This report has been prepared to provide Congress and the public with information about the resources in the study area and how they relate to criteria for parklands applied by the professional staff of the National Park Service. Publication and transmittal of this report, including any discussion of a preferred course of action, should not be considered an endorsement or a commitment by the National Park Service to seek or support either specific legislative authorization for the project or appropriations for its implementation. Authorization and funding for any new commitments by the National Park Service will have to be considered in light of competing priorities for existing units of the national park system and other programs.
Special Resource Study
September 1995

CEDAR VALLEY
Iowa

United States Department of the Interior • National Park Service • Denver Service Center
SUMMARY

In 1991 a group of seven community volunteers met to propose an economic revitalization program for downtown Waterloo, Iowa. What the group discovered was a rich variety of stories and resources that stretched beyond local city boundaries and encompassed a broad vision—the connections between agriculture and industry that help feed the world. An urban-centered effort expanded to encompass a wide geographic area that includes small towns, family farms, and urban centers. Together, they present a dynamic chapter in the history and development of American agriculture. In 1992, the volunteer group formally established themselves as Silos & Smokestacks, a privately financed, nonprofit community advocacy organization.

The National Park Service identified the Cedar Valley area as a high priority for study, and Congress provided funds to initiate the project in January 1994. This Cedar Valley Special Resource Study presents a broad overview of 17 counties in Iowa's Cedar Valley, documents the significance of the area's resources, and identifies general threats to those resources. The study also presents three alternative concepts and five management options that begin to identify and evaluate possible approaches for use, protection, and management of the region's resources.

Many important elements of the nationally significant story of American agriculture can be seen across the study area's 17 counties. Waterloo and northeast Iowa's resources speak to that nationally significant story, and northeast Iowa is an ideal place to tell that story. In addition, if directed by Congress, there may be partnership opportunities for the National Park Service in telling that story.

This Cedar Valley Special Resource Study presents three conceptual alternatives for the conservation, development, and interpretation of agriculture-related resources. The study team emphasizes that these alternatives are conceptual in nature and that additional planning would need to be completed to determine the feasibility of implementing any or all of them. They are briefly described below.

ALTERNATIVES

Alternative 1: Quality Economic Revitalization Based on Agricultural Heritage Tourism

The focus of this alternative would be on economic revitalization through agriculture-related heritage tourism within the cities of Waterloo and Cedar Falls in Black Hawk County, Iowa, and the seven counties immediately adjacent to Black Hawk. Economic revitalization would be coordinated through a central entity that would foster partnerships with institutions, businesses, individuals, and agencies to achieve its goals.
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Alternative 2: Growth of Modern Agricultural America

This alternative would focus on the changes in 20th century agriculture that have brought the American people to this era of modern agriculture. The goals of this alternative would be achieved through the conservation, management, and use of a variety of agriculture-related resources throughout the 17-county study area of northeast Iowa.

Alternative 3: America's Agriculture Heartland

This alternative would focus on the Midwest states to tell the stories of food production innovations that have been developed there and continue to influence our everyday lives. Northeast Iowa's contributions within the larger region would be highlighted and would be the first in a series of interrelated areas that would educate Americans about the rich agricultural landscape of the Midwest.

MANAGEMENT OPTIONS

Any of the three alternatives could be managed in a variety of ways. An initial approach would be for Silos & Smokestacks to convene a conference of experts and others interested in agricultural heritage in northeast Iowa to discuss a viable management organization that would meet the goals of the agricultural heritage tourism initiative. The following discussion suggests five options for managing the complex story of American agriculture over a large geographic area.

Option 1: Heritage Preservation Efforts Coordinated by the Silos & Smokestacks Organization

Silos & Smokestacks would expand its current role and would facilitate establishing vision, goals, and responsibilities for various participating groups.

Option 2: Heritage Preservation Efforts Coordinated in Partnership with the National Park Service

The National Park Service and Silos & Smokestacks would work together to develop and implement the goals of the regional agricultural heritage tourism initiative.

Option 3: Area Affiliated with the National Park System

If the former Rath Packing Company plant and/or the Reeve REA power station is designated a national historic landmark, further assessment would be completed to evaluate the suitability and feasibility of designating one or the other as an affiliated area of the national park system.

Option 4: National Heritage Area

Silos & Smokestacks would continue its efforts to gain national heritage area designation.

Option 5: America's Agricultural Heritage Partnership

This option would create a partnership among Silos & Smokestacks, the United States Department of Agriculture (USDA), the National Park Service (NPS), the state of Iowa, and other federal, state, and local agencies, private enterprise, professional associations, and volunteer organizations to develop and implement the agricultural heritage tourism initiative in northeast Iowa.
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INTRODUCTION

Burn down our cities and leave our farms, and the cities will spring up again as if by magic; but destroy our farms and grass will grow in the streets of every city in the country.

— William Jennings Bryan

The rise of America's agriculture is told through thousands of stories. Many of them are wrapped in the warm glow of 1930s American painter Grant Wood's images of the quiet family farm with its hay mow and garden. Pastoral farm scenes, bathed in pleasant tones, show cows grazing among gentle hills, orchards bursting with spring blossoms, and a landscape where contentment reigns. But other stories tell of hundreds of country towns vying to become cities, thousands of farmers struggling to find outlets for their crops and livestock, vast networks of rails and roads connecting farms and towns, and fresh agricultural opportunities being seized with unforetold consequences.

In the span of one century, Americans have dramatically transformed the mid-continent landscape. The geometry of fenced farms now dominate vistas where fertile prairies were once intercut with old rivers. Urban settlements quickly grew up along countless railroad tracks to serve the farmers' needs. Forests disappeared — exhausted for shelter and food — and enterprising farmers drained wetlands and planted crops. In the process indigenous species suffered near-extinction. A vast commercial agriculture, made possible by railroads, flourished under the rapid evolution of mechanical innovations that made farmwork easier, and the development of reliable transportation systems for bringing to market what the farmer produced. As their part in this complex expansion of agricultural opportunities, many cities became industrial centers for manufacturers of farm machines and served as market outlets for farm products.

The success of this complex food production system has placed it among the United States' greatest achievements of the 20th century. Although only 2% of the population
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is employed in direct food production, our international trade partners have access to an abundant and reliable food supply network; knowledge, technology, and surpluses are shared across the globe; and Americans spend a smaller percentage of their income on food than any other nation.

Nowhere was commercial food production more advanced and refined than in the Midwest, where its broad expanses of open prairie lent itself to intensive mechanized agriculture. Within this central region, particular farming areas took form, such as dairying, corn-hog production, and beef cattle feeding, as farmers determined the best way to gain a high return from their investments in the land. Northeast Iowa lay astride the boundaries of these major farming areas and illustrated several features of each.

The development of this remarkable food production system was not confined to Iowa. One of the nation’s most important agricultural sections, the cornbelt, grew westward from Ohio and sections of Kentucky, across Indiana, Illinois, and Iowa. Undoubtedly the history of American agriculture cannot be told without repeated reference to Iowans and Iowa’s distinctive landscape, productivity, and accomplishments. Northeast Iowa’s Cedar Valley has long been recognized as an important segment of Iowa’s agricultural economy. Its corn and hog production, tractor factories, and food-processing plants have played a key role in Iowa’s and the nation’s agricultural development. Other important examples of northeast Iowa’s contributions include

- the Meskwaki sharing Native American agriculture and beliefs
- the African-Americans, Czechs, Germans, Norwegians, and countless others migrating to northeast Iowa and helping to create America’s 20th century food production system
- the Amish community with turn-of-the-century technology and countryside
- development and production of the farm tractor
- the early development of hybrid seed
- the early history of the farm cooperative movement
- the Depression-era farmboy who later won the Nobel Peace Prize for the Green Revolution
- the Iowan who led the humanitarian effort to feed Europe after World War I and later became president of the United States
- the farmgirl who became a leader in the women’s suffrage movement
- the scientist and journalist who designed many of the farm programs still in use today
- the pioneer farmer who served 16 years as secretary of agriculture during the Golden Age of agriculture
- the Effigy Mounds National Monument interpreting life before modern agriculture

The key to the region’s settlement and agricultural development has been the almost unparalleled quality of its soil. Much of its land was native prairie, covered with tall joint-grass anchored in a thick, nutrient rich layer of topsoil. When the grass was burned, the fields drained, and the soil tilled, well over 90% of the total area of Iowa was available for cultivation. It has been stated that 25% of America’s Grade-A land lies within Iowa’s boundaries (Sage 1974). From this land, farmers, farm families, food processors, suppliers, policymakers, and thousands of others in agriculture-related technologies have developed the most abundant, most reliable, cheapest, and safest food production system ever known. For thousands of years, Iowa’s land has drawn people of various cultures to the richness of its bounty and has been an integral part of the growth of a food production system that helps feed the world.
Resources representing northeast Iowa's vital role in the evolution of America's 20th century food production system can be seen across the region's landscape. From an early tractor factory at Charles City to modern Deere & Company plants in Waterloo; from the creameries that represent a dairy industry nationally recognized at the turn of the century to the Farm Park at Decorah that reflect today's efforts to maintain genetically diverse animal breeds, Iowa remains at the forefront of innovation and change in American agriculture. The land remains the primary defining feature of northeast Iowa's rural landscape as farmhouses, barns, and silos rise from the verdant prairie soil. Through appropriate management and interpretation, these resources can begin to convey to residents and visitors alike the rich story of America's agricultural heritage — the ability to feed the nation and the world.

BACKGROUND AND PURPOSE OF THE STUDY

Background

The initiative for the Cedar Valley Special Resource Study began in November 1991 when seven community volunteers met to propose an economic revitalization program for downtown Waterloo, Iowa. In 1992 this group was formally established as Silos & Smokestacks — a privately financed, nonprofit, community advocacy organization. The National Park Service identified the area as a high priority for study, and Congress provided funds to initiate the study in January 1994. In addition, other activities and initiatives have influenced this study, including the following:

- the revised thematic framework of American history that the National Park Service uses in studying and interpreting historic sites — the Cedar Valley study is among the first of the special resource studies completed under the revised thematic framework (see appendix B)
- a proposal, with support from the National Trust for Historic Preservation and the National Park Service, to establish a system of national heritage areas; it led to the formation of the National Coalition for Heritage Areas and their advocacy of federal legislation to establish a national program for heritage areas
- congressional authorization to prepare a national landmark theme study on American labor history — as a result, the former Rath Packing Company plant site will receive consideration of national landmark eligibility

Purpose of the Study

The Cedar Valley Special Resource Study is one of nine National Park Service (NPS) special resource studies that were mandated in the Department of the Interior Appropriations Act for fiscal year 1994 in Public Law 103-138. This special resource study provides a broad overview of the area, documents the significance of the area's resources, and identifies general threats to the resources. In addition, it presents three alternatives and five management options that begin to identify and evaluate possible approaches for use, protection, and management of the region's resources.

The study provides Congress and private and public entities with a foundation upon which to make decisions concerning resource conservation and economic revitalization efforts in 17 counties in northeast Iowa.
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As outlined in its 1988 Management Policies, the National Park Service conducts planning activities to identify and assess significant natural, cultural, and recreational resources and to analyze strategies for their conservation within and outside the national park system. These studies are initiated by the agency or are conducted in response to requests from Congress, other federal, state, or local agencies, or the private sector. The National Park Service has established the criteria for evaluating natural, cultural, and recreational resources for national significance set forth in the Management Policies (see appendix C).

PARTNERSHIP COORDINATION AND PUBLIC INVOLVEMENT

This special resource study has been conducted in partnership with Silos & Smokestacks, using the expertise, ideas, and recommendations of individuals, businesses, and public agencies. In January 1994 Silos & Smokestacks sponsored a kick-off meeting for the National Park Service study team to introduce the team to the people, stories, and resources associated with northeast Iowa's agricultural heritage project. It was apparent at that time that there was widespread interest in the project and that community volunteers had conducted considerable research into their agricultural heritage.

Discussions between the National Park Service, Silos & Smokestacks, and other agencies have centered on the nationally significant story of American agriculture and the resources available in the study area that could be used to convey that important story to local, national, and international visitors. The National Park Service has concentrated its efforts on assisting the local community with ideas on how to conserve it agricultural heritage and to use its diverse agricultural-related resources to stimulate economic opportunities.

Staff members and representatives of the Silos & Smokestacks organization have actively participated in the study process in several areas, including provision of resource data; consultation concerning related planning and agricultural heritage conservation efforts; participation in joint field reconnaissance of resource sites; formulation of alternatives and management options; review of the draft document; and cosponsorship of public meetings. In turn, the study team has presented its findings to Silos & Smokestacks at key junctures during the study process for informational purposes and to elicit feedback. The input provided by the Silos organization has facilitated and enhanced the study team's planning efforts.

In addition to Silos & Smokestacks, the study team has worked with a number of individuals and agencies having specialized knowledge of American agriculture and its related industries or who have been involved in similar initiatives. These participants are identified in the "Study Participants" section of the document. Points of coordination with these interested parties involved identification and location of the region's agriculture-related resources; resource evaluation (including assessing significance, integrity, and other attributes of resources during field investigations); participation in interactive planning workshops; alternatives formulation and review; and draft document review and comment.

The interest and enthusiasm first expressed at the kick-off meeting in 1994 has continued throughout the study process and was reinforced at three open-house meetings held in June 1995. More than 75 people attended workshops sponsored by Silos & Smokestacks, the State Historical Society of Iowa, the Iowa Farm Bureau, the Iowa Department of Agriculture and Land Stewardship, the Waterloo Historic Preservation Commission, the Cedar Falls Historical Society, the Clayton County Conservation Board, the Floyd County Historical Society, and the National Park Service at Waterloo, Elkader, and Charles City. Participants voiced support for the agricultural heritage initiative and expressed a desire to have their favorite...
agricultural resources included in the NPS document. At the meetings, participants also indicated a strong pride in their agricultural heritage and Iowa's contributions to America's modern food production system. They emphasized the need to educate the American public about how food is produced and to tell the stories of the evolutionary changes that have taken place in American agriculture during the 20th century.

STUDY AREA

The Cedar Valley study area covers a large portion of Iowa's northeastern corner, including the following 17 counties: Allamakee, Benton, Black Hawk, Bremer, Buchanan, Butler, Chickasaw, Clayton, Delaware, Fayette, Floyd, Franklin, Grundy, Howard, Mitchell, Tama, and Winneshiek (see Study Area map). Definition of the study area was based on work initiated by the Silos & Smokestacks organization and discussed during meetings with the National Park Service. The large region and its associated resources represent the relationships between rural and urban settings in the development of 20th century American agriculture and is key to understanding the importance and complexity of the area's agricultural heritage.

