an ideal place for our disabled vets to have the hunt of their lives. The park with its many access roads and vantage points would be an ideal place to honor our vets and solve the over population of the deer herd in a controlled hunt. It could be an extra drawing, and a different date (warmer weather) to make it as comfortable as possible for our vets.

I, as a sportsman would gladly give up any day to lend a hand to help our vets, they have done so very much for us all. It seems only fitting and proper to show respect to our disabled vets. What better place could be found to help solve two very touchy issues than Gettysburg? I would also suggest that it would be limited to shotgun slugs only, this is much safer for people who would gladly drive the deer to the ready hunters.

Sincerely,
H. William Moyer

H. William Moyer
748 Mohns Hill Rd.
Reading, Pa. 19608

RECEIVED
JAN 12 1995
GETT — EISE

George D. Murry
28 Knollwood Lane
Hanover, Pa. 17331-8507

9 January, 1995

Superintendent
Gettysburg National Military Park
RD 1
Gettysburg, PA 17325

Dear Superintendent:

I am writing concerning the culling of the deer population at the Gettysburg Military Park and the options that you may be considering.

Sir, as a Pennsylvania Sportsman and a Conservationist, I believe the best way to reduce the deer population and satisfy the most people, would be to allow a limited hunt on the park property. It would be an absolute waste just to go in and shoot the deer.

This license to hunt could be issued by a lottery which would limit the number of hunters on the property during any daily hunting period. By controlling the number of hunters you can then control the number of deer harvested.. Safety would also be under your control, by reducing the number of hunters you can assure that there would be no accidents. You can also direct where the hunting is to take place.

The hunt would be conducted for 1 week, and for safety reasons, would be limited to bow only. You might also consider closing the park for that week in order to assure safety to any visitors or sightseer's. If it is impossible to close the entire park, at least you could control traffic flow into the areas to be hunted.

Please give this your utmost consideration. The sportsman of Pennsylvania would be grateful for your attention.

Sincerely,
George D. Murry

Ephrata Manor
UCCH

1/26/95

Dear Sirs;

I favor a controlled hunt with muzzleloaders & archers taking part in such a hunt. I am a retired teacher and would be able to help in any program you decide, if you would so desire.

Please, let me know if I could be of any help!

With Respect,

John Musser
330 W Conestoga St.
New Holland, Pa.
17557

RECEIVED
JAN 27 1995
GETT — EISE

My suggestion -

Use outside hunting until herd size is down and then use either control shooting or sterilization + Conception to Control herd size. My son William is a sportsman + would be interested in outside hunting if that Choice is selected.

Thank you.

Helen J Myers

RECEIVED
FEB 13 1995

Dr. Gethin Eisenhauer

I realize That There is a deer problem on The Gellysburg National Military Park and Eisenhower National Historic Site. At This point, The Management objectives Cannot be met for These Two Areas.

No Action, Would only allow This Situation to get worse.

Trap + Tranfer, No, who would pay This bill, I hope Not The Tax payers, Also, Too many deer Die using This method.

Sterilization + Contraception, Again, Who would pay The bill.

Yes, I Do hunt Deer. I have been involed in Some Control hunts in The State of Maryland, and These All went well. Have an Application fee of $5.00. have This hunt for The Disabled, Elderly hunters and young hunters who are Just Starting This great Sport.

Have designated Stand Sites, I'm Sure you Could get Local Volunteer Sportsmen to be with The youths, Elderly and disabled hunters. This would Not Cost Taxpayer any money, In Fact, I'm Sure you Could make a small profit using This Method.

Whatever you choose, I hope it is done wisely and not foolishly Due to presure put on by Animal Rights Activist.

Please excuse The messy writing

Thanks for your time.

Ned A. Myers

Ned A. Myers
R.R #2 Box #2972
Glenville, PA
17329

RECEIVED
FEB 10 1995
GETT — EISE

February 06, 1995
125 Cashman Road
New Oxford, PA 17350

Superintendent
National Park Service
RD 1
Gettysburg, PA 17325

Dear Superintendent:

I would like to give my opinion on the deer problem on the battlefield. After reading the newspaper, listening to the T.V. and with much personal experience I have several suggestions that I would like you to think about.

First, I (we) are very much against the thought of having marksmen come in and destroy the herd. We are also against spending any federal or state tax dollars on this problem.

There are many other ways to deal with this, for example, there are hundreds of sportsmen who would give their left arm to be able to hunt just near the battlefield (not on it). I know for a fact there local, near-by farms that would allow sportsmen to shoot off the excess deer. Much corporation would be needed by the National Park Service.

My example would be to have the N.P.S. push the deer herds onto the joining farms either by vehicle or on foot. If this is not allowed to be done, I'm sure there are many local sportsmen groups such as; McSherrystown Fish and Game, East Berlin Fish and Game, and Adams County Fish and Game. These groups could drive the deer off the battlefield (without guns) so that hunters on the farms could legally bring the herd to the desired numbers.

Permits could be issued with a two or three deer limit and if the N.P.S. needs money, a reasonable fee could also be charged. I do know that Maryland State Parks have much of the same problem that hunting is not allowed in the State Parks, but they overcome the situations like this, depending on the number of deer that need to be killed.

Applications are mailed to the park, by a certain date with a five dollar fee, then a lottery drawing is held and 250 names are drawn and each is required to pay ten dollars for the permit, then two weeks before the hunt each drawn applicant must go to a designated range and a certain score must be obtained before they are eligible to hunt.

The hunt lasts two weeks or ten days with 25 hunters each day. They are put on stand and are able to shoot only in certain directions and may not leave the stand. The park police (D.E.R.) using four wheelers and on foot push the deer into the hunters. Each hunter is allowed three deer (which have no bearing on the state season limit). The hunt is done in late January or early February (low tourist time). For more information you can contact the Gunpowder State Park Baltimore, Maryland.

Last year 4000 applications were received for the hunt, this shows that there is plenty of interest. That is just one suggestion, I have plenty of others if you have not already made up your mind.

One other suggestion is that the PA Game Commission could have extended seasons for certain townships that are joining the park for doe only, but again the N.P.S. would have to work in conjunction with the hunters.

Thank you for your time! This I'm sure will control the deer, that is if we are willing to work together, but please do not send in sharp shooters and wipe out the herds with automatic weapons. There are so many other ways to have it done.

Sincerely,

Richard E. Myers

Richard E. Myers

Jan. 28, 1995

Please send me information on the deer population at the National Military Park at Gettysburg PA

Thank you.

RECEIVED
JAN 31 1995
GETT — EISE

S. J. Myers
324 Beverly Rd
Camp Hill, PA. 17011-2813

RECEIVED
FEB 14 1995
GETT — EISE

Feb. 11- 1995

Park Superintendent,

Informing you about Deer on the Battlefield. First about the Farmers the hunters ask to hunt and kill a deer on their Ground but they said no - And about the eating & Destroy the Crops Two yrs ago their Was a drout & they Didn't have any Crops for the deer to Destroy & the Government paid them for their Crops. So What are they Crying about & about the Deer on the Battlefield all they need to do is get Some of the hunters to help to load them deer up & take them to the big mountains of Potter County & Tioga County Where they Can roam & Breed. Their are men Who would help to do it instead of Killing them & putting them in a hole they Desire put here. For that reason.

Yours Truly

Roy E Myers

RECEIVED
FEB
GETT — EISE

DR. B. DEAN NARDIS II
OPTOMETRIST
3536 DERRY STREET
PAXTANG, PENNSYLVANIA 17111
(717) 564-8833

February 7, 1995

Dr. John Latschar
Superintendent,
Gettysburg National Military Park
R.D. 1
Gettysburg, PA 17325

Dear Dr. Latschar:

Concerning deer population reduction at Gettysburg. Please consider allowing a special draw, on access for Pennsylvania hunters. Even if you have to limit it to archery hunters. Any of the other methods listed in the Patriot, December 4, 1994 article, seem to be unconscionable.

Thank you and please inform me of your decision.

Yours truly,

Dean Nardis

Dr. B. Dean Nardis II
BDN; jt

3205 E. Market Street, Apt. N-3
York, PA 17402-2535

February 7, 1995

RECEIVED
FEB -8 1995
GETT — EISE

Mr. John Latschar
Superintendent
Gettysburg National Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Mr. Latschar:

As a Pennsylvania Taxpayer and Hunter in the Forests of Northern Pennsylvania, I am opposed to bringing in sharp shooters or the other so-called solutions such as sterilization and annihilation to reduce the Deer Herd on The Gettysburg Battlefield. I am for Trapping and Transferring them upstate to the Northern Counties where the deer herds are scarce, which is one of the points of the Environmental Impact Solutions Study.

As a hunter of the Pennsylvania Forests, since I was taught to hunt by my father when I was 14 years old, I am disgusted with the way The Game Commission is handling the deer situation in general. The building of homes in the deer habitats forces the animals out of their natural habitats and causes the deer to move closer to city areas. Modern man is slowly eliminating the animal kingdom, as he always has. Look at the Buffalo, if it wasn't for President Theodore Roosevelt they would be gone. We have forced these animals out of their homeland. Now it should be up to us to put them back in their natural habitat.

I would be willing to pay the $11.50 I pay for Doe License each year in York and Tioga Counties to stop the doe hunting in the Northern Counties where they are scarce for a period of at least 5 years. I support bow hunting in Counties to the South such as Berks, Schuylkill and Chester where the human population has taken over.

Some of our so-called "State Backed Hunting Groups" would shoot their neighbors livelihood if they thought they could get away with it. It is time to use common sense in hunting and conservation to understand that we don't hunt for the biggest rack, but for food.

I use to enjoy seeing herds of deer upstate in my younger years, but they are no longer there. Now I can sit in the mountains and only see as many as 3 deer in 5 days and who is to say these are not the same deer I had seen the day before.

Sincerely,

Ray A. Ness

Ray A. Ness

RECEIVED
DEC - 7 1994
GETT — EISE

12/4/94

Dear Dr. Latschar,

I am responding to today's article in The Patriot News about the deer population problem in Gettysburg. I, for one, am in favor of capturing the deer, and setting them free in other, more remote and less populated, areas.

While it is true that the deer are causing problems to an historical area, nearby farms, and auto traffic alike, we must remember that all forms of life must be treated with respect. ~~and~~ We must handle this issue with the utmost responsibility, and I feel that the baited killing of deer is not at all responsible. It is an easy out, as well as an all too quick solution. Once the precedence is set to kill annoying deer, the practice will spread to other areas of the state. We, as humans, take our ability to kill and be lord over the animals way too seriously. We need to constantly remind ourselves to practice non violent methods & means to solve our problems.

I hope you look seriously into this non violent option. If it becomes necessary to further decrease the population, then sterilization & birth control would be my second choice. You have the power to act in a humane way. Please use that power wisely.

Sincerely yours,

Catherine A. Nelson

2/9/95

Dear D.R. Letschar,

I am writing to you, to give you some ideas on the area of Hunting Deer on Gettysburg ~~counties~~ (GNM).

First of all I want you to know that I am a Law Enforcement Officer; Police Officer II Supervisor. I have been in Law Enforcement for twenty three years. I have also hunted in Letterkenny Army Depot for the past fifteen years, and I've also hunted on A.P. Hill Military base as well. Here are some ideas that may or may not help; but I have seen the implemented in other areas. I hope you can gain something from them. And I would be more than glad to Volunteer and assist you in any way possible. I have hunted deer for over thirty years. And I enjoy hunting and photoing deer. But I also have a very high respect and love for the Whitetail deer. Enclosed is my phone number in the event you would want to talk with me. (717) 532-8651 Home, work 532-1444, Shippensburg University Police Department.

Sincerely Concerned
Sgt. Robert S. Nickey

Sorry for the poor handwriting.

ROBERT S. NICKEY
1216 Kitner Hwy
Shippensburg, Pa.
17257

1. Establish a Season for Hunting, such as second archery season only on certain dates. (Ex. Dec 26 - Feb 11th, or Nov 15 - Dec 26.)

2. Have set hunting hours; also a registration date; (Ex. 0500 - 1200 hrs. or 1600 to Dark, or Both Times). Set hours and a check out time will probably cut down on the number of Applicants.

3. Have Archery hunting only. (This will prevent damage and accidents.)

4. No Tree stands permitted on Government Properties.

5. Establish set Registration fees; and waiver card. (Ex) $10. Reg. fee; $5.00 per deer permit; allow each hunter (Through drawing), obtain up to 2-3 permits. (Ex) (If you want less deer killed allow each applicant to apply for a doe or buck tag; and a drawing for any bonus tags if needed.)

6. Establish high concentrated areas where hunting will take place, and have marked restricted areas where hunting is not permitted.

7. Establish fines for the following:
a. hunters with firearms (Ex $100 - 500.-)
b. hunting in Restricted areas (Ex. $25.-) (Safety Zones etc.)
c. for mistake Kills - (Doe or Buck according to permit, Ex. $25.- and loss of deer.).
d. Time violations, after hours, before hours, or restricted hours. (Ex. $25.00), Exceptions: Trailing Injured Game only; Requirements - must be unarmed and must report the area in which you will be or accompanied by an official Employee.

D. E. failure to check in deer, Ex $100.00
F. failure to have harvest stamp on permit if transporting game (Ex $100.00).
G. Damage to property or monuments (Ex $100.00 + restitution.)
H. Parking Fines. —

When permits are sent to successful applicants, include a map of hunting areas and all regulations that are to be followed.

Establish check in points for harvested deer and a main area for daily registration and Parking.

Have set check out times and everyone must be back to the main registration point for check out. Failure to do so would mean loss of hunting privileges.

January 30, 1995

Dear Park Superintendent,

My husband and I want to applaud the Park Dept. for all the deer.

We would be on hand to help them when killed and the meat given to the poor. It could be given to food banks. Soup kitchens etc. Whatever.

The park is the beautiful it is destroyed by the deer. Thank you for considering this matter.

Sincerely,

Catherine Dereniuk

RECEIVED
FEB - 2 1995
GETT — FIRE

Gentlemen:
In regards to the Deer Herd at Gettysburg National Park and Dwight D. Eisenhower's farm, I would like to make the following comments.
Capture them & return them to areas in the Northern Counties of Penna. The Herd has dwindled downward in the Northern areas of Tioga Co. Thank You,
James Pagano

RECEIVED
DEC -7 1994
GETT — FISE

Lawrence Peiper
1641 Coon Rd.
Aspers, PA
677-4659

December 5, 1994

Dear Dr. Latschar,

This is my idea to control the deer population in the battlefield.

1. Reach a number of how many deer need to be harvested.
2. Decide a price on the tag. I suggest it should be $10.00.
3. Set up a drawing lottery style the same as the game commission.
4. Pick a place for the deer to taken and picked up.
5. Hire sharp shooters to harvest the deer:

   They will shoot the deer using safe practice.
   They will field dress the deer.
   They will drop the deer off at the pick up station.
   Their share of the tag should be $4.00.

6. Anyone that receives a tag will be able to call or be called to pick up their deer.
7. $6.00 will go to the park service to pay for printing, handling of tags, phone, and deer herd.

Sincerely,

Lawrence Peiper

Lawrence Peiper

RECEIVED
DEC - 5 1994
GETT -- FISE

Donald F. Peterson
1033 Johnson Drive
Lake Heritage
Gettysburg, Pa. 17325
December 12, 1994

To whom it may concern:

About the NPS deer population problem. Seems to me the NPS have been complaining about revenue; the NPS should take lessons from its neighbor Maryland; they have managed public hunting (LOTTEREY DRAWING) at several of their state parks. All lottery applications require a non-refundable five dollar application fee and successful applicants must pay a non-refundable ten dollar permit fee. See the attached.

