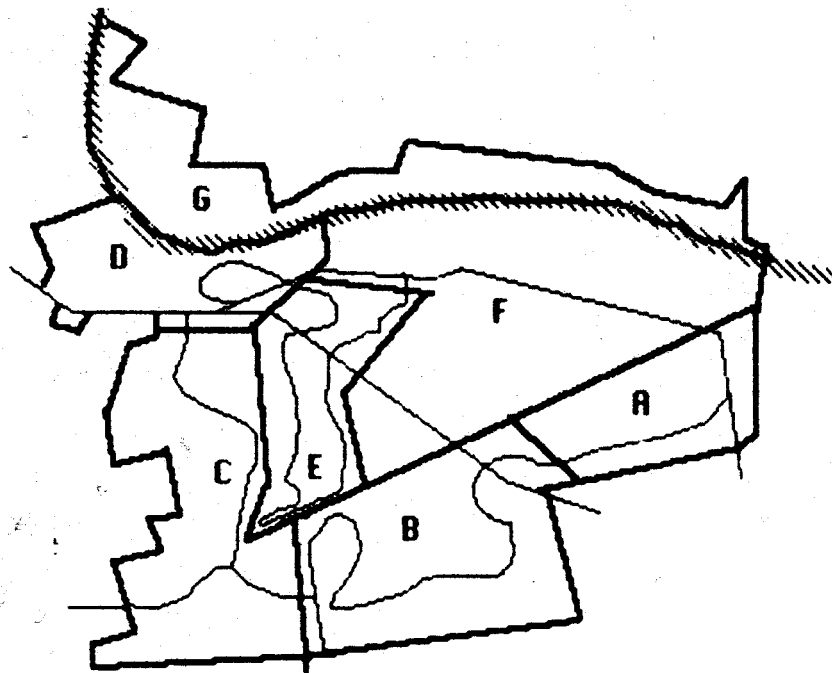


Visitor Services Project

Report 9

Valley Forge National Historical Park

Volume 1 of 3



Valley Forge National Historical Park



Cooperative Park Studies Unit
University of Idaho

Visitor Services Project
Report 9
Valley Forge National Historical Park

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Executive summary

- This report describes the results of a visitor mapping study undertaken at Valley Forge National Historical Park during the week of August 9-15, 1986. Visitors were contacted at 10 different sites throughout the park. Questionnaires were distributed to 782 visitors and 353 were returned, a 45 percent response rate.
- This visitor survey provides a profile of the people who visit Valley Forge, how they spend their time, which areas of the park they use, their activities, their visit frequencies, and which service types they use. It also provides visitor comments (found in Volume 2 of this report). Volume 3 contains an interpretive profile developed in conjunction with this study.
- Visitors were most likely to be in family groups of two people, although single visitors were common. Large proportions were children under 15 or adults between 25 and 45 years old. Only a small proportion of Valley Forge's visitors were from foreign countries. Although visitors came from several states, nearly one-half were from Pennsylvania, primarily from counties in the southeastern section of the state.
- Most visitors entered Valley Forge between mid-morning and mid-afternoon and spent from one to three hours in the park. Most activity took place during the afternoon.
- Interpretive managers divided the park into zones they wished to study. Visitors were asked to report their locations, by zone, during each time period. Thus, maps showing the use of each zone are included.
- Except for zone G, visitor use was widely distributed throughout the park. Zone A received the largest proportion of use during the morning periods.
- Visiting historic buildings was the most common activity, followed by walking and hiking. Jogging was the most common activity during the sunrise period, and visiting historic buildings was the most common activity from late morning through early evening. Several activities, such as picnicking, nature study, biking, walking/hiking, and jogging were distributed throughout most zones of the park.
- Responses to special questions revealed that:
 - 1) Although over one-half of the visitors enter Valley Forge via route PA23/US 422 from the east, a variety of other routes are used as well.
 - 2) Nearly one-half of the visitors had been to Valley Forge only once in the past year; visitors who visited Valley Forge once a week or more were also common.
 - 3) Over one-half of Valley Forge visitors use interpretive exhibits, signs, or buildings or visit the Visitor Center.
 - 4) Visitors who have visited only once are more likely to use the different interpretive services than frequent visitors.
 - 5) A small proportion of visitors felt that other visitors and their activities interfered with their visit.

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INTRODUCTION

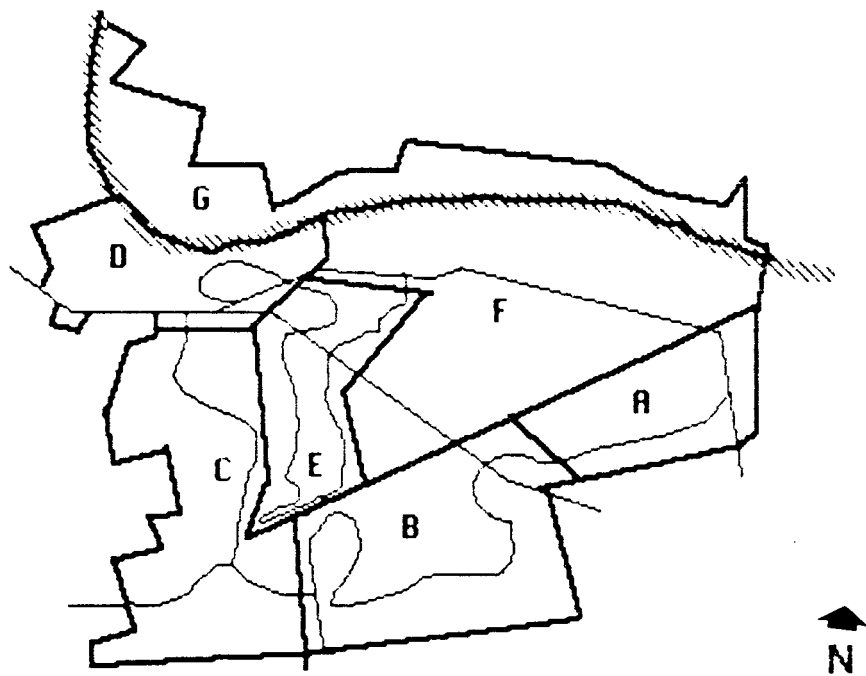
This report describes the results of a visitor mapping study undertaken at Valley Forge National Historical Park (referred to as 'Valley Forge') during the summer of 1986 by the Cooperative Park Studies Unit at the University of Idaho as a part of its Visitor Services Project¹. The purpose of the study was to provide the park staff with useful information about their visitors and their interpretive program.

At Valley Forge, a survey of visitors was conducted during August 9-15.

The measure of period visits

The visitor mapping technique provides managers with data in table, graph, and map form. Much of the data are reported as period visits. A period visit represents a respondent's report that his or her group spent most of a specific time period (sunrise, early morning, late morning, early afternoon, late afternoon, early evening, or late evening) in a particular zone of the park doing a particular activity. For example, if someone visited Valley Forge for one day, arriving during the sunrise period (6:00 to 8:00 a.m.) and leaving in the early evening (5:00 to 7:00p.m), his or her group would have spent five time periods in the park (sunrise, early morning, late morning, early afternoon, and late afternoon). If most of the morning periods were spent in zone A, that zone would receive two period visits. If most of the late afternoon was spent relaxing, that activity would receive one period visit. Map 1 shows the zones used in this effort.

¹The effort was part of an ongoing project to develop techniques for collecting visitor data useful for park management; previous work has been done at Grand Teton, Mount Rushmore, Yellowstone, Glacier, North Cascades, and Crater Lake National Parks. The larger project--its purposes, rationale theory, and methods--is described in several publications (for a list of publications on the Visitor Services Project, contact the Cooperative Park Studies Unit at the University of Idaho).

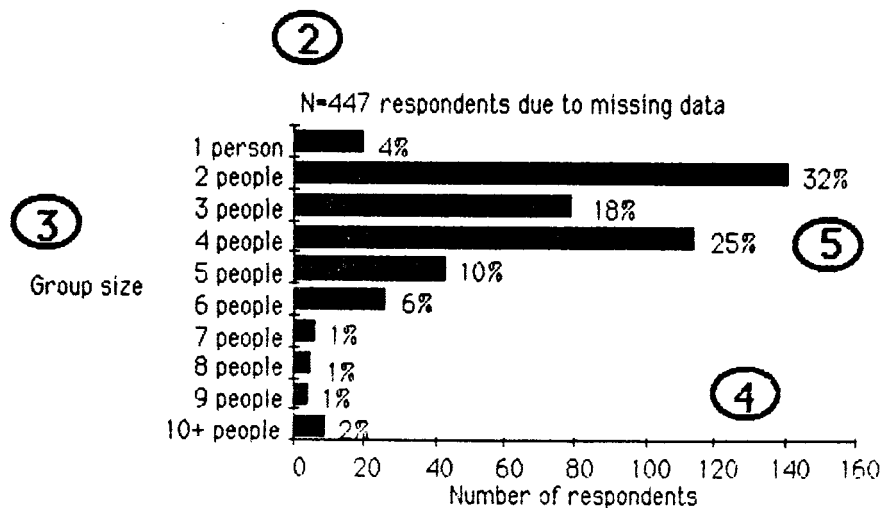


Valley Forge National Historical Park

Map 1: Zone map of Valley Forge

Period visits are a general indicator of visitors' behavior, and are useful for comparing the major time periods of the day, such as morning, afternoon, and so forth.

Many of the graphs in this report are like the following example. The large numbers refer to explanations below.



① **Figure 1: Visitor group sizes**

- 1: The figure title provides a general description of the information contained in the graph.
- 2: A note above gives the 'N', or number of items in the sample, and a very specific description of the information in the chart. This graph contains information on respondents, or those visitors who returned a questionnaire describing his or her group's visit. Some graphs contain information on individual group members, or on activity periods and so forth.
- 3: The left side, or axis, shows categories. This graph shows different group sizes, others show group types, time periods, activities, and so forth.
- 4: The bottom axis and bars show the number of items that fall into each category. In some graphs, the bottom axis shows proportions.
- 5: In most graphs, percentages are added to provide additional explanation.

Each table in the report presents different information; most tables compare two characteristics of a sample (such as the number of period visits measured) which can be broken down into several categories (such as separate activities or time periods). Some guidelines for reading the tables follow:

- 1: The title provides a general description of the information presented in the table. (Proportions are always expressed in percentages.)
- 2: At the top of the table, labels for each characteristic are given in bold type. In addition, column headings list different categories.
- 3: On the left are row headings, which list different categories; for example, Tables 1 and 2 show different activities.
- 4: Moving to the right, one or more columns are shown, which also represent different categories. Thus, each table should be read from left to right.
- 5: A note at the bottom of the table shows the 'N' or number of items in the sample and a specific description of the information presented in the table.

After this Introduction, the Methods are presented. The Results follow. Next, a Menu for Further Analysis is provided to assist managers in requesting any additional analyses they desire. Finally, Appendix A contains the questionnaire used. Volume 2 of this report contains comments made by visitors who returned their questionnaires. Volume 3 contains an interpretive profile of Valley Forge, developed in conjunction with this study.

METHODS

The general strategy of the visitor mapping technique is to distribute mailback questionnaires to randomly selected visitors entering the park during a designated study period. Specific visitor sampling strategies differ from area to area, depending on unique site characteristics. Returned questionnaires are analyzed and a report is developed, containing maps, graphs, and tables.

Questionnaire design

The questionnaire asked visitors to keep track of where they went and their activities for the time they spent in the park (see Appendix A for a copy of the questionnaire). A park map, showing zones, and a list of activities were provided in the questionnaire. Using a diary format, respondents could report their primary location (by zone) and activity during several time periods. Additional information was requested about the group type and size, and the age, home zip code, and number of previous visits to the park of each group member. Also, several questions were included based on the park staff's specific interests. Space was provided for respondents' comments about their visit and the survey.