The study area's geographic expanse presented a major challenge because of the number of resources and the complexity of the story of American agriculture. It was also difficult to limit the size of the area assessed, because resources occur in adjacent counties and in many cases include historical connections to those in the study area. For that reason, the boundaries defined in the study should be considered flexible and could be easily adjusted to meet future needs of the region's agricultural heritage tourism initiative.

RELATED ACTIVITIES

Silos & Smokestacks: The Partner Organization in Cedar Valley

A renewed sense of volunteer spirit and pride in America's agricultural heritage has emerged in northeast Iowa. The spirit is manifested in grassroots planning efforts that seek to prepare for the future through a respect for and celebration of the region's cultural, natural, and scenic heritage.

As noted previously, the Silos & Smokestacks organization originated as a meeting of seven community volunteers interested in developing an economic revitalization program for downtown Waterloo, Iowa. From that first meeting, Silos & Smokestacks evolved into a community advocacy program promoting agricultural heritage tourism initiatives across northeast Iowa. Their focus has now become the more encompassing story of America's agricultural revolution and the development of international agribusiness from seed to table. Resources that illustrate important aspects of that larger story are easily recognized across northeast Iowa's rural landscape and are being planned as the anchors for a regional heritage tourism industry.

While agricultural heritage experiences are already available in many places, they most often focus on pioneer and 19th century agriculture. The role and development of 20th century agriculture is rarely explained. Silos & Smokestacks proposes a complete overview of this more recent evolution of American agriculture and agribusiness and is pursuing its goal by actively seeking private/public and rural/urban partnerships. Potential partnership involvement could include the Department of the Interior (National Park Service, Fish and Wildlife Service), Department of Agriculture (Natural Resources Conservation Service), the Smithsonian Institution, Iowa's Regent universities, Deere & Company, Pioneer Hi-Bred International, and many other public and private entities. Partnership projects may include heritage tourism, recreation,
interpretation, education, research, cultural events, and economic revitalization. Sites and experiences could include historical exhibits, farm tours, factory tours, science activities, nature center interpretation, and countryside tours offering insight into and understanding of American farm life available from no other source.

Much change is taking place in Iowa's Cedar Valley and surrounding northeast Iowa counties as new social and economic demands drive revitalization. Silos & Smokestacks is one response to that change as citizens continue to find ways to improve the quality of life, promote growth and prosperity, and define the region's future in a way that recognizes, conserves, and promotes the people's heritage. The challenges also can be met through a collective effort of local, regional, state, and federal interests providing guidance in developing visitor-oriented programs and facilities and facilitating access to a variety of agriculture-related resources.

Heritage Areas: A New Program and Its Influences in the Cedar Valley

One partnership option being considered by the Silos & Smokestacks organization is congressional designation of the 17-county region as a national heritage area. A heritage area is usually organized around a distinctive large-scale resource — a cultural resource such as a railroad or canal or a natural resource such as a river. A heritage area could also be organized around productive land such as that found in northeast Iowa. A heritage area includes both rural and urban settlements that are cohesive, dynamic environments where private property predominates and where large-scale government ownership is rare.

Heritage areas are not national parks — although they may contain individual National Park Service elements and may involve partnerships with the National Park Service. Rather, these are working landscapes where residents have formed new cooperative efforts to celebrate their heritage, revitalize their communities, and conserve natural and cultural resources.

Heritage areas encourage both the protection of a wide variety of environmental, recreational, and cultural resources, and promote sustainable development for tourism and other economic opportunities. They educate residents and visitors about community history and traditions and provide opportunities for outdoor recreation. Heritage areas most often comprise more than one jurisdiction, with regional management that combines private and public sector leadership.

Regional heritage areas exhibit two clear, consistent characteristics: they are built on a wide base of support directly linked to the historic region, and they are structured in a way that ensures economic benefit will accrue from the expenditure of private, state, and federal dollars for heritage preservation. In northeast Iowa the Silos & Smokestacks agricultural heritage tourism initiative clearly demonstrates both these characteristics.

National Park Service Labor Theme Study

Public Law 102-101 authorized the secretary of the interior to prepare and transmit to the Congress a national historic landmark theme study on American labor history. The purpose of the theme study is to identify the key sites in American labor history, including the history of employees and their work, organizing efforts, strikes, the impacts of industrial and technological change, and of the contributions of American labor to American history. Also, the theme study will nominate those districts, sites, buildings, and structures as national historic landmarks that best illustrate or commemorate American labor history in its fullest variety. In addition, the law requires the secretary to prepare a list, in order of importance, of the most appropriate sites for possible addition to the national park system. This list is to include a discussion of the feasibility and suitability of such sites.
In August 1993, the National Park Service selected Dr. James R. Grossman of the Newberry Library, Chicago, Illinois, to prepare the Labor National Historic Landmark Theme Study. Dr. Harry Butowsky, History Division, Washington Office, National Park Service, and Dr. Marty Blatt, Lowell National Historical Park, are monitoring the implementation of the labor theme study cooperative agreement.

The former Rath Packing Company plant in Waterloo, Iowa, has been named as one of the resources that will receive consideration for national landmark eligibility as part of the labor theme study. An investigative team from the Newberry Library visited the site in September. National landmark designation could help in preserving the historic site and associated historic neighborhood districts.
Northeast Iowa's Cedar Valley, both in its settlement patterns and in its participation in the emerging agricultural/industrial economy, illustrates the rise and transformation of America's commercial agriculture during the past 150 years. As the United States expanded its boundaries toward the Pacific Ocean, the region that stretched from Ohio west to the Dakotas became known as the nation's "bread basket." By 1899 this Midwest region produced 77% of the nation's oats and 58% of the total hay. As the population of the United States spread westward, so did grain production. The leading wheat producers before the turn of the century were Illinois and Indiana. By 1899 production had shifted and Minnesota, the Dakotas, and Kansas had become the lead grain producers. Similarly, corn production in 1859 had been centered in the Southeast and the Ohio Valley, but by 1899 Iowa, Kansas, and Nebraska had become the leaders. Midwest farmers also increased their livestock as they raised 57% of the nation's milk cows and 59% of its horses (National Park Service 1963).

"The westward sweep of American agriculture, which had germinated in southeastern Pennsylvania, attained its peak in Iowa, the heart of the nation's agricultural heartland" (Hart 1991). At the turn of the 20th century Iowa was already known for its production of corn, hogs, and cattle. The State Agricultural Society, at its annual meeting in 1896, wishing to recognize the state's corn crop as "the chief source of wealth to the State," adopted a stock of corn and "a fat pig" as the Society's emblem (Ross 1951). The interdependent relationship between growing corn and raising hogs for market developed in Iowa as in no other state in the Midwest. Throughout the 20th century Iowa has been number one in the nation in hog production and consistently among the top three states in farm cash receipts in corn, soybeans, hogs, and livestock. Iowa and Illinois (Iowa's nearest competitor for corn production honors) produced 37.5% of the nation's corn produced for grain in 1992 (Iowa Farm Bureau 1993).

During the 20th century American farmers throughout the Midwest and across the nation dramatically increased production of the nation's farmland. Each mechanical advancement brought relief to labor intensive farming
practices, livestock improvements set new standards for healthy animal production, new grain-processing methods and products stimulated the raising of particular crops, veterinary science opened innovative possibilities for livestock confinement, and new seed varieties yielded greater production of food and feed. Iowa lay astride these developments and led the field in many of them including the production of a reliable farm tractor, the commercial development of hybrid corn, the research and subsequent development of the hog cholera vaccine, and Norman Borlaug's genetic research, which led to awarding him the Nobel Peace Prize in 1972.

In northeastern Iowa, the Cedar Valley participated in these revolutionary changes to become an important part of the state's agricultural/industrial economy. Waterloo/Cedar Falls became an important regional center where its factories manufactured farm equipment and processed food and grain products. Between 1880 and 1920, due in part to the region's location along the Cedar River and its attractive financial offerings to new business, the region's industrial base grew at a rate that outpaced other regional centers like Cedar Rapids and Iowa City. By the turn of the 20th century Waterloo/Cedar Falls and surrounding counties had securely linked the region to eastern markets via a vast transportation network.

While corn and hog production along with a vital dairy industry was the mainstay of farm production in the Cedar Valley at the turn of the century, railroads, a slaughterhouse and packing plant, farm tractor factories, and related industries were the backbone of the urban center. Railroads provided the transportation ties for rural and urban products with Chicago and the markets beyond. Railroads first ventured into Waterloo in 1861 when Dubuque & Sioux City Railroad (taken over by the Illinois Central in 1870) brought the first passenger train to town. By 1899 the region was being served by the Illinois Central, Burlington, Cedar Rapids & Northern, and the Chicago & Great Western rail lines. The lines led virtually in every direction from Waterloo and offered innumerable markets for northeastern Iowa's farm products.

In 1891, following a disastrous fire at its Dubuque plant, the Rath Packing Company moved its operation to Waterloo. Bolstering the agricultural/industrial employment base in Waterloo, Rath became one of the leading employers in the region. The company hired H. Peter Henschein, one of the country's premiere packing plant designers, to design and build its slaughterhouse and many of the plant's other structures. Design and installation of the "vertical kill" and associated disassembly line came at a time when the meatpacking industry was being scrutinized for its meatpacking practices. Rath's new processing plant reflected demands of meat inspection laws for safe, sanitary processing conditions and became known throughout the industry for its innovative practices.

The Rath Packing Company was family owned and operated for most of its history. The Waterloo plant reflected a trend in the industry to locate packing plants closer to the source of production. Small to mid-sized plants were built across the Midwest, and though they did not share the same market as the giant Armor and Swift companies, this 'second tier' group of meatpackers found a secure market niche. Rath was among the top of this group.

In addition to supplying a market for farmers' meat products, the industries of the Cedar Valley supported farmers by attracting businesses that manufactured farm implements. Of these manufacturers, Deere & Company has been a mainstay of the region's industrial economy since 1918.

Another aspect of change in farming was the advances made in machinery. Nothing has so changed the work of farming as mechanization. With the advent of the steel plow, farmers could break the thick sod of the Midwest prairie with greater ease. The introduction of the tractor, however, eclipsed the
impact of the plow on farming and transformed farm labor forever. The tractor replaced human and animal power with machine power, increased the number of acres one person could plow, plant, and harvest, and reduced the number of workers needed on a farm. The changes wrought by farm mechanization, especially with the advent of the tractor, is directly evident in the events that took place in the Cedar Valley.

Building on initial attempts by John Froelich to build a viable tractor, Louis Witry, a machinist and technical expert, had helped create the famous "Waterloo Boy" gasoline engine that powered the Waterloo Gasoline Engine Company's first successful tractor in 1905. By 1915 the company was a successful tractor manufacturer with more orders than it could fill. In 1918, Deere & Company, looking to expand its line of farm equipment and with the insight to realize the possibilities offered by the successful company, bought the Waterloo Gasoline Engine Company. Through innovation and the introduction of new tractor lines, Deere survived the hard times and competition of the post World War I era and went on to claim a major share of the tractor manufacturing market in the nation. Today Deere & Company remains the major industrial employer in Waterloo and continues to enjoy a major tractor market share around the world.

Other agriculture-related businesses flourished in the Cedar Valley as well. The region's dairy industry gained early national recognition for its production of high-quality butter and had markets as far away as New York. Northeast Iowa formed the heart of Iowa's dairy development. Although the Granger movement does not seem to have played an important role in the dairy industry, dairy cooperatives were strong in northeast Iowa. The Waterloo Dairy Cooperative is one example of the farmers' coop movement in the region.

The Waterloo Dairy Cooperative was an extension of the cooperative established in Orange Township in 1889. Farmers in Black Hawk County enjoyed a reputation throughout the state as a progressive and successful group. In 1922 a group of 125 farmers opened a creamery in Waterloo to compete for the lucrative urban market. Although this cooperative was based in Black Hawk County, other cooperatives were strong in Bremer County as well.

Like the challenges faced by farmers and urban agricultural/industrial centers across the nation during the latter half of the 20th century, the Cedar Valley faced enormous problems on its farms and in its cities. Declining farm population and farm consolidation, changes in the nation's food consumption habits, and shrinkage in the dairy industry unsettled old arrangements. Industrially, Deere & Company drastically downsized their operations while Rath Packing Company, suffering unfavorable market conditions, labor troubles, and intermittent livestock shortages, closed its doors in 1985.

Today the Cedar Valley embarks on a new path as community leaders and organizers seek to attract new businesses to the region. Along with attempts to lure new and vital business interests to the Cedar Valley, people are looking to their heritage as food producers and processors to help revitalize their region. Their goals are to regain a sense of pride in their contributions to America's agricultural accomplishments — providing a safe, inexpensive source of food for Americans and helping feed many other nations around the world. By telling the stories associated with America's agricultural/industrial heritage, which will revitalize the resources associated with their heritage, northeast Iowa's people hope to reach all Americans. Farmers and agricultural/industrial workers across the land share common stories with the people of the Cedar Valley. Although the stories and resources may differ from New England to Georgia and from New York to California, all Americans can appreciate northeast Iowa's efforts to conserve and share a vital part of this nation's history.
RESOURCES WITHIN THE STUDY AREA

Representing four broad interpretive topics (see the "Visitor Experience" section for detailed descriptions on topics) are a variety of cultural, natural, and recreational resources. Following is a general description of the resources in the study area. More detailed descriptions of selected resources are included in appendixes D, E, and F to illustrate the rich diversity of cultural, natural, and recreational resources that could be used for conservation and economic revitalization efforts in the study area.

CULTURAL RESOURCES

Overview

Cultural resources in the Cedar Valley study area include sites and structures associated with the development of agriculture and agriculture-related industries (see Selected Cultural Resources map). Many resources representing major trends in American agriculture and the agricultural industry of the late 19th century and into the 20th century are extant and offer varied opportunities for relating the stories associated with those developments. The 17-county area contains extant national register properties, ranging from round barns and farmhouses to creamery buildings and packing plants. Many industrial resources and historic neighborhoods have been identified at Waterloo, Cedar Falls, Decorah, Guttenburg, Spillville, and other towns. Still other resources have been determined eligible for listing on the national register and need further study. In particular, the former Rath Packing Company plant is being evaluated for national historic landmark status as part of the National Park Service's labor theme study. The Waterloo Cooperative Creamery site warrants further study to place the cooperative within the context of the state's farmers' cooperative movement and the state's dairy industry. The study team also recommends that the Reeve REA power plant in Franklin County be evaluated for national landmark status.

The study area has a strong community of cultural institutions with many collections. The member institutions of Resources Plus, the local association of cultural institutions in Waterloo/Cedar Falls, serve as a repository of information and important agriculture-related collections. It will be important, as the agriculture heritage initiative proceeds, to...
work closely with this and other historical societies and associations to coordinate efforts in collecting artifacts and in telling the story of America's agricultural development.