Sincerely Yours,

D.F. Peterson

Donald F. Peterson

GUNPOWDER FALLS ST. PARK
815 HARFORD RD.
GLEN ARM, MD. 21057

MARYLAND DEPARTMENT OF NATURAL RESOURCES
STATE FOREST AND PARK SERVICE

410-592-2897

DEER HUNTING LOTTERY INFORMATION
GUNPOWDER FALLS STATE PARK, SWEET AIR AREA

The Maryland Department of Natural Resources will be conducting a managed hunt for white-tailed deer in the Sweet Air Area of Gunpowder Falls State Park, in response to a biological need to reduce the deer population in that area. Hunters will be selected by lottery. Please read the following information carefully before completing the enclosed application.

WHEN: Monday January 16 through Friday January 20, 1995
Hunting hours: 1/2 hour before sunrise to 1:00 p.m.

WHAT: SPECIES: White-tailed deer (antlerless)
BAG LIMIT: Three (3) deer per hunter, in addition to regular license limit.
WEAPONS: Shotgun (rifled slug) only. See Guide to Hunting and Trapping in Maryland 1994-1995 for specific guidelines.
OTHER REGULATIONS: All rules and regulations stated in the Guide to Hunting and Trapping in Maryland 1994-1995 will apply to all hunters. Other procedures specific to the Sweet Air Hunt may be imposed as necessary. All successful applicants will receive written notification of procedures prior to the hunt.

WHO: 40 hunters per day will be selected from the lottery.

Completing the lottery application:
APPLICATION DEADLINE: All applications must be received at Gunpowder Falls State Park Headquarters by Friday, November 11, 1994 at 4:00 p.m. Applications received after this time will not be considered.

LOTTERY DRAWING: Thursday, November 17, 1994 at 1:00 p.m. at Gunpowder Headquarters.

PLEASE NOTE:
* Each hunter may submit only one application.
* If you wish to apply as a hunting party, please staple applications together when submitting (limit 3 per party).
* Incomplete applications will not be considered.
* The lottery drawing is open to the public. Successful applicants will be notified by mail after the drawing.
* APPLICATION FEE: The $5.00 application fee to enter the lottery is non-refundable.
* PERMIT FEE: Successful applicants must pay a $10.00 permit fee. This fee is also non-refundable. PAYABLE TO DEPT. OF Natural Resources.

ALL HUNTERS WHOSE NAMES ARE DRAWN WILL BE NOTIFIED BY MAIL ON OR BEFORE DECEMBER 3, 1994. INFORMATION REGARDING RESULTS OF THE DRAWING WILL NOT BE GIVEN OVER THE PHONE.

MANDATORY SIGHT IN
17 DEC 94 9^00 AM
MD Army Nat. Guard Military Site
ON NOTCHCLIFF RD.

RECEIVED
FEB -6 1995
GETT — EISE

FEBRUARY 4, 1995

DEAR SUPERINTENDENT:

CONCERNING THE ISSUE OF TOO MANY DEER ON THE BATTLEFIELD I FAVOR A PUBLIC SPORTSMAN HUNT USING BOWS & MUZZLELOADERS. TAKE APPLICATIONS AND IN A LOTTERY DRAW THE NUMBER OF HUNTERS YOU FEEL WOULD BE SAFE, SELL THEM PERMITS, HOLD A DO'S & DON'TS MEETING PRIOR TO THE HUNT, AND LET SUCCESSFUL HUNTERS EITHER KEEP THE DEER OR DONATE TO CHARITY AT THEIR OPTION. IF THIS HUNT IS SUCCESSFUL, HOLD IT AS OFTEN AS NEEDED TO KEEP THE DEER HERD IN CHECK.

THANK YOU!

DONALD R. PETERS

DONALD R. PETERS
717-259-0174

32 Bentley Smt.
Lancaster, PA
17603

Dr. John Latschar, Supt
Gettysburg Natl PK
97 Taneytown Rd
Gettysburg, PA 17325

RECEIVED
JAN 10 1995
GETT — EISE

Dear Dr. Latscher:

After reading Jack Hubley's analysis in Lacaster's "Sunday Times" on Jan 8, 1995, I strongly urge you to implement a controlled hunt to reduce the excessive deer herd. The Park personnel should work with the Pa. Game Commission to insure the safety of all concerned and to minimize costs. In my opinion, these constraints can best be met with Pa. licensed hunters, not with sharp shooters on the federal payroll nor with contraceptive dart shooters.

At your convenience, please send to me the entire Environmental Impact statement (195 page report).

Thank you for your consideration.

Sincerely,
Roger A. Place
Jan 8, 1995

PAGE #1

JACK L. PETERS
356 LINGG RD
NEW OXFORD
PA 17350
624-2071

1/25/95

DR. JOHN LATSCHAR
GETTYSBURG NATIONAL MILITARY PARK
97 TANEYTOWN RD
GETTYSBURG PA. 17325

RECEIVED
FEB - 3 1995
GETT — EISE

DEAR SIR:

IF I MAY, I'LL START BY TELLING YOU A LITTLE ABOUT MYSELF. I WAS BORN IN ASPERS PA. IN 1949, RAISED IN, AND LIVE NOW IN ADAMS COUNTY. I AM AN AVID HUNTER, AND HAVE BEEN SINCE 1965 (30 YRS.). I LOVE THE OUTDOORS, AND HAVE A HUNTING LODGE IN CLINTON COUNTY PA, SINCE 1975, WHERE I WAS ELECTED ONE, DEER DEER HUNT COORDINATER, IN 1982. OUR CAMP MEMBERS, WHICH NUMBER 18, HAVE GREAT RESPECT FOR THE PA. GAME COMMISSION, ALSO NATURE AND OUR WILDLIFE RESOURCES. I HAVE, OVER THE YEARS COORDINATED 25 MEN AT A TIME, FOR MANY SUCCESSFUL HUNTS.

I OWN AND OPERATE AN AUTO, TRUCK CORROSION REPAIR FACILITY IN NEW OXFORD SINCE 1974.

I ATTENDED, AND APPRECIATED YOUR LAST MEETING IN NOV. AT THE GETTYSBURG SCHOOL. IT GAVE ME A BETTER UNDERSTANDING OF THE DIFFICULT POSITION THE PARK SERVICE IS IN CONCERNING THE OVERPOPULATION OF DEER ON THE BATTLEFIELD. AN INSIGHT OF HOW THIS COULD SHOULD BE IMPLEMENTED, AS WELL AS HOW TO, WITHIN REASON, KEEP EVERYONE CONCERNED, HAPPY. GIVING EVERYONE KNOWLEDGE OF THE PROBLEM AS WELL AS THE SOLUTIONS, (OR MY PART) WAS GREATLY APPRECIATED.

I WROTE AN EDITORIAL STATING MY THOUGHTS ON THIS SUBJECT (COPY ENCLOSED). I PRESENTED IT TO THE GETTYSBURG TIMES ON 1/27/95. IT MAY OR MAY NOT HAVE BEEN PRINTED BY THE TIME YOU RECEIVE THIS LETTER.

PAGE #2

I HAVE SOME THOUGHTS AND IDEAS THAT MAY OR MAY NOT BE OF HELP TO YOU IN CORRECTING THE COYOTE PROJECT. I APPRECIATE THE OPPORTUNITY YOU GIVE THE PUBLIC TO DO SO.

I BELIEVE THE DIRECT REDUCTION (SHOOTING, IF I MAY) IS THE BEST METHOD OF CONTROL. HOWEVER I DO NOT FEEL THAT A RIFLE SHOULD BE DISCHARGED ON THE BATTLEFIELD, EXCEPT FOR IN REENACTMENTS, WHERE LIVE AMMUNITION IS NOT USED. I HAVE NO PROBLEM WITH THE COYOTE TRAPS PLACED ON, OR AROUND THE BATTLEFIELD.

IF THE DECISION WAS MADE TO DRIVE THE DEER OFF THE BATTLEFIELD TO WAITING RIFLEMEN, IT WOULD APPEAR TO BE A VERY DANGEROUS MANEUVER FOR THE RIFLEMEN AS WELL AS THE DRIVERS, NO MATTER HOW THEY ARE PLACED. ON A TIGHT DRIVE, THIS IS TO SAY EACH DRIVER IS VERY CLOSE, 15 TO 20 YDS APART, DEPENDING ON THE COVER WITH THE STANDERS, (RIFLEMEN), COVERING ALL ESCAPE ROUTES FOR THE DEER. A DEER WILL NOT, IN MY EXPERIENCE, PUSH MUCH FARTHER THAN ABOUT 100 YDS TOTAL, GIVE OR TAKE, DEPENDING ON THE COVER AND WIND DIRECTION. WHITETAILS ARE VERY CUNNING AS YOU KNOW, AND WILL REACT TO EACH INDIVIDUAL CIRCUMSTANCE DIFFERENTLY. EACH DEER BECOMES MORE ON IT'S OWN WHEN PUSHED HARD. ALSO A BUCK WILL CUT FROM THE HERD, IF HE FEELS HE IS IN DANGER. DEER DO NOT HERD LIKE CATTLE, FOR LONG DISTANCES. ALTHOUGH SOME WOULD PUSH TO THE STANDERS, THE FACT THAT SOME WOULD GO BACK THROUGH BETWEEN THE DRIVERS, WOULD DEMONSTRATE A DANGEROUS SITUATION. NOT THAT THE DRIVERS WOULD BE HURT BY THE DEER, BUT NEAR THE DRIVES END, WHERE THIS WOULD HAPPEN MORE OFTEN (WHEN THE DRIVE IS WITHIN 50 TO 100 YDS OF THE STANDERS) DEPENDING AGAIN ON THE COVER, AND WIND DIRECTION.

THE DANGER WOULD COME, IF A RIFLEMEN SHOT AT A DEER, GONE BACK THROUGH THE DRIVE, AND THEY WILL DO THIS I KNOW. THE OTHER RANGER WOULD BE THE DEER BEING SHOT AT, GOING BETWEEN THE RIFLEMEN, CREATING A CROSS FIRE SITUATION. WITH ALL DUE RESPECT TO THE RIFLEMEN, IN A MOMENT OF EXCITEMENT, ANY THING CAN AND WILL HAPPEN.

THEREFORE I FEEL THAT DRIVING THE DEER OFF THE BATTLEFIELD, ALTHOUGH IT SOUNDS LIKE A GREAT IDEA, WOULD BE VERY DANGEROUS AND NOT VERY EFFECTIVE.

OF COURSE YOU KNOW THE ANIMAL ACTIVISTS ARE GOING TO CAUSE A STINK, NO MATTER HOW THIS CONTROL IS CONDUCTED,

AT SOME POINT YOU HAVE TO THROW DOWN YOUR HAT, AND PROCEED WITH WHATEVER NEED WORK, AND DEAL WITH THE ACTIVISTS AND PUBLIC AS THE OCCASION ARISES.

THE WAY I FEEL WOULD BE MOST EFFECTIVE, WOULD BE TO BAIT ON THE BATTLEFIELD AND ON THE IKE FARM. HAVE QUALIFIED ARCHERS, IN FULL CAMOUFLAGE, IN TREE STANDS. THIS CONTROL WOULD BE PERFORMED STARTING WITH THE ARCHERS BEING PLACED ABOUT 2 TO 3 HRS BEFORE SUNDOWN, DAILY EXCEPT ON SUNDAYS, THE STAND WOULD BE NEAR BUT NOT DIRECT OVER THE BAIT. EACH MAN WOULD BE SUPPLIED WITH 3 OR 4 TRASH BAGS. THE DEER WOULD BE FIELD DRESSED AS SOON AS POSSIBLE, AND THE ENTRAILS PUT IN THE TRASH BAGS IMMEDIATELY. THE DEER MUST NOT BE REMOVED FROM THE STAND, BAIT POSITION UNTIL AFTER PARK HRS, OR WHEN THE PARK IS CLOSED TO THE PUBLIC. THIS WOULD LIMIT CONFRONTATIONS WITH ACTIVISTS, OF COURSE AS IN GAME COMMISSION LAWS, NO SHOOTING AFTER SUNSET,

BRIEF YOUR PERSONNEL ON WHAT TO TELL A TOURIST IF THEY REPORT AN ARCHER SEEN, OR A DEER SEEN WOUNDED. HOPEFULLY THIS WOULD NOT HAPPEN. ALSO ARCHERS SHOULD BE BRIEFED ON WHAT TO DO AND SAY, IF THEY COME IN CONTACT WITH A TOURIST OR AN

ACTIVIST.

RANGERS COULD PATROL NEAR, BUT OUTSIDE OF COURSE, OF THE BAITED PERIMETER. THIS WOULD CURTAIL, ACTIVIST ARCHER CONTACT.

BE SURE ARCHERS KNOW HOW TO FIELD DRESS A DEER QUICKLY AND PROPERLY.

IF THE COMMISSION WOULD DECIDE TO PERFORM THE CONTROL TOTALLY ON THE IKE FARM, THERE COULD BE LESS ACTIVIST PROBLEMS, IF A COURT CASE ENSUES.

SIGNS SHOULD BE DISPLAYED TO MAKE TOURISTS AWARE OF THE CONTROL. THESE SIGNS BEING DISPLAYED ONLY WHEN CONTROLS ARE IN PROGRESS, NEAR ALL PARK ENTRANCES. SIGNS COULD READ (DEER POPULATION CONTROL AREA)

A MORE SPECIFIC AREA SHOULD BE DECIDED ALSO, A PERIMETER WITH THE CENTER BEING THE BAIT, STAND AREA. THIS PERIMETER WOULD BE POSTED, CLOSED TO TOURISTS. THE PERIMETER SIGNS WOULD IF POSSIBLE, BE OUT OF SIGHT OF THE MAIN STREAM TOURIST. NOT USING A BRIGHT COLOR FOR THESE SIGNS, BUT BETTER TO POST SIGNS CLOSER TOGETHER AND CLEARLY VISIBLE FROM CLOSE UP.

THESE SIGNS WOULD SERVE A DOUBLE PURPOSE, TO KEEP TOURISTS OUT, ALSO KEEP ACTIVISTS OUT. IF A FINE COULD BE INCLUDED ON PERIMETER SIGNS, IT MAY HELP.

THE BAITING SHOULD BE STARTED LONG BEFORE THE ACTUAL CONTROL IS STARTED, AS DEER WOULD BECOME FAMILIAR OF THE LOCATIONS OF THE BAIT. ALSO THE START OF BAITING COULD BE REFERRED TO AS THE START OF THE CONTROL REDUCTION. THIS IS THAT, THE BAIT START DATE COULD BE PUBLICIZED AS THE CONTROL REDUCTION START DATE. EXCEPT ON THE ARCHERS PERMITS WHICH WOULD READ. (PERMIT VALID ON DATES POSTED BY PARK COMMISSION.)

THE PUBLICIZED BAIT, ALTHOUGH JUST BAITING, WOULD SET THE ACTIVISTS IN MOTION, THIS WOULD GIVE YOU SOME INSIGHT ON ACTIVIST STRATEGIES, AND OR PROCEDURE, BEFORE THE CONTROL (HUNT) ACTUALLY STARTS, IF DONE PROPERLY, THIS WOULD BE TOTALLY LEGAL AND WOULD WORK.

THE BAIT USED, SHOULD BE CHOSEN CAREFULLY, JUST CORN MAY NOT BE A GOOD CHOICE, AS AT HARVEST TIME, IT IS READILY AVAILABLE FOR DEER.