Sampling

At Valley Forge, visitors who stopped at different park sites were sampled. This approach was selected to avoid stopping cars in areas that have high volumes of commuter traffic. Thus, visitors who drove through the park without stopping were not included in the sample. Ten different sites were selected for sampling to ensure that as many different visitors as possible were represented. The sites were:

1. the bike trail parking area
2. the Visitor Center
3. Wayne's Woods picnic area
4. Redoubt 4
5. Washington's Headquarters
6. the National Memorial Arch
7. the Muhlenberg Brigade parking area
8. the Von Steuben Statue
9. Maxwell's Brigade picnic area
10. Conways Brigade picnic area

Visitors were sampled from 7:30 a.m. until 7:30 p.m. during the week of August 9-13. Each day was divided into time periods. The time periods were then randomly assigned to the ten sampling sites. Sites that were visited by more people were assigned more time periods for sampling than sites that were visited less often (according to previous park estimates). At each four minute interval during the sampling periods, a visitor group was selected at random to be included in the survey.

Questionnaire administration

Visitor groups were stopped by a contact person, greeted, briefly introduced to the study, and asked to participate. If a visitor agreed, further instructions were given. One adult member of the group was asked to complete the questionnaire. Completed questionnaires could then be sealed and returned via U.S. mail, postage paid.

Data analysis

A cut-off date was established for incoming questionnaires approximately ten weeks after they were distributed. All questionnaires that arrived within that period were then coded and entered into a computer. Frequency distributions and crosstabulations were calculated, using a standard software package. Respondents' additional comments were summarized, and copies of the comments are provided in Volume 2 of this report.

Sample size, missing data, and reporting errors

In a visitor mapping study, some information is collected on visitor groups, some on individual group members, and some on group behavior, which is measured in period visits (see Introduction). Therefore, in the results, the 'N', or number in the sample, varies from figure to figure. For example, Figure 1 shows information on 347 visitor groups, while Figure 3 shows information on 917 individual group members, and Figure 7 shows information on 573 period visits. Each figure contains a note in the upper left-hand corner that specifies the information it illustrates.

In some figures, the 'N' is very small. For example, Figure 9 shows information for only eight period visits that occurred during the sunrise period. In such cases, small changes in visitor activity can alter proportions dramatically. To caution the reader in interpreting and using the data, figures with 'N' of less than 20 are marked with ∞ .

Often, a respondent may not answer all of the questions in the questionnaire, or may answer some incorrectly. Unanswered questions create missing data. Missing data also causes the 'N' to vary. For example, although 353 questionnaires were returned, Figure 1 shows groups sizes for only 347 respondents because of missing data.

Questions that are answered incorrectly due to carelessness, misunderstanding directions or maps, and so forth, show up in the data as reporting errors. Reporting errors create small, but obvious inconsistencies in the data. For example, in Table 1, three period visits for 'visiting historic buildings' were reported as having occurred in zone C. Since there are no historic buildings open to the public in zone C, these must be due to recording errors.

Limitations

The mapping technique has several limitations. First, the questionnaire asks visitors to record their location and activities, and it is not possible to know whether

their responses reflect actual behavior. This disadvantage is applicable to all time-budget studies and is reduced by having visitors fill out the questionnaire as they visit the park.

Second, the data describe the use patterns of only those visitors who use the park during the designated study period and who visit the sites sampled. The results do not apply to visitors who use the park during different times of the year or who do not visit the sites sampled.

Third, respondents can only indicate the zone they were in or the activity they were doing for the most amount of time each time period. Visitors may travel to additional zones or be involved in additional activities during one time period. Thus, the period visits present a simplified picture of visitor behavior. Also, period visits represent major time periods that are easy for the respondent to remember, and cannot be converted into other time units, such as hours or days.

Fourth, data are not collected on non-respondents. That is, we do not know if the visitors who return their questionnaires differ from those who do not.

Finally, the map presented in the questionnaire may have affected some visits by influencing people to visit all or most of the sites shown. Thus, some visitor groups may have visited more sites than they would have normally. We have no evidence to determine what proportion of respondents may have been influenced this way, or to what degree their visits were altered.

Nevertheless, the mapping data provide managers with a useful profile of visitor use, which can be further analyzed in a number of ways, as illustrated in the menu for further analysis.

RESULTS

A. Visitors contacted

Seven hundred eighty-nine visitor groups were contacted, and 782 agreed to participate. Thus, the acceptance rate was 99 percent. Three hundred fifty-three completed and returned their questionnaires, a 45 percent response rate. The acceptance and response rates are similar to those in previous visitor mapping studies.

B. Visitor characteristics

The returned questionnaires provide information on both the respondents and the groups they were with. Figure 1 shows the group sizes, which ranged from one to 44 people. The most common group size (mode) was two people, while the average group size (mean) was three. Over one-half of the visitors came in family groups, as shown in Figure 2.

Questions were asked on the age and number of previous visits to Valley Forge of each group member; Figures 3 and 4 illustrate the results. There was a wide range of ages; the most common age groups were children under 15 and adults between 25 and 45 years old. Over half were making their first visit to Valley Forge.

The home zip code of each group member was also asked. Visitors came from many different residences, as shown in Figure 5 and Maps 2 and 3. Sixteen¹ visitors (4 percent) were from foreign countries, primarily Canada and England. U.S. visitors came from many different states, while Pennsylvania visitors came primarily from counties in the southeastern portion of the state.