Significance

The majority of resources in the study area are related to the growth and development of northeast Iowa's agricultural/industrial economy. The former Rath Packing Company plant has been determined eligible for listing on the national register and is being further considered for national landmark status. Other resources listed in or eligible for listing on the national register are of local or state significance. In addition, the Reeve REA power plant should be evaluated for national historic landmark eligibility. Effigy Mounds National Monument is the only currently known nationally significant archeological site in the study area.

NATURAL RESOURCES

Natural resources directly influenced the development of northeast Iowa as an important agricultural area (see Selected Natural and Recreational Resources map). Important natural resource elements that characterize the region include climate, topography, water resources, vegetation, wildlife, and soils.

Climate and Topography

Iowa lies within the Central Feed Grains and Livestock Region, a land resource region as defined by the USDA which also includes portions of Ohio, Indiana, Illinois, Minnesota, Wisconsin, Nebraska, South Dakota, Oklahoma, and Missouri, and which is one of the most famous grain-producing regions in the world. The major crops of the region include soybeans, corn, oats, hay, winter wheat, and other crops and feed grains. The region contains fertile, well-drained soils. Annual average temperatures range from 43°F to 55°F. Average annual precipitation in the region varies from nearly 20 inches to over 45 inches. Approximately half the precipitation falls during the spring and summer growing seasons.

Iowa is divided into seven major land resource areas. The study area lies within the Eastern Iowa and Minnesota Till Prairies, the Northern Mississippi Valley Loess Hills, and the Illinois and Iowa Deep Loess and Drift areas.

The Eastern Iowa and Minnesota Till Prairies Region features streams with narrow and shallow valleys in their upper reaches. The soils of the area are deep and medium to moderately fine textured and support such vegetation as switchgrass, prairie dropseed, prairie cordgrass, little bluestem, porcupinegrass, sand lovegrass, clovers, phlox, sunflower, gayfeather, and goldenrod. Swampy and wet soils in the region support cattails, milkweed, bedstraw, and tickclovers. Nearly all the land is taken up by farms — approximately 80% is cropland with under 10% in pasture, while the remaining 10% is wooded wet bottomland and forested slopes bordering stream valleys.

In the Northern Mississippi Valley Loess Hills area the soils are moderately deep to deep to medium textured and well drained. The upland soils feature natural hardwood forests of oak, hickory, and sugar maple. In the same area big and little bluestem and scattered oak trees are also prevalent. Elm, cottonwood, river birch, ash, willow, and silver maple inhabit lowland soils. The region is primarily made up of layers of thin soil over bedrock. Most of the land is in farms, but only two-fifths is used for croplands to grow feed grains and forage for livestock. This is the area which developed into Iowa's dairy region.

The Illinois and Iowa Deep Loess and Drift Area contains almost 80% cropland producing corn, soybeans, and other feed grains. Ten percent of the region is made up of native and introduced grasses, while the remaining 10% has developed into urban areas and industrial centers. Most of the region is loess-covered glacial plain, rolling to
hilly, with some broad, level to undulating uplands. The Mississippi River and a number of large tributaries provide water transportation and recreation. Most of the soils in the area are formed from loess and are deep and medium texture. The area formerly supported tall grass prairie vegetation and a few native prairie segments remain in protected parks. The floodplains support mainly maple, elm, and ash trees, while the steep slopes of valley sides support such forest vegetation as black oak, white oak, bur oak, shagbark, hickory, and walnut (Clements 1988).

Water Resources

The state of Iowa is often described as "the land between two rivers" — the Mississippi and the Missouri. The Upper Iowa, Turkey, Wapsipinicon, Cedar, Maquoketa, and Iowa Rivers that drain into the Mississippi River are the major rivers within the study area. With a total drainage area of 12,637 square miles, the Iowa-Cedar River Basin is the second largest in Iowa. The most important of the major rivers in the basin is the Iowa, which has several tributaries that are relatively short and have small drainage areas. The Iowa River is joined by the Cedar River about 30 miles upstream from its mouth. Originating in the glacial drift/lake region of southern Minnesota, the Cedar River, like the Iowa, has a subbasin with elongated shapes — a characteristic of most streams in eastern Iowa. The main stem of the Cedar River has 11 dams erected across it, which are used primarily for power generation, not for the streamflow control (Clements 1988).

The Northeast Iowa River Basin covers 8,652 square miles, 97% of which is in Iowa and the remainder in Minnesota. This basin is drained by small rivers such as the Turkey, Wapsipinicon, the Maquoketa, the Upper Iowa, and a number of smaller streams that drain into the Mississippi. These river subbasins are largely agricultural in character, except along the Mississippi River where industrial centers have developed.

Narrow valleys limit the frequency of flooding in the northeast basin area, and most streams have low flows but are sustained by influxes of groundwater from shallow aquifers (Clements 1988).

Significance

The Upper Mississippi River National Wildlife and Fish Refuge is a nationally significant resource in the study area. In addition the U.S. Fish and Wildlife Service has been authorized to expand the Driftless Area National Wildlife Refuge, which is also located along the Mississippi. A preliminary planning document has been prepared for the proposed expansion and identifies one or more small sites in Fayette County. Further planning, NEPA compliance, and land acquisition issues must be resolved before the refuge expansion can be completed.

The state of Iowa has identified several natural resource areas having state significance including the Hayden Prairie State Preserve in Howard County, Otter Creek Marsh in Tama County, and Backbone State Forest in Delaware County.

RECREATIONAL RESOURCES

Overview

Recreational opportunities within the study area offer a variety of visitor experiences. The region contains a series of state, county, and local recreation parks for camping, hunting, fishing, and pedestrian activities (see Selected Natural and Recreational Resources map). In cooperation with the U.S. Fish and Wildlife Service, the Iowa Department of Natural Resources has established programs aiding wildlife habitat restoration and fostering a viable public hunting program. Efforts have resulted in the return of large numbers of Canada geese, wood ducks, deer, and wild turkey. In addition, the region's waterways offer fishing and water-based recreational activities.

The region also contains various recreational trails in parks and along river corridors.
RESOURCES WITHIN THE STUDY AREA

Others are along abandoned railroad lines and help maintain historic connections between neighboring communities. The Cedar Valley Nature Trail is an excellent example of using existing historic corridors for recreational use. This trail uses both railroad alignment and abandoned trolley line rights-of-way between Waterloo/Cedar Falls and Cedar Rapids. Where once travelers between the two communities could travel by train or trolley, people now can travel the 52 miles on bicycle, or by walking or jogging along the route.

Another important trail in the region is the American Discovery Trail (ADT) that connects the East Coast with the West Coast through a network of trails and unpaved roads. The ADT passes through the study area via Interstate Highway 380, along the Cedar Valley Nature Trail, through Waterloo/Cedar Falls and westward. The ADT was created by the American Hiking Society and Backpacker magazine. While primarily a hiking trail, the idea is that many parts of the ADT will be shared with bicyclists and equestrians. The creators envisioned the ADT as

a trail of discovery - a true "slice of Americana." Seeing the country on foot on trails or by bicycle on quiet roads, the adventurer will come to know the land and its people in a way not possible from a highway. The ADT will be a "Route 66 for the self-propelled."

The American Discovery Trail reaches its northern-most point as it passes along the Cedar Valley Nature Trail in the Waterloo/Cedar Falls area.

Significance

The study area’s recreational resources provide a variety of opportunities for outdoor recreation. There are currently no designated nationally significant recreational resources in the study area.

THREATS TO RESOURCES

Fewer people today are engaged in farming in the United States than ever before. Although the debate continues as to whether the family farm is disappearing or has disappeared, it is readily apparent that the American rural landscape has changed. In Iowa, as in other sections of the Midwest, some of the small rural communities complete with "white houses and broad lawns, kids on bicycles delivering newspapers, and a brass band playing in the town square on the Fourth of July" (Heilman 1988) no longer exist. In telling the story of American agricultural development, the physical resources now missing become vitally important components of that story, as vital as the resources that remain.

The debate surrounding the status of the family farm revolves around the fact that seemingly little acreage has been actually removed from agricultural production while the numbers of farms has decreased dramatically. In Iowa between 1970 and 1990 the number of farms has decreased from 145,000 to 102,000 while the number of acres of "land in farms" has decreased from 34,400,000 in 1970 to 33,400,000 in 1990. These figures indicate that the loss of 1 million acres of farmland also translates into an apparent increase in the average acreage of an Iowa farm from 237 acres to 327 (Iowa Farm Bureau 1993).

Even though acreage remains largely in agricultural production, the face of Iowa’s landscape has changed and the resources integral to telling the story of the region’s agricultural development are being lost to decay, vandalism, demolition, and neglect. As abandoned farm buildings fall into disrepair and young people leave their rural homes for jobs and careers in the cities, visible signs of the region’s vital agricultural heritage continue to fade from view. In urban areas resources related to food processing and marketing are threatened by development, decay, and vandalism. As more resources are lost to the present generation, future generations will have difficulty visualizing and
understanding their agricultural heritage and their ancestors' contributions to America's agricultural development.

The concept of the loss of the family farm as a tragedy is an example of transplanted cultural regionalism that shows up in the behavior of prairie farmers: To the predominantly Germanic (in this case Germany, Scandinavia, Slavic countries) immigrants to the area, the inheritance of landed wealth is viewed as an important element of the maintenance of family and community. The expectation that towns retain their immigrant flavor and that farms stay in a family generation after generation, is characteristic to this area. This differs somewhat from the behavior of farmers of New England who were predominantly from the British Isles and surrounding countries who generally treated farmland as a commodity to be bought, sold, and traded. There is cultural differences in the lesser degree of emotional attachment to a specific property or town. The New England (and other Anglo-settled areas on the Atlantic) farmer expected to move more frequently in hopes of improving the farming operation through advantageous acquisitions.

Iowa's farm communities' struggle to retain their immigrant flavor in the face of the loss of a large segment of the farm population and subsequent redistribution of community resources to larger urban areas marked the decade of the 1980s and is still being felt as we push closer to the turn of the next century.
VISITOR EXPERIENCES IN THE CEDAR VALLEY

This section describes the experiences visitors may have when they visit the farms, museums, factories, or landscapes associated with the Cedar Valley’s agricultural/industrial heritage. There is no single experience in the Cedar Valley because there are many stories to tell and many resources to visit. To satisfy diverse visitor interests a range of opportunities would be available for people to learn about American agriculture and the Cedar Valley.

GOALS OF THE VISITOR EXPERIENCE

The goals of the visitor experience would be to make the following opportunities available to people regardless of how much time they may spend in the Cedar Valley or how many sites they may visit.

- to see, smell, hear, and touch live farm animals on an Iowa farm
- to learn how food is grown/raised, harvested, processed and shipped to markets
- to learn about the diversity of farming people, crops, and farming techniques
- to appreciate farming as a way of life
- to understand how American farm products have improved the quality of life for people around the world
- to learn about the profound changes in American agriculture that have occurred from prehistoric times to the present
- to appreciate the complexity of the American food production system and the evolution of American agriculture and agribusiness
- to enjoy personal interactions with local farming people

INTERPRETATION

Interpretation is a process of education that stimulates curiosity and conveys ideas and stories to people. It is part of the visitor experience, and in the Cedar Valley, interpretation would help people understand complex stories, discover deeper meaning behind seemingly simple relationships, and be inspired to learn more about American agriculture. Interpretation can also promote pride in a shared heritage.
There are many ways to achieve the visitor experience goals and to foster visitor understanding of American agricultural heritage in the Cedar Valley through interpretation. People who visit the region could marvel at the sight of endless corn rows, visit a tractor assembly plant, smell freshly plowed earth, see an exhibit about rural electrification, view a short film about growing up on a farm, or read a farm almanac. People might stroll through a county fair, go to a horse auction, or hear the whistle of antique farm machinery. Good interpretation ties together stories, sensory activities, and resources to provide meaningful and enjoyable visitor experiences.

The growth and development of American agriculture is a nationally significant story and in the Cedar Valley there are resources that can help illustrate aspects of that story. Because there are an unlimited number of stories that can be told about American agriculture, the following discussion focuses on those stories that can be told in association with sites and resources in the Cedar Valley. The following organizational framework (topic, element, resource/site) is provided as an example; it can be used to define what story is interpreted and which resources illustrate that story. The framework can be modified as more resources are identified, or as the story is further defined.

Principal Interpretation Topics

For this study, the story of American agriculture has been divided into four principal topics that could be interpreted in the Cedar Valley. These four topics are broad and contain many secondary stories. Additionally, representative resources and sites in the Cedar Valley that could illustrate the topic are identified.

Note: The topics are in no particular order, and the listing of elements and resources is not considered complete. All topics are interrelated, and all resources and sites are extant. Some are not open for visitors, others require rehabilitation/development, and still others do not offer interpretive opportunities. Some of the resources and sites could illustrate more than one interpretive topic. Human communities require privacy and respect for culture; any visitation or interpretation planning related to these groups must have their approval, control, and hands-on involvement.

The four topics discussed in this section are not to be considered primary interpretive themes. Primary interpretive themes would define what visitors should know about the Cedar Valley project's purpose, resources/sites, and significance. Primary interpretive themes help limit and focus the messages and programs. The National Park Service recommends that an interpretive planning professional be involved with the identification and writing of primary interpretive themes and media decisions involving the planning, design, and production of audiovisual products, wayside exhibits, museum exhibits, and publications. This professional should also be involved with the planning and operation of any personal services program. (Silos & Smokestacks has contracted with Christopher Chadbourne & Associates and Living History Farms to develop an interpretive plan.)

The Amazing Science of Agriculture. This topic focuses on past, present, and future research efforts leading to higher quality and larger quantities of food. Since Iowa's lands were first cultivated by Europeans, there has been an ongoing agricultural revolution in mechanical, biological, chemical, and genetic technologies. New machines for cultivating, planting, and harvesting were standardized by the Civil War, and power sources changed from human and animal to steam, and then electric, gasoline, and diesel. The tractor was invented and developed largely in northeast Iowa. Advancements in genetics and breeding are as revolutionary, with the introduction of soybeans and hybrid corn in the 20th century having the greatest benefits for Iowa farmers and for the world. All of these changes transformed not only agriculture to agribusiness, but the farmers
of America's global strength based on its agricultural resources.