IN THE CONTROL REDUCTION, WHEREVER PERFORMED, (IKE FARM AND OR BATTLEFIELD) ARCHERS SHOULD BE IN THE MOST DENSE AREAS AVAILABLE. YOU WANT TO BE OUT OF SIGHT OF PUBLIC AS MUCH AS POSSIBLE, ALSO MAKING IT DIFFICULT FOR A TELESCOPIC LENS TO BE USED FROM THE MAINSTREAM TOURIST ROUTES.

THE IKE FARM BROCHURE STATES THERE IS A LAND OWNER THAT HAS 189 ACRES ADJOINING THE IKE FARM, THIS LAND WITH OWNER APPROVAL, MAY BE UTILIZED FOR THE CONTROL. THE GAME COMMISSION COULD USE THE SAME OR SIMILAR METHODS FOR THE CONTROL, AS USED ON THE BATTLEFIELD AND OR IKE FARM. I DO FEEL, HOWEVER THAT THE FURTHER FROM THE BATTLEFIELD THIS CONTROL IS CONDUCTED, THE LESS EFFECTIVE IT WILL BE AND LONGER IT WILL TAKE TO REDUCE THE HERDS TO THE DESIRED LEVELS. REDUCTION DIRECTLY ON THE BATTLEFIELD WOULD UNDOUBTEDLY BE BEST.

THE CONTROL WOULD BE MOST EFFECTIVE IF PERFORMED SIMULTANEOUSLY WITH THE PA. HUNTING SEASON, REGARDLESS WHERE IT IS PERFORMED. THERE COULD BE AN ALTERING OR EXTENSION OF THE SEASON IN THE CONTROL AREA IF NEEDED.

ALLOWING ARCHERS A DAILY LIMIT OF 3 DEER PER MAN, (MAXIMUM) DEPENDING ON THE NUMBER OF ARCHERS USED, WOULD DECREASE THE HERDS QUITE RAPIDLY.

WITH THE 3 DEER LIMIT YOU WOULD NOT HAVE WHAT AN ACTIVIST MAY CALL, A PILE, OR SLOTTER OF DEER.

UPON REMOVAL OF THE DEER FROM THE CONTROL PERIMETERS, CLOSED VEHICLES SHOULD BE USED FOR TRANSPORTING. WHILE AWAITING TRANSPORT VEHICLES TO PICK UP DEER, ARCHERS SHOULD NOT CONGREGATE WITH THERE HARVESTED ANIMALS. NOT MORE THAN 2 OR 3 DEER PER VEHICLE WOULD BE ALLOWED TO LEAVE THE BATTLEFIELD. ARCHERS THAT DECIDE TO KEEP THEIR DEER, WOULD BE INSTRUCTED TO TAKE THEM DIRECTLY TO PROCESS, OR DIRECTLY HOME, IF THEY INTEND TO DO THEIR OWN PROCESSING.

THE ABOVE MENTIONED IDEAS WOULD ALLEVIATE THE POSSIBILITY OF A PICTURE BEING TAKEN AND PUBLICIZED BY THE ACTIVISTS, OF MORE THAN 2 OR 3 DEER AT A TIME.

AS YOU CAN SEE I AM INSIDE THE ACTIVISTS HEADS, AS MUCH AS POSSIBLE. I'M SURE YOU ARE MORE FAMILIAR THAN I, WITH THE SENSELESS PROBLEMS THEY CAN CAUSE.

AS FOR DECIDING WHOM THE ARCHERS WILL BE, I'M NOT SURE OF THE PROPER WAY TO CONDUCT THIS, AND BE REASONABLY FAIR TO EVERYONE. I CAN TELL YOU THIS, I HAVE SPOKEN TO MANY PA. HUNTERS ABOUT THIS SUBJECT, AND THEY WOULD ALL LIKE A CHANCE TO HUNT ON THE BATTLEFIELD. WITH ALL DUE RESPECT, YOU WILL INCURE PROBLEMS FROM PA. SPORTSMEN, IF PARK OFFICIALS ONLY, ARE USED IN THIS REDUCTION.

I PERSONALLY WOULD NOT LIKE PARK OFFICIALS ONLY, TO PERFORM THE REDUCTION, BUT IF THAT DECISION IS MADE, I WOULD RESPECT IT. I MIGHT ADD, IF PARK OFFICIALS PERFORM THE CONTROL, WHO IS GOING TO CONTROL THE ACTIVISTS AND PATROL THE PARK.

A DRAWING FOR A PERMIT WOULD BE THE BEST WAY TO KEEP THIS FAIR. THIS METHOD IS USED FOR HUNTING PERMITS (LICENSES) IN MANY OTHER STATES.

THE ARCHERS DRAWN SHOULD HAVE TO UNDERSTAND THAT A TEST FOR ACCURACY, WILL BE GIVEN, ALSO THAT NOT ALL WOULD RECIEVE A PERMIT. RESULTS, WILL BE SENT THEM BY MAIL. (PERMIT OR REJECTION.)

A FEE SHOULD BE CHARGED UPON APPLYING FOR A PERMIT DRAW. THIS FEE WOULD BE REFUNDED RETURNABLE UPON, NOT BEING DRAWN, OR AN ACCURACY REJECTION WOULD OCCUR.

THE PERMIT FEE FIGURE, IS QUESTIONABLE, BUT MUST BE REASONABLY FAIR FOR EVERYONE. MY IDEA OF A FAIR FIGURE WOULD BE $5 TO $10 DOLLARS, PER PERMIT. THIS PERMIT WOULD BE VALID FOR ONE CONTROL SEASON, OR UNTIL THEIR SEASON LIMIT IS FILLED. ANYONE CAN REAPPLY YEARLY FOR A PERMIT.

I HAVE A COPY OF A WYOMING HUNTING APPLICATION. (THIS APP. IS A 1992 NON-RESIDENT) IF YOU WOULD LIKE TO SEE IT LET ME KNOW. I SHOULD NOTE, ONLY ARCHERS WITHIN THE STATE OF PA, WITH A VALID PA. HUNTING AND ARCHERY LICENSE COULD APPLY FOR A PERMIT. NO NON RESIDENT SPORTSMEN.

THE PERMIT AND INFORMATION ABOUT THE CONTROLLED REDUCTION COULD BE VERY EFFECTIVELY AND FAIRLY DISTRIBUTED WITH GAME COMMISSION HUNTING LICENSE APPLICATIONS, OR DISTRIBUTED DIRECTLY TO THE LICENSE ISSUERS THROUGHOUT THE STATE, DIRECT FROM THE PARK SERVICE. UPON HUNTING LICENSE APPLICATION, THE ISSUERS COULD ASK, (AS THEY DO FOR ARCHERY LICENSES)

IF THE APPLICANT WOULD LIKE TO FILL OUT AN APPLICATION FOR A PERMIT TO HUNT ON THE GETTYSBURG BATTLEFIELD. THEY WOULD ALSO STATE, THERE ARE FEES INVOLVED AND A TEST FOR ACCURACY MUST BE COMPLETED. IT SHOULD BE NOTED, IT WILL BE A DRAWING AND LOT ALL APPLICANTS WOULD RECIEVE A PERMIT.

ANOTHER PROBLEM THAT WILL ARISE. SPORTSMEN WOULD WANT TO SHOOT ONLY A BIG BUCK. DOE ONLY, CAN BE HARVESTED BY ARCHERS, AT LEAST UNTIL THE HERD IS UNDER CONTROL. A SPLIT SEASON COULD BE UTILIZED ALSO. INFORM ARCHERS THAT THEY MAY BE DRAWN FOR EITHER CONTROL, BUCK OR DOE.

YOU MAY WANT TWO DIFFERENT FEES, ONE FOR DOE, SAY $5.00 AND BUCK $10.00, BUT A $10.00 FEE MUST BE SUBMITTED WITH EACH PERMIT APPLICATION. THIS FEE, WOULD BE REFUNDABLE IN PART OR FULL DEPENDING ON THE DRAW.

SOME OF THE ABOVE SUGGESTIONS WOULD INDICATE, MORE OF A HUNT THAN A CONTROL REDUCTION, BUT IF STATED CAREFULLY ON THE APPLICATION AND PERMIT, IT WOULD BE AS FAIR FOR EVERYONE CONCERNED AS POSSIBLE.

WITH NO KNOWLEDGE OF YOUR MONETARY RESOURCES, ONLY THE KNOWLEDGE I'VE GAINED FROM YOUR NOVEMBER MEETING. MY IDEAS ARE HARD TO DIRECT. IF I COULD HAVE RECIEVED YOUR D.E.I.S. BOOK, I MAY HAVE BEEN ABLE TO CONTRIBUTE MORE FEASIBLE IDEAS.

AT YOUR NOV. MEETING, I FILLED OUT A FORM AND GAVE IT TO A WOMEN BEHIND THE TABLE IN THE LOBBY, TO RECIEVE A D.E.I.S. BOOK. I HAVE NOT RECIEVED IT TO DATE.

PAGE #1

PENNSYLVANIA HAS MANY SPORTSMAN, MR. HAYNES CAN ATTEST TO THAT. PA IS THE LARGEST SUBSCRIBER IN THE U.S. OF THE MAGAZINE, "OUTDOOR LIFE." 96,000 IN PA ALONE.

THE SPORTSMAN SHOW IN HARRISBURG WOULD BE A GREAT PLACE FOR YOU TO GATHER THOUGHTS FROM HUNTERS, CONCERNING THIS REDUCTION. THIS SHOW IS HUGE, AND GETTING BIGGER EVERY YEAR. (4TH TO 12TH FEB)

THE PA. GAME COMMISSION HAS BEEN CONTROLLING ANIMALS FOR 100 YRS. (1995 IS THEIR 100TH ANNIVERSARY). THEREFORE THEIR THOUGHTS AND IDEAS SHOULD BE CONSIDERED VERY CLOSELY.

(IN CLOSING) I'M NOT THE BEST LETTER WRITER, AS YOU CAN SEE, EVERY WORD IS IMPORTANT ENOUGH TO HAVE A CAPITAL LETTER! I DO HAVE A SENSE OF HUMOR THEW.

NOT TO DISCOUNT THE SINCERITY OF THIS LETTER.

BUT YOU COULD FORGET ABOUT THE PROBLEMS WITH THE DEER HERD REDUCTION, AND GO WITH THE "ADOPT A DEER" PROGRAM. ASSIGN EACH ONE OF THE ACTIVISTS A DEER. THAT MUST BE REMOVED FROM THE BATTLEFIELD IN ONE WEEK, AND LET THEM DEAL WITH IT! THERE WOULD BE SOME MINDS CHANGED ABOUT DEER CONTROL THEN, I'M SURE.

AGAIN, THANK YOU FOR THE OPPORTUNITY TO PRESENT MY THOUGHTS IN WRITING.

IF I CAN BE OF HELP IN ANY WAY, PLEASE CALL.

SINCERELY

Jack L. Peters

6234-2031

RECEIVED
JAN 12 1995
GETT — FISE

Carolyn Plotica
346 E. Railroad St.
Gettysburg, PA 17325

Dr. John Latschar
Superintendent, Gettysburg National Military Park
RD1
Gettysburg, PA 17325

Dear Sir,

Are you out of your mind? You cannot hunt deer on the battlefield. People go to the battlefield during the months of October through April. My husband runs on the battlefield. Sometimes we hike around on the trails. It's bad enough during regular deer season, not knowing if you're going to catch a stray bullet from hunters' guns. No matter how much you try to have "authorized hunters" there will be poachers who will be hunting illegally and you know it. As the article in the Harrisburg Patriot stated: people want to know how to get in on the action. People are gun happy around here when the idea comes up to hunt the battlefield deer (as if the battlefield deer are somehow better.) Also tourists continue to come to Gettysburg during the winter months. All you need is to have someone shot and killed or even wounded by a hunter and you'll have the biggest law suit ever, and rightly so. Haven't the taxpayers paid enough already for the battlefield? Buying and buying land and of course the "Yingling debacle" has cost enough. Don't create an opportunity for a tragedy. There was enough tragedy and killing on this ground in 1863.

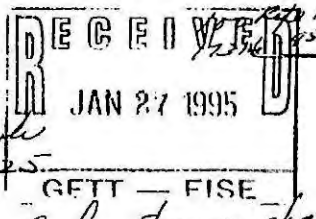
The reproduction intervention or transferring the deer elsewhere seem to be the most logical and sensible options.

Sincerely,

Carolyn Plotica

1/10/95

192



Superintendent
Park Ranger
Gettysburg Military Park
R.D. 1, Gettysburg, Pa. 17325

Sir: Give every registered hunter a chance to shoot 1-3 deer. Choose the hunter by random selection. Specify the meat is to be used for food and not sold for profit.

Sincerely,
S Pico

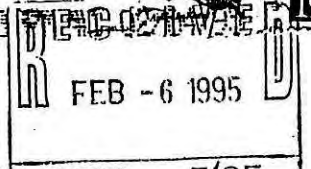
as seen on WGAL 8
1-25-95

193

2-4-95







Dear Sir/Madam:

Please do not allow hunting in your fine Military Park. If there is a deer population problem, please solve it in a non-violent manner.

Contraception methods are humane and effective. Please give these methods serious consideration. Thank you.

Jennie Pope

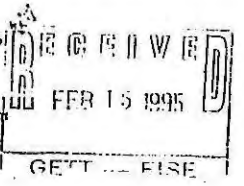
Gettysburg National Military Park
R.D. # 1
Gettysburg PA 17325

Published and distributed by Dawn Publications, Brighton, England (1627) 696829

Jennie Pope
9117 Brookwood Path
Louisville KY 40241-2417

194

Concerning the overpopulation of deer we prefer a controlled shoot and outside hunting.



Mr. & Mrs. John Melhorn
R.D. #1, Box 510
East Berlin, PA 17316

Sir:

I am in agreement with your plans to reduce the deer herd in the Gettysburg park.

I am not a hunter, but may I suggest the safest way to reduce the deer numbers, in my opinion, would be to allow archery hunting.

Thank you,

David R. Price
3965 Chestnut St.
Harrisburg
Pa. 17109

RECEIVED
DEC - 8 1994
GETT — EISE

KR

Please put into place a deer Contraceptive program. Please do not Allow hunting on national military Parks.

RECEIVED
FEB 21 1995
GETT — EISE

Thank you

Barbara Price

RECEIVED
JAN 30 1995
GETT — EISE

As for the Deer -
I believe in
Sterilization
Capture - Transfer

Sincerely
Mrs. Gloria Kampulla
935 Wabank St
Lane. Pa. 17603

RECEIVED
FEB 1 9 1995
GETT — EISE

NO DRUGS IN OUR MEAT

THIS LETTER IS ON THE DEER MANAGEMENT PROJECT. I WENT TO LISTENED TO SOME OF THE MEETING ON JANUARY 14 AT THE JUNIOR HIGH SCHOOL AND READ THE PAPER. I THINK SHOOTING SOME WOULD BE FINE, NOT ALL, JUST SOME. I DON'T THINK IT'S FAIR EITHER TO LURE DEER IN TO BAIT PILES AND KILL THEM. IT'S INHUMANE. I ALSO THINK YOU COULD LENGTHEN THE HUNTING SEASON, OR LET HUNTERS SHOOT DEER AND KEEP THEM OR GIVE THEM TO HOMELESS SHELTERS. I AGREE WITH THAT, BUT NO DRUGS! IT WOULD RUIN MOST EVERYONES HUNTING. ONCE YOU DRUG THEM WITH BIRTH - COTROL AND THEN START SHOOTING THEM THEY'RE GOING TO SCATTER. IT'S NOT EVEN APPROVED BY THE F.D.A. NOT MANY PEOPLE ARE GOING TO WANT TO HUNT WITH DRUGS IN THE MEAT. I ALSO THINK WHEN HUNTING SEASON STARTS, HAVE PEOPLE WAITING TO SHOOT THE DEER WHEN THEY WORK THEIR WAY ONTO THE PARK. IN THIS WAY THEY WILL STILL GET RID OF SOME. PLEASE NO DRUGS.