B. Visitor characteristics (continued)

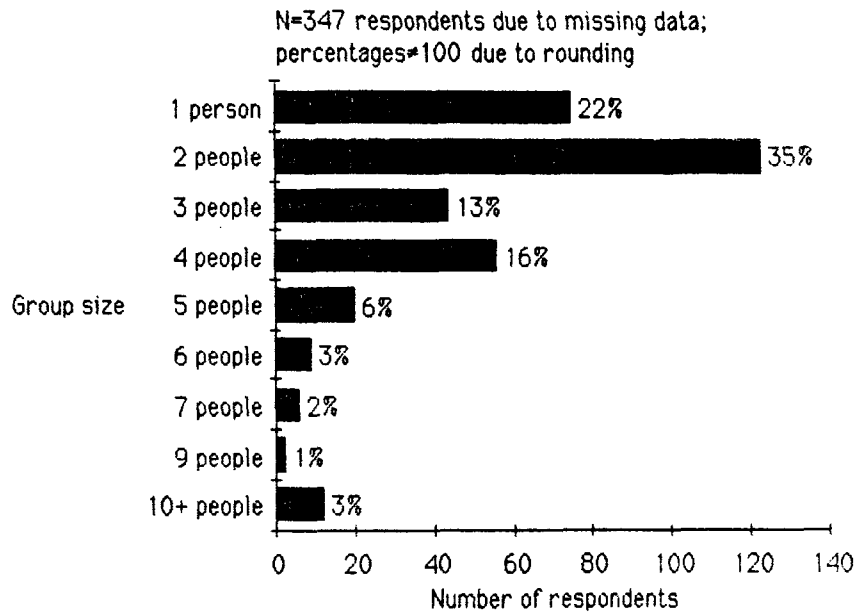


Figure 1: Visitor group sizes

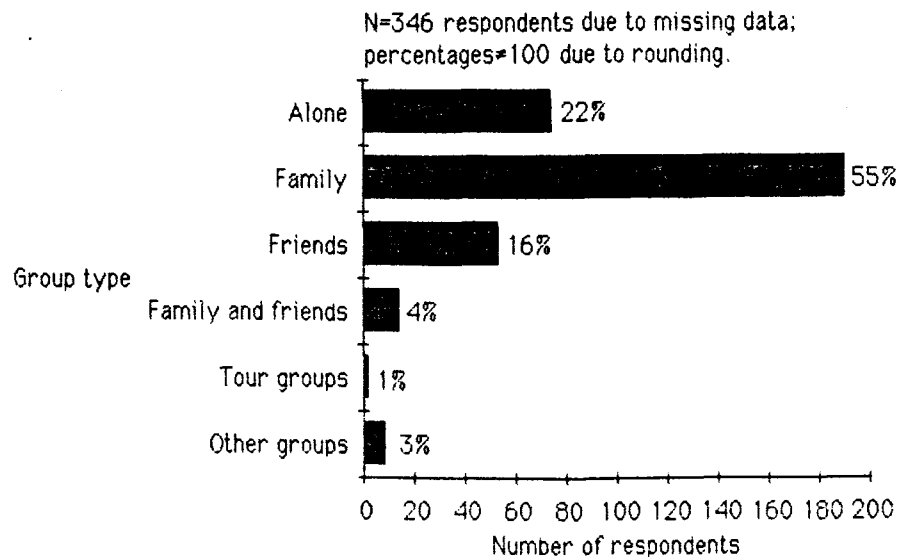


Figure 2: Visitor group types

B. Visitor characteristics (continued)

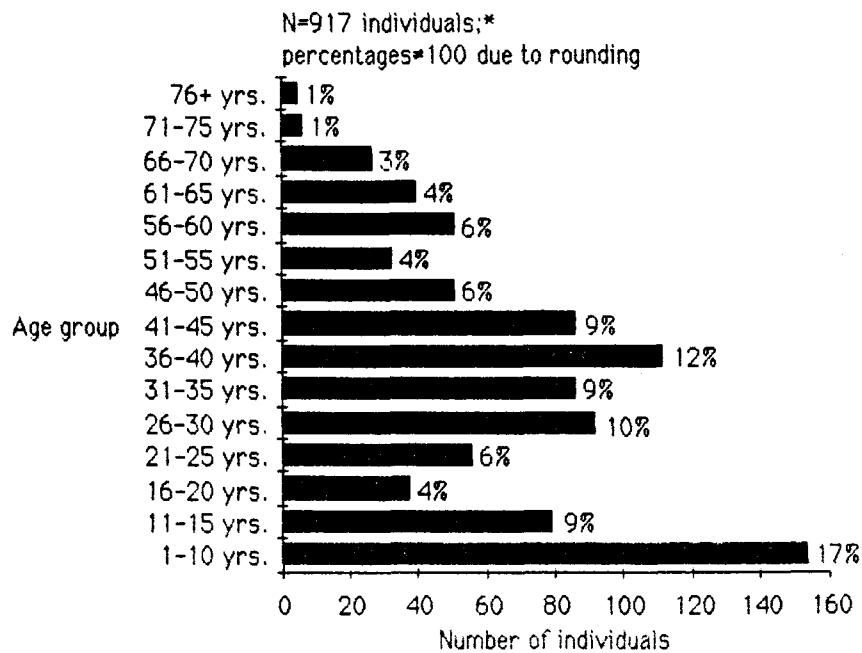


Figure 3: Visitor ages

* Ages, zip codes, and previous visits were asked of individual group members

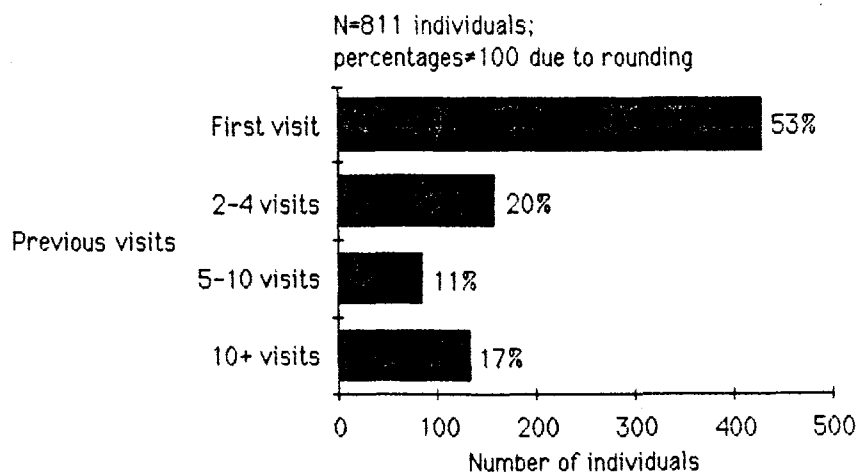
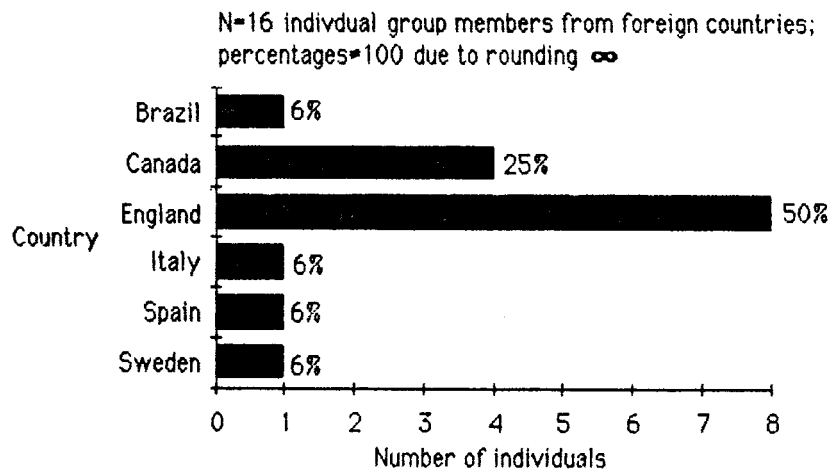
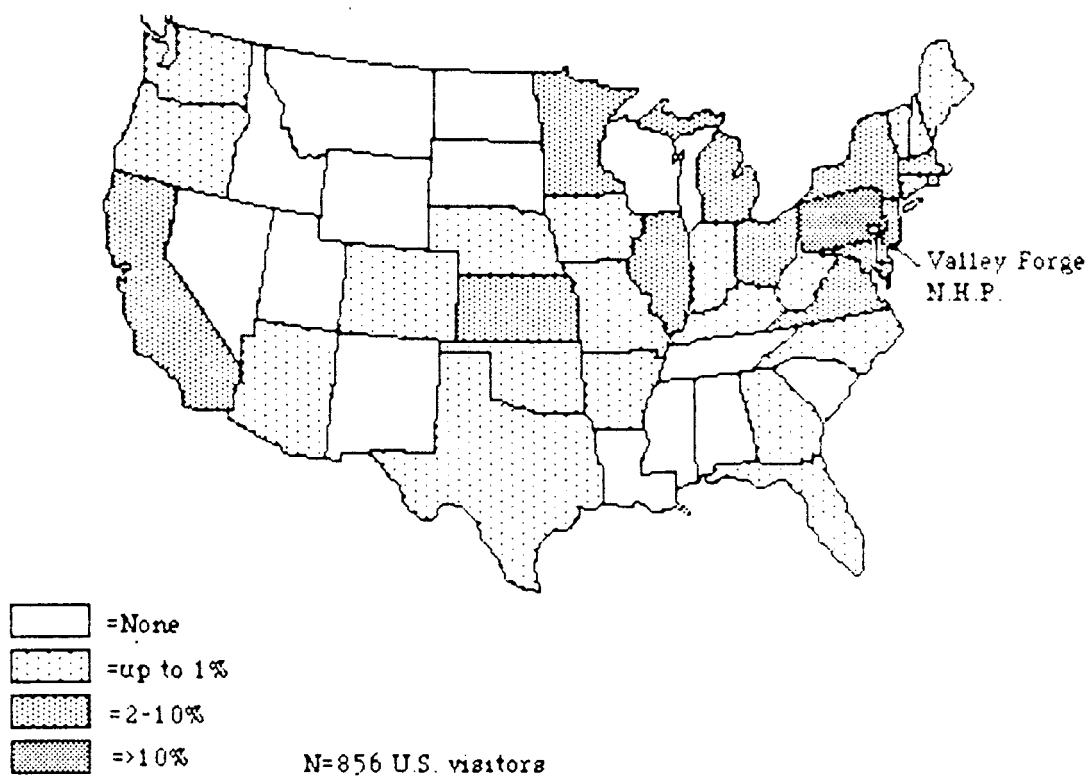


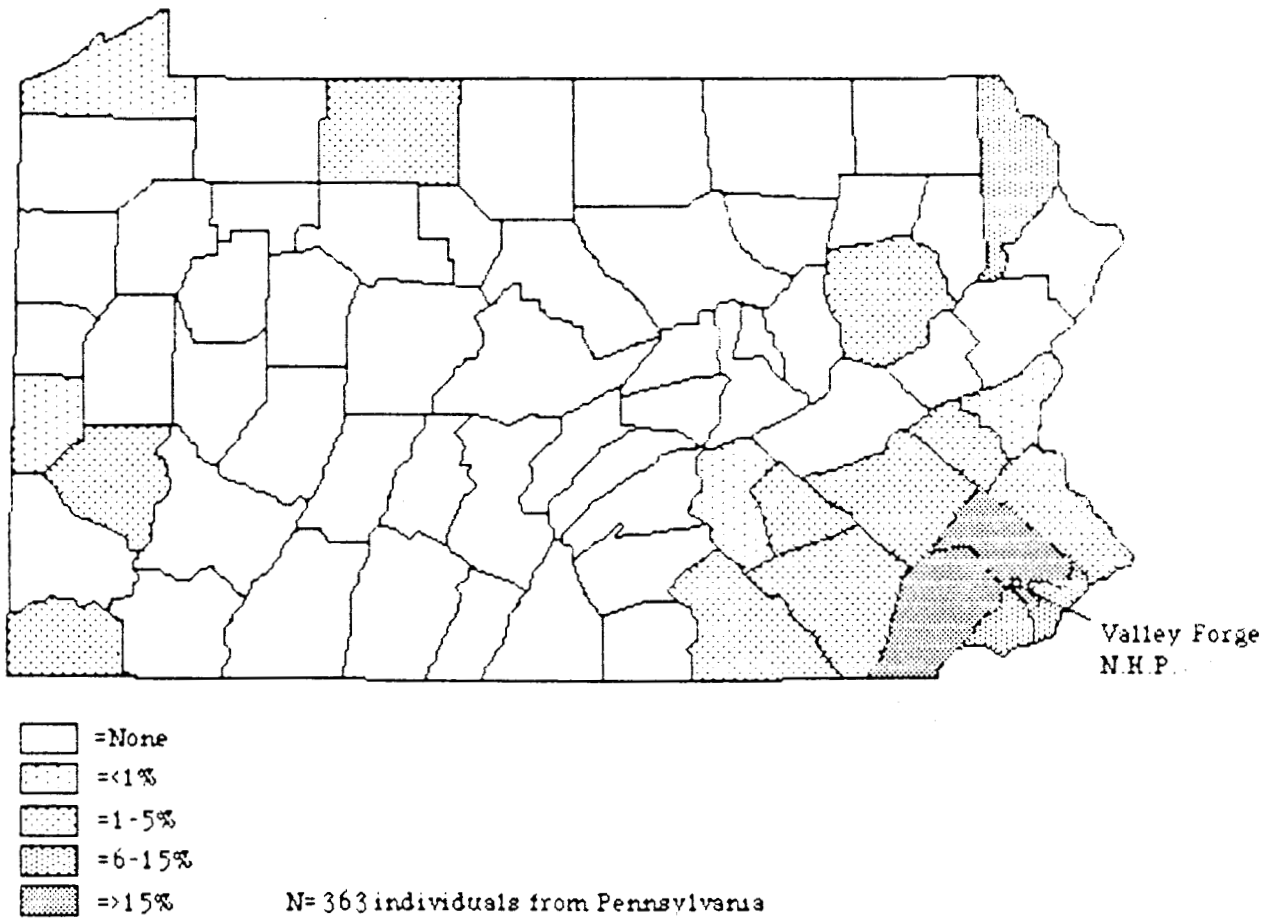
Figure 4: Number of visits

B. Visitor characteristics (continued)**Figure 5: Visitors from each country**

B. Visitor characteristics (continued)

Map 2: Proportion of visitors from each state
-- U.S. visitors

B. Visitor characteristics (continued)



**Map 3: Proportion of visitors from each county
--Pennsylvania visitors**

C. Visitor use of time

Most visitors entered Valley Forge between 10:00 a.m. and 3:00 p.m., as shown in Figure 6. Most spent from one to three hours in the park, as shown in Figure 7.

Visitor activities over time are measured in period visits (see Introduction), which represent one group in the park engaged in a particular activity for a specific time period. The amount of period visits occurring in the park varied with the time period of the day, as shown in Figure 8. The largest proportions of period visits occurred during the late morning through late afternoon periods.