**Elements**

- feeding a growing population — national and international
- using American Indian hybrid corn
- researching ways to grow viable crops (hybridization, disease resistance, new strains)
- conserving genetic material, ensuring the future of diverse animal and plant stock
- defining the role of agricultural research colleges and universities
- creating the Green Revolution
- acknowledging public concern about "what is good, healthy food", chemical use and food (preservatives, antibiotics), organically grown food, fat content in animals and dairy products, developing vaccines and animal feed
- expanding animal science and husbandry in northeast Iowa
- expanding dairy technology
- fostering and promoting farm mechanization, especially the tractor
- recognizing research/inventions/patents from northeast Iowa and the motivations behind them
- supporting medical research (pig heart transplants)
- utilizing modern communication/technology systems on the family farm

The amazing science of agriculture topic would be an interpretive challenge. Visitors would require some background orientation and information regarding the chemical and genetic revolutions, if not the mechanical revolution in agriculture. A basic grounding could be provided through media in museums, historical societies, or visitor centers, followed by an onsite visit to university research plots, genetics laboratories, or animal breeding centers.

**Agriculture as a Way of Life.** This topic focuses on the people involved with agriculture, both on and off the farm. The vast grassland between the Missouri and Mississippi Rivers was first occupied by various nomadic Indian tribes. After the Louisiana Purchase, land-hungry eastern farmers and immigrants quickly displaced the hunting and food-producing Winnebago, Sauk, Meskwaki, several Dakota Sioux tribes, and the Potawatomi; Iowa became a state in 1846 and boasted a population of nearly 200,000 by 1850. Many settlers left their homes in the East, drawn by the tales of Iowa's rich land. First, the high prairie grass had to be broken, a task followed by the ever-cyclic concerns of weather, pests, disease, transportation, and market prices. By the 1880s Iowans had discovered their calling as the corn and hog producers for the nation. Railroads crisscrossed Iowa by 1880, opening the entire state to cultivation and accessing the world market. The growth of food processing and manufacturing centers offered agriculture-related jobs, attracting many people in the Deep South to move to Iowa's towns and cities. Revolutionary changes have transformed agriculture as a way of life for most farm families, however, several constants remain in a farm family's life — economic uncertainty, respect for nature, artistic and religious expression, and foremost, love of the land.

**Elements**

- Native American philosophy, land use, and dislocation
- European immigration
- land acquisition, including cash sales, military bounty warrants, state grants, and the 1862 Homestead Act
- south to north migration
- rural to urban migration
- diverse agricultural practices
Interpretation

- evolution of family farms (acreage and impacts on family size)
- agricultural architecture
- women in agriculture — on the farm and in supporting industries
- Midwest work ethic and volunteerism
- rural/urban interaction
- connections to the land (physical, spiritual, emotional, collective memory) and how those connections are expressed (religion, literature, humor, art, music, ceremonies)
- seasonal cycles and natural disasters (storms, floods, pests, tornados, droughts)

Visitors coming to the Cedar Valley could have a variety of activities to enjoy and interesting stories to learn under the topic of "agriculture as a way of life." For example, if they chose to focus on women in agriculture, visitors would learn about the range of experiences women have had on farms and in agriculture-related industries. Resources in the Cedar Valley would illustrate the early agricultural practices of the Native American women, specifically the gathering and food-processing duties of Indian women. Nineteenth century farm life, with its backbreaking labor, could be highlighted at historic farms through an emphasis on farm women's writings and personal belongings. The social and cultural upheaval immigrants experienced on farms and in agriculture-related industries. Resources in the Cedar Valley would illustrate the early agricultural practices of the Native American women, specifically the gathering and food-processing duties of Indian women. Nineteenth century farm life, with its backbreaking labor, could be highlighted at historic farms through an emphasis on farm women's writings and personal belongings. The social and cultural upheaval immigrants experienced on farms and in agriculture-related industries.

Organizing for Survival. This topic focuses on farming cooperative activities, past and present government farm policies, and the farming community's responses to those policies. An early farming concern was the power of the railroad companies. Railroads opened the state to cultivation and offered access to world markets, but Iowa farmers spent decades trying to control the railroads' political and economic demands. Farmers also responded to the economic depressions of the 1870s and falling farm prices, by joining the National Grange and demanding regulatory legislation for the railroads. During the 1880s farmers joined the Farmers' Alliance to address economic and political concerns; in the late 1890s the People's Party or "Populist" movement sought recognition for farming contributions to America's economy. Iowa produced four secretaries of agriculture — James "Tama Jim" Wilson, E. T. Meredith, Henry C. Wallace, and Henry A. Wallace. The Wallaces fought for farmers during dreadful economic times (1921-1924 and 1933-1940). Farmers' cooperative and self-improvement efforts have not completely focused on political issues; they have also directed their efforts toward self-education and land stewardship. In addition, Iowa's farmers have demonstrated a great willingness to share their knowledge of agricultural advances with others around the world.

Elements

- secretaries of agriculture from Iowa
- government farm policies
- soil conservation activities
- agrarian revolt
- Farmers' Alliance movement
- Grange movement (National Grange of the Patrons of Husbandry)
- People's (Populist) party
- farm journal publications
- food export markets
- transportation infrastructure
VISITOR EXPERIENCES IN THE CEDAR VALLEY

- conservation/environmental regulation
- education programs, including 4-H, extension service, 1862 Land Grant College Act
- mutual insurance industry development, including Farmers Fire Insurance and Farmers Mutual Hail Insurance Company

This topic could be presented through museum and media presentations, and through site visits, rather than interactive activities for visitors. The history of agriculture and political action are complex, filled with both tragic and inspirational individual and group stories of survival. Land stewardship, as expressed in soil conservation and scientific farming methods, could be interpreted for visitors through tours of the landscape, as well as the writings of Aldo Leopold and the work of Jay N. "Ding" Darling.

Crops from Field to Table. This topic focuses on the work involved with growing crops and raising animals, and the preparation, processing, transporting, and marketing involved with getting food on the dining tables of people around the world. This is a story of change: from wooden plows to steel plows; from horses to tractors; from soil exploitation to soil conservation; from small-scale farming to large-scale commercial business; from human and horsepower to steam, electric, and gasoline power; shift in population from the farm to the towns and cities; decrease in numbers of farmworkers but an increase in production per acre; from local markets to global markets; and from home food-processing to agribusiness processing of meat, vegetable, and dairy products. This is the story of survival, flexibility, adaptation, and response to market demands. It is also the story of people's pride in producing the highest quality and quantity of food in the world.

Elements
- developing markets for agricultural products — local, state, national, international
- establishing transportation systems from farm to market: the Mississippi River — river boats and barges, river towns as transhipment centers; railroad systems — railroad towns as important market links; urban and county road infrastructure — facilitating truck and automobile use
- developing food storage and handling systems - mills, elevators, refrigeration units
- establishing agriculture-related industrial processes - vegetable canning, meatpacking, creameries
- understanding the steps from soil preparation to planting, harvesting, and processing
- raising healthy animals; ensuring genetic diversity
- developing new agricultural products — plastics, ethanol

There are numerous sites in the Cedar Valley that could offer tours and activities to educate people about how their food is grown, processed, and marketed. People could visit farms to see planting and harvesting techniques at different times of the year, see early farming implements, tour grist mills, watch barges carry grain up and down the Mississippi River, tour food-processing companies, as well as purchase fresh farm produce at farmers' markets before they head for a local restaurant for a good meal. Visitors would be offered the opportunity to see how all agricultural systems, from the field to the table, come together to benefit us all.
Tools for Interpretation

There are various techniques, or tools, that could be used in interpreting American agriculture. These tools, including audio tapes, slide shows, publications, costumed interpretation, or museum exhibits, would help visitors understand and enjoy the Cedar Valley’s stories, sites, and resources. The following list highlights possibilities for interpretation and orientation, and describes extant interpretive facilities and working agricultural/industrial sites that currently offer tours. The list is not considered comprehensive.

Current Activities/Facilities Within the Study Area

University Museum, University of Northern Iowa, Cedar Falls
The museum has natural science, history, and anthropology collections, exhibits, and outreach educational programs.

Grout Museum of History and Science, Waterloo
The museum features exhibits and programs on area history and the environment.

Cedar Falls Farmers’ Market, Cedar Falls
The market offers local produce, plants, baked goods, and crafts.

Downtown Farmers Market, Waterloo
The market offers local produce, plants, baked goods, and crafts.

Ice House Museum, Cedar Falls
The museum features ice-harvesting.

John Deere Waterloo Works, Tractor Assembly Division; Waterloo
The Waterloo Works offers public tours of the tractor assembly line.

Waverly Horse Sales, Waverly
The Horse Sales includes spring and fall horse and implement sales.

Proposed Activities/Facilities

- Central interpretation center in the Cedar Valley
- Countryside interpretation
- Auto routes, guides, audiotapes for the Cedar Valley
- Demonstration farm
- Agribusiness tours
- Walking/auto tours and bus guides for Waterloo-Cedar Falls
- Visitor orientation and information for trip planning
- Packaging of tours based on topic and resources

National Cattle Congress Exposition, Cattle Congress Grounds, Waterloo
The September fair offers livestock and horse shows, competitive exhibits, and other entertainment activities.

Vesterheim Museum, Decorah
The museum focuses on Scandinavian immigration history.

Floyd County Historical Society Museum, Charles City
The museum contains artifacts relating to the development of the Hart-Parr gasoline tractor and exhibits of veterinary medicine for poultry.

Ackley Heritage Center, Ackley
The center focuses on Oosterland immigration history.

The Osborne Welcome and Nature Center, Elkader
The center serves as nature center, historic site, and has a wildlife exhibit.
This section presents three conceptual alternatives for the conservation, development, and interpretation of agriculture-related resources in Iowa's Cedar Valley. The study team emphasizes that the alternatives are conceptual in nature and are simply a starting point for organizing the complex stories and relationships inherent in America's 20th century agricultural heritage. Additional planning efforts would need to be completed to determine the appropriateness or feasibility of implementing any of the alternatives. In addition, the areas outlined in the alternatives are not meant to suggest fixed boundaries. Flexibility must be maintained to allow for the addition of future unidentified resources or interested organizations.

ALTERNATIVE 1: QUALITY ECONOMIC REVITALIZATION BASED ON AGRICULTURAL HERITAGE TOURISM

Concept

Northeast Iowa's agricultural heritage is the foundation for the economic revitalization of an eight-county region. An eight-county area has been selected for this alternative because it represents a reasonable area for coordinating economic revitalization efforts and achieving related goals. Agricultural heritage tourism development and growth would be in harmony with the Silos & Smokestacks' purpose and vision statement for the study area.

Focus

The focus of this alternative would be on economic revitalization through agriculture-related heritage tourism within the cities of Waterloo and Cedar Falls in Black Hawk County, Iowa, and the counties immediately adjacent to Black Hawk — Benton, Bremer, Buchanan, Butler, Fayette, Grundy, and Tama. Economic revitalization efforts would be coordinated through a central entity that would encourage partnering with institutions, businesses, individuals, and agencies to achieve the goals of this alternative. Additional emphasis would be on quality visitors experiences and support services and on protecting the area's rural landscape character and values (see alternative 1 map).
ALTERNATIVE 1
QUALITY ECONOMIC REVITALIZATION
BASED ON AGRICULTURAL HERITAGE TOURISM
CEDAR VALLEY SPECIAL RESOURCE STUDY • IOWA
U.S. DEPARTMENT OF THE INTERIOR • NATIONAL PARK SERVICE
903 • 2011A • 090 - 096
ON MICROFILM
Interpretation and Visitor Experience

The overarching aspect of the visitor experience would be an emphasis on the evolution of 20th century American agriculture as a way of life and as a science. Interpretive messages would focus on the past, present, and future of American agriculture and resources in the eight counties that illustrate that story. Visitors would recognize northeast Iowa as a prime destination for vacations, commercial opportunities, extended visits, conferences, and educational opportunities related to the story of American agriculture. Participation in entertaining, interactive, and meaningful activities would allow visitors to leave Iowa with an appreciation of the impact agriculture has had on the nation’s development and its continuing role in our daily lives.

Resources

Development and marketing of theme-related extant visitor facilities, resources, and historic sites within the eight-county area would contribute to economic revitalization goals. Emphasis would be placed on development or conservation efforts that would increase economic viability and enhance the quality and diversity of the visitor experience at these sites. Additional theme-related sites and attractions outside the eight-county area would be able to tie into the primary attractions through the central coordinating entity.

Development

To help visitors view northeast Iowa as a prime destination area, a central facility would be developed to give the area a physical and marketable identity. The facility would serve as an identifying feature of Iowa’s agricultural heritage and would serve several functions, including orientation, interpretation, and visitor support activities.

Alternative 2: Growth of Modern Agricultural America

A priority would be to develop a variety of resources and attractions that would reestablish a vital economic base through increased sales and tax revenues. Visitors would be encouraged, through the diversity of opportunities, to spend more time in the area, resulting in renewed support of local businesses.

ALTERNATIVE 2: GROWTH OF MODERN AGRICULTURAL AMERICA

Concept

This alternative proposes that by fostering an appreciation of the evolution of modern agricultural practices through the protection, interpretation, and accessibility of agriculture-related resources, agricultural illiteracy can be reduced. As mechanical and technological advances changed lives and created a major shift away from self-sufficient family farms to today’s agribusiness operations, the American people have lost an understanding and appreciation for how the food production system has evolved or how it continues to deliver food efficiently and safely to homes.

Focus

The focus of this alternative would be on the presentation, conservation, management, and use of a variety of agriculture-related resources across the following 17 counties: Allamakee, Benton, Black Hawk, Bremer, Buchanan, Butler, Chickasaw, Clayton, Delaware, Fayette, Floyd, Franklin, Grundy, Howard, Mitchell, Tama, and Winneshiek. The city of Waterloo would have a central visitor contact facility from which visitors would venture out into the agricultural landscape to learn and experience some of the elements that make up the nation’s agricultural character (see Alternative 2 map).
Interpretation and Visitor Experience

The visitor experience under this alternative would be achieved by bringing visitors into contact with the diverse agricultural heritage in the region. Visitors may already be familiar with some of northeast Iowa's farm products, but few know the story behind the scenes. Why did farming and agriculture-related industries develop here? How did the region's resources influence the evolution of one of the most dynamic agricultural areas in the country? Who were the people with such strong ties to the land? Who grew the crops, harvested the bounty of the fields, and built the machinery to make it all happen? By experiencing the answers to these and other questions, visitors would also gain an appreciation for the characteristics of the land and the environment that helped shape the course of the nation's economic and agricultural development. Visitors would then gain new insight into the remarkable achievements of northeast Iowa's people in the ever-changing work of feeding the nation and the world. Above all, visitors would begin to understand how the ability to feed people around the world has changed dramatically over time.