BY,
ADAM REBERT
Age 12
702 Wright Avenue
Gettysburg, Pa.
17325

DR. JOHN LATSCHAR, SUPERINTENDENT
GETTYSBURG NATIONAL MILITARY PARK

RECEIVED
FEB 13 1995
GETTYSBURG, N.M.P.

DR. LATSCHAR:

I AM WRITING TO YOU REGUARDING THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE WHITE- TAILED DEER MANAGEMENT PLAN. I OWN LAND WHICH IS NOW WITHIN THE BOUDARY OF THE G.N.M.P.. I AM IN TOTAL AGREEMENT THAT THERE ARE FAR TOO MANY DEER WITHIN THE PARK DURING CERTAIN PARTS OF THE YEAR.

AS I READ THE E.I.S. I FOUND IT VERY INTERESTING AND WELL RESEARCHED. THANK YOU FOR THE OPPORTUNITY TO WRITE MY COMMENTS CONCERNING THIS UNIQUE AND PRECARIOUS SITUATION. I WILL LIST EACH ALTERNATIVE AS YOU HAVE AND COMMENT ON EACH.

ALTERNATIVE 1. I BELIEVE THIS IS OUT OF THE QUESTION. IT IS QUITE EVIDENT THAT THERE IS A SEVERE OVER-POPULATION OF DEER AND SOME SORT OF HERD REDUCTION MANAGEMENT TECHNIQUES NEED TO BE IMPLEMENTED.

ALTERNATIVE 2A. I FEEL THIS SHOULD ONLY BE USED IF AN OUTSIDE GROUP FUNDS THE PROJECT COMPLETELY.

ALTERNATIVE 2B. I FEEL THIS IS NECESSARY AND IN CONJUNCTION WITH ALTERNATIVE 4. THE MOST EFFECTIVE WAY OF REDUCING THE HERD. THE GNMP MUST ALSO REMEMBER THAT THIS IS A FREE-RANGING HERD THAT HAS A RANGE OF 36 SQUARE MILES AROUND THE PARK. A MAJORITY OF THE DEER THAT OVERWINTER ON THE PARK LEAVE AND SPEND A GREAT DEAL OF TIME ON PRIVATE LAND AND THAT DEER DENSITY LEVELS SHOULD BE CONSIDERED ON THESE PRIVATE LANDS ALSO. I FEEL QUOTAS SHOULD BE PLACED ON THIS ALTERNATIVE IN CONJUNCTION WITH ALTERNATIVE 4 AND THE POSSIBILITY OF A SEVERE WINTER KILL.

ALTERNATIVE 3. I WOULD NOT EVEN CONSIDER THIS ALTERNATIVE. THERE IS FAR TOO LITTLE RESEARCH AND NO F.D.A. APPROVAL AT THIS TIME. WHY WASTE TIME, MONEY AND POTENTIAL LAWSUITS OVER CONTAMINATED MEAT AND FUTURE HEALTH RISKS. DID WE NOT LEARN ANYTHING FROM D.D.T. AND THAMALIHIDE? I FEEL SURGICAL STEILIZATION IS A WASTE OF TIME AND MONEY.

ALTERNATIVE 4 TO ME THIS COULD BE VERY EFFECTIVE. IF YOU COULD WORK OUT A PLAN WITH THE PENNSYLVANIA GAME COMMISSION THAT WOULD ALLOW LAND OWNERS WITH ADJOINING LAND TO HAVE A QUOTA OF ANTLERLESS TAGS THAT WOULD NEED TO BE FILLED BETWEEN OCTOBER AND APRIL. AN EXAMPLE OF THIS WOULD BE AS FOLLOWS: IF A LAND OWNER HAD 10 ACRES OF LAND HE WOULD BE GIVEN 20 ANTLERLESS TAGS TO BE FILLED BETWEEN OCTOBER AND APRIL EITHER BY HIMSELF OR BY HUNTERS HE ALLOWS TO HUNT ON HIS LAND. THE MORE LAND A PERSON OWNS THE MORE TAGS HE WOULD BE GIVEN. LANDOWNERS WOULD BE ENCOURAGED TO ALLOW MORE HUNTERS ON THEIR LAND TO FILL THE TAGS PLUS HAVE GREATER CONTROL OF HOW MANY AND WHEN THEY COULD HUNT. I HAVE READ WHERE SOME STATES EVEN GIVE A TAX BREAK TO LANDOWNERS IF QUOTAS ARE MET. I FEEL THIS WOULD BE A POPULAR AND EFFECTIVE WAY OF KEEPING THE POPULATION AT PREDETERMINED LEVELS.

SIDELINE: I HAVE FOUND THAT ON MY LAND,I HAVE HAD SOME SUCCESS WITH REFORESTATION WHEN I SELECT-CUT SECTIONS OF THE WOODLOTS. I THINK THE PARK SHOULD CONSIDER THINNING THEIR WOODLOTS. THEY ARE AT POLE STAGE AND AT A MATURE STAGE NOW. YOU DO NOT GET ALOT OF NEW UNDERSTORY GROWTH IN A MATURE WOODLOT. YOU CAN NOT BLAME ALL OF YOUR PROBLEMS ON THE DEER. IN TWO SECTIONS OF THE PARK YOU HAD NEW OAK SEEDLINGS GROWING AND THEN YOU MOWED THEM OFF. ONE WAS NEAR LITTLE ROUND TOP AND THE OTHER NEAR THE WHEATFIELD.I UNDERSTAND WHY YOU MOWED THESE AREAS BUT IT POINTS OUT THAT YOU NEED SOME OPEN AREAS SO NEW GROWTH CAN OCCUR.

AGAIN, I THANK YOU FOR ALLOWING ME TO EXPRESS MY OPINIONS AND I LOOK FORWARD TO YOUR DECISIONS AND POSSIBLY WORKING WITH YOU IN THE FUTURE.

SINCERELY,

JAMES D. REBERT
702 WRIGHT AVENUE
GETTYSBURG,PA. 17325

Environmental Impact Statement
Public Comment

RECEIVED
FEB 10 1995
GETT. SITE

Lera Susan Hebert
702 Wright Ave
Gettysburg, PA. 17325
717-334-0552

Considering your study figures on the Number of Deer p16, Part 1, it appears by your estimate for 1994 that the number has considerably dropped by natural causes. We had numerous dead deer on our property, due to the harsh winter of '93 and '94.

Here on Big Round Top, there were days during the hunting season when few or no deer were seen by hunters in the Round Top Heat Club, on the Hebert property and the Reikert and Fleishauer properties.

It is a definite fact that as soon as the hunting season begins, each year, the deer travel into the Park area, especially Round Top deer move toward the Eisenhower Farm and Pickett's Charge directions.

Perhaps your solution to the over population on the Park is to simply chase or in some manner, move the deer back to private lands adjacent to the park during the hunting seasons. It seems ridiculous to hire or move in other hunters to do what we, Gettysburg landowners and hunters

of our choice, could do ourselves, if given the opportunity.

#2 Alternative -
A + B are possibly both good alternatives, as long as you can guarantee no hunter or innocent other receiving the meat would consume harmful drugs from immobilization darts or sterilization drugs from bait stations. This should never be! FDA has approved drugs, chemicals etc. which later have been known to be harmful. Please don't use drugs in our deer EVER! Not the deer that are to stay here or would be taken to a location where others may consume the meat. Please!

#3 Please remove as an alternative - we don't want drugs in our deer!

#4 This is the BEST alternative as long as property owners have FINAL

say and input on this cooperative management. NO outsiders will ever be allowed on the REBERT property or the HARTMAN farm under any circumstances to hunt or for control kill without our approval.

#5 NO - NO drugs in MEAT!
Reproductive intervention in the whitetail deer, here at Gettysburg, is unacceptable! PLEASE!

* — I totally object to the use of any sort of drug (for sterilization), whether approved by the FDA or not. Too many drugs (chemicals etc.) have been approved, only to be later proven to cause drastic health consequences. I would certainly hate to see my children or grandchildren suffer because of our stupidity in this matter!
Please don't choose Alternative 2B, Alternative 3 or 4 or 5 unless you change the wording to specify NO DRUGS will ever be used in our deer here at

Gettysburg which could end up as meat.
Reproductive intervention is NOT the safest nor is it acceptable for us as hunters or meat eaters.
I expect, should the Reproductive intervention method be chosen you would, in future years, end up with an even larger problem than you have today.
Most hunters share these feelings I have about eating venison containing sterilization of any form.
Sterilization methods, not being efficient, compounded with the loss of hunters due to contaminated meat and the loss of food banks & shelters not accepting contaminated meat. What then?
Please don't allow sterilization or reproductive intervention to even be considered any further.
I enjoy venison and hope to continue to be able to use it for my family for years to come. It is the healthiest red meat available to us, as humans.
Sue Rebert 3/6/95

RODNEY E. ROHRBAUGH
R.D. #2, Box 4090
Felton, Pennsylvania 17322
(717) 927-8034

RECEIVED
JAN 31 1995
GETT — EISE

January 27,1994

Superintendant
Gettysburg National Military Park
R. D. 1
Gettysburg, PA 17325

Gentlemen:

I am writing this letter in response to your invitation for opinions regarding the deer herd at Gettysburg Park.

I feel the most effective and most humane methods to reduce the size of the herd to the point that it can be properly supported by the land are first, a controlled shoot, and second, a transfer to other less populated land in the State.

The controlled shoot, assuming that it is conducted by qualified hunters / marksmen, is the most humane method of reducing the population and it also carries with it the wonderful benefit of feeding needy families in the state. By also transferring some deer to less crowded habitat you can help to provide better distribution of Pennsylvania's deer herd and provide greater opportunites to our sportsmen who as a group are the greatest supporters and protectors of wildlife.

Thank you for allowing me the opportunity to express my views.

Very truly yours,

Rodney E. Rohrbaugh

RECEIVED
FEB -9 1995
GETT — EISE

David A. Reese, D.D.S.
214 Broadway
Hanover, PA 17331
(717) 637-2255

February 7, 1995

Dr. John Latschaw
Gettysburg National Military Park
97 Taneytown Rd.
Gettysburg, PA 17325

Dear Dr. Latschaw,

I am appealing to you and your constituents to draw upon past lessons in both political choice-making and man's previous attempt at biological control. I know much research has gone into this decision and I have read much of it with enthusiasm.

I'm afraid that politics create an environment in which the logical time tested predator-prey relationship has been passed over. It is much more politically correct to search for an easier?? answer - one which inevitably still means the loss of deer lives. A quick fix is always a political priority, but always has been an environmental mistake.

Man in his search for wisdom has tried a great many chemical and biological controls including DDT and water hyacinths. Almost without exception these experiments with the environment have lead to more serious side-effects and expensive corrective measures.

It is time to decide whether men want to expose another one of its politically biased biological experiments on a segment of our national parks; or recognize that the obvious solution is a balanced predator-prey situation. I think that hunters and nonhunters will both agree that in light of our past political, biological errors any other choice is working against the tide of "Mother Nature". A deer predator whether it is a wolf or man will prove to be the least costly in terms of dollars and bio-effect. In fact, I'm certain that a method of permit-controlled, site-controlled, time-controlled (January/February) hunting could benefit hunters, Park Service, local farmers and tax payers. I hope we can make a common sense decision this time.

Sincerely,

David A. Reese

RECEIVED
FEB 14 1995
GETT -- FISE

February 9, 1995

Dr. John Latschar
Superintendent
Gettsburg National Military Park
RD#1
Gettysburg, PA 17325

I strongly disagree with utilizing outside agencies or park personnel to harvest whitetail deer within the park for the following reasons.

1) Hiring outside agencies or utilizing park personnel to harvest deer will require additional park funding or decrease the time park personnel are available to perform their regular jobs.

2) additional money will be required to process deer carcasses before they are given to the needy people.

I suggest that the battlefield is opened to public hunting during the park off season. This option will not cost the government as much money. No money would be required to butcher the carcasses or added fees to hire additional personnel. Problems with entrails could be solved by designating a special area and removing the entrails from the park. Please reply.

Sincerely,
Carl Rudquist
1211 Narrow Lane
Dauphin, PA 17018

RECEIVED
JAN 27 1995
GFTT — E'SE

01-26-95

Dear Sir

Relative to your deer problem. How Licensed Hunters come in with Shotguns with Slugs. How the hunt controlled by your officers, allowing so many in A.M., likewise in P.M. How vehicles picking hunters with deer and taking to safe locations.

I feel this will thin your herd.

John E. Rupert

717-766-2644
John E. Rupert
318-322 Ridge Hill Rd.
Carlisle, Pa. 17013

RECEIVED
FEB 10 1995
GETT — EISE

February 8, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Dr. Latschar:

I am writing in regards to the Draft Environmental Impact Statement for the White-Tailed Deer Management Plan. I have enclosed a recent article from the Humane Society of the United States. This article discusses the successful use of an immunocontraceptive vaccine in blocking pregnancies in free-ranging white-tailed deer. This program is being conducted at Fire Island National Seashore - another National Park Service administered area. Obviously they have received approval from the U.S. Food & Drug Administration to conduct this program which began in 1993. I believe that this program could also be used successfully at Gettysburg NMP/Eisenhower NHS.

I believe that Alternative 3 of the Draft EIS is a viable option for a sizable reduction of the deer herd. A reduction of the deer herd by this non-lethal method would also be much less controversial than the preferred alternative which also utilizes direct reduction by shooting. Although there is certainly broad support for reduction of the herd through open hunting, many locals are not as enthusiastic about a reduction by NPS personnel. No matter how skilled your personnel supposedly are in "public safety and ...the use of firearms", there is still a greatly increased potentail for an accidental shooting. The EIS also states that, "Deer would be shot during the day and night from October through April." October through mid-November as well as April are very busy visitation periods in the park. Senior citizen bus tours and children's school groups abound during these times. I consider this direction reduction to be a public relations nightmare - not to mention a huge safety hazard. Just imagine the horror on the faces of a bus load of seniors or children if they ask what all of the shooting is about or actually see deer being killed? Inevitably there will be deer who are only initially injured that will run into the paths of passing automobiles and will be in plain view of the public. Has anyone really considered the chaos that will occur when multiple high-powered rifle shots are being sent into a herd of deer that is acclimated to the safe haven of the park?

I believe that with the rapid and ever advancing progress in the field of immunocontraceptive vaccines, that this is clearly a viable method of deer control. I do not believe that it has been given any serious consideration as the primary means of control. I believe that now is the time to open your minds to a very real solution.

Sincerely,

Susan Sanders

Susan Sanders

RECEIVED
JAN 3 1 1995
GETT — EISE

Jan. 30, 1995

Superintendent,
Gettysburg National Military Park

Dear Sir,

I understand that the National Military Park is interested in comments from the public regarding the deer problem on the Battlefield. Having been interested in problems of ecology since I first studied it in college 40 years ago, I would like to offer my opinions on some of the current proposals.

The sterilization/birth control route is a nice idea; but it will obviously take a long time to produce any meaningful reduction in the size of the deer herd. It will be labor- and cost-intensive, and for these reasons should be rejected.

To do nothing will probably lead to mass epidemics, malnutrition and eventual starvation of the deer, not to mention worsening the problem of overpopulation, all of which make it unacceptable. Of course, if the deer are prospering by destroying the farmers' crops every year, they could continue to do well for some time, supported by the public's tax dollars as we subsidize reimbursement to the farmers, against our will and with no choice in the matter, apparently.