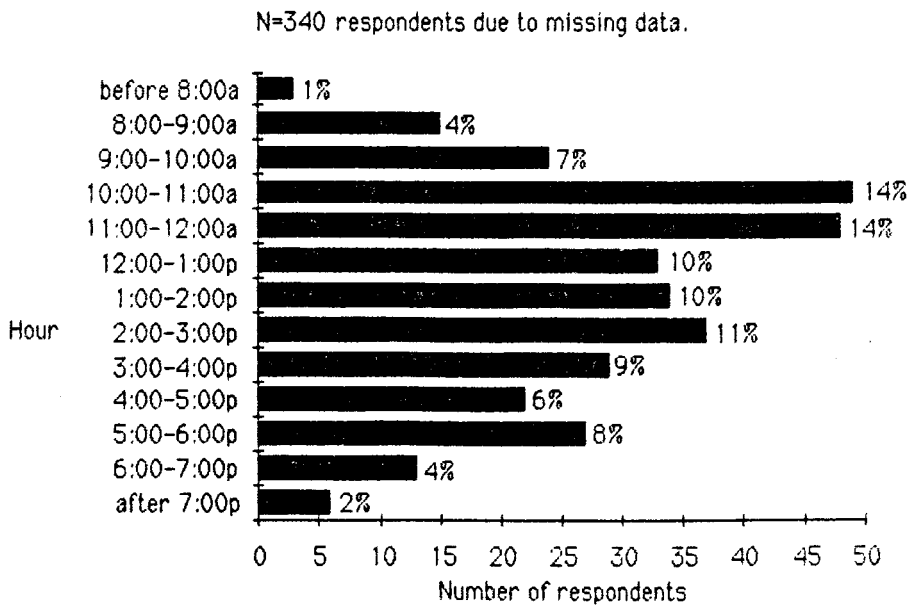


Figure 6: Visitors entering Valley Forge each hour of the day

C. Visitor use of time (continued)

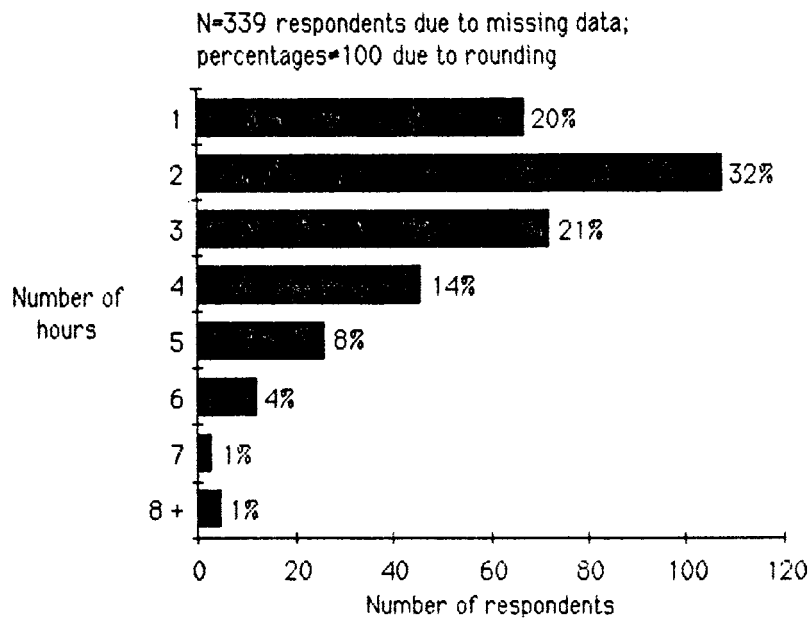


Figure 7: Number of hours visitors spent at Valley Forge

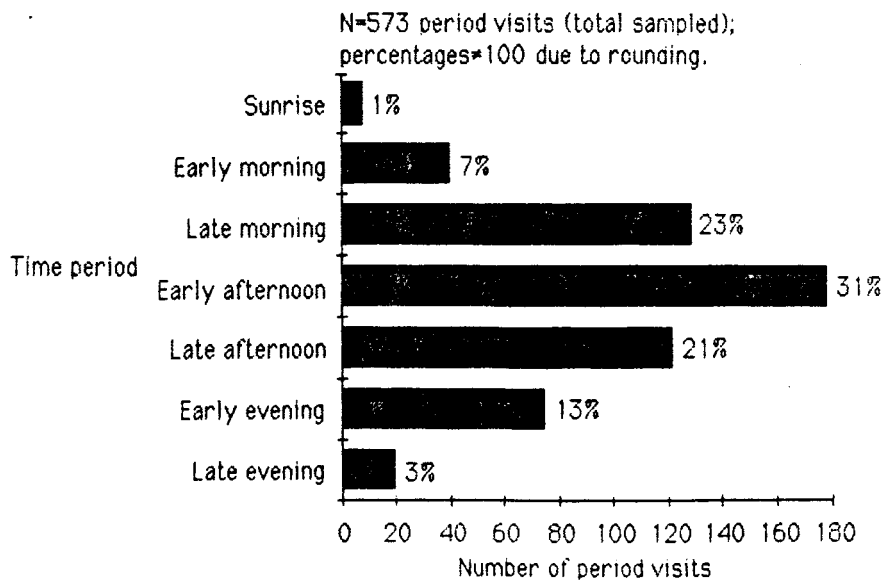
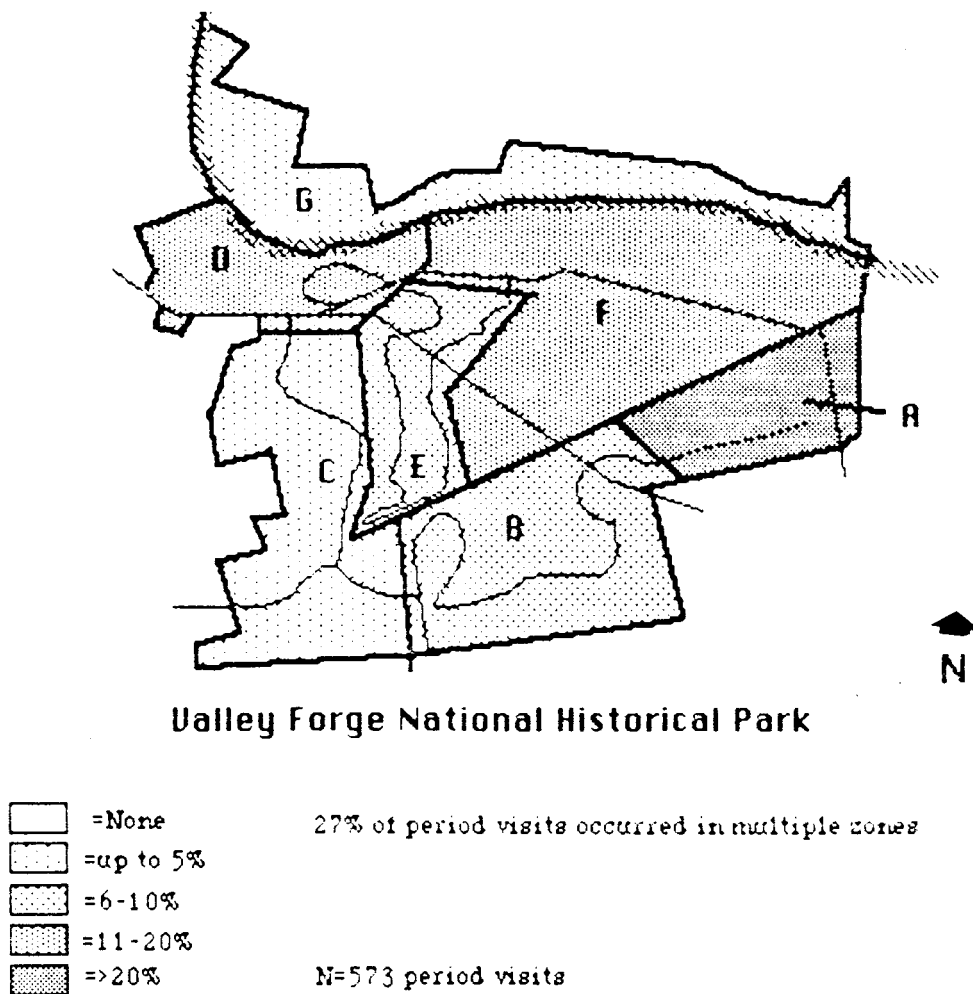


Figure 8: Period visits each time period

D. Visitor locations

Map 4 shows the proportion of period visits to each zone of the park. Zone A received the greatest proportion, followed by zones D and F.



Map 4: Proportion of period visits occurring in each zone

E. Visitor activities

The activities visitors reported are shown in Figure 9. Visiting historic buildings was the most common activity, followed by walking, hiking and viewing interpretive facilities. Visitors reported 'other' activities for six percent of their period visits. Visitors could also list other activities; responses included driving and watching animals.

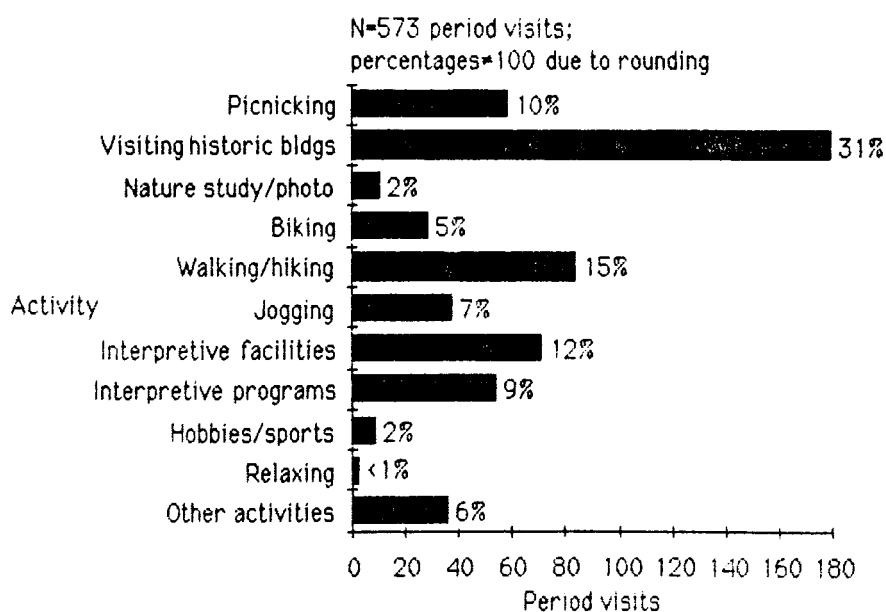


Figure 9: Period visits for each activity

F. Activities and use of time compared

Visitors' activities varied each time period throughout the day, as shown in Figures 10 through 16. Jogging was the most common activity during the sunrise period, while visiting historic buildings was the most common activity from the early morning through the early evening periods. During the evening, walking and hiking, and 'other' activities were common.