Resources

Resources directly related to the development of modern agricultural practices would be emphasized under this alternative. For example, visitors might be directed to the Norman Borlaug farms in Howard County to become familiar with the ground-breaking work of this Nobel Peace Prize winner in plant genetics. Visitors also might be directed to a rehabilitated structure at the former Rath Packing Company plant to learn how animal food is prepared for our consumption and how that process has changed over time. Because northeast Iowa's rich soil and landforms are integral to the agricultural heritage of the region, visitors might be directed to the Aldo Leopold Wetland Complex in Bremer County or Hayden Prairie in Howard County to experience the dramatic and dynamic nature of the land that has sustained a complex network of plant and animal life and has created the opportunity to provide food for people around the world.

Development

A priority for development related to this alternative would be conservation of existing historic structures that could be used to convey the stories related to northeast Iowa's agricultural heritage. Similar to alternative 1, visitors would be directed and/or encouraged to start their northeast Iowa visit at a central facility. In this case, the facility would preferably be located at a rehabilitated historic structure and would serve several functions, including orientation, interpretation, and visitor support services.

Along with the physical development of a visitor facility, it would be important to develop and distribute pamphlets, brochures, maps, and tour guides that would begin to inform the public of northeast Iowa's agriculture-related attractions. In addition, survey work to identify and nominate historic properties and districts to the national register would continue with the goal of enhancing the documentation of the region's role in American agricultural development.

ALTERNATIVE 3: AMERICA'S AGRICULTURAL HEARTLAND

Concept

Across the nation there are many stories that convey the importance of American farming in creating and maintaining an abundant, safe food supply for the nation and the world's populations. States across the Midwest have each contributed greatly to the development of American agriculture. Cincinnati, Ohio, became a gateway city and jumping-off point for thousands of settlers moving through America's heartland during the 19th century. Illinois and Indiana, like Iowa, became corn belt producers in their own rights. In addition,
Chicago, Illinois, became home to the nation's stockyards, slaughterhouses, and transportation hub for food produced in the West and Midwest. St. Louis, a major shipping point on the Mississippi, has its own story to tell about American agricultural production and the people who made their living in related industries. Nebraska and Kansas illustrate in different ways the transitions between the abundant crops of the hot, humid, tall grasslands and the large tracts of 'dry land' wheat farming and cattle ranching of their western sections. It goes without saying that Wisconsin's dairy products are nationally renowned, while the wild and cultivated rice of Minnesota's northern tier are also important national products.

These stories merely touch on a few of the hundreds of agriculture-related stories to be found around the Midwest. And the most important stories running through them all are the stories of the people who have lived their lives close to the land that bears such bounty. This alternative would touch all aspects of agriculture in the Midwest and would try to convey a sense of the interrelationships between farmers, products, and the nation they serve. This alternative would place the Midwest states at the center of agriculture-related innovations that have evolved and continue to influence everyday lives. Northeast Iowa's contributions within the larger region would be highlighted and would be the first in a series of opportunities that would convey to visitors the magnitude of the region's contribution to the nation's food-supply network (see Alternative 3 map).

Focus

This alternative would use a "hub and spoke" network of facilities that would focus on the food production heritage of the nation's Midwest states. The creation of a multipurpose 'hub' facility at Waterloo, Iowa, would be an initial step in attracting and informing visitors about the variety of agriculture-related resources in northeast Iowa specifically and the other Midwest states in general.

Waterloo's multipurpose facility would serve as a model for future development of centers throughout the Midwest, each focusing on a particular aspect of the Midwest's agricultural heritage. As other hubs were identified, visitors would be directed from the Waterloo facility to other facilities to gain a more complete picture of America's agricultural developments.

Interpretation and Visitor Experience

At each of the hub facilities identified throughout the Midwest, visitors would gain an understanding and appreciation for the diversity of agricultural developments in each state. Each hub would also present the connections between the different agricultural regions so that visitors could appreciate the interrelationships between the various agricultural areas. Diverse activities, including tours, visits to different types of farms throughout the Midwest, and innovative interpretive media at the hub facilities would combine to give visitors a sense of the magnitude and diversity of the nation's agricultural heritage.

Resources

A large, rehabilitated historic structure in Waterloo, Iowa, would serve as the first of a series of central hub facilities. Initially visitors would be able to choose several tours and/or activities within northeast Iowa to experience the region's diverse agricultural heritage. As other facilities were developed around the Midwest, visitors would have a variety of options from which to develop an itinerary for experiencing the Midwest's agricultural heritage. An emphasis would be placed on directing visitors to extant historic sites and active farmsteads to gain a better appreciation of the changes that have taken place in American agriculture over the years.
ALTERNATIVE 3
AMERICA'S AGRICULTURAL HEARTLAND
CEDAR VALLEY SPECIAL RESOURCE STUDY • IOWA
U S DEPARTMENT OF THE INTERIOR • NATIONAL PARK SERVICE
903 • 20103A • DSC • 9/96

ON MICROFILM
Development

The central facility would serve visitor orientation, interpretation, and support activities and would also support a headquarters/administrative function. In addition, the center would serve as a repository of information modeled on the Smithsonian Institution and focused on America's agricultural development. Another important element of this hub facility would be its "think thank" function — a center for exploring agricultural policy issues and an international place for training and workshops and preparing deliberative studies on agricultural research. Development of other hub facilities would depend on future planning efforts initiated by each of the Midwest states.
MANAGEMENT OPTIONS

This section outlines several possible approaches or management options to translate the Silos & Smokestacks vision into reality. Any of these five management options — or combination of options — could be used with any of the three alternatives presented above. They are not presented in any ranked order.

An initial approach to management of the complex mix of resources, stories, and organizations in the study area would be for Silos & Smokestacks to convene a conference of experts and interested parties to discuss a viable management organization to meet the goals of the agriculture heritage tourism initiative.

The management entity must have the power and the means to ensure effective conservation of the resources crucial to the project and have the wherewithal to develop, implement, and manage a comprehensive interpretive program that would enhance the economic base of the Cedar Valley study area. The organization also must be able operate across federal, state, and local jurisdictions, enabling all levels of the private sector and government to work together cooperatively and productively.

Implementation of any management option in the Cedar Valley study area would involve the continuation of individual option and choice in the ownership, preservation, management, and interpretation at any individual site. If property owners wanted to participate in a management option, they could establish a partnership agreement with the management entity within the framework of existing local guidelines, ordinances, and regulations. Other lands and resources in the study area would continue to be managed by present owners, including private, city, county, state, and federal entities.

In presenting these five management options, there is no agreement or commitment by the National Park Service — or any other private or public entity mentioned herein — to assume any responsibility to develop these various options. In the case of the National Park Service, responsibility could only occur through specific congressional direction. Normally, a special resource study would include cost estimates for planning,
development, operations, and staffing for the project area. However, since the level of federal government involvement is unknown at this time, they are not included here. If Congress and local groups adopt one or a combination of alternatives and management options from those presented here, cost estimates will be needed at that time.

**OPTION 1: AGRICULTURAL HERITAGE TOURISM AND PRESERVATION EFFORTS COORDINATED BY THE SILOS & SMOKESTACKS ORGANIZATION**

This option would build on existing conditions. Silos & Smokestacks would expand its current role and establish all policies. Existing committee structures would work through their own organization to accomplish objectives. The success of this management entity would reside in its ability to organize volunteer forces in the study area to raise funds and implement action items. In addition to its current volunteer work and fundraising efforts, Silos & Smokestacks would take on added responsibility to coordinate conservation efforts in the study area. Future funding would continue to come through private contributions. The National Park Service would provide only limited technical assistance in developing, implementing, and coordinating strategies.

**OPTION 2: AGRICULTURAL HERITAGE TOURISM AND PRESERVATION EFFORTS COORDINATED IN PARTNERSHIP WITH THE NATIONAL PARK SERVICE**

Under this option, the National Park Service and the Silos & Smokestacks organization would work together to develop and implement the goals of the regional heritage initiative. Silos & Smokestacks would continue its role in building grassroots support and would work in partnership with the National Park Service to meet agricultural heritage tourism goals. Silos & Smokestacks would continue to be community-based with members representing the communities, businesses, and agencies participating in the initiative with a high degree of citizen involvement.

**OPTION 3: AREA AFFILIATED WITH THE NATIONAL PARK SYSTEM**

Consideration of this option would depend on national historic landmark designation for those resources identified in this study as needing further evaluation of their potential national significance.

Areas are defined as being affiliated with the national park system if Congress or the secretary of the interior has determined that they meet criteria for national significance, if the resources can be most efficiently and effectively managed by a cooperative arrangement with the National Park Service instead of direct operation as a unit of the national park system, and if the National Park Service has some continuing responsibility for technical, financial, or management assistance.

Under this option, upon final determination of national significance, the former Rath Packing Company plant, Black Hawk County, or the Reeve REA power plant, Franklin County, could be considered for affiliated area status. Determination of national significance would be completed through the national historic landmark nomination process. Further assessment would then be completed to more fully explore appropriate management options, including affiliated area status for these resources.

The ownership and management of either national historic landmark, if so designated, would remain unchanged and NPS involvement in this option could range from providing some support through existing technical assistance programs to sharing in the design and construction activities at either site. The extent of NPS involvement and financial assistance would depend on legislation and funding from Congress.
OPTION 4: NATIONAL HERITAGE AREA

National heritage area partnership legislation, introduced in the 103rd Congress, would continue through the legislative process in the 104th Congress. This legislation provides for private/public partnerships as a means of establishing, preserving, and maintaining the natural, cultural, and historical resources of an area. Much of the groundwork toward designation as a national heritage area for the study area is being accomplished currently by the Silos & Smokestacks organization.

As outlined in H. R. 1280, recently introduced in the House of Representatives, the Cedar Valley Special Resource Study begins to give a "description of the natural, historic, and cultural resources and recreational opportunities presented by the area." The study also begins to give Congress an idea of the "potential partners, units of government, nonprofit organizations and other private entities" that have indicated an interested in the agricultural heritage initiative. By completing the studies recommended in the "Recommendations for Further Study" section, local agencies and organizations could complete the requirements for nomination of the area as a national heritage area.

The requirements include a feasibility study that includes a description and analysis of the area's resources, an assessment of and impact on potential partners, a description of tentative boundaries for a national heritage area, and identification of a possible management entity for the area. In addition, the bill requires a statement from the governor of the state of Iowa that he approves of the requested national heritage area designation. A compact would also be submitted to Congress that would include information relating to the objectives and management of the area.

The National Park Service would provide technical assistance in preparing documentation for designation.

OPTION 5: AMERICA'S AGRICULTURAL HERITAGE PARTNERSHIP

Under this option Silos & Smokestacks, the United State Department of Agriculture, the National Park Service, the state of Iowa, and other federal, state, and local agencies, private enterprise, professional associations, and volunteer organizations would join in partnership to fully develop and implement the agricultural heritage tourism initiative in northeast Iowa.
Since 1991 local efforts within the study area have focused on creating a visitor attraction based on America's agricultural heritage by using historic and cultural resources. The Silos & Smokestacks organization has been at the forefront of those activities and has realized that no one particular group can coordinate and implement a plan for agricultural heritage and tourism and preservation efforts over a 17-county area. The region is large and complex and many of the resources and concerns are represented by numerous interest groups. The Silos & Smokestacks organization has actively pursued partnership relationships with local, state, and federal entities. Together, the groups are working to develop and implement a plan that would serve future generations. The following is a representative list of agencies and organizations that have been active in northeastern Iowa's agricultural heritage tourism project. The list is not meant to be inclusive but to give examples of different heritage protection efforts in the study area.

PRIVATE/NONPROFIT EFFORTS

Silos & Smokestacks: The Partner Organization in the Cedar Valley

Silos & Smokestacks is dedicated to recognizing, preserving, promoting, and celebrating our contributions in feeding the world. This private, nonprofit agricultural partnership in eastern Iowa carries out its mission by facilitating private/public and rural/urban partnerships. Partnerships projects include tourism, recreation, and interpretation, as well as education, research, cultural events, and economic revitalization.

Silos & Smokestacks tells the story of how American agriculture combined with industry to help feed the world. It is the story of invention and technology from hand tools to tractors, the story of labor and transportation from farm to market, and the story of America's agricultural revolution and the development of international agribusiness from seed to table.
Institute for Agricultural Biodiversity

The Institute for Agricultural Biodiversity was established in 1991 at Luther College in Decorah, Iowa. The fundamental aim of the institute is to ensure genetic options for the sustainable production of food and fiber by preserving the genetic legacy (cultural as well as biological) of American agriculture. The institute is committed to developing the tools for practitioners and policymakers to initiate programs preserving genetic resources within the context of sustainable agricultural systems.

The institute has completed a cultural resource analysis under contract to Silos & Smokestacks and is developing an agricultural tourism attraction in Decorah. The institute continues its efforts to maintain genetically diverse plant material and animal breeds at the Farm Park at Decorah, a project on the campus of Luther College. The Farm Park at Decorah opened July 1995.

Northwest Area Foundation (Saint Paul, Minnesota)

The Northwest Area Foundation has awarded Silos & Smokestacks a grant to develop a comprehensive interpretive plan identifying interpretive themes, media, and priority development of interpretive programs for the study area. Christopher Chadbourne & Associates and Living History Farms are under contract to Silos & Smokestacks to develop this interpretive plan.

FEDERAL EFFORTS

U.S. Department of Agriculture — Natural Resources Conservation Service

In addition to the National Park Service, at the federal level, the Department of Agriculture's Natural Resources Conservation Service has provided five Ameri Corps members to Silos & Smokestacks to aid in the research, planning, marketing, and implementation of various preservation projects.

One of the goals of this agricultural heritage initiative is for visitors to venture into the countryside and experience, firsthand, life in the agricultural heartland. To make that experience as enjoyable as possible for tourists and residents alike, the department's Ameri Corps members and Iowa State University students have begun to study the safest and most desirable routes for visitors to use during their stay in the region. The result of the study will be a travel guide and accompanying audiocassette tapes.

STATE EFFORTS

General Assembly of the State of Iowa

The General Assembly has funded two rounds of market research through the Iowa Department of Economic Development, Division of Tourism, to determine the market for agriculture heritage tourism in northeast Iowa. A third round will fund rehabilitation of an agriculture-related structure for an initial Silos project.

State Historical Society of Iowa

The State Historical Society has provided consultation with the state historic preservation officer and senior staff related to background material for national register and local preservation planning efforts. Senior staff have also been directly involved in the NPS special resource study resource analysis and review.

Iowa Natural Heritage Foundation

The Iowa National Heritage Foundation was one of the initial partnership organizations under contract to Silos & Smokestacks and has provided an analysis of rural interpretive opportunities and priorities.
Iowa State University — College of Design, Department of Landscape Architecture

Students of Iowa State University have been involved in research and planning in the past and continue investigating roles in rural and urban cultural resource planning and cultural landscape management. University students are also working with Ameri Corps volunteers to develop a Tourism Route Plan.