A managed hunt seems to be the most sensible solution here. After all, these deer are a highly prolific game animal. They are hunted regularly in Pennsylvania. It should be easy to find plenty of responsible people who would be eager to take part in such a hunt and who would

be quite willing to pay for the privilege. A hunt should include all age classes and both male and female deer, at a time of year to coincide with the state hunting season, perhaps: the deer seem to have learned they are safe on the battlefield in hunting season. An annual managed hunt would probably be needed.

The National Wildlife Refuge at Assateague Island, Virginia seems to have a situation rather like Gettysburg — deer, habitat to be protected, and large numbers of tourists. Wouldn't it be possible to manage deer control as they do at Assateague? The current situation in Gettysburg is bad for the deer, for the woods and farmlands on the Battlefield, and it really makes the National Park Service look incompetent. This is not the first time the public has been asked for input. Endless studies will not solve a problem that needs a solution now, before more damage is done. Please stop wasting public money and get on with a solution.

Sincerely yours,

Alice E. Savage
625 Spook Lane
Gettysburg

#2 1-25-95

Dear Park management

I would like to see You Remove the Deer By spreading them over Some off the Norther Counties where the deer heard has been hurting. Clinton Cameron Lycoming to get more have had their deer heard reduced very hard by Poor managenent. I would like to see new Breeding with out of County deer. By taking these deer from Your place of overcrowding to these counties would help Yau & these Counties over



I have talked to people here in Schuylkill Co. who feel the same way. they Brought Bear from the norther Counties into the Southern Counties so why not take these deer + Spread them out in the norther Counties.

a Pa Hunter
& Admirer of the
Deer
William Seaver
Schuylkill Co.

Schaak's Garage
RD 1 Box 541
Pine Grove, PA
17963
717-345-8193

RECEIVED
FEB - 1 1995
GETT — EISE

Jan. 30, 1995

To Whom it May Concern,

I am writing in reference to your problem of the large deer herd in Gettysburg Military Park. These animals should not be killed. Why not catch them and transport them to the Mountains of Penna.? There they could be left loose in their own habitat.

We need more deer upstate Pa. Just ask our hunters. Most deer hunters head for the Mountains and there aren't that many deer up there. We have a cabin in "Potter County" and hardly see any deer there the past few years. The herd is way down in numbers and yet there is plenty of forest land for grazing etc. They could be taken closer to home, too, maybe Clinton or Huntingdon counties etc. The game commission should also only allow Doe Season every 2 or 3 yrs. so the herd would have a chance to increase their numbers. Just hope these animals are not shot, and are moved elsewhere so they can have a fair chance.

Thank You!

Mrs. Nelson Schlegelmilch
85 Delp Rd.
Lancaster Pa. 17601

RECEIVED
JAN 26 1995
GETT — EISE

January 25, 1995

Dr. John A. Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

RE: N1615 (DEER)

Dear Dr. Latschar:

I sent for and received a copy of the Draft Environmental Impact statement, White-Tailed Deer Management Plan.

In a previous letter I sent to Hal Greenly dated December 15, 1994, I made a proposal that Congress amend the act prohibiting hunting. At this time I would like to withdraw that proposal entirely.

After reviewing your draft and putting serious consideration into this, along with my experience hunting in areas that are open to the public, my thoughts are that you get a few indiscriminate individuals that throw lead around, making one seek cover. Thus, I have come to the conclusion that these areas should never be opened to public hunting. However, The Organic Act of 1916 as Amended and the Redwood National Park Act of 1978 as Amended, permits the management of this problem.

Let me explain my thoughts. Millions of dollars are spent every year by upstanding Americans in the pursuit of bagging the proverbial trophy, a once-in-a-life time chance.

You are the keeper of the gates, so to speak. Since management is permitted by federal law and you are permitting authorized agents to help manage this problem, why can't the authorized agents be any person checked out by the A.T.F. for a fee (let's just say $1,000 to $1,500)? That would cover the application processing and permit fee, and the park ranger or guide's fee for this said person to manage (harvest) one (1) male white tail (no guarantees). If this said person harvests a deer, this authorized agent will be permitted to keep the carcass to do with as he wishes, however, its disposal will be at the authorized agent's expense.

Look what the American sportsman pays to travel out West or to Canada, even foreign countries, to harvest that one-in-a-life time animal. With the fees generated from this management scheme, all of our parks could assure only the healthiest and superior species. On the other hand, the processing fee for an application and permit for doe could be around $50.00 to $75.00. The bottom line would be the management of the deer now and in years to come wouldn't cost the tax payers and the Department of the Interior anything, in fact, if managed correctly, it could generate fees.

This price for the management of the doe would be acceptable to everyone I have talked to and they would gladly pay it. Several of them said they would pay the fee to get a trophy buck. My thoughts were well received and that's just here in Harrisburg. I truly believe that there would be people interested in every State to have a chance to manage a trophy PA white tailed buck.

I recently saw on television Park Rangers shooting buffalo in Yellowstone. I'm sure the meat was still edible but with the above type of management system, those buffalo could have been managed at no cost to the tax payer. Where in America can you participate in a managed harvest to harvest buffalo to have his head over your mantel or in your game room?

I am writing this as a taxpayer and veteran. I believe through your wisdom, the management of these parks across our great land can be done safely and efficiently with no cost to the people.

I want to thank you for your time and consideration in this matter and I'm sure every taxpayer will thank you. I know that you will have a few groups making a fuss, but these people wouldn't be willing to lay down their lives or serve this great country. They will just never understand what it has taken and will take to give them what they have.

Respectfully,

W. H. Schooley
2140 Sir Lancelot Drive, Apt. A3
Harrisburg, PA 17110

RECEIVED
JAN 30 1995
GETT — EISE

210

Jan. 25, 1995

Natl. Park
RD #1
Gettysburg Pa 17325

Superintendant,

Controlled shooting makes sense to my family.

It has a "double benefit... Controlling deer population and feeding needy people.

The other options could bring about other problems.

Sincerely
Mr. + Mrs. Larry Weaver + family

211

1-27-95

Dear Gettysburg;

Please protect the present peacefulness of our National Military Parks, and let there never be killing of any kind permitted in them again.

I'm writing in support of the deer contraceptive program, so that I may walk these parks without fear.

Sincerely,
Trisha Lamb Feuerstein

212

Dec 4, 1994

To Hal Greenlee,

You have my support for Controling the Deer herd in the National Military Park.

We need this to be successful.

Thank You. James Hender

RECEIVED
JAN - 5 1995
GETT — EISE

GETTYSBURG ENGINEERING CO., INC.
CONSULTING ENGINEERS AND SURVEYORS
40 EAST HIGH STREET
GETTYSBURG, PENNSYLVANIA 17325

BRANSBY W. BUSHEY, P.E.
DEAN A SHULTZ, P.L.S.

Area Code 717
Telephone 334-4016

February 8, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Dear Superintendent Latschar:

I have reviewed the Draft Environmental Impact Statement, White-Tail Deer Management Plan dated November 1994 and wish to offer the following comments.

From personal observations I am in agreement that there is a over population of deer within the GNMP. The study has addressed the adverse effect the deer population has created and has also evaluated sufficient alternatives for controlling the deer population.

Alternative 5, the studies preferred alternative, appears to be the most reasonable, humane, and cost effective way to reduce the deer population. I would suggest that cooperative management with the Pennsylvania Game Commission be considered as the first step in reduction of the deer herd. If both antlered and antlerless hunting could be permitted during the Pennsylvania antlered deer season, and the NPS was willing to drive the deer off GNMP lands during this season, the number of deer killed during the Pennsylvania deer hunting season may reduce the number sufficient to eliminate the need for shooting deer within the Park. It is also my opinion that the reduction of deer by this method would be a plus to the public relations immage at the Park.

During the first Saturday of the 1994 antlered deer season at least 45 deer were seen on my property on Wolf Hill. When antlerless deer season arrived the hunters on Wolf Hill I spoke with, although they hunted every day, did not see one deer. The deer had became wise to the hunters during "buck" season and went onto Park land where they were safe. During the first week of antlered deer season, before the deer had became " hunter shy", at least 10 buck were shot on Wolf Hill. I do not believe one deer was shot on Wolf Hill during antlerless deer season. This is the basis of my argument for permitting both antlered and antlerless hunting during antlered season on property near the Park. It would permit a larger number of deer to be shot before the deer decided to move to the safety of the 'old battlefield'.

The deer population has been studied again and again. At some point in time there is a need to stop doing studies and take action. I feel this time has come and it is time to "do something". I encourage the NPS and the Pennsylvania Game Commission to proceed and take action to reduce the deer herd.

Very truly yours,

Dean A. Shultz

RD 2 Box 292
Newport, PA 17074
26 January 1995

RECEIVED
JAN 30 1995
GETT — FISE

Superintendent
Gettysburg Military Park
RD 1
Gettysburg, PA 17325

Dear Sir/Madame,

I am responding to your invitation to the public to offer their input into the problem of overpopulation of whitetail deer in the Gettysburg Military Park.

I feel that the most sensible solution is the natural one: Hunting. A controlled hunt, with the meat going to those who need it most, would effectively reduce the herd to whatever size the game biologists deem appropriate for the habitat.

Live trapping and relocation of the deer has been proven both ineffective and wasteful. These deer do not thrive, or even survive, in their new habitat. It has been tried and proved a failure in several recorded instances that I have read about.

Sterilization and/or birth control measures are totally unnatural, horribly expensive, and more inhumane (in my opinion) than hitting them with automobiles.

Doing nothing is not a viable answer, either. Aside from the damage an oversized deer herd can wreak on the habitat (and citizens' shrubbery), the gene pool would suffer dramatically. Then there is the problem of disease inherent in overpopulation.

I respectfully suggest that you let man do what man has always done best - hunt! He has been doing it since the Big A got himself evicted from the Garden of Eden, along with his wife, and he's been doing it well. Besides, hunters and shooters have been paying for effective game management since wildlife management became a matter of public policy. Why not utilize this resource to properly manage a problem resource? It's a **natural tradition!**

Thank you for allowing for public input in this public affair.

Sincerely,

DONALD J. SEAMAN

RECEIVED
FEB 13 1995
GETT — EISE

2-9-95

Gentlemen:

As a hunter and resident of nearby Hanover I have been following the Gettysburg deer management issue. I bowhunt on private land very close to the battlefield and bow and gun hunt in other parts of the state.

If contraceptives are introduced into the deer population at Gettysburg, I will stop hunting in the area, even if the drug is FDA approved for human consumption. A part of the attraction of hunting is the harvesting of a natural source of meat.

If the noise of gunfire becomes an issue, one solution may be to close off sections of the battlefield to tourists ~~to allow~~ at different times to allow bowhunters to take deer in those areas. Small sections of the park could be closed, while tourists would be undisturbed by gunfire.

If the trap and move option is used, the Michaux State Forest may be a good place to relocate the deer. Its 80,000 acres seem to be able to support a larger deer population.

If you desire any assistance in shooting deer with a firearm or bow and arrow, please give me a call or write. I was a Marine infantry officer for five years and have been a federal law enforcement agent for seven. My work phone # is (410)962-4115, home # (717)630-8677. My address is: Richard W. Seger, 197 Skylite Dr., Hanover PA 17331. Two other federal agents in the office, Mike Schneider and Karl Stankovic, are also interested in participating. All three of us have received firearms training above and beyond that of the average federal agent.

Thank you very much for your attention. I am looking forward to hearing from you.

Sincerely,

Richard W. Seger

To Whom It may Concern!
Gettysburg Nat'l Park Service

Have read your article on deer overpopulation Hope this letter will give you some ideas as well as volunteer my services to assist you with this problem. I am a 37 yr old and reside in Gordonsville Va. and have hunted deer & with archery as well as rifle for about 20 yrs. Every deer I kill is used by me for the meat as I consider it a delicacy. I wouldn't dare kill anything just for the sport. I love the outdoors and enjoy hunting for it is a priviledge to me. I would be willing to purchase a permit (special) (as long as cost isn't too high) from you or the State of PA for either archery or rifle to assist you with decreasing the population of the deer. I would sign a promise to you to utilize all deer killed, check every deer in, maintain beautiful surrondings, and follow Park Service guidelines. By purchasing this special permit, it would allow the state to generate revenue as the other two methods you described ~~&~~ Sterilization, relocation would probably cost the state money & time. Every year in Va around hunting season the local radio stations advertise to hunters the names of two to three & meat processing plants that will take deer in process the meat and give to the homeless or needy. I would agree to give any extra deer I couldn't use for meat to the State of PA.

If you have such a program or If not bring the deer back to Va. to help feed the Needy & homeless. I would consider it a priviledge to come and hunt there purchase the special permit and bring my brother in law (If allowable) (he obtain a permit also) and spend a Friday and Saturday hunting there with a limit of amount of deer per person, and agreement to utilize all deer taken. I really don't favor an open season because too many hunters & with rifles get in the woods at the same time and I'm afraid of someone getting shot. Maybe you can issue a certain number of permits for certain days if you decide to go this way. What this method would do is (1) Generate revenue to the State of PA. for permits not cost the State money.
(2) Could help feed the Needy families of your State
(3) Most of all decrease the herd to manageable numbers.
(4) If relocation still had to be done hopefully the money generated by hunting permits would help pay for this.

Please contact me at this address & phone number if I can help you with this as it would certainly be a priviledge to me.

conscientious hunter
David S. Shuffler
5465 Turkey Ridge Rd
Gordonsville, Va. 22942

RECEIVED
JAN - 3 1995
GETT — FISE

Robert D Shumi
Box 5 Mc Knightstown
Pa 17343

Dr. John Latschar
Gettysburg National Milatary Park
97 Tanytown Road
Gettysburg Pa 17325

Dear Dr Latschar

I recieved a copy of (E I S) of deer on the battlefield.
Since I travel the Tanytown Road every A.M and P.M.
I see many deer, there is definitly a need to bring
down the herd size, just for safety.

If the park Service will allow hunters to remove deer
why not do it like they do in africa. our park
rangers can take out 1, 2 or 3 hunters this way
rangers can pick out which deer are to be removed
also rangers would know if any property damage was done

I feel that this suggestion would boost public
relation. if the park does allow hunting to remove
deer why not give the disabled American Veterans
and other handicapped people first chance. many of
these people are capable of shooting deer but cannot
walk the mountains or fields to get to a place to shoot
deer.
all that these people should have to do is show a doctors
Certificate of ~~buy~~ being handicapped.

over

Thank you very much for listening to my
opinion on this matter.

Thank You
Robert D Shumi

218

RECEIVED
FEB - 3 1995
GETT — EISE

Any options " but not to " Kill "
birth control
relocate

Any donations for the above options
please let me know

Thank You
Donna Spangler

Feb. 8, 1995 219

Dear Dr. Latshar:

I Like Venison, lots of people like venison. it is food--healthy food. Why don't you butcher the deer, put them in the store and sell the meat??? My Father was a hunter. Every season he killed deer, we ate meat; we liked it. What is the problem? Please do what is reasonable.

RECEIVED
FEB - 9 1995
GETT — EISE

Thank You,
Beulah Smith
Beulah Smith

SAVE OUR EARTH!
2008 [redacted] PREUSS ROAD
LOS ANGELES CA 90034

3-17-95 220

We understand that you consider the deer "expendable" that you plan to "harvest" the so Gettysburg can remain sacred. Well, we believe there must be a better way and we entreat you to find it, for we do not wish gettysburg to be sacred at this expense. We also believe available methods to cut down on the deer population by birth control are feasible and must be implemented.