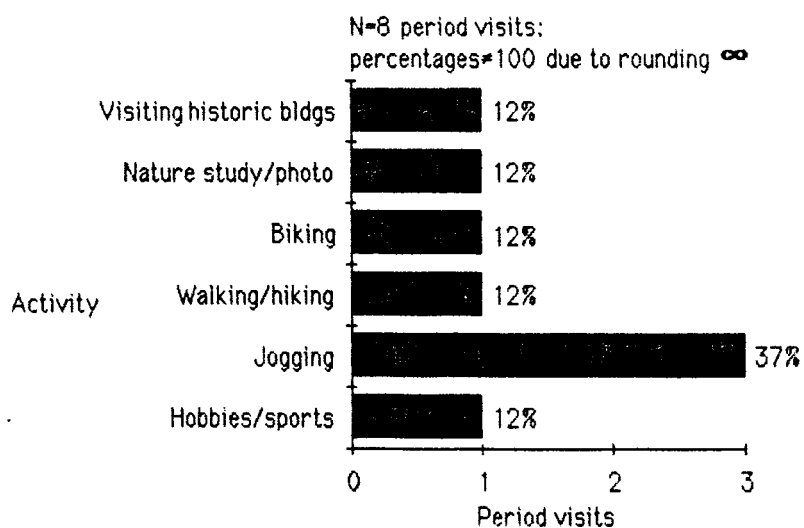


Figure 10: Period visits for each activity
--sunrise period

F. Activities and use of time compared (continued)

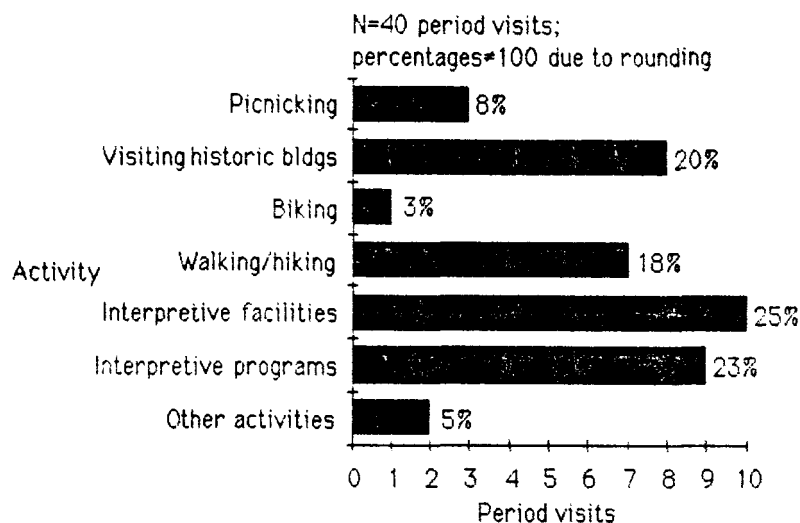


Figure 11: Period visits for each activity
--early morning period

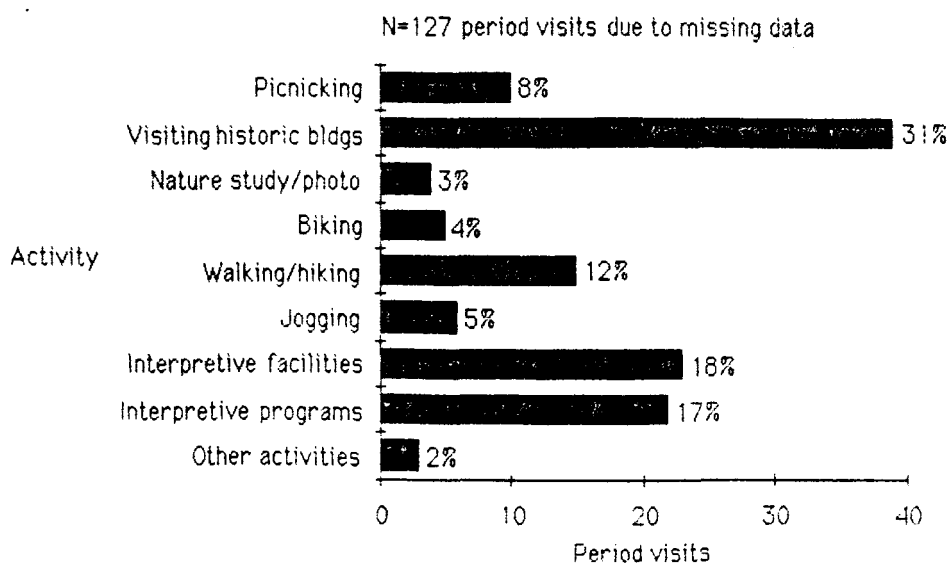


Figure 12: Period visits for each activity
--late morning period

F. Activities and use of time compared (continued)

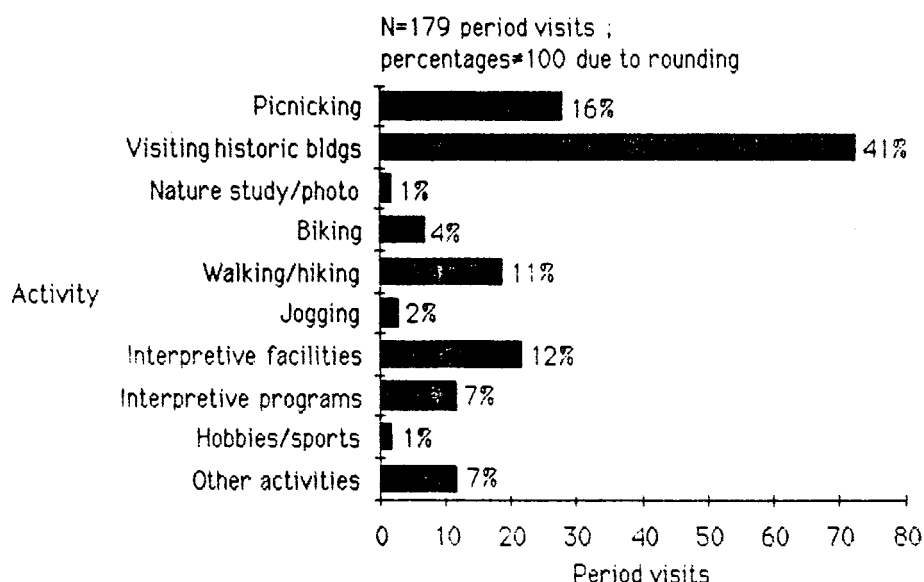


Figure 13: Period visits for each activity
--early afternoon period

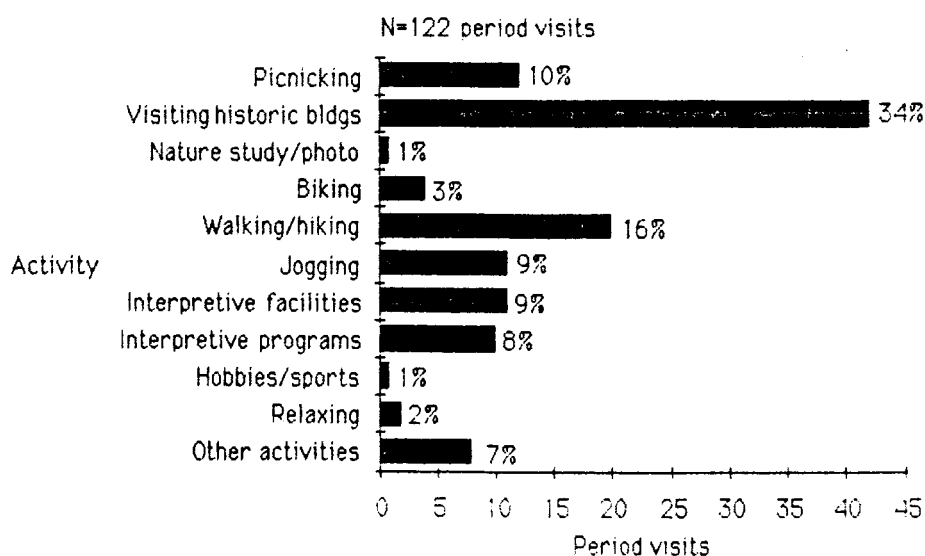


Figure 14: Period visits for each activity
--late afternoon period

F. Activities and use of time compared (continued)

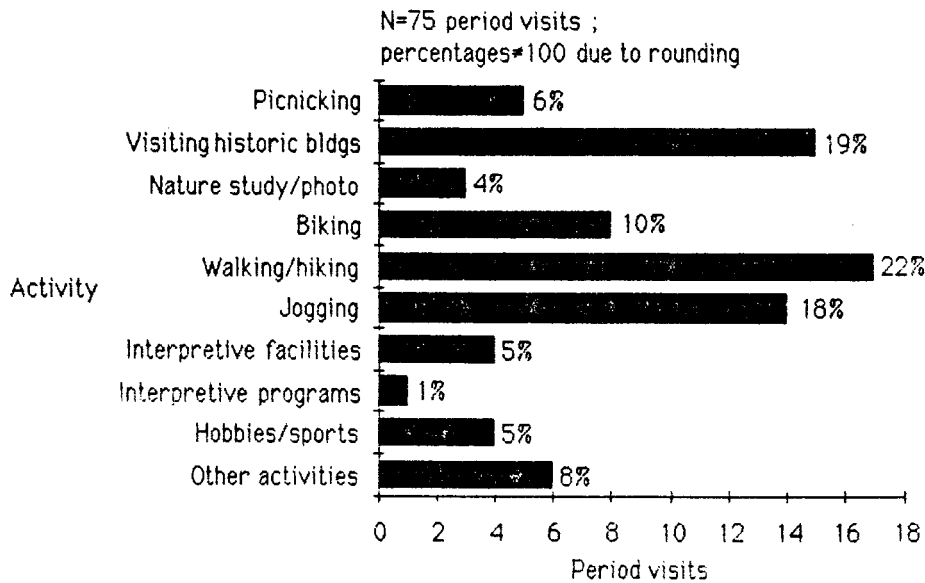


Figure 15: Period visits for each activity
--early evening period

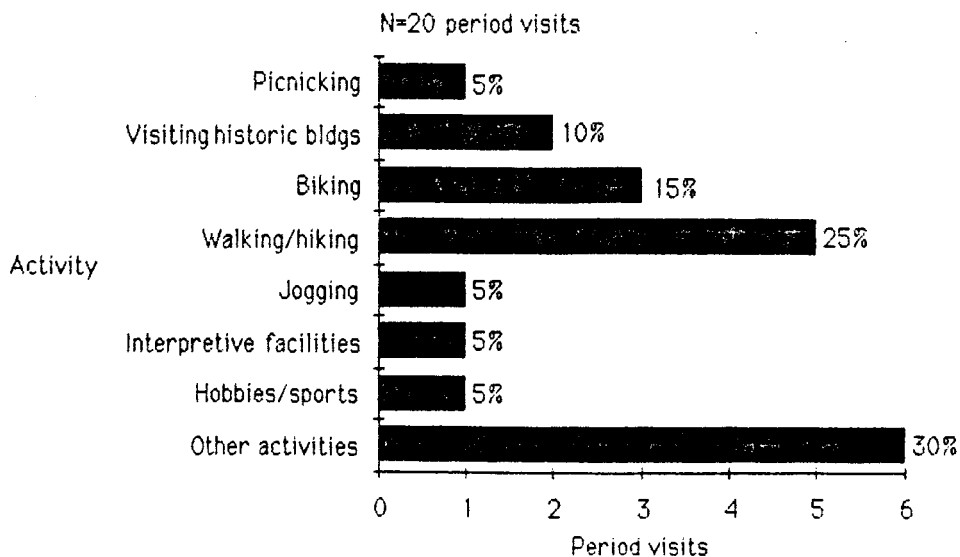
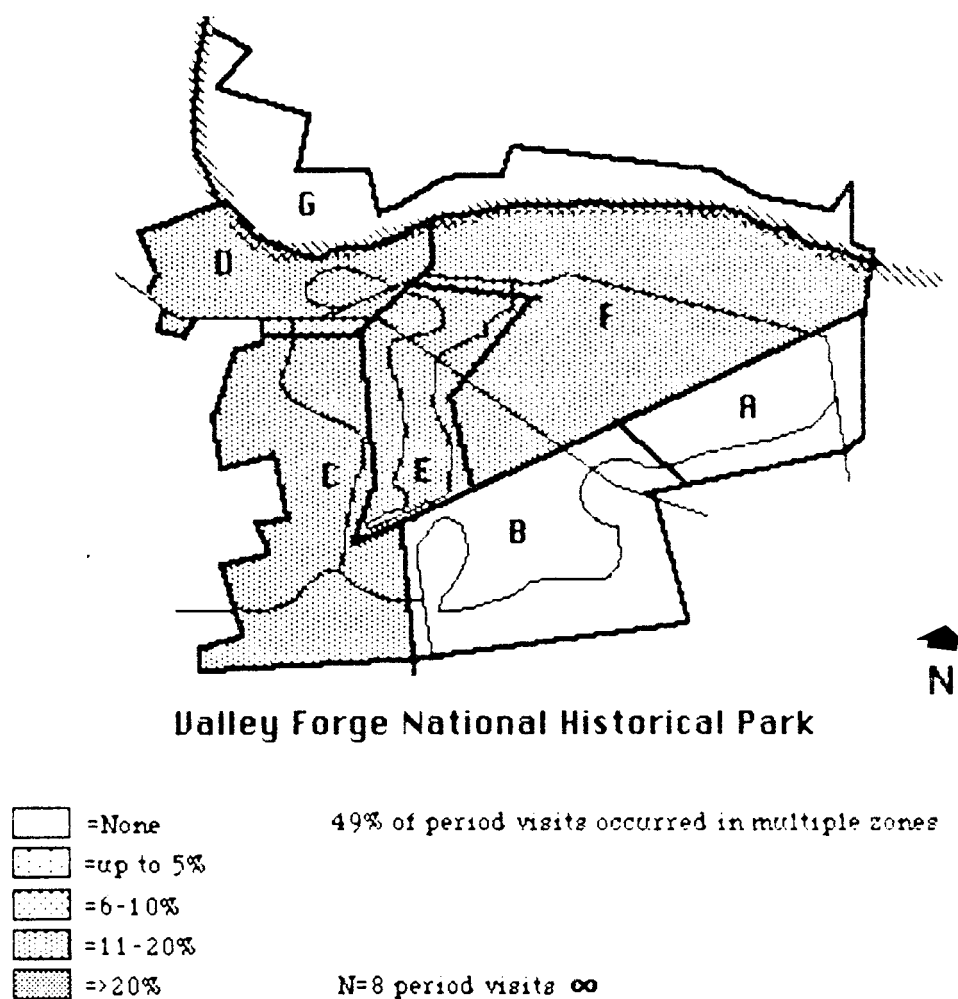