Hawkeye Community College

Hawkeye Community College has provided faculty liaison through Administration, Minority Affairs, and Agriculture Services and also provided fundraising assistance and advice. The Hawkeye Community College president serves on the Silos & Smokestacks executive committee.

University of Northern Iowa

The University of Northern Iowa has provided faculty liaison through the College of Humanities and Fine Arts and the Department of Leisure Studies. The Institute for Decision Making has provided consultation in the area of management analysis. The director of conferences and visitor services at the university serves on the Silos & Smokestacks Board and is the official representative of the city of Cedar Falls.

REGIONAL EFFORTS

Iowa Northland Regional Council of Governments

The Iowa Northland Regional Council of Governments is the regional planning body. It has sponsored community meetings within the area and is the processor of grant applications for the Intermodal Surface Transportation Efficiency Act and to the Department of Commerce, Economic Development Administration. The council's executive director serves on the Silos & Smokestacks Board.

LOCAL EFFORTS

Cedar Valley Economic Development Corporation, Waterloo Community Development Board, and Waterloo Redevelopment Authority

These three local economic groups have provided background information, national register materials, site inspection services, and continuing oversight in the development of the heritage tourism initiative. The director of the economic development corporation and the co-chair of the redevelopment authority serve on the Silos & Smokestacks Board.

Waterloo Chamber of Commerce

Waterloo Convention & Visitors Bureau

Use of Waterloo's hotel/motel tax is administered through these two groups. They have granted hotel/motel tax dollars for general operational and programming support to Silos & Smokestacks, and the executive director of the Bureau serves on the Silos & Smokestacks Board. The Bureau and Chamber also have sponsored community meetings and coordinated events in support of the agricultural heritage tourism initiative.

Black Hawk County Conservation Board

Grout Museum of History and Science

The Grout Museum has provided access to historical files and artifacts and sponsored public meetings at the museum. The Conservation Board has assisted in the preparation of materials and interpretation in support of the agricultural heritage tourism initiative.
RECOMMENDATIONS FOR FURTHER STUDY

The Cedar Valley Special Resource Study has identified a variety of resources in the study area related to agriculture and agricultural/industrial development. The study has recognized that the development of American agriculture is a nationally significant story and that the Silos & Smokestacks study area contains many viable resources appropriate to telling that story. The study team also recognizes and recommends further study in the following areas outside the scope of this study. The Silos & Smokestacks organization could take the lead in hiring some of the services needed to complete additional studies, or other organizations could conduct joint projects related to the goal of creating agricultural heritage tourism attractions in the region.

NATIONAL HISTORIC LANDMARK NOMINATION

A national historic landmark nomination should be completed for the REA Power Plant in Franklin County. Now on the national register, the power plant represents a significant era in rural agricultural development. The Franklin County Historical Society owns the power plant but does not have the expertise to complete the landmark nomination process. Electric power not only brought improvements to rural farmhouses but brought power to the barn in the form of electric milking machines and electric motors to run farm tools and machinery. Women's lives changed dramatically in their homes as electric lighting and electric appliances entered their lives.

RESOURCE INVENTORIES

Some resource inventories have been undertaken in Black Hawk and Bremer Counties. It is imperative to extend that work to the other 15 counties of the study area to identify as many of the study area's important landscape features as possible. The wide-ranging study area encompasses 17 counties that contain hundreds of farms, field systems, buildings, and landscape arrangements that have not been sufficiently addressed. The baseline data that resource surveys supply is vitally important in assessing threats to the resources and developing appropriate
conservation strategies. In addition, identification of agriculture-related resources and an analysis of their eligibility for listing on the National Register of Historic Places would aid in presenting a comprehensive view of the region and would be invaluable in future planning efforts.

CULTURAL LANDSCAPE STUDY

As northeast Iowa's prairie has been turned by the plow to produce an abundance of food products, Iowa's residents have also altered its prairie landscapes in ways that reflect their cultural attitudes and beliefs. A cultural landscape study would reveal the practical and utilitarian layout of the family farm as well as uncover the ways family flower and vegetable gardens served aesthetic and practical purposes. In addition, a cultural landscape study would illuminate the ways in which humans altered the natural landscape to create agricultural lands to support the human population.

MAIN STREET PROGRAM ASSESSMENT

Communities are remembered by residents and visitors because of the social and economic character of their downtowns and especially their Main Streets. Burlington, Vermont, and Red Wing, Minnesota, are two excellent examples of this statement in practice in smaller American towns. Northeast Iowa's farm towns and urban centers present opportunities for residents and visitors to remember a first visit and want to return. An enhanced Main Street Iowa program focusing on these opportunities could help enhance a community's interpretation of its rural heritage and help maintain its singular character.
APPENDIX A: LEGISLATION

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES
APPROPRIATIONS BILL, 1993

July 29 (legislative July 23), 1992 - Ordered to be printed

Mr. BYRD, from the Committee on Appropriations, submitted the following

REPORT

[To accompany H.R. 5503]

The Committee on Appropriations, to which was referred the bill (H.R. 5503) making appropriations for the Department of the Interior and related agencies for the fiscal year ending September 30, 1993, and for other purposes, reports the same to the Senate with various amendments and presents herewith information relative to the changes recommended:

The Committee has included the funding requested in the budget for special studies and general management planning. An increase of $200,000 is provided for the general management plan [GMP] at Adams National Historic Site. The Committee understands that the budget request includes $450,000 for work on the GMP at Grand Canyon National Park. If the proposed legislation authorizing the Monroe School National Historic Site, Kansas, is approved prior to the end of the fiscal year 1993, the Service should allocate funds such as to allow work to begin on a GMP for this site.

The Committee has not recommended additional funds above the budget request for special study areas. The Committee received numerous requests for such study efforts, and commends to the consideration of the Service the proposals regarding Cedar Valley, IA, Revere Beach, MA, and the Tenement Museum, New York.
APPENDIX B: NATIONAL PARK SERVICE THEMATIC FRAMEWORK

The National Park Service uses a thematic framework of American history and prehistory in studying and interpreting historic sites. Until 1990, the publication History and Prehistory in the National Park Service and the National Landmark Program (NPS 1987) was used for that purpose. The revised thematic framework outline is reflected in this study.

As indicated by the new thematic framework, the topic of American agriculture in the 20th century is a complex subject that covers such diverse topics as local reform movements and the changing role of the United States in the world economy. The migration of people from rural farmland to urban areas as well as technological advances in farm machinery technology are key to understanding our agricultural heritage. Northeast Iowa has played an integral role in the development of our modern food production and processing systems, and many of the historic sites in the study area represent these diverse yet interrelated facets of agricultural history. The historic and cultural resources identified in the study area relate to the following thematic framework themes and topics:

I. Peopling Places
   Family and the life cycle
   Migration from outside and within
   Community and neighborhood

II. Creating Social Institutions and Movements
   Clubs and organizations
   Reform movements

III. Expressing Cultural Values
   Educational and intellectual currents
   Architecture, landscape architecture, and urban design

IV. Shaping the Political Landscape
   Parties, protests, and movements
   Governmental institutions

V. Developing the American Economy
   Distribution and consumption
   Transportation and communication
   Workers and work culture
   Labor organizations and protest
   Exchange and trade
   Governmental policies and practices
   Economic theory

VI. Expanding Science and Technology
   Experimentation and invention
   Technological applications
   Effects on lifestyle and health

VII. Transforming the Environment
   Manipulating the environment and its resources
   Adverse consequences and stresses on the environment
   Protecting and preserving the environment

VIII. Changing Role of the U.S. in the World Economy
   Commerce

For this study, the story of 20th century American agriculture has been divided into four principal topics that could be interpreted in the study area. These topics contain many elements or secondary stories, which were described in the "Visitor Experience" section of the document.
APPENDIX C: NATIONAL PARK SERVICE CRITERIA FOR NATIONAL SIGNIFICANCE

To be eligible for favorable consideration as a unit of the national park system, an area must (1) possess nationally significant natural, cultural, or recreational resources, (2) be a suitable and feasible addition to the system, and (3) require direct NPS management instead of alternative protection by other agencies or the private sector. These criteria are designed to ensure that the national park system includes only outstanding examples of the nation's natural, cultural, and recreational resources. They also recognize that inclusion in the national park system is not the only option for conserving the nation's outstanding resources.

A natural, cultural, or recreational resource will be considered nationally significant if it meets all of the following criteria:

- It is an outstanding example of a particular type of resource.
- It possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation's heritage.
- It offers superlative opportunities for recreation, public use, and enjoyment or for scientific study.
- It retains a high degree of integrity as a true, accurate, and relatively unspoiled example of a resource.

Nationally significant cultural resources include districts, sites, buildings, structures, or objects that possess exceptional value or quality in illustrating or interpreting our heritage and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association. Examples of cultural resources that may be nationally significant include those that:

- are associated importantly with the lives of people nationally significant in the history of the United States
- represent some great idea or ideal of the American people
- embody the distinguishing characteristics of an architectural type specimen, exceptionally valuable for study of a period, style, or method of construction; or represent a significant, distinctive, and exceptional entity, whose components may lack individual distinction
- are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively composing an entity of exceptional historical or artistic significance; or outstandingly commemorate or illustrate a way of life or culture
- have yielded or may be likely to yield information of major scientific importance by revealing new cultures or by shedding light on periods of occupation over large areas of the United States.

Ordinarily, cemeteries, birthplaces, graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, and properties that have achieved significance within the last 50 years are not considered appropriate for addition to the national park system unless they have transcendent importance, unless they possess inherent architectural or artistic significance, or unless no other site associated with that theme remains.
APPENDIX D: SELECTED CULTURAL RESOURCE INVENTORY

The cultural resources visited and evaluated for this project are described below and present some of the key resources important to the Silos & Smokestacks agricultural heritage initiative. The descriptions include information related to location, ownership, and national register status. They are by no means the only agriculture-related resources in the study area, rather, they are representative of the diversity of resources related to agricultural heritage available in the study area.

NATIONAL CATTLE CONGRESS EXPOSITION

Location: Rainbow Drive, Waterloo, Black Hawk County

Ownership: Private

Resource Description: The National Cattle Congress Exposition dates to the year 1910 when the Iowa State Dairy Association and a small group of Waterloo business leaders initiated a program of dairy exhibits in conjunction with their annual meeting. The Dairy Cattle Congress, as the exposition was first called, served several functions: it provided a venue for exhibiting purebred dairy cattle; it distributed information about the latest improvements in dairy farming and milk production; and, by extension, improved dairy herds and milk production among the region's dairy farms. The Dairy Cattle Congress grew into the leading dairy show in the region and, by 1949, was recognized nationally. Poultry, corn, 4-H Club exhibits, soybean, and alfalfa shows were added to enhance the dairy cattle show. By 1979, facing increased financial problems that reflected the loss of family farms and the number of farmers left on the land, the agricultural show was renamed the National Cattle Congress. In 1990 the show became the National Cattle Congress Exposition.

The entire complex contains numerous buildings, exhibition halls, and support structures, all dating after 1912. The step-gables of the exhibit halls are repeated in other buildings around Waterloo of the same period.

National Register Status: The Edward Estel House, 1142 Grant Street, is considered eligible for listing in the National Register of Historic Places. Edward Estel was manager of the Dairy Congress and was closely associated with the dairy industry in Iowa. He edited and managed the Creamery Journal from 1920 to 1947.

JOHN DEERE WATERLOO WORKS - WESTFIELD AVENUE SITE COMPONENT WORKS

Location: Westfield Avenue, Waterloo, Black Hawk County

Ownership: Private

Resource Description: The John Deere Waterloo Works is an operating manufacturing plant that produces components of John Deere farm tractors. Deere & Company acquired the Waterloo Gasoline Engine Company in 1918 and has been producing tractors at the plant since then. The historic structures associated with the original Waterloo Gasoline Engine Company are no longer extant. However the structures that housed early Deere assembly lines are still extant (T1-1935, T2-1936), although apparently scheduled for demolition. The Waterloo Gasoline Engine Company was significant for designing and developing a workable farm tractor. Today, the John Deere Waterloo Works is a market leader in tractor manufacturing, research and development, and sales. Tours of the plant are regularly held and are a popular tourist attraction.

National Register Status: The John Deere Waterloo Works is not listed on the National Register of Historic Places.

WATERLOO DAIRY COOPERATIVE

Location: 1302 Commercial Street, Waterloo, Black Hawk County
Ownership: Private

Resource Description: The Waterloo Dairy Cooperative was one of the most successful creameries in Iowa. The creamery's butter was marketed throughout the nation. Formed in 1889 by farmers in Orange Township, it was the first cooperative in Black Hawk County.

The extant structure on Commercial Street was the result of the cooperative's expansion into the Waterloo market and opened in 1922. This dark red, brick building with decorative light stone details resembles in many ways the style of the buildings in the Rath Packing Company, although there is no known connection.

The significance of the Waterloo Dairy Cooperative in the history of Iowa's dairy industry and its place in the history of cooperative creameries needs further investigation. The Waterloo Dairy Cooperative is an important example of farmers' responses to economic needs in the face of economic downturns, especially the Panic of 1893. Farmers in Iowa formed co-ops in order to save their dairy businesses and created a way to successfully market their products in urban markets.

National Register Status: The Waterloo Dairy Cooperative is considered eligible for listing on the National Register of Historic Places. Documentation has not been completed.

RATH PACKING COMPANY PLANT

Location: Sycamore and Elm Streets, Waterloo, Black Hawk County

Ownership: Private and City of Waterloo (Buildings 148-149)

Resource Description: The Rath Packing Company, following a disastrous fire at its Dubuque plant and enticed by incentives offered by the Waterloo Improvement Syndicate, began slaughtering animals at the new Waterloo location during the winter of 1891-92. Primarily a hog operation, beef and sheep were also being processed by 1929. By the mid-1930s, the company's Waterloo Plant was widely regarded as a model for the industry.

The Rath complex design was largely the work of Hans Peter Henschein of Chicago, the nation's foremost packinghouse architect during the first half of the 20th century. The packing plant is also associated with the period during which meatpacking plants were located closer to the source of animal production. (The advent of refrigerated railcars allowed slaughter operations to locate further from markets and closer to producers.) The fully integrated plant complex reflected many of the changes in meat processing implemented following the passage of meat inspection laws after the turn of the century.

The Rath Packing Plant complex, once the site of a major employer for the Waterloo/Cedar Falls area, is now being used by food distribution and manufacturing entities. Buildings 148 (grease interceptor) and 149 (vertical kill) along with the administration building remain at the site for possible interpretation efforts. The majority of machinery associated with hog and beef killing operations has been removed, although the movement of animal carcasses through the structure is still easily identifiable. This complex is integrally related to the development of the agriculture-related industries in Waterloo and the Midwest.