E. Stansfield (Directo

RECEIVED
JAN 30 1995
GETT — EISE

Jan 27, 1995

TO- SUPERINTENDENT
GETTYSBURG NATIONAL PARK
MILITARY PARK
RD #1
GETTYSBURG, PA 17325

FROM: HARVEY E SITLER + BONNIE SITLER
1109 STEVENS ST.
MANHEIM, PA 17545

RE- DEER OVER POPULATION IN PARK

DEAR SIR:

PLEASE DO NOT WASTE TAXPAYERS MONEY ON STUDIES INVOLVING DEER OVERPOPULATION. ALL YOU HAVE TO DO IS SEE THE DAMAGE INVOLVED AND THE FACT THAT THE AREA WILL ONLY HANDLE 90 DEER AND THE HERD NUMBERS 900. USING THESE FACTS YOU SIMPLY HAVE YEARLY CONTROLLED SHOOTING TO MANAGE THE HERD. WE ARE TALKING ABOUT ANIMALS NOT PEOPLE.

Dr. John Latschar,
Supt. Gettysburg Natl Military park —

Dear Sir:

In regard to the over population of deer on the park. - I think it is past time to do something about them. The deer come up to my place and eat everything in the garden and the shaubbery also,

Shooting them is the only solution and I will even help to do that. If not on park property, why don't you get a group together and drive the herds off and let the hunters know and I'm sure a lot will be eliminated outside of park boundaries. Don't mess around with drugs or sterilization.

There has been a lot of talk over the past several years, so now lets get down to business and do something. More talk never do the job.

RECEIVED
FEB - 3 1995
GETT — EISE

Yours Truly
Allen Slonaker
1365 York Rd.
Gettysburg, Pa. 17325

RECEIVED
FEB - 2 1995
GETT — EISE

320 Boundary Ave.
Red Lion, PA 17356
January 26, 1995

Gettysburg National Park
R.D.#1
Gettysburg, PA 17325

Dear Superintendent,

I am writing to voice my opinion on the whitetail deer problem within the park.

No action would be unacceptable. There has been no action for the past several years and the problem has increased not decreased. Trap and transfer would be costly and from what I understand the deer do not survive well after relocation. Sterilization is unproven in effectiveness in my opinion.

The only real possibility in controlling the deer population within the park is a controlled hunt archery hunt. The safety hazard to the general public would be minimal. The liability to the park could be controlled with releases. The cost would be zero, a fee could even be charged for some type of permit. Each applicant should take a shooting skill test before a permit is issued. Many army bases have this type of control in effect. Ft. Belvior has this type of control in effect and is very successful.

I am sure there are mountains of scientific information provided to you , it just seems the simplest and easiest solution to the problem is a controlled archery hunt.

Sincerely,

Lee Sowers
Lee Sowers

RECEIVED
FEB - 2 1995
GETT — EISE

56 Franklin Drive
MCSherrystown, PA 17344

January 26, 1994

Park Superintendent
Gettysburg National Military Park
R.D. #1
Gettysburg, PA 17325

Dear Park Superintendent,

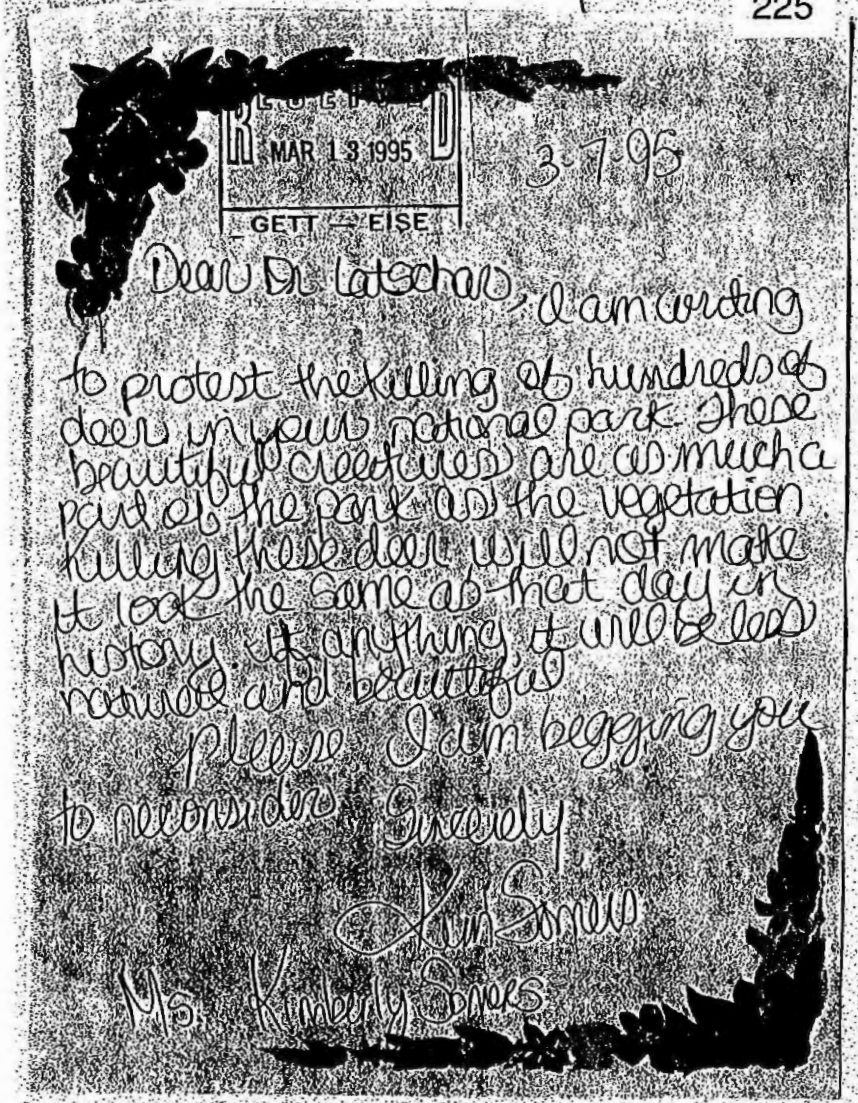
After receiving the invitation on WGAL TV8 last evening, I felt I would like to comment on the deer population problem within, and surrounding the park. Several Sunday evening rides through the park, although picturesque, made me realize that a problem did exit. I firmly agree with saving the battlefields, and realize this problem must be addressed; however, I have a problem showing sympathy for surrounding farms crying for crop damage. My reason being, a friend of mine went door-to-door to every surrounding farm **politely** asking to hunt on their property. **Every landowner refused to let him hunt.** How do they expect to costly control the deer population refusing to allow hunting.

My suggestion to control the deer population is regulated hunting on farms surrounding the battlefield. I understand with the problems of vandalism, littering, etc. landowners are leery about allowing open hunting, however if hunting was regulated by the Park Service or the Game Commission these problems could be controlled. My plan would be to establish a program similar to the Middlecreek goose hunting program. Portable stands or blinds could be placed thoughout with cooperation of landowners. Hunting out of these stands would be awarded though a lottery. Funding may be a problem with a program like this, however, charging a nominal fee to enter into the lottery may be one source of generating revenue. I realize a program like this would take some time and planning, but I believe in the long run , this would be a permanent solution. Thank you for your time.

Sincerely,

John A. Smith
John A. Smith

225



226

RECEIVED
FEB - 8 1995
GETT — EISE

Feb. 5, 1995

Subject - "what to do with excess deer"

Dear Sir.

This is a big tough subject but I would be in favor of a senior citizen hunt. anyone over 62 years old with current Pa Hunting license. Some of these older people find it hard to get to where the deer are & can't stand the cold too well anymore.

Each hunter should have a park employee or Qualified sportsman with him when he is hunting - to aid & help prevent damage to the park & the area around it.

This is my suggestion for the problem.

Leroy E Smith
768 Burnthouse Rd.
Carlisle, Pa 17013

My age 58 years old!

227

136 North Stratton St
GETT PA. 17325

January 16, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
97 Taneytown Rd.
Gettysburg, PA 17325

Dear Dr. Latschar:

I have read the Draft Environmental Impact Statement Whitetail Deer Management Plan. I advocate Alternative 5 with one exception. In the interest of the public, and as an unofficial steward of wildlife and natural resources, I have a problem with the use of any artificial means to control the deer population, (mainly because venison is used for human consumption), even if the FDA does approve; also, because I believe that the natural environment should be controlled through natural processes. As a former wildlife artist, I have done research and field study on the environment and habitats of many species. I realize conditions change and sometimes there may be no other recourse than to use agents and/or devices to control the environs. However, in this case, I hope you will be able to solve this difficult problem exclusively through controlled hunting.

I appreciate the opportunity to give my input on your search for a solution to the over-population of deer on GNMP and ENHS. Thank you.

Sincerely,

Cindy Stouffer

Cindy Stouffer

RECEIVED
JAN 18 1995
GETT — EISE

RECEIVED
JAN 13 1995
GETT — EISE

228

January 10, 1995
Richard C. Spangler
46 Short Cut Rd.
Abbottstown, PA. 17301

Superintendent
Gettysburg National Military Park
RD1
Gettysburg, PA 17325

Superintendent:

I am writing to comment on your proposals for the management of the deer herd on the military park. Perhaps you have already thought of my suggestions but I wish to express my thoughts.

I realize that Washington may need to make some sort of move on your suggestion for control of the deer herd but one thing that must be remembered is that it is not 1895 but 1995 and times do change.

I am somewhat of a Civil War buff and try to visit the park at every opportunity I get as does my oldest son and I see nothing wrong with allowing properly licensed hunters walk on the battlefield to drive the deer out to perhaps a farm that borders the battlefield where they could be legally harvested. This could be controlled by issuing a permit, perhaps on a daily to prevent excessive drives from being done. These drives would be done WITHOUT any type of weapons in the possession of the drivers. The drives could also be observed and controlled by the on sight observation of the park service so that both the area of the drive and the conduct of the participants is respectful to the battlefield. Perhaps an arm band (retumable) could be worn by each participant to insure that no other persons participate without authorization.

Another suggestion would be a more direct hunt with archers hunting directly on the battlefield. This could be done by issuing permits on a lottery basis to those who apply. The cost of this could be covered by a fee collected from those who are awarded a permit. Permit carriers could hunt in a specific area, controlled by the park service, perhaps at less peak times, like during the week only or only for several hours in the morning and/or evening. The hunters could be assigned a specific area by the park service and not allowed to leave that area without a park service person with them. The areas used for this type of hunt could be posted by the park service so that the public is aware of what is going on in that area. Since archery is a sport where shots are not taken longer that 25 to 30 yards it would be the safest type of on sight hunt or thinning of the herd. Perhaps a proficiency test controlled by a park service representative could be done to insure that the hunters are accurate with their bow.

I believe that these suggestions, at least the first one, would satisfy the needs a desires of all parties concerned and would not offend others if handled properly. I thank you for your time and for listening to my suggestions.

Respectfully,

Richard C. Spangler

Richard C. Spangler

From: D. Stokes
180 Farm Valley Rd.
Wellsville, Pa. 17365

6 Dec 1994

RECEIVED
DEC - 8 1994
GETT — EISE

To: Superintendent
Dr. John Latschar

Your inquiry in reference to suggestions for management of the Gettysburg deer problem can be controlled in a similar way the Western States manage the problem. The following suggestions with the coordination through the Pa. Game Commission is recommend.

"a" The Game Commission should establish a Special Hunt Stamp for designated area (number) within the Battle field areas or county. This provides the amount of controlled hunting pressure and number of hunters for designated areas.

Con't Page 1

"b" Successful hunts would require half of the hunters Special Hunt Stamp to be turned into a check station or land owners (Same day of hunt) for a redeemable fund (monies from Spl. Stamp fund) by the PGC. Example - Cost of the Stamp $8.00, PGC. Retains $3.00 for Redeemable Tag Returns $5.00 to County or land owners.

"c" Unsuccessful hunts or Un-redeemed Stamps not accounted for, this sum of monies or a portion could be returned to registered land owners & County for deer crop damage or County administrative costs.

"d" Limit of types of fire arms would be responsibility of the Pa. Game Commission

Con't Page 2

As noted in the Harrisburg Patriot News the Park Service could take full responsibility and manage the hunt process with a Federal Gov. Stamp. But - Co-operation with the PGC assistance in this matter may in result act as a prototype for future programs within other counties of this state.

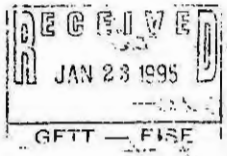
Respectfully
David J. Stokes

Page 3 of 3

Superintendent - Gettysburg NMP DATE 1/16/95

Doris M. Taylor

ECT White-Tailed Deer FILE National Park Service



1435 Elizabeth Road
Melrose Park, Pa. 19027
January 16, 1995

Superintendent
Gettysburg NMP/Eisenhower NHS
97 Taneytown Road
Gettysburg, Pennsylvania 17325

Regarding deer damage in Gettysburg NMP, my family and I are 100% against reduction of the herd by deputized marksmen, rangers and/or public hunt. Not one (1) shot should ever be fired in Gettysburg. To begin with, if motor vehicle collision with deer rose in the Park, the traffic must be going too fast. Certainly auto travelling throughout the park should be going at a very slow pace in order to appreciate the history.

What you do at the Eisenhower Site is a different matter. While I believe the deer population should be managed by fencing, repellents, fertility control etc - Do what you want! But not in the Military Park.

Sincerely,

Doris M. Taylor

(Mrs. Wm R. Taylor)

RECEIVED
JAN 26 995
GETT — EISE

231

Dr. Satchor,

My favorite method would be to use a shot gun knock the deer out, then transfer them to over shot ublic lands. Although I live in York county, I hunt in Cleorfield county. I don't go there because f the great hunting, its lousy anymore, thanks to twice as many doe licenses as ever.

I don't want you to transfer the deer that far, bad as the deer population up here could use shot in the arm. No, I'd say send them to tate game lands in nearby counties. Dauphin ounty's state game lands are nearly shot out, o theres plenty of food for any released deer.

William H. Traister, Jr.
PO BOX 104
Franklintown, PA 17323

RECEIVED
GETT — EISE

1-27-95

232

Dear Sir

I have a suggestion on how to help cut down on the deer herd in the military parks.

I know it would give the handicapped people great pleasure to bag a deer!

I would be glad to help them get around and field dress deer for them. I am sure there would be a lot of other sportsman that would help.

Clarence W. Toomey Jr.
1220 Valley Road
Etters Pa.
17319

(717) 938-6337

Comments on:

White-Tailed Deer Management Plan

RECEIVED
FEB - 9 1995
GETT — EISE

This is the first time that I've been involved with this issue. I would like to have about a month to try to get some ideas from our club, which is the AMP NIMRODS. I am including a few possibilities to add to the list of alternatives.

A. *I would favor a lottery hunt where the park rangers and/or biologists would place the hunters in a designated area.*

B. *I would also suggest that this would possibly be a good opportunity for handicapped hunters to have the first opportunity.*

C. *All successful applicants would pay a $5.00 charge to be used by the park. The park would decide which weapons could be used.*

Sincerely,
Mike Wagner

MIKE WAGNER
POB 43
CODORUS PA 17311-0043

RECEIVED
JAN - 3 1995
GETT — EISE

31 Dec. 1994

Dear Mr. Latcher,

I am responding to your drafted impact study on the deer herd at Gettysburg Park, which I received from your study group.

I thoroughly read all of the report with great interest, and agree something must be done.

My personal preference of plans is alternative #4. This plan would require a bit more co-operation and planning among different parties, but would be a less controversial plan than the others.

I am dead set against Alternative plan 2B. This I feel would be a very controversial approach. I feel the general non-hunting public would view this a type of Bounty Hunting.