Figure 16: Period visits for each activity
--late evening period

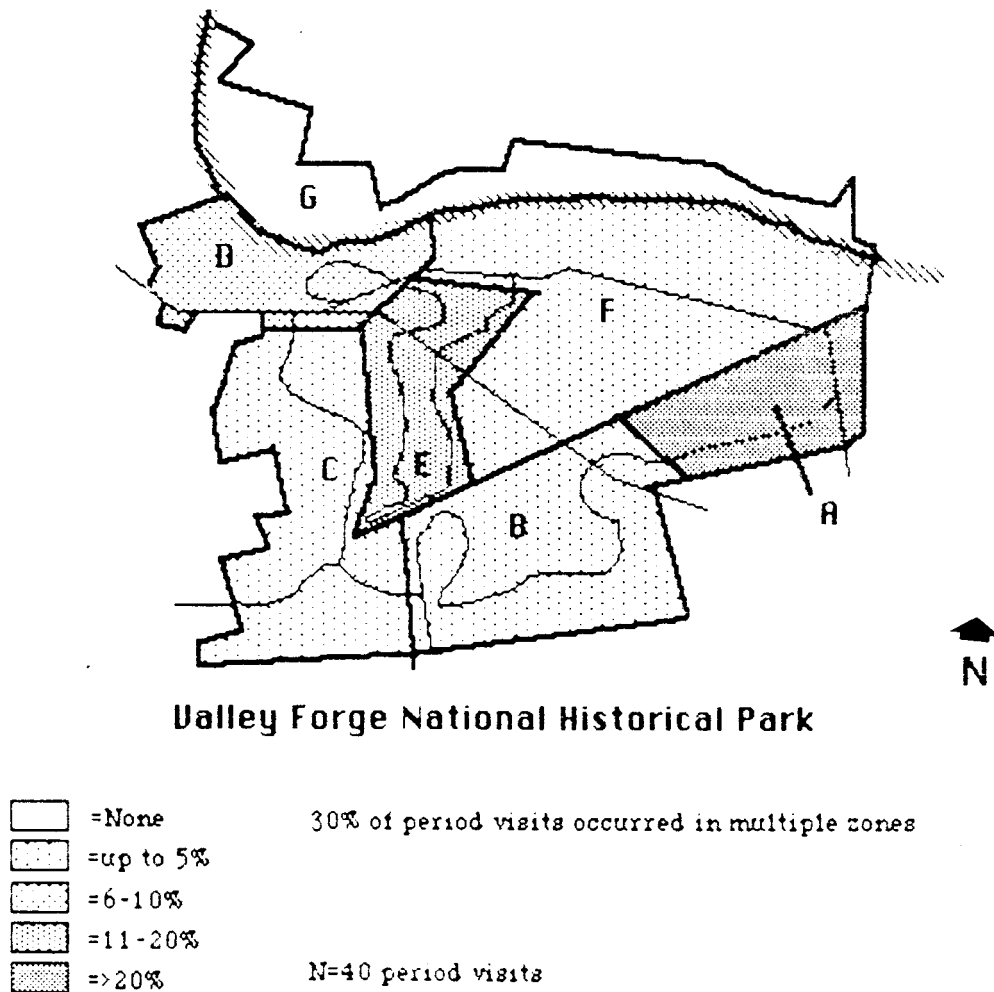
G. Locations and use of time compared

Visitors' use of each zone changed during the day, as shown on Maps 5 through 11. Except for zone G, visitor use was widely distributed throughout the park. Zone A received the largest proportion of use during the early and late morning periods.



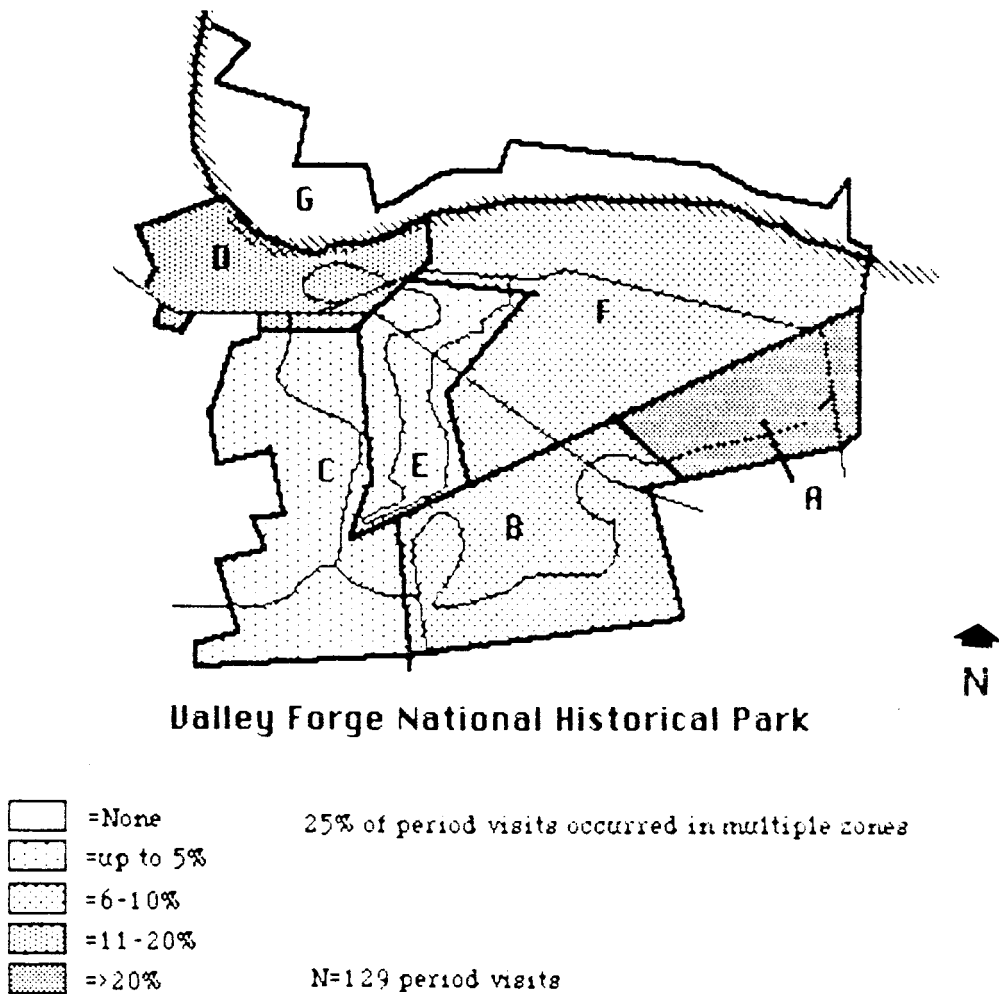
Map 5: Proportion of period visits occurring in each zone--sunrise period

G. Locations and use of time compared (continued)



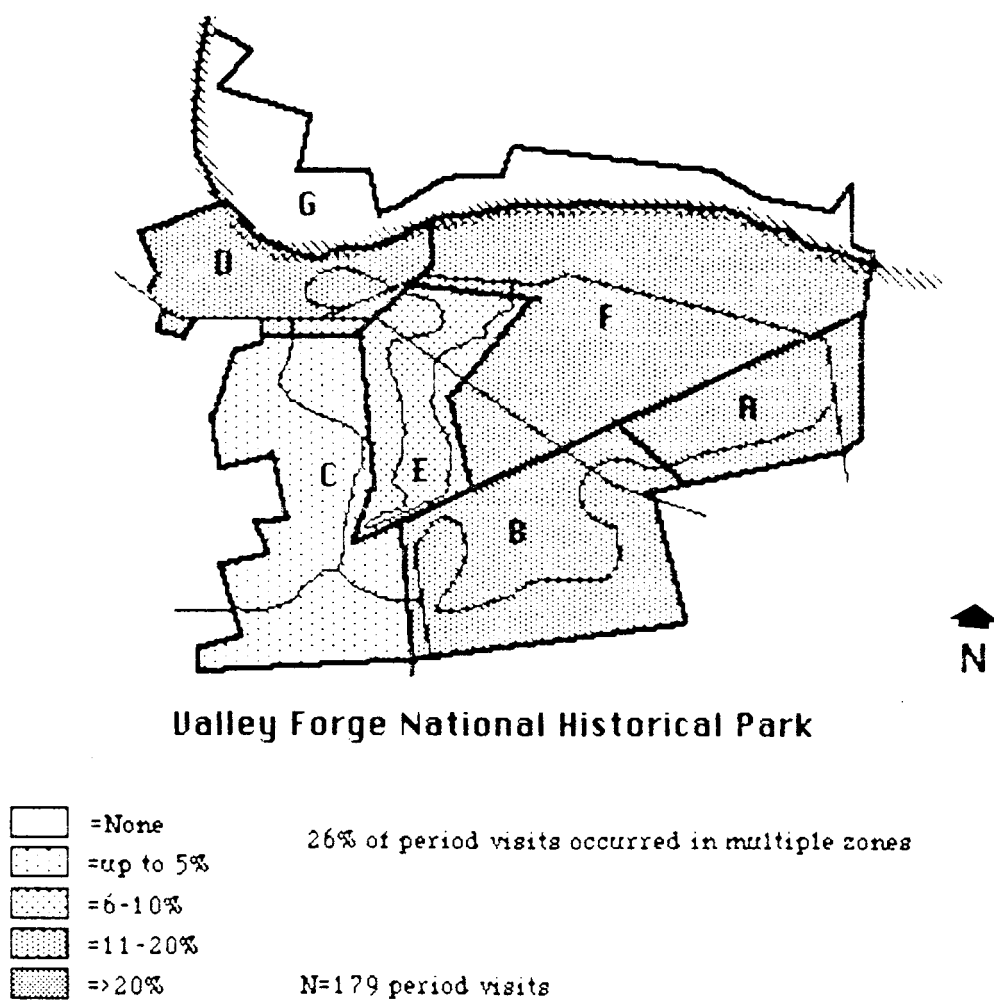
Map 6: Proportion of period visits occurring in each zone--early morning period

G. Locations and use of time compared (continued)



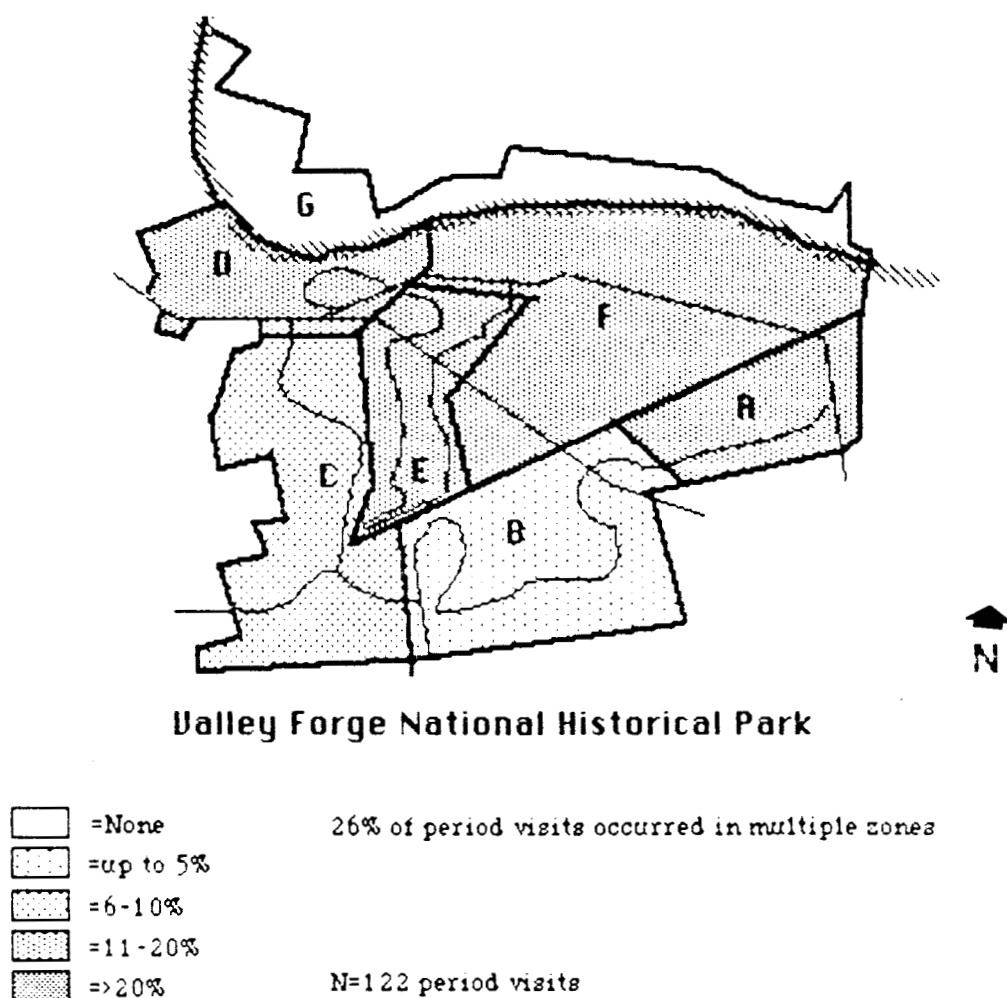
Map 7: Proportion of period visits occurring in each zone--late morning period