National Register Status: Buildings 148 and 149 have been determined eligible for listing on the National Register of Historic Places. The Newberry Library, in conjunction with the National Park Service's National Labor Theme Study, is determining whether the site is eligible for national landmark designation.

WAPSPINICON MILL

Location: Independence, Buchanan County

Ownership: Buchanan County Historical Society

Resource Description: The Wapsipinicon Mill was designed and built by millwright Samuel Sherwood in 1867 for use as a flouring mill.
1878 the mill was grinding flour, buckwheat, and cornmeal for local farmers. Much of the mill's interior is intact. One original set of grinding stones, along with turbines, leather belts, grain bins, and other equipment remain in the structure. In 1911 the Wapsipinicon Mill and Power Company installed a generator and used water turbines at the mill to produce power for the city of Independence. Today the mill is a museum, dedicated to preserving the mill (one of only a few flour mills left in Iowa and the only one with a brick facade) and to telling the story of the early settlement along this section of the Wapsipinicon River.

National Register Status: The Wapsipinicon Mill is listed on the National Register of Historic Places.

MAYNARD STATION (Lafayette Street Station)

Location: West Lafayette Street, Waterloo, Black Hawk County

Ownership: Midwest Energy Company

Description: This power station was built in 1917 and put on-line to generate electric power in 1918. Originally put in service by the Citizens Gas & Electric Company, Lafayette Street Station contained two 5,000-kilowatt turbines and five 600-horsepower boilers. This station provided power from water and gas for Waterloo residents between 1918 and the mid-1980s.

National Register Status: Maynard Station is considered eligible for listing on the National Register of Historic Places, however, the documentation has not been completed.

CHICAGO & GREAT WESTERN FREIGHT DEPOT

Location: Sixth and Sycamore Streets, Waterloo, Black Hawk County

Ownership: Private

Description: This two-story railroad freight building was constructed in 1903 near the heart of downtown Waterloo. The walls are rough cast concrete blocks over a limestone foundation. Large arched loading bays, raised slightly above ground level, punctuate each side. A belt course of smooth concrete blocks ties the freight bays together. Built during the rising economic boom in Waterloo at the turn of the century, this freight house is an excellent example of the major role rail transport played in developing the area's commerce.

National Register Status: The Chicago & Great Western freight depot is not listed on the National Register of Historic Places.

CEDAR ROCK

Location: Quasqueton, rural Buchanan County

Ownership: Iowa Department of Natural Resources

Description: This Frank Lloyd Wright Usonian-style residence is the only "signed" Wright house in Iowa. Cedar Rock (the Lowell Walter residence) was the first and most elaborate of 10 houses that Wright designed in Iowa after World War II. Completed in 1950, Cedar Rock is a testament to Frank Lloyd Wright's belief that architecture should directly relate to its environment.

National Register Status: Cedar Rock is listed on the National Register of Historic Places and is being evaluated for national landmark eligibility.

NORMAN BORLAUG BIRTHPLACE AND CHILDHOOD HOME

Location: Cresco, rural Howard County

Ownership: Iowa Natural Heritage Foundation

Description: Norman Borlaug has played a key role in agricultural genetics research and received the 1970 Nobel Peace Prize. Borlaug's lifetime work reflects the "value and
heritage that I acquired from family and community in northeast Iowa early in life. His birthplace and childhood home sites are connected and include farm buildings, a barn, chicken house, and machine shed. The surrounding meadows and pastureland are intact and reflect the character of the family farm of the 1910-1930 era.

National Register Status: The Norman Borlaug birthplace and childhood home are not listed on the National Register of Historic Places. Documentation is underway.

CARRIE LANE CHAPMAN CATT FAMILY HOME

Location: Charles City, rural Floyd County

Ownership: National 19th Amendment Society

Description: In 1866 Carrie Lane’s father built this 1 1/2-story Late Victorian brick farmhouse. This house of her youth marked an early event that helped shape her life’s work. After accompanying her father at several political rallies for Horace Greeley in 1872, she watched in amazement on election day as her father and the hired hands went off to the polls to vote. What Carrie Lane did not understand was why her mother was not allowed to vote along with the others. When her father returned from the polls, Carrie Lane declared the real reason mother couldn’t vote was because no one had ever thought about giving the vote to women, and that when I grew up I should tell everyone it ought to be done. With the death of her first husband, Leo Chapman, and subsequent marriage to George Catt, Carrie Lane Chapman Catt dedicated her life to the cause of women’s suffrage. Her experience as a young girl in an Iowa farmhouse shaped Carrie’s life and changed the political life of millions of American women across the nation.

National Register Status: The Carrie Chapman Catt childhood home is listed on the National Register of Historic Places.

REEVE ELECTRIC ASSOCIATION PLANT

Location: Hampton, rural Franklin County

Ownership: Franklin County Historical Society

Description: The Reeve REA plant was built during the severe winter of 1937 and "went on the line" on Wednesday, March 7, 1938, only seven months after construction began. The plant stands in testimony to the efforts of farmers in north central Iowa to overcome major barriers put up by power companies in refusing to negotiate reasonable rates. John M. Carmody, administrator of REA, successfully broke the power companies’ stranglehold by agreeing to fund independent generating plants in Iowa that would serve rural electric cooperatives. The Reeve plant was built by and serviced one of those cooperatives. It delivered electric power to north central Iowa farm communities until 1950. Today the plant is owned and maintained by the Franklin County Historical Society and is a reminder of the immense changes brought to the farm with the arrival of electric power.

National Register Status: The Reeve Electric Association Plant was listed on the National Register of Historic Places in 1990. This study recommends further evaluation of the plant for national landmark eligibility.

STAR CLIPPER BUILDING

Location: Second Street, Traer, Tama County

Ownership: The Traer Museum, Inc.

Description: James (“Tama Jim”) Wilson, one of Iowa’s four prominent secretaries of agriculture, served for 16 years under three different presidents. Several important agricultural programs were initiated during his tenure, including federal food and drug inspection programs. In addition to his years as secretary of agriculture, Tama Jim served six years in the Iowa legislature, most of three terms in the U.S. House of Representatives, taught at the Iowa College of Agriculture, and was part owner of his hometown newspaper, the Star Clipper. At
APPENDIXES

the Star Clipper Wilson had a syndicated column for 10 years that appeared in as many as 75 publications. He was part of a growing trend in agriculture to create papers and/or magazines dedicated to agriculture-related topics. Wallace's Farmer and Successful Farming were two Iowa farm magazines that grew out of this desire to put agricultural topics in the hands of farmers.

National Register Status: The Star Clipper building is not listed on the National Register of Historic Places.

EFFIGY MOUNDS NATIONAL MONUMENT

Location: Rural Clayton County

Ownership: National Park Service

Description: Effigy Mounds National Monument in northeast Iowa was established in 1949. The monument preserves a representative and outstanding example of a significant phase of the prehistoric American Indian moundbuilding culture and protects wildlife, scenic, and other natural values of the area.

The 1,475-acre monument preserves over 200 mound sites, some dating to 2,500 years old, including 26 in the shape of animal effigies. Indian burial mounds are found in a relatively small area in northeast Iowa, southeast Minnesota, and southern Wisconsin. Within the boundaries of the monument there are four different types of mounds: conical, linear, compound, and effigy mounds.

AFRICAN-AMERICAN NEIGHBORHOOD, MESKWAKI SETTLEMENT, AMISH COMMUNITY

These human communities are resources identified within the study area. Each community has sites, physical resources, and significant stories associated with America's agricultural/industrial history. Further contact with these groups to identify their desired level of participation in telling those stories is imperative so that appropriate levels of privacy and respect for the diversity of cultures is maintained. Members of the African-American community have been involved with present planning efforts and should maintain or increase that involvement as the project progresses. Direct contact with the Meskwaki and Amish communities needs to take place before further planning or interpretation efforts are undertaken in relation to these communities.
APPENDIX E: SELECTED NATURAL RESOURCE INVENTORY

From a refuge established for the benefit of migratory birds, fish, plants, and animals to a 240-acre prairie sporting at least 149 species of prairie plants, the 17-county study area contains a fascinating variety of natural resources protected at federal, state, and local levels. The following chart lists selected natural resources in the study area.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location - County</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Mississippi River</td>
<td>Allamakee, Clayton</td>
<td>200,000 acres — wooded islands, waters, and marshes, river bottom 2 to 5 miles wide; the refuge is for the benefit of migratory birds, fish, plants, and animals</td>
</tr>
<tr>
<td>National Wildlife &amp; Fish Refuge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey River Wildlife Area</td>
<td>Howard</td>
<td>410 acres — Turkey River floodplain, upland timber</td>
</tr>
<tr>
<td>Aldo Leopold Wetland Complex</td>
<td>Bremer</td>
<td>Wetland</td>
</tr>
<tr>
<td>Hayden Prairie State Preserve</td>
<td>Howard</td>
<td>National natural landmark, 240 acres — prairie tract with at least 149 species of prairie plants</td>
</tr>
<tr>
<td>Rowley Fen</td>
<td>Buchanan</td>
<td>43 acres — a &quot;fen&quot; is a calcareous, boggy wetland once common throughout Iowa, now an endangered habitat and last refuge of several endangered plants and animals</td>
</tr>
<tr>
<td>Otter Creek Marsh</td>
<td>Tama</td>
<td>3,400 acres — 1/2 marsh, 1/4 river bottom, 1/4 timber semi-open; waterfowl refuge closed to trespassing in fall</td>
</tr>
<tr>
<td>Bearbower Sand Prairie</td>
<td>Buchanan</td>
<td>40 acres — ranges from sand prairie to wetlands containing some rare Iowa species</td>
</tr>
<tr>
<td>Idlewild Access</td>
<td>Floyd</td>
<td>254 acres — river access, timber, deer squirrel, rabbit</td>
</tr>
<tr>
<td>Troy Mills</td>
<td>Buchanan</td>
<td>75 acres — borders Wapslipinicon River, marsh, timber</td>
</tr>
<tr>
<td>Manchester Fish Hatchery</td>
<td>Delaware</td>
<td>30 acres — trout hatching and rearing areas, Spring Branch trout stream</td>
</tr>
<tr>
<td>Shearer Wildlife Area</td>
<td>Delaware</td>
<td>Wooded hills and river bottomland, dissected by small spring-fed stream</td>
</tr>
<tr>
<td>Name</td>
<td>Location - County</td>
<td>Remarks</td>
</tr>
<tr>
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<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Spring Creek Wildlife Area</td>
<td>Franklin</td>
<td>20 acres — grassy lowlands</td>
</tr>
<tr>
<td>Effigy Mounds National Monument</td>
<td>Allamakee, Clayton</td>
<td>1,475 acres — wood bluff tops, tallgrass prairies, and wetlands</td>
</tr>
<tr>
<td>Grannis Creek</td>
<td>Fayette</td>
<td>179 acres — timber, trout stream, wildlife management area</td>
</tr>
<tr>
<td>Wildwood Nature Center</td>
<td>Fayette</td>
<td>7 acres — nature center and historic site, live animal and raptor exhibit</td>
</tr>
<tr>
<td>Chipera Prairie</td>
<td>Winnebago</td>
<td>77 acres — prairie preserve</td>
</tr>
<tr>
<td>Ludwig Reserve</td>
<td>Winnebago</td>
<td>3.5 acres — red pine plantation and native prairie</td>
</tr>
<tr>
<td>Cardinal Marsh</td>
<td>Winnebago</td>
<td>1,165 acres — 1/8 marsh, 7/8 Turkey River floodplain, upland timber, deer, squirrel, grouse, waterfowl, woodcock</td>
</tr>
<tr>
<td>Union Grove Wildlife Area</td>
<td>Tama</td>
<td>108 acres — open upland, 10-acre pond, pheasant, rabbit, waterfowl</td>
</tr>
<tr>
<td>Wittenbreer Marsh</td>
<td>Howard</td>
<td>40 acres — marsh, three large pine plantings</td>
</tr>
<tr>
<td>Hartman Reserve Nature Center</td>
<td>Black Hawk</td>
<td>260 acres — floodplain adjacent to large upland mature forest</td>
</tr>
<tr>
<td>Blackhawk Creek Green Belt</td>
<td>Black Hawk</td>
<td>255 acres — floodplain, timber, wetlands</td>
</tr>
<tr>
<td>Wapsipinicon Wetlands/County Forest</td>
<td>Bremer</td>
<td>750 acres — along Wapsipinicon River, floodplain, timber, wetlands</td>
</tr>
<tr>
<td>Little Pain Creek</td>
<td>Allamakee</td>
<td>864 acres — timber upland, Paint Creek Trout Stream</td>
</tr>
<tr>
<td>Lansing Wildlife</td>
<td>Allamakee</td>
<td>1,955 acres — timber upland, deer, squirrel, grouse, turkey, woodcock</td>
</tr>
<tr>
<td>Otter Creek Wildlife Area</td>
<td>Buchanan</td>
<td>100 acres — creek bottom and wetlands</td>
</tr>
<tr>
<td>Osborne Visitor Welcome and Nature Center</td>
<td>Clayton</td>
<td>260 acres — nature center, historic site, wildlife exhibit</td>
</tr>
<tr>
<td>Volga White Pine Forest Preserve</td>
<td>Clayton</td>
<td>22 acres — white pine forest</td>
</tr>
<tr>
<td>Name</td>
<td>Location - County</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ackerson-Easterly Wildlife Area</td>
<td>Chickasaw</td>
<td>115 acres — timber, grassland, and wetland habitats</td>
</tr>
<tr>
<td>Jerico Wildlife Area</td>
<td>Chickasaw</td>
<td>37 acres — grassland and woody vegetation with small stream</td>
</tr>
<tr>
<td>Sleeping Duck Marsh</td>
<td>Mitchell</td>
<td>62 acres — marshland and upland game bird habitat</td>
</tr>
<tr>
<td>Pinicon Alders Wildlife Area</td>
<td>Mitchell</td>
<td>310 acres — upland hardwood, floodplain, and prairie</td>
</tr>
<tr>
<td>New Haven Potholes</td>
<td>Mitchell</td>
<td>168 acres — marsh, prairie, woodland, and prairie potholes</td>
</tr>
<tr>
<td>Restoration Marsh</td>
<td>Floyd</td>
<td>117 acres — 1/3 marsh, 2/3 grassland, waterfowl, pheasant</td>
</tr>
<tr>
<td>Wolters Prairie Preserve</td>
<td>Butler</td>
<td>44 acres — native prairie, controlled burns for woody plant control, wildlife refuge</td>
</tr>
<tr>
<td>Hauser Wildlife Area</td>
<td>Butler</td>
<td>25 acres — upland game habitat, refuge</td>
</tr>
<tr>
<td>Dudgeon Lake</td>
<td>Benton</td>
<td>1,364 acres — borders Cedar River, 1/4 water, 3/4 open timber, waterfowl, pheasant, deer, quail, turkey</td>
</tr>
</tbody>
</table>
APPENDIX F: SELECTED RECREATIONAL RESOURCE INVENTORY