Thanks for sharing my opinions & I plan to be at your next meeting.

Sincerely
Robert Vandevanter
2193 New Franklin Rd.
Chambersburg, Pa. 17201.

Dear Sir:

It is in my opinion that the deer heard in the battle field at Gettysburg should be trapped and relocated. they should be moved to areas of Penn. were the population is low such as Clinton and Cameron County's. the expense should be shared between the Federal and State goverment, and if nessary the Penn. Game commision. thank you for allowing my opinion.

RECEIVED
JAN 31 1995
GETT — EISE

Max Neary
age 57
8 Dogwood Drive
Mt. Holly Springs Pa
17065

Superintendent, Jan 1995

I do not approve of U.S.D.A. approved contraceptives for the deer on the park service.

Drugs can show up harmful on future tests. Please do not endanger the local hunters with drugs they chose not to consume. These deer travel to local farms for forage and may be shot and consumed.

Controlled shoots would be wonderful. These deer are not sacred and would provide needed food.

Connie Weaner

RECEIVED
JAN 27 1995
GETT — EISE

Connie H. Weaner
1480 Old Harrisburg Rd.
Gettysburg, PA 17325



RECEIVED
DEC - 5 1994
GETT — EISE

WEISER ORCHARDS
FRUIT STAND



Weiser Orchards
490 Town Hill Road
York Springs, PA 17372

TEL. HOME: 717-528-4763
ROAD STAND: 717-528-4796

Dear Sirs,

I would prefer you use alternative (2B) if possible - probably the least expensive, and a more sure way to handle the deer problem in the Park - should be an on going program also.

Sincerely M. Everett Weiser

ROBERT B WENDLER
108 KUHN DR
HANOVER PA 17331-1112

#K)8

Jan. 12, 1995

Deer Problem

Folks:

How long Are you Going to debate this Problem?
Enough is enough - time to put this thing to Rest.
Do something!

Thanks for listening
Robert B. Wendler

RECEIVED
JAN 17 1995
GETT — EISE

notes

Superintendent of Natl. Parks,

In response to your problem of White tail deer Control in Gettysburg Natl. Park, I would like to see the following measures tried:

1. Sterilization and birth control
2. Capture and transfer

I don't want to see more hunting and killing of deer as a response to this problem.

Sincerely

C. M. Hite

Blood

RECEIVED
JAN 30 1995
GETT - EISE

York Hospital
1001 South George Street
York, Pennsylvania 17405
(717) 771-2345

RECEIVED
FEB - 8 1995
GETT - EISE

February 6, 1995

Dr. John Latschar, Superintendent
Gettysburg National Military Park
R. D. 1
Gettysburg, PA 17325

Dear Dr. Latschar,

It is my understanding that the preferred course of action concerning the management of the white-tailed deer within the Gettysburg National Military Park and the Eisenhower National Historic Site is Alternative 5 Combination Management.

Since it appears in your intensive studies that the deer population is out of control, Alternative 2B and 4, with proper management appears to be the most efficient solution.

I do not agree with the implementation of Alternative 3 Reproductive Intervention. Surgical sterilization does not appear to be cost effective. I am very concerned about the effect of chemical contraceptives on the meat of deer that would be killed by hunters and served to their families.

Sincerely,

Barbara A. Williams

Barbara A. Williams

241

02/14/95

Deer Comments

My name is Kurt Wolf and I heard that you wanted advice on how to control the deer population in the park area. I saw your problem through the news media and thought I would give my opinion.

I am all for a hunting program. This is a very cheap way to solve the problem. Instead of removing the deer through a form of science and transporting them else where.

I am sure some people will be against a group of hunters with high powered rifles in a park. So my idea is to have an archery hunt. This is a much safer since hunters that hunt with a bow are more experienced and are safer people then those who just hunt with rifles. This will help save the land from becoming a battle zone again. Plus the deer that are killed could be given to an orphanage.

I hope my information has been helpful. And please contact me for more information or let me know what you have decided to do with your problem, because if their is a hunt, I will be very pleased to help out.

Sincerely,

Kurt Wolf

Box 430 R.D.1

Lykens, PA 17048

(717)365-3861

242

January 17, 1995

Gettysburg National Military Park
R.D. #1
Gettysburg, PA 17325

Joy M. Zakarian, M.P.H.
2442 Oxford Ave.
Cardiff, CA 92007

To Whom It May Concern:

I recently read on the Internet about your request for public comment regarding the growing deer population in Gettysburg National Park. I believe that a program of deer contraception is the most humane solution. I am very much opposed to allowing hunting in the Park.

Thank you for this opportunity to express my opinion.

Sincerely,

Joy Zakarian

Joy M. Zakarian, M.P.H.

243

Dear concerned,

We think the best choice is a controlled shoot and give the meat to the food banks + needy people — It could even be an annual event to help feed the people of need in Pa. The Fuglers family Wilmington, Pa

Note

LETTER NUMBER 244 IS LOCATED BETWEEN LETTERS 11 AND 12

LETTER NUMBER 245 IS LOCATED BETWEEN LETTERS 140 AND 141

BIBLIOGRAPHY

Allen, J. M. "Deer Capture and Restocking." In *Statewide Wildlife Survey, Game Management, and Demonstration*. Ind. Div. of Fish and Game, 1958.

Allen, R. E., and D. R. McCullough. 1976. Deer-car accidents in southern Michigan. *J. Wildl. Manage.* 40:317-325.

Alverson, W. S., D. M. Waller, and S. L. Solheim. 1988. Forests to deer: Edge effects in Northern Wisconsin. *Conser. Biol.* 2:348-358.

Anderson, R. C., and H. Stoebe. 1973. Trapping the Arboretum deer herd. *Wisconsin Conserv. Bull.* 38(6):20-21.

Bartlett, C. O. *A study of some deer and forest relationships in Rondeau Provincial Park.* Ontario Dept. Lands and Forests: Wildlife Ser. Publication no. 7, 172 pp., 1958.

Beals, E. W., G. Cottom, and R. J. Vogl. 1960. Influence of deer on vegetation of the Apostle Islands, Wisconsin. *J. Wildl. Manage.* 24:68-80.

Beasom, S. L., W. Evans, and L. Temple. 1980. The drive net for capturing western big game. *J. Wildl. Manage.* 44(2):478-480.

Behrend, D. F., G. F. Mattfeld, W. C. Tierson, and J. E. Wiley. 1970. Deer density control for comprehensive forest management. *J. of Forestry* 68(11).

Belden, R. C., and B. W. Hagedorn. 1993. Feasibility of translocating panthers into northern Florida. *J. Wildl. Manage.* 57:388-397.

Bell, R. L., and T. J. Peterle. 1975. Hormone implants control reproduction in white-tailed deer. *Wildl. Soc. Bull.* 3:152-156.

Beringer, J. J., L. Hansen, S. Sheriff, and W. Wilding. In press. Factors affecting capture myopathy in white-tailed deer. Paper presented at the 17th Annual Southeast Deer Study Group Meeting in Charlottesville, Virginia, February 20-23, 1994.

Bowersox, T., Prof. of Silviculture, The Pennsylvania State University. Oral communication, 12 April 1994.

Bowersox, T., Prof. of Silviculture, The Pennsylvania State University. Preliminary data, 27 September 1994.

Bowersox, T. W., G. L. Storm, and W. M. Tzilkowski. *Regenerating mixed-oak historic woodlots at Gettysburg National Military Park and Eisenhower National Historic Site: Phase I.* Cooperative Agreement 4000-9-8004, 1992.

Bramble, W. C., and P. F. English. 1948. The forest grazing problem created by deer in eastern forests. *Soc. of American Foresters Proceedings*, 257-263.

Bratton, S. P. 1979. Impacts of white-tailed deer on the vegetation of Cades Cove, Great Smokey Mountains National Park. *Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies* 33:305-312.

Bryant, B. K., and W. Ishmael. "Movements and mortality patterns of resident and translocated suburban white-tailed deer." In *Wildlife Conservation in Metropolitan Environments*, edited by L. W. Adams and D. L. Leedy. NIUW, Columbia MD. Symp. 2., pp 53-58, 1990.

Buechner, M. 1987. Conservation in insular parks: Simulation models of factors affecting the movement of animals across park boundaries. *Biological Conservation* 41:57-76.

Casey, D., and D. Hein. 1983. Effects of heavy browsing on a bird community in deciduous forest. *J. Wildl. Manage.* 47:829-836.

Chalmers, G. A., and M. W. Barrett. "Capture Myopathy." In *Noninfectious Diseases of Wildlife*, edited by G. L. Hoff and J. W. Davis, 84-94. Ames Iowa St. Univ. Press, 1982.

Conner, M. C., E. C. Soutiere, and R. A. Lancia. 1987. Drop netting deer: Costs and incidence of capture myopathy. *Wildl. Soc. Bull.* 15:434-438.

Connolly, G. E. "Predators and Predator Control." In *Big Game of North America: Ecology and Management*, edited by J. L. Schmidt and D. L. Gilbert, 369-394. Harrisburg: Stackpole Books, 1978.

Conover, M. R. 1984. Effectiveness of repellents in reducing deer damage in nuzseries. *Wildl. Soc. Bull.* 12:399-404.

Cottam, D., District Wildlife Biologist, Oregon Department of Fish and Wildlife. Telephone conversation, 5 January 1994.

Craven, S. R., and S. E. Hygnstrom. *Controlling Deer Damage in Wisconsin*. Madison: Univ. Wisconsin-Extension Publication no. G3083, 12 pp, 1986.

Decker, D. J., K. M. Laconti Lee, and N. A. Connelly. Deer-related vehicular accidents in Tompkins County, New York: Incidence, costs, and implications for deer management. *Transactions of the Northeast Section of the Wildlife Society* 47:21-26, 1990.

Diehl, S. R. "The Translocation of Urban White-Tailed Deer." In *Translocation of Wild Animals*, edited by L. Nielsen and R. D. Brown, 238-249. Milwaukee: Wis. Humane Soc., Inc., 1988.

Drake, W. E., and W. L. Palmer. *Overwintering Deer Feeding Capacities of Mixed Oak Forests in Central Pennsylvania.* Harrisburg: Pennsylvania Game Commission Final Report Project no. 06218, 1991.

DuBrock, C., Director, Bureau of Wildlife Management, Pennsylvania Game Commission. Meeting, 17 May 1994.

Ebert, J., Natural Resource Specialist, Fire Island National Seashore. Telephone conversation, 7 February 1994.

Fairweather, S. E., and C. M. Cavanaugh. *Identification, Restoration, and Maintenance of Historic Woodlots at Gettysburg National Military Park.* Tech. Rep. NPS/MAR/NRTR - 90/049, 123 pp, 1990.

Flowers, S. S. 1931. Contributions to our knowledge of duration of life in vertebrate animals: Mammals. *Proc. Zool. Soc. Lond.* V:145-234.

Frank, E., Curator of Large Mammals, Milwaukee County Zoo. Telephone conversation, 3 August 1994.

Fritts, S. H., W. J. Paul, and L. D. Mech. 1985. Can relocated wolves survive? *Wildl. Soc. Bull.* 13:459-463.

Harder, J. D. 1971. The application of an antifertility agent in the control of a white-tailed deer population. Ph.D. diss., Univ. of Michigan, Ann Arbor.

Harder, J. D., and T. J. Peterle. 1974. Effect of diethylstilbestrol on reproductive performance of white-tailed deer. *J. Wildl. Manage.* 38:183-196.

Harlow, R. F. Habitat Evaluation. In *White-Tailed Deer Ecology and Management,* edited by L. K. Halls, 601-628. Harrisburg: Stackpole Books, 1984.

Hawkins, R. E., D. C. Autry, and W. D. Klimstra. 1967. Comparison of methods used to capture white-tailed deer. *J. Wildl. Manage.* 31(3):460-464.

Hawkins, R. E., W. D. Klimstra, and D. C. Autry. 1971. Dispersal of deer from Crab Orchard National Wildlife Refuge. *J. Wildl. Manage.* 35:216-220.

Hough, A. F. 1965. A twenty-year record of understory vegetational change in a virgin Pennsylvania forest. *Ecology* 46:370-373.

Ishmael, W. E., and O. J. Rongstad. 1984. Economics of an urban deer-removal program. *Wildl. Soc. Bull.* 12(4):394-398.

Jessup, D. A., N. K. Jacobsen, and D. J. Kesler. 1993. Remotely delivered and reversible contraception of black-tailed deer (*Odocoileus hemionus columbianus*) by norgestomet ballistic implants. Abstract from the Proceedings of the American Association of Zoo Veterinarians, 135-136.

Jessup, D. A. 1992. Mountain goat populations in Olympic National Park: Capture them, kill them, contracept them or leave them alone? Proceedings Joint Meeting AAZV/AAWV, 48-49.

Johnson, S. A., J. M. Wentworth, and P. E. Hale. "Cumulative Mast Needs of Forest Wildlife." In *Proceedings Workshop on Southern Appalachian Mast Management*, edited by C. E. McGee, 18-23, Knoxville, Tennessee, 1989.

Jones, J. M., and J. H. Witham. 1990. Post-translocation survival and movements of metropolitan white-tailed deer. *Wildl. Soc. Bull.* 18:434-441.

Jones, S. B., D. deCalesta, and S. E. Chunko. 1993. Whitetails are changing our woodlands. *American Forests* 99:20.

Kammermeyer, K. E., and R. L. Marchinton. 1976. The dynamic aspects of deer populations utilizing a refuge. *Proc. Ann. Conf. Southeast. Assoc. Game and Fish Comm.* 29:466-475.

Kirkpatrick, J., Senior Staff Scientist, Deaconness Research Institute. Telephone conversation, 7 February 1994.

Kirkpatrick, J., Senior Staff Scientist, Deaconness Research Institute. Telephone conversation, 14 April 1994.

Kirkpatrick, J., Senior Staff Scientist, Deaconness Research Institute. Written communication, 21 August 1994.

Kirkpatrick, J. F., I. K. M. Liu, J. W. Turner, Jr., R. Naugle, and R. Keiper. 1992. Long-term effects of porcine zonae pellucidae immunocontraception on ovarian function of feral horses (Equus caballus). *J. Reproduction and Fertility* 94:437-444.

Kirkpatrick, J. F., and J. W. Turner. In press. "Contraception as an Alternative in Deer Management. In *Deer Management in an Urbanizing Region: Problems and Alternatives to Traditional Management.*

Kirkpatrick, J. F., and J. W. Turner, Jr. "Contraception: An Alternative to Traditional Management Techniques." In *Current Issues in Deer Management in Urbanizing Regions*, edited by S. Lieberman, 1991.

Lynch, J. F., and D. F. Whigham. 1984. Effect of forest fragmentation on breeding bird communities in Maryland. *Biol. Conserv.* 28:287-324.

Marquis, D. A. *Effect of Deer Browsing on Timber Production in Allegheny Hardwood Forests of Northwestern Pennsylvania*. Broomall, Pa.: U.S. Department of Agriculture, Forest Service Research Paper NE 475, 10 pp, 1981.

Martin, A. C., H. S. Zim, and A. L. Nelson. *American Wildlife and Plants*. New York: Dover Publ., 1951.

Matschke, G. H. 1977a. Antifertility action of two synthetic progestins in female white-tailed deer. *J. Wildl. Manage.* 41:194-196.

Matschke, G. H. 1977b. Fertility control in white-tailed deer by steroid implants. *J. Wildl. Manage.* 41:731-735.

Matschke, G. H. 1977c. The future of chemical repellents and possible alternatives in preventing white-tailed deer damage. Paper presented at Trans. NE/SE Deer Study Group Meeting, September 1977, at Ft. Picket, Virginia, pp. 85-87.