G. Locations and use of time compared (continued)



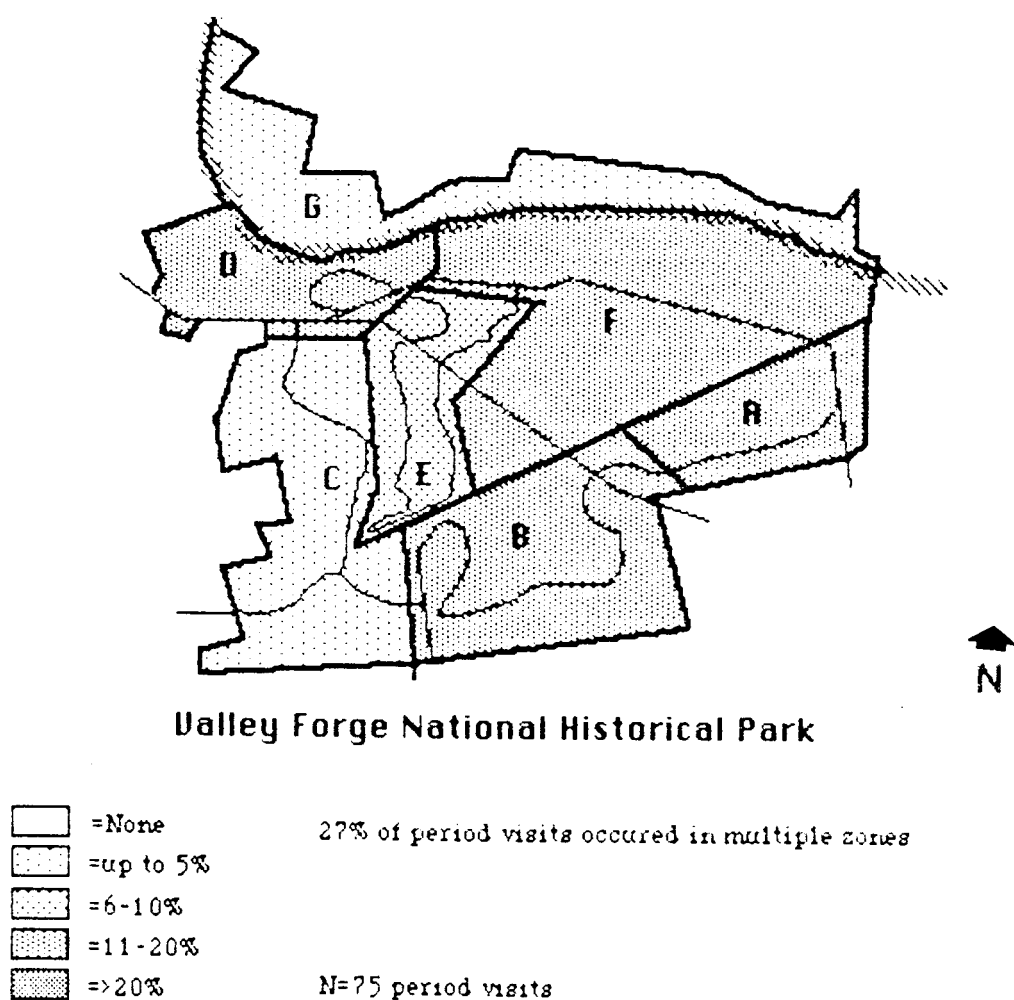
Map 8: Proportion of period visits occurring in each zone--early afternoon period

G. Locations and use of time compared (continued)



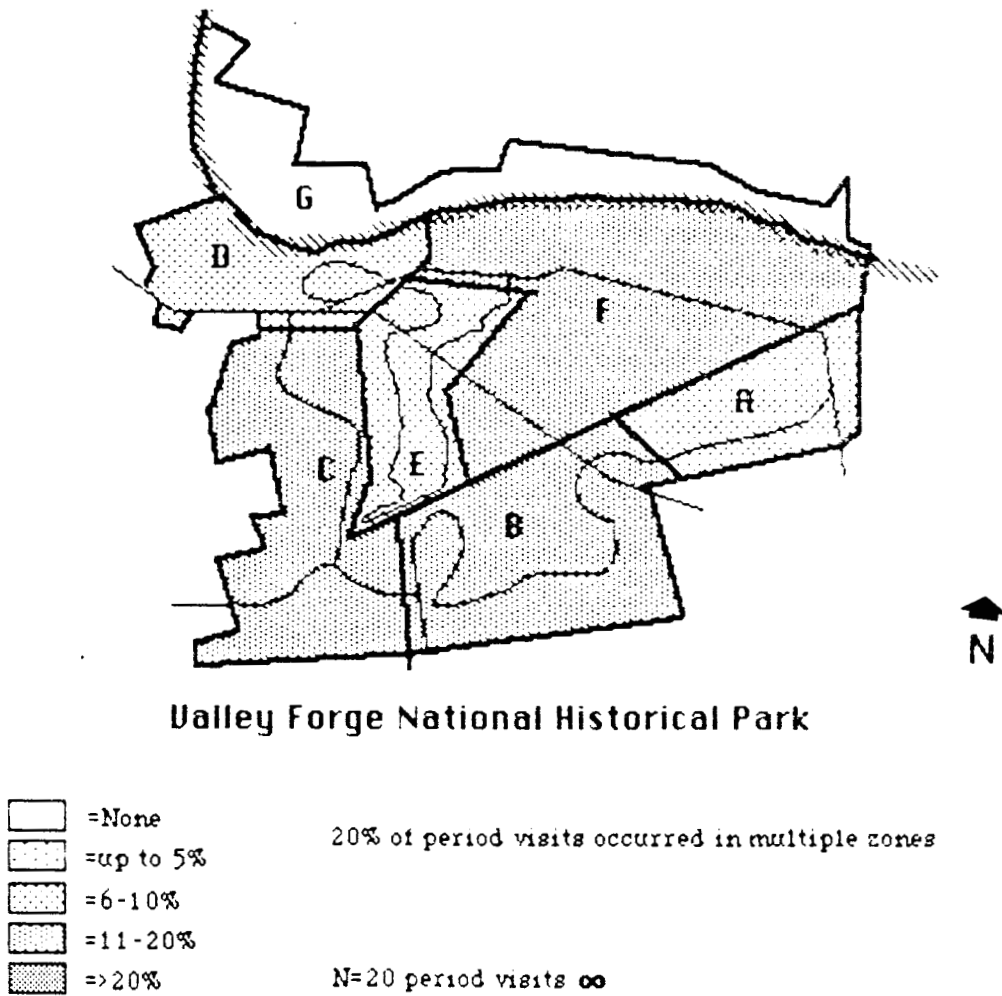
Map 9: Proportion of period visits occurring in each zone--late afternoon period

G. Locations and use of time compared (continued)



Map 10: Proportion of period visits occurring in each zone--early evening period

G. Locations and use of time compared (continued)



Map 11: Proportion of period visits occurring in each zone--late evening period

H. Locations and activities compared

Visitors used the zones in different amounts, and for different activities. That is, the relative proportions of period visits for the different activities varied from zone to zone, as shown in Table 1. (Due to recording errors, small amounts of activities are shown occurring in zones where they could not occur--for example, visiting historic buildings in zones C and E.) Most activities were distributed throughout several zones, while some (such as attending interpretive programs) were concentrated in a few zones.

Table 1: Proportion of period visits occurring in each zone (%)^{*}

<u>Activity</u>	<u>Zone</u>						
	A %	B %	C %	D %	E %	F %	G %
Picnicking (N-53)	11	47	--	2	19	21	-- -100%
Visiting Historic Buildings (N-114)	16	1	3	53	3	25	-- -101%**
Nature study/photography (N-8) [∞]	25	12	25	12	--	25	-- - 99%**
Biking (N-18) [∞]	28	17	--	11	17	28	-- -101%**
Walking/hiking (N-55)	7	18	13	9	27	25	-- - 99%**
Jogging (N-19) [∞]	37	5	--	10	16	31	-- - 99%**
Interpretive facilities (N-57)	74	2	3	10	3	7	-- - 99%**
Interpretive programs (N-44)	86	--	--	7	--	7	-- -100%
Hobbies/sports (N-8) [∞]	11	--	55	11	22	--	-- - 99%**
Relaxing (N-2) [∞]	--	--	50	--	50	--	-- -100%
Other activities (N-34)	12	26	15	6	18	21	3 -101%**

^{*}N=413 period visits due to missing data and activities that occurred in multiple zones.

^{**}Row percentages do not equal 100 due to rounding.

I. Locations, activities, and use of time compared

By combining data on locations, activities, and use of time, a more detailed picture of visitors' behavior is possible. Table 2 shows the proportion of period visits for different activities during each time period for zone A (similar tables for other zones are available, see Menu for Further Analysis).

Table 2: Proportion of period visits occurring during each time period in zone A (%)*

<u>Activity</u>	<u>Time period</u>						
	Sun- rise %	Early Morn- ing %	Late Morn- ing %	Early After- noon %	Late After- noon %	Early Even- ing %	Late Even- ing %
Picnicking (N-6)∞	--	--	17	50	17	17	-- -101%**
Visiting Historic Buildings (N-18)∞	--	11	39	28	22	--	-- -100%
Nature study/photography (N-2)∞	--	--	--	50	--	50	-- -100%
Biking (N-5)∞	--	20	60	--	--	--	20 -100%
Walking/hiking (N-4)∞	--	--	50	--	--	50	-- -100%
Jogging (N-7)∞	--	--	--	--	43	57	-- -100%
Interpretive facilities (N-42)	--	19	38	33	9	--	-- - 99%**
Interpretive programs (N-38)	--	10	50	21	16	3	-- -100%
Hobbies/sports (N-1)∞	--	--	--	--	--	100	-- -100%
Other activities (N-4)∞	--	--	--	25	50	--	25 -100%

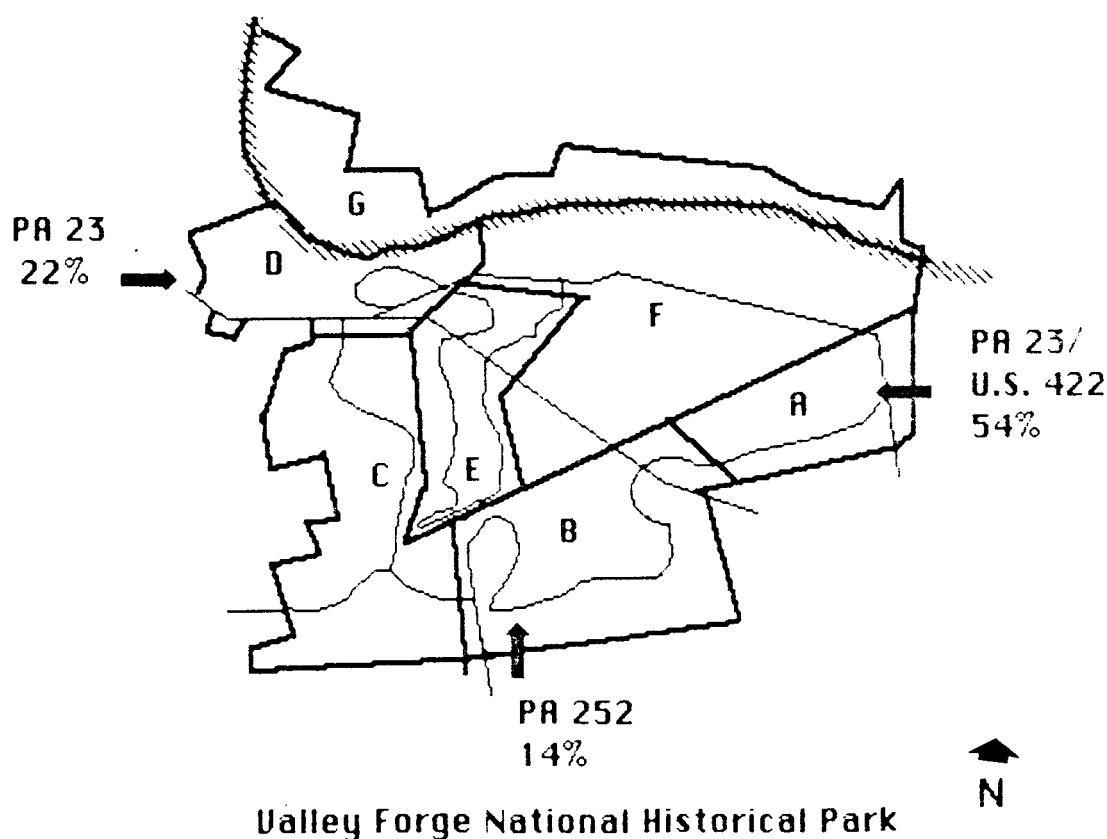
*N-127 period visits (in zone A) due to missing data

**Row percentages do not equal 100 due to rounding.

J. Special question 1--Park entrances used

Question 5 (see questionnaire, Appendix A) asked visitors which routes they used to enter the park. Map 12 illustrates their responses; over one-half entered from the east, via PA 23/US 422. Visitors could also list other routes they used to enter the park; their responses included:

1. PA 363
2. I 76
3. PA 202
4. Yellow Springs Road
5. Thomas Road
6. Across Betzwood Bridge
7. Gulph Road
8. US 422 (from West)



N=347 respondents due to missing data

10% of respondents used other routes

Map 12: Proportion of visitors entering by each route

K. Special question 2--Frequency of visits compared with use of interpretive services

Question 6 asked (see questionnaire, Appendix A) visitors how often they visited Valley Forge in the past year (including this visit) and question 7 asked visitors which interpretive services they used. Figures 17 and 18 illustrate their responses. The most common frequency of visits in the past year was 'once', followed by 'once a week or more.' Over one half of the visitors used interpretive exhibits, signs, or buildings or went to the Visitor Center.