Public lands in the study area offer a variety of outdoor recreational opportunities for residents and visitors. A network of state, county, and local parks, open space, and multiuse trails can be found throughout the region. The following chart lists selected recreational resources found in the study area.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backbone State Park</td>
<td>Delaware</td>
<td>Camping, nature trails, lake and stream fishing, Civilian Conservation Corps (CCC) Museum</td>
</tr>
<tr>
<td>Beeds Lake State Park</td>
<td>Franklin</td>
<td>Camping, nature trail, scenic CCC dam, 99-acre man-made lake</td>
</tr>
<tr>
<td>Bixby State Park and Preserve</td>
<td>Clayton</td>
<td>184 acres — rugged woodland with stream, trails, picnic shelter</td>
</tr>
<tr>
<td>Pike's Peak State Park</td>
<td>Clayton</td>
<td>970 acres — camping, hiking trails, scenic overlooks'</td>
</tr>
<tr>
<td>Turkey River Mounds State Preserve</td>
<td>Clayton</td>
<td>82 acres — forested ridge containing numerous conical and linear Indian mounds</td>
</tr>
<tr>
<td>Echo Valley State Park</td>
<td>Fayette</td>
<td>100 acres — built by CCC in 1930s, hand-built dam, keystone archway, camping, ski and hiking trails</td>
</tr>
<tr>
<td>Volga River State Recreation Area</td>
<td>Fayette</td>
<td>5,422 acres — camping, nature trail, bridle and hiking trails, lake and stream fishing</td>
</tr>
<tr>
<td>Fort Atkinson State Preserve</td>
<td>Winneshiek</td>
<td>5 acres — reconstructed fort built in 1840, museum, annual &quot;Rendezvous&quot;</td>
</tr>
<tr>
<td>Bluffton Fir Stand State Preserve</td>
<td>Winneshiek</td>
<td>124 acres — Upper Iowa River floodplain</td>
</tr>
<tr>
<td>Union Grove State Park</td>
<td>Tama</td>
<td>172 acres — camping, hiking trails, swimming</td>
</tr>
<tr>
<td>Union Grove Wildlife Area</td>
<td>Tama</td>
<td>108 acres — open upland</td>
</tr>
<tr>
<td>Otter Creek Marsh</td>
<td>Tama</td>
<td>3,400 acres — 1/2 marsh, 1/4 river bottom, 1/4 timber semi-open</td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>George Wyth State Park</td>
<td>Black Hawk</td>
<td>494 acres — lodge rentals; camping, hiking and biking trails; swimming; lake and stream fishing</td>
</tr>
<tr>
<td>Sweet Marsh</td>
<td>Bremer</td>
<td>2,242 acres — 1/2 marsh, 1/2 open timber prairie</td>
</tr>
<tr>
<td>Brush Creek Canyon State Park</td>
<td>Fayette</td>
<td>217 acres — forested, steep, wooded terrain with diversity of habitats, flora, and fauna</td>
</tr>
<tr>
<td>Yellow River Forest, Lost 40 Unit</td>
<td>Allamakee</td>
<td>160 acres — forest area</td>
</tr>
<tr>
<td>Cutshall Access Area</td>
<td>Buchanan</td>
<td>70 acres — wetlands, camping</td>
</tr>
<tr>
<td>Otterville Bridge</td>
<td>Buchanan</td>
<td>187 acres — borders Wapsipinicon River, boat ramp</td>
</tr>
<tr>
<td>Prairie Bridges Park</td>
<td>Franklin</td>
<td>70 acres — prairie, ponds, trails, Beaver Creek</td>
</tr>
<tr>
<td>Split Rock Park</td>
<td>Chickasaw</td>
<td>80 acres — camping, lake and stream fishing, hiking, cross-country skiing, and bridle trails</td>
</tr>
<tr>
<td>Wapsi River Wildlife Area</td>
<td>Mitchell</td>
<td>114 acres — timbered river bottomland, river access</td>
</tr>
<tr>
<td>Idlewild Access</td>
<td>Floyd</td>
<td>254 acres — river access, camping, picnicking, hiking</td>
</tr>
<tr>
<td>Restoration Marsh</td>
<td>Floyd</td>
<td>117 acres — 1/3 marsh, 2/3 grassland</td>
</tr>
<tr>
<td>Heery Woods State Park</td>
<td>Butler</td>
<td>394 acres — timbered, food plots, 1930s CCC stone lodge, camping, picnicking, hiking and bridle trails, fishing, nature center, boat ramp</td>
</tr>
<tr>
<td>Big Marsh</td>
<td>Butler</td>
<td>3,049 acres — 1/3 marsh, 2/3 timber, prairie, boat ramps</td>
</tr>
<tr>
<td>Wolf Creek Recreation Area</td>
<td>Grundy</td>
<td>93 acres — camping, picnicking, hiking and bridle trails, fishing, baseball</td>
</tr>
</tbody>
</table>
APPENDIX G: RECREATION TRAILS

Hiking, biking, and bridle trails are found throughout the study area. The Iowa Statewide Recreational Trails Plan was prepared in 1987 to provide a comprehensive long-range plan for development of trails in the state. A representative sample of trails found in northeast Iowa are listed below.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location - County</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNW Nature Trail</td>
<td>Butler</td>
<td>5.4 miles of abandoned railroad right-of-way — hiking and biking, cross-country skiing</td>
</tr>
<tr>
<td>Pioneer Trail</td>
<td>Grundy</td>
<td>96 acres — hiking, bridle, biking, and cross-country skiing trails</td>
</tr>
<tr>
<td>Comet Trail</td>
<td>Grundy</td>
<td>5 miles — hiking, biking, and cross-country skiing trail</td>
</tr>
<tr>
<td>Cedar Valley Nature Trail</td>
<td>Black Hawk</td>
<td>52 miles — connects Waterloo/Cedar Falls with Cedar Rapids, hiking, biking, running, nature study</td>
</tr>
<tr>
<td></td>
<td>Buchanan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benton</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Linn</td>
<td></td>
</tr>
<tr>
<td>Cedar River Canoe Trail</td>
<td>Bremer</td>
<td>30 miles — Nashua to Finchford</td>
</tr>
<tr>
<td>Wapsipinicon River Trail</td>
<td>Bremer</td>
<td>20 miles — Tripoli to Littleton</td>
</tr>
<tr>
<td>Chickasaw County Trail</td>
<td>Chickasaw</td>
<td>10 miles — Alta Vista to New Hampton</td>
</tr>
<tr>
<td>Pony Hollow Trail</td>
<td>Clayton</td>
<td>2.5 miles — hiking, equestrian, nature, cross-country ski trail</td>
</tr>
<tr>
<td>Prairie Farmer Trail</td>
<td>Winneshiek</td>
<td>16 miles — Calmar to Cresco</td>
</tr>
<tr>
<td>Winneshiek County Recreation Trail</td>
<td>Winneshiek</td>
<td>210 acres — (under development) biking, hiking, cross-country skiing, Howard/Winneshiek county line to Calmar</td>
</tr>
</tbody>
</table>
Mr. Alan M. Hutchings
Deputy Associate Regional Director
Planning & Resource Preservation
Midwest Region, National Park Service
1709 Jackson Street
Omaha, Nebraska  68102

RE: Cedar Valley Special Resource Study

Dear Mr. Hutchings:

I want to convey my wholehearted support for the Silos & Smokestacks initiative and to commend you and its sponsors for this innovative approach to telling the story of American agriculture.

Agriculture is the largest industry in the United States. It directly or indirectly supports 18 percent of our nation's population and 60 percent of all Iowans. Thus, since 1993, the State Historical Society of Iowa, the Iowa Department of Economic Development Division of Tourism, and the Iowa Department of Agriculture and Land Stewardship have participated in shaping Silos & Smokestacks. The Iowa General Assembly is currently exploring additional participation by these and other State of Iowa agencies.

We are justly proud of our agricultural heritage and as Iowa's Governor, I stand ready to work with you in any way to make this visionary project in the Cedar Valley a reality.

Sincerely,

Terry E. Branstad
Governor
March 30, 1995

Mr. Alan M. Hutchings, Deputy
Associate Regional Director
Planning and Resource Preservation
Midwest Region, National Park Service
1709 Jackson Street
Omaha, NE 68102

Dear Alan:

It is fitting that the City of Waterloo was one of the original parties in developing the Silos & Smokestacks vision. It continues to be an active and enthusiastic participant. After all, this is our story - past, present and future. Waterloo was one of the major sites in America's agricultural revolution. An American heritage area which will tell the story of this city's and Northeast Iowa's - rich agricultural history is a major priority for this administration.

We are pleased and proud to acknowledge the National Park Service's Cedar Valley Special Resource Study. Further, we pledge our support to the full development of the Silos & Smokestacks vision.

Please let us know how we may be of additional assistance.

Sincerely,

John R. Rooff
Mayor

JR:dc
April 17, 1995

Alan M. Hutchings, Deputy Associate Regional Director
Planning and Resource Preservation
Midwest Region, National Park Service
1709 Jackson Street
Omaha, NE 68102

Dear Alan:

The City of Cedar Falls, Iowa, joins Waterloo and Northeast Iowa in support of the Silos and Smokestacks initiative.

This visionary organization, by calling national attention to our regional agricultural heritage, is worthy of the continuing support necessary for the preservation of our history.

Sincerely,

Ed Stachovic, Mayor
City of Cedar Falls
April 14, 1995

Alan M. Hutchings  
Planning and Resource Preservation  
Midwest Region, National Park Service  
1709 Jackson Street  
Omaha, NE 68102

Dear Alan:

This letter expresses my support for the Silos & Smokestacks vision of a heritage tourism network throughout northeast Iowa. The Division of Tourism has been involved with this project since its inception: first, as a funding agent and participant in the tourism market research stage in 1993 and 1994; currently, as a funding agent and participant in the marketing, communications, and business planning stages. The results of the tourism market research were most impressive -- between 545,000 and 645,000 net new guests in northeast Iowa; $60 million in annual expenditures; 1,100 new jobs; $4.1 million in new state tax revenues; $800 thousand in net new local tax revenues.

We have recently undertaken a state-wide Heritage Tourism program in partnership with the National Trust for Historic Preservation. This program, the first in the nation, stresses local grassroots efforts such as Silos & Smokestacks, and we look to Silos to provide a model for other area-wide enterprises.

We are pleased with the National Park Service's Cedar Valley Special Resource Study and look forward to working with Silos & Smokestacks in all implementation phases. We pledge our support to help tell the full story of America's agricultural revolution.

Please let us know how we may be of any assistance.

Sincerely,

[Signature]

David K. Reynolds  
Administrator  
Iowa Division of Tourism  
515/242-4710

DKR/cas
April 6, 1995

Alan M. Hutchings, Deputy Associate Regional Director
Planning and Resource Preservation
Midwest Region, National Park Service
1709 Jackson Street
Omaha, NE 68102

Dear Mr. Hutchings:

Your agency’s Cedar Valley Special Resource Study is a welcome contribution indeed. Visitors to America’s regions are increasingly enjoying the distinct historical experience that such areas have to offer. They are more easily discovering and appreciating the region’s sense of place because communities within these areas are working both together and with state and federal partners to develop economic possibilities offered by their unified vision of the history they share. Silos and Smokestacks, we are pleased to say, is well on its way to organizing the effort for presenting the rise of our nation’s modern agriculture.

Northeast Iowa is nicely poised to call visitor attention to the many facets of our remarkable food production system. Her farms and factories make known the features of America’s vast commercial agriculture that has produced ever greater harvests with fewer hands. Her museums and settlements illustrate the character of those who came to farm here. Her restaurants and summer festivals recall the varieties of ethnic experience. And numerous rural landscapes dotted with country churches, early bridges and mills bring forth memories of earlier agricultural times.

We urge and endorse efforts being made by Silos and Smokestacks to bring before the public genuine and authentic historic resources of this region, to foster their stewardship, and to connect that past to the many ways that modern farming is practiced today.

Please feel free to contact me if you have any questions. My office phone number is (515) 281-3306.

Sincerely,

Jerome Thompson, Acting Administrator

Patricia Ohlerking, Acting State Historic Preservation Officer

cc: Tom Gallaher, Silos and Smokestacks
February 2, 1995

Mr. Alan M. Hutching
Deputy Associate Regional Director
Planning and Resource Preservation
National Park Service
1709 Jackson Street
Omaha, Nebraska 68102

Dear Alan:

I was delighted to learn that the National Park Service has nearly completed its special resource study of the Cedar Valley. As you know, my firm's analysis of Silos & Smokestacks concluded that the region's contribution to agriculture and food processing offers compelling interpretive opportunities which will attract interest from a broad range of market segments. Moreover, our work suggests that the dozens of sites which collectively comprise the Silos & Smokestacks experience could generate substantial visitation for Northeast Iowa and yield impressive economic benefits. We found that:

- Silos & Smokestacks can, with proper asset development, interpretation and promotion, expect to attract between 575,000 and 683,000 net new visitors by maturation in 2004. These visitors are defined as those who will spend at least one night and go to two or more Silos & Smokestacks affiliate attractions;

- In addition, Silos & Smokestacks will enjoy visitation from local residents. We believe that local residents will generate the equivalent of an additional 25,000 two-attraction visit-equivalents each year, for a total net new visitation of between 600,000 and 708,000 annually at maturation;

- In the near term, visitation will range between 545,000 and 645,000 people per year. The economic impact associated with this visitation will be substantial, totaling approximately:
  - 1,100 jobs;
  - $12.0 million in new payroll;
  - $4.1 million in new state taxes; and
  - $800,000 in new local tax revenues.

These dollars will circulate in the local economy and exert a multiplier effect, furthering the economic impact associated with Silos & Smokestacks.
Mr. Alan M. Huching  
February 2, 1995  
Page 2

In addition, there are many other collateral economic benefits:

- Waterloo's status as a convention and meetings location will be enhanced;
- The region will be exposed to more people who make business location decisions who may ultimately choose it for their facilities. For example, a location in the Silos & Smokestacks region will lend cachet to agri-business enterprises who can tout their location at the buckle of the farm belt;
- the quality of life in the region will be immensely enhanced;
- Private sector investment will respond to the new market posed by the visitors;
- Iowa's image as a place without cultural resources will be corrected.

In short, I believe the Silos & Smokestacks initiative offers real economic opportunity for Northeast Iowa and I am pleased that, with the completion of the National Park Service's study, another giant step forward to realizing its potential has been taken.

Sincerely,

[Signature]

Elaine Van S. Carmichael, AICP  
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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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