Matschke, G. H. 1977d. Microencapsulated diethylstilbestrol as an oral contraceptive in white-tailed deer. *J. Wildl. Manage.* 41:87-91.

Matschke, G. H. 1980. Efficacy of steroid implants in preventing pregnancy in white-tailed deer. *J. Wildl. Manage.* 44:756-758.

Matschke, G. H., D. S. deCalesta, and J. D. Harder. "Crop and Damage Control." In *White-Tailed Deer Ecology and Management*, edited by L. K. Halls, 647-654. Harrisburg: Stackpole Books, 1984.

Matschke, G. H., D. S. deCalesta, and J. D. Harder. 1985. "Crop Damage and Control." In *White-Tailed Deer Ecology and Management*, edited by L. K. Halls, 647-654, Harrisburg: Stackpole Books, 1985.

McCall, T. C., R. D. Brown, and C. A. DeYoung. 1988. Mortality of pen-raised and wild white-tailed deer bucks. *Wildl. Soc. Bull.* 16(4):380-384.

McShea, W. J., and J. Rappole. 1992. White-tailed deer as keystone species within forest habitats of Virginia. *Virginia Journal of Science* 43:177-186.

Noonan, B. 1994. Pennsylvania's coyote. *Pennsylvania Game News* 65(8):16-20.

O'Bryan, M. K., and D. R. McCullough. 1985. Survival of black-tailed deer following relocation in California. *J. Wildl. Manage.* 49:115-119.

Palmer, D. T., D. A. Andrews, R. O. Winters, and J. W. Francis. 1980. Removal techniques to control an enclosed deer herd. *Wildl. Soc. Bull.* 8(1):29-33.

Palmer, J. H., and L. M. Lang. *Habitat Suitability Index Model: White-Tailed Deer.* Harrisburg: Pennsylvania Game Commission, 1987.

Palmer, W., Biologist, Pennsylvania Game Commission. Written communication, 5 July 1994.

Plotka, E. D., and U. S. Seal. 1989. Fertility control in female white-tailed deer. *J. Wildl. Diseases* 25:643-646.

Porter, W. F. *White-Tailed Deer in Eastern Ecosystems: Implications for Management and Research in National Parks.* Nat. Resources Report NPS/NRSUNY/NRR-91/05, 1991.

Rand McNally. *Commercial Atlas and Marketing Guide.* 124th ed. USA, 1993.

Rongstad, O. J., and R. A. McCabe. In *White-Tailed Deer Ecology and Management*, edited by L. K. Halls, 655-676. Harrisburg: Stackpole Books, 1984.

Root, B. G., E. K. Fritzell, and N. F. Giessman. 1988. Effects of intensive hunting on white-tailed deer movement. *Wildl. Soc. Bull.* 16:145-151.

Roughton, R. D. 1979. Effects of oral melengestrol acetate on reproduction in captive white-tailed deer. *J. Wildl. Manage.* 43:428-436.

Scientific Panel Review. *Final Report: The Applicability of Contraceptives in the Elimination or Control of Exotic Mountain Goats from Olympic National Park*, 35 pp., 1992.

Short, H. L. *Habitat Suitability Index Models: White-Tailed Deer in the Gulf of Mexico and South Atlantic Coastal Plains.* Washington: U.S. Department of the Interior Biological Report 82(10:123), 1986.

Silvy, N. J., J. W. Hardin, and W. D. Klimstra. 1975. Use of a portable net to capture free-ranging deer. *Wildl. Soc. Bull.*. 3:27-29.

Storm, G., Wildlife Biologist, National Biological Survey. Meeting, 18 October 1993.

Storm, G., Wildlife Biologist, National Biological Survey. Meeting, 9 May 1994.

Storm, G. L., R. H. Yahner, D. F. Cottam, and G. M. Vecellio. *Population Status, Movements, Habitat Use, and Impact of White-Tailed deer at Gettysburg National Historic Site, Pennsylvania.* Springfield, Va.: U.S. Dep. Comm., Natl. Tech. Info. Serv. Tech. Rep. NPS/MAR/NRTR-89/043, 513 pp., 1989.

Strole, T. A., and R. C. Anderson. 1992. White-tailed deer browsing: Species preferences and implications for central Illinois forests. *Natural Areas Journal* 12:139-144.

Sullivan, J. B., C. A. DeYoung, S. L. Beasom, J. R. Hefflinger, S. P. Coughlin, and M. W. Hellickson. 1991. Drive netting deer: Incidence of mortality. *Wildl. Soc. Bull.* 19:393-396.

Sullivan, T. P., L. O. Nordstrom, and D. S. Sullivan. 1985. Use of predator odors as repellents to reduce feeding damage by herbivores: II. Black-tailed deer (Odocoileus hemionus columbianus). *J. Chemical Ecology* 11:921-935.

Tilghman, N. G. 1989. Impacts of white-tailed deer on forest regeneration in northwestern Pennsylvania. *J. Wildl. Manage.* 53:524-532.

Turner, J. W. Jr., and J. F. Kirkpatrick. 1991. New developments in feral horse contraception and their potential application to wildlife. *Wildl. Soc. Bull.* 19:350-359.

Turner, J. W., Jr., I. K. M. Liu, and J. F. Kirkpatrick. 1992. Remotely delivered immunocontraception of captive white-tailed deer. *J. Wildl. Manage.* 56:154-157.

Tzilkowski, W. M., S. E. Fairweather, G. L. Storm, and T. W. Bowersox. 1993. Forest regeneration and white-tailed deer at Gettysburg National Military Park. Paper presented at the Proceedings of the Seventh Conference on Research and Resource Management in Parks and on Public Lands, pp. 86-95.

Underwood, H. B., K. A. Austin, W. F. Porter, R. L. Burgess, and R. W. Sage. *Deer and Vegetation Interaction at Saratoga National Historical Park.* Washington: U.S. Department of Interior, National Park Service, North Atlantic Region Technical Report NPS/NAR. In press.

Urban Deer Symposium. 1993. Transactions of the 55th Midwest Fish and Wildlife Conference, December 12-14. St. Louis: North Central Section of the Wildlife Society. In press.

USDI (National Park Service). *General Management Plan: Gettysburg National Military Park.* Washington: National Pazk Service, 1982.

USDI (National Park Service). *General Management Plan: Eisenhower National Historic Site.* Washington: National Park Service, 1987.

USDI (National Park Service). *Management Policies.* Washington: National Park Service, 1988.

USDI (National Park Service). *Natural Resources Management Guideline*, NPS-77. Washington: National Park Service publication NPS-77, 1991a.

USDI (National Park Service). *Statement for Management: Gettysburg National Military Park.* Washington: National Park Service, 1991b.

USDI (National Park Service). *Evaluation of Alternatives for Managing the Appearance of Cropfields and Woodlots: Gettysburg National Military Park, Eisenhower National Historic Site.* Washington: National Park Service, 1992a.

USDI (National Park Service). *Statement for Management: Eisenhower National Historic Site.* Washington: National Park Service, 1992b.

Vecellio, G. M., Yahner, R. H., and G. L. Storm. 1994. Crop damage by deer at Gettysburg Park. *Wildl. Soc. Bull.* 22(1):89-93.

Warren, R. J. 1991. Ecological justification for controlling deer populations in eastern national parks. *Transactions of the North American Wildlife Conference* 56:56-66.

Warren, R. J., White, L. M., and W. R. Lance. 1993. Management of urban deer populations with immunocontraceptives: Practicality and agency concerns. Paper presented at the Urban Deer Symposium at the 55th Midwest Fish and Wildlife Conference, St. Louis, Mo.

Williams, S., Deputy Executive Director, Pennsylvania Game Commission. Written communication, 16 March 1994.

Wood, R. 1994. Arkansas' deer transplanting program. *Trans. N. Amer. Wildl. Conf.* 9:162-167.

Yahner, R. H., G. L. Storm, G. S. Keller, and R. W. Rohrbaugh, Jr. *Inventorying and Monitoring Protocols of Vertebrates in National Park Areas of the Eastern United States: The Faunal Report.* Washington: National Park Service Technical Report NPS/MAR/NRTR 94/058, 1994.

GLOSSARY

AGRICULTURAL SPECIAL USE PERMIT PROGRAM: The agricultural special use permit program is a management tool used to maintain the parks' rural agricultural settings. Local farmers are charged a fee and issued special use permits to farm park land. The permit normally has a five-year limit and contains conditions the farmers must follow.

CULTURAL LANDSCAPE: A geographic area, including both cultural and natural resources, wildlife, and domestic animals associated with a historic event, activity, or person. A cultural landscape can consist of historic buildings, monuments, fencing, avenues and lanes, pastures, cattle, cropfields, gardens, orchards, woodlots, woodlands, wetlands, and waterways.

CULTURAL RESOURCES: Cultural resources include historic structures which are fixed and relatively immovable (such as buildings, monuments, road systems, stone walls, and other kinds of fencing) and historic objects (such as individual items in museum collections, archeological collections, and artifacts still in the ground).

ENABLING LEGISLATION: Enabling legislation is an act of the U.S. Congress, signed into law by the President, to establish a unit of the National Park System. Among other things, a park's enabling legislation states the reasons for the unit's designation.

INTERPRETATION: Interpretation, as it applies to the National Park Service, is an educational activity that stresses appreciation and understanding of the parks' natural and cultural resources and history. It combines factual information with visual, audio, original objects (e.g., structures or landscapes), and hands-on experiences, in order to inspire as well as inform the visiting public.

LICENSED BATTLEFIELD GUIDES: Licensed Battlefield Guides are individuals that take park visitors on tours of the Gettysburg National Military Park battlefield for a fee. Although the guides are self-employed, they must meet National Park Service standards and regulations.

MANAGEMENT OBJECTIVES: Management objectives are short descriptive statements based on a park's enabling legislation, past management history and objectives, and traditions of commemoration, preservation, and interpretation.

NATIONAL REGISTER OF HISTORIC PLACES: The National Register of Historic Places is a list of structures and districts that have been judged to be of national historical significance after a stringent nomination and review process.

STUDY AREA: The eleven square miles where research was conducted for the *Population Status, Movements, Habitat Use, and Impact of White-tailed Deer at Gettysburg National Military Park and Eisenhower National Historic Site, Pennsylvania*, project.

VISITOR USE: In the National Park Service, this usually means the appropriate level, types, and patterns of visitor activities which contribute to visitor understanding and enjoyment and which are compatible with the preservation of park resources.

WOODLANDS: Woodlands are forested areas in the two parks where natural processes (with the exception of fire) are allowed to occur.

WOODLOTS: Woodlots are wooded areas that are managed for timber production and various uses. Historically, there were at least 25 woodlots on the Gettysburg battlefield within current limits of the national park. Most have not been actively managed as woodlots in many years. It is the park's intent to intensively manage three of these historic woodlots (category A) in significant interpretive areas. The other woodlots will not be as actively managed, but will be preserved as woodlands (category B).

INDEX

Adams County 1, 14, 25, 27, 51-53, 56
Affected Environment (Chapter 3) 49-57
Agricultural Special Use Permit Program (See also Permittees) 11, 31, 59, 72-74
Alternatives (Chapter 2)
    Described 23
    Eliminated 24
    Preferred 26
Capture 31-33, 35, 37, 43-45, 60-61, 63, 67-70, 74, 80, 82, 84
Contraception (See Reproductive Intervention)
Cost 11, 19, 35, 40, 61-63, 65-66, 75
Cropfields (See Cultural Resources) (See also Monitoring)
Cultural Resources
    Cultural Landscape Components
        Cropfields 6, 11, 16-17, 52, 87
        Woodlots 6, 16-17, 52, 71
    Historical Structures 3, 5-6, 20-22, 35, 41, 51-53, 55, 70-71
Cultural Landscape (See Cultural Resources)
Deer
    Carcasses 30, 36, 41
    Density
        Estimates 31-32, 36, 39, 42, 59-65, 67-70, 74-81, 83
        Goal 23-24, 51
    History 12, 14, 18, 33, 56
    Impacts to 14, 20, 62-64, 66-68, 78, 86
    Population Management 5, 10, 13-14, 19, 21, 23, 25-40, 51, 59-61, 65, 74, 87
    Population Monitoring 10, 12, 14, 16, 18, 24-25, 31-32, 51, 66
    Study Area 14-15, 17, 24, 49, 51
    Viewing 13, 17-18, 56, 82
Deer/Vehicle Collisions 17, 19, 50, 56-57, 84-87
Deterrents 25-26

Direct Reduction 27, 30-31, 34, 40-41, 62, 66, 69, 71, 74-75, 77-78, 80, 82, 86
Environmental Consequences (Chapter 4) 23, 42, 59-88
Environmental Impact Statement Recipients (Chapter 6) 93-101
Fencing 5-6, 9-10, 17, 28-29, 32, 51-52, 85
Food and Drug Administration 33, 38, 40, 42, 63
Gettysburg Battlefield Historic District 5, 52, 55
Historical Structures (See Cultural Resources)
Human Safety 18-19, 27, 32, 41, 56, 84-85
Hunting
    Legislation 14, 16, 27, 31, 33, 40-41, 64, 66
    Outside the Parks 26-27, 31, 33, 38, 40-42, 51, 59, 64-66, 68
Immunocontraceptives (See Reproductive Intervention)
Legal Compliance (See also Management Policies)
Management Objectives
    Cropfields 6, 11, 24, 28, 30-31, 73-74
    Eisenhower National Historic Site 6, 13, 16, 22, 73
    Gettysburg National Military Park 6, 9, 13, 16-17, 22, 73
    Woodlots 6, 9-10, 13, 24, 28, 30-31, 74, 87
Management Policies (See also Legal Compliance) 16-18, 21, 30-31, 34, 40, 42
Monitoring
    Cropfields and Woodlots 24, 30
    Deer Population 24, 30, 32, 60
Pennsylvania Game Commission 14, 21, 24, 32, 40-41, 50-51, 61-62, 64-65, 70-71, 74, 76, 78-79, 81, 83, 85-86
Permittees (See also Agricultural Special Use Permit Program) 13, 56, 59, 72-73
Poison 26
Predators 26, 50, 68
Preparers and Consultants (Chapter 5) 89-92
Private Land 3, 14, 17-18, 20, 26, 28-30, 32, 38, 40, 51-53, 59-61, 64-65, 75-76, 84
Private Landowners 30, 32, 40-41, 53, 56, 64-66, 68, 70-71, 74, 76, 78-79, 81, 83, 85-87

Purpose and Need (Chapter 1) 1-22
Rare, Threatened, and Endangered Species 54, 78
Relocation (See also Capture) 31-33, 61, 67-68, 80, 85
Repellents 26
Scoping
    Mailing List 93-101
    Process 18-19, 21, 23-24, 35
Shooting (See Direct Reduction)
Sterilization (See Reproductive Intervention)
Reproductive Intervention
    Contraception
        Immunocontraceptives 36, 39-40, 42, 63, 66, 69-70, 80, 84
        Steroids 36-40, 42, 63, 66, 69, 80, 84
    Sterilization 36-37, 42, 62, 64, 69, 71, 74-75, 77, 79-80, 83-84, 86
Trapping (See Capture) (See also Relocation)
Vegetation 6, 10, 18, 23, 26, 49, 52-53, 76-77, 79-81, 83, 88
Vehicle Collisions (See Deer/Vehicle Collisions)
Visitor
    Access 18, 28, 32, 34, 56, 81, 83, 87
    Safety (See Human Safety)
    Use 19, 55-56, 66, 81-82
Wildlife 14, 16, 21, 24, 26, 31, 40
Woodlots (See Cultural Resources) (See also Monitoring)