Table 3 shows a comparison of visit frequencies with the proportion of visitors who used each type of interpretive service. Those who visited only once in the past year were more likely to use these services than more frequent visitors (who visited once a month or more often).

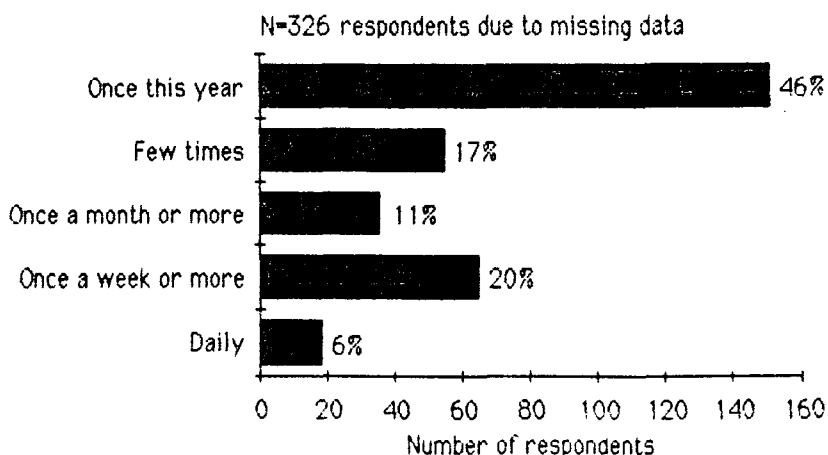


Figure 17: Frequency of visits to Valley Forge in the past year

K. Special question 2--Frequency of visits compared with use of interpretive services (continued)

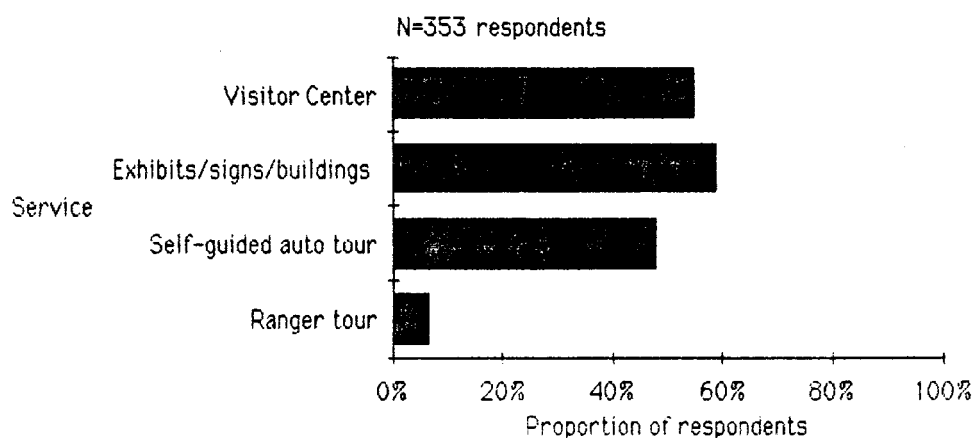


Figure 18: Proportion of respondents using each service

Table 3: Comparison of visit frequencies with use of each service type.*

Service type used	Frequency of visits				
	Once this yr.	Few times	Monthly plus	Weekly plus	Daily
	%	%	%	%	%
Ranger tours	12	--	--	3	--**
Self-guided auto tour	67	51	19	18	21
Exhibits/signs/ historic buildings	89	64	25	15	10
Visitor Center	82	51	19	21	10
Used none of these services	2	24	56	69	68

*N=326 respondents due to missing data.

**Because respondents could use more than one service type, row percentages do not equal 100

L. Special question 3--Interferences among visitor activities

Question 8 (see questionnaire, Appendix A) asked visitors if other visitors and their activities interfered with their visit. Nine percent responded 'yes', while 91 percent responded 'no', as shown in Figure 19. (Explanations can be seen in Volume 2, accompanying visitor comments.)

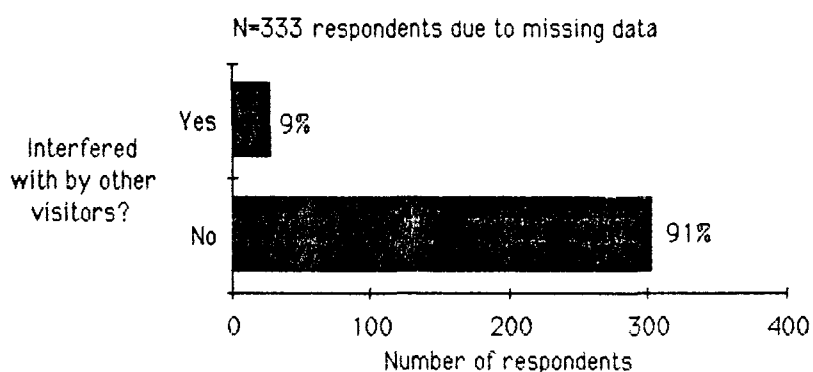


Figure 19: Visitor reports of interferences

MENU FOR FURTHER ANALYSIS

This report contains only some of the information that can be provided by the visitor mapping technique. By comparing characteristics such as location, time of day, and so forth, in different ways, many further analyses can be made. You may wish to see other tables, graphs, and maps in order to learn more about park visitors. This menu is provided so that you can order these easily. Two kinds of analyses are available:

1) Two-way comparisons--comparing two characteristics at a time. For example, if you wished to know which time periods a particular age group was likely to use the park, you could request a comparison of time period by age group; if you wished to know which zones received more use by local visitors, he could request a comparison of zone by zip code.

2) Three-way comparisons--comparing a two-way comparison to a third characteristic. For example, if you wished to know the different amounts of activities occurring during each time period in each zone, you could request a comparison of (activity by time period) by zone; if you wished to know which age groups were participating in an activity during each time period, you could request a comparison of (activity by time period) by age group.

In Table 4, all of the possible two-way comparisons are shown. You can use this table to request further analyses the same way you would use a mileage table on a road map to determine the distance between two cities. First locate one of the characteristics you wish to compare in the left-hand column. Then move to the right across the page until you intersect the column under the other characteristic of interest. The number labels the number of the two-way comparison of the characteristics--use this number when ordering a two-way comparison analysis.

To request a three-way comparison analysis, list all three characteristics you wish to compare. For example, if you request a comparison of activity by time period by age group, each of these should be listed in the space provided on the order form. A sample order form follows Table 4. Then, blank order forms are provided for you to tear out and complete, as shown in the sample.

Table 4: Menu for additional two-way comparisons

Item:	Group size	Group type	Age	State res.	County res.	Previous visits	Entry time	Entry day
1. Group size								
2. Group type	1							
3. Age	2	16						
4. State residence	3	17	30					
5. County residence	4	18	31	@				
6. Previous visits	5	19	32	43	54			
7. Entry time	6	20	33	44	55	65		
8. Entry day	7	21	34	45	56	66	75	
9. Length of stay	8	22	35	46	57	67	76	84
10. Time period	9	23	36	47	58	68	77	85
11. Zone	10	24	37	48	59	69	78	86
12. Activity	11	25	38	49	60	70	79	87
13. Entry route	12	26	39	50	61	71	80	88
14. Visit Frequency	13	27	40	51	62	72	81	89
15. Services used	14	28	41	52	63	73	82	90
16. Conflict?	15	29	42	53	64	74	83	91

*Provided in this report

@Not available

Length of stay	Time period	Zone	Activity	Entry route	Visit freq.	Services used	Conflict?
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92

93 99*

94 100* 105*

95 101 106 110

96 102 107 111 114

97 103 108 112 115 117*

98 104 109 113 116 118 119

This report contains only some of the information that can be provided by the visitor mapping technique. By comparing characteristics such as location, time of day, and so forth, in different ways, many further analyses can be made. You may wish to see other tables, graphs, and maps in order to learn more about park visitors. This menu is provided so that you can order these easily. Two kinds of analyses are available:

- 1) Two-way comparisons--comparing two characteristics at a time. For example, if you wished to know which time periods a particular age group was likely to use the park, you could request a comparison of time period by age group; if you wished to know which zones received more use by local visitors, he could request a comparison of zone by zip code.
- 2) Three-way comparisons--comparing a two-way comparison to a third characteristic. For example, if you wished to know the different amounts of activities occurring during each time period in each zone, you could request a comparison of (activity by time period) by zone; if you wished to know which age groups were participating in an activity during each time period, you could request a comparison of (activity by time period) by age group.

In Table 4, all of the possible two-way comparisons are shown. You can use this table to request further analyses the same way you would use a mileage table on a road map to determine the distance between two cities. First locate one of the characteristics you wish to compare in the left-hand column. Then move to the right across the page until you intersect the column under the other characteristic of interest. The number labels the number of the two-way comparison of the characteristics--use this number when ordering a two-way comparison analysis.

To request a three-way comparison analysis, list all three characteristics you wish to compare. For example, if you request a comparison of activity by time period by age group, each of these should be listed in the space provided on the order form. A sample order form follows Table 4. Then, blank order forms are provided for you to tear out and complete, as shown in the sample.

SAMPLE

48

Visitor Services Project
Analysis Order Form--Report 9 (Valley Forge)

Please complete
this information

Date of request: ____/____/____

Person requesting analysis: _____

Phone number (commercial): _____

1. Additional two-way comparisons (please circle
appropriate number from Table 4)

Circle the
numbers from Table

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116
117 118 119

2. Additional three-way comparisons (please describe,
listing the three items of interest)

Please list
characteristics
as they are named
Table 4

3. Special Instructions

*It may be helpful to describe why
you need the information*

Mail to:
Cooperative Park Studies Unit
College of Forestry, Wildlife, and Range Sciences
University of Idaho
Moscow, Idaho 83843

**Visitor Services Project
Analysis Order Form--Report 9 (Valley Forge)**

Date of request: ____/____/____

Person requesting analysis: _____

Phone number (commercial): _____

1. Additional two-way comparisons (please circle appropriate number from Table 4)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116
117 118 119

2. Additional three-way comparisons (please describe, listing the three items of interest)

3. Special Instructions

**Mail to:
Cooperative Park Studies Unit
College of Forestry, Wildlife, and Range Sciences
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Moscow, Idaho 83843**