TRENDS AND CURRENT STATUS OF PARTICIPATION IN OUTDOOR RECREATION

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Abstract—This paper takes a global approach to participation in outdoor recreation in the United States. First, a review and comparison of several past major national surveys provides some information on overall long-term trends in outdoor recreation participation, despite comparability problems. Second, a previously unpublished analysis of the multiagency 1985-87 Public Area Recreation Visitor Study provides current information on the recreation participation patterns of current users of Federal and State resource-based recreation areas. Finally, implications are provided based on the material presented.

INTRODUCTION

Since the Outdoor Recreation Resources Review Commission (ORRRC) in the early 1960's, Federal agencies and other organizations have examined national-level participation in outdoor recreation activities. The Resources Planning Act (RPA) Assessment of Outdoor Recreation and Wilderness requires such an examination. The material presented in this article was initially prepared for the RPA Assessment, and is provided here to permit wider distribution of the results as well as allow peer review and comment as to the conclusions reached.

Most users of public recreation areas could be said to hold a generic image of parks. They are not aware of, nor are they particularly interested in the variety of legal mandates, or the resulting complexity of administrative and organizational arrangements for providing recreation opportunities in public parks. Thus, the political and bureaucratic aspects of management are not likely to make a strong or lasting impression on the leisure, social world of most park visitors (Haywood 1986). This paper, therefore, examines resource-based outdoor recreation without regard to the administrative area on which that recreation occurs, although recreation participation on Federal and State lands is the primary focus of this paper.

In this paper, we will briefly examine the trends in outdoor recreation participation in the past 25 years, focusing on an activity-by-activity comparison for the most popular resource-based outdoor recreation activities in the United States. Following that review, a more detailed examination of the current status of annual participation in outdoor recreation is offered, using the Public Area Recreation Visitor Study (PARVS) as our source of data. (This data set covers only Federal and State recreation areas, and it should be remembered that local and private lands support a very large amount of recreation participation, which is not discussed in this paper.) Finally, some interpretation of these results will be presented including opportunities for public recreation providers, barriers and constraints to implementing these opportunities, some suggestions for improving the information base, and some questions for discussion.

LONG-TERM TRENDS IN LEISURE

Leisure, or free time, is a basic resource for participation in outdoor recreation. It is commonly assumed that American's participation in recreation has increased because of increased free time that people now have available. However, there are few definitive long-term statistics on how much free time the public actually does have available, and there are indications that there has been a recent decline in leisure.

Robinson (1986) presented a review of several time-diary studies for the President's Commission on Americans Outdoors. He found that total free time has increased between 1965 and 1981, after a drop in free time between the 1954 and 1965 time-diary

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studies. The main gap in free time occurred between 1965 and 1974. Robinson's (1986) data are for "regular" workweeks and he suggests that there are indications that these proportions may not hold during some periods of the year, such as vacations. It appears that to the extent that there has been a "recreation boom," it has occurred during such concentrated "blocks" of free time and much less so during regular workweeks during the year.

Some recent studies present a contrary picture in which leisure time is decreasing, and time spent working, commuting, and studying is increasing. The 1984 Louis Harris report on "Americans and the Arts" reports that "over the past decade, for the average American, the amount of leisure time has shrunk 31 percent, a loss of 8 hours per week." Harris defined work for survey participants as hours spent "at work, housekeeping, or studies, including travel time to and from the job or school." Leisure was defined as the amount of time respondents had available "to relax, watch TV, take part in sports or hobbies, go swimming or skiing" as well as attending entertainment events or visiting with friends.

In their final report on a 1986 telephone survey of Americans for the President's Commission on Americans Outdoors, Market Opinion Research stated: "The current pattern for three-fourths of American adults includes 1-2 vacations of a week or more and multiple numbers of mini-vacations." This survey also found that "3 out of 10 adults took six or more long weekend or mini-vacations during 1985 and another one-fifth took 4 or 5." It appears that the extended vacation of 2 or more weeks is becoming less common, losing out to long weekends or other short blocks of time on several occasions throughout the year.

Although there is a recent trend toward declining leisure for the average American, the Harris Poll found considerable leisure differences depending on sex, age, ethnic group, and family status. The Harris report stated that Americans over age 65 report an average of 25.4 hours of leisure per week compared with a Baby Boom generation average of 16 hours per week. Further, in the latter group, women are reported to have 23 percent less leisure time than men. Among ethnic groups, while both whites and nonwhites report working slightly more than 43 hours per week, Blacks have 12.2 hours of leisure and Hispanics have 18 hours of leisure per week according to the Harris survey. There are several contributing social and economic causes for leisure time decline, including: 1) more women in the work force, 2) more two income families, 3) more single parent families, 4) pressures of work, job security issues, and 5) continuing/re-education.

LONG-TERM TRENDS IN OUTDOOR RECREATION PARTICIPATION

Since 1959, more than 30 nationwide recreation surveys have been conducted by public agencies and private companies. All of these surveys attempted to measure outdoor recreation participation rates and other variables affecting participation patterns. Any discussion of trends in participation uses some combination of data from these previous surveys.

Comparability Issues

Over the years, variations in methods of data collection and analysis of recreation participation have made it difficult to compare the information provided by different national-level surveys. Commonly, when individual land- management agencies have specific needs for recreation participation data, they have developed their own survey instrument and methods to best meet their needs. Generally, attempts have been made to provide comparability with past surveys; also, changes are made from previous instruments to clarify questions, add new categories, or otherwise improve the survey. As a result, there is a loss of consistency, and comparisons between surveys become more difficult.

It is difficult to draw comparisons among the large national surveys of Americans' recreation habits because of sometimes subtle differences in methods (Bevins and Wilcox 1980). The variations in research methodology include: the method of contact with persons being studied (personal interview, telephone, or mail), the time period during which the respondent is asked to recall activity participation (summer, winter, all year), the minimum age of respondent, and the position of the respondent in the household (individual or head) and recreating group (group leader or member).

Differences in the definitions of activities, question phraseology and ordering, and the number of activities suggested to the respondent also create problems of comparability. Many of the earlier surveys do not distinguish between developed camping, primitive camping, or backpacking. Boating is subdivided to canoeing, sailing, rowing, and powerboats in some surveys but not all. Swimming can also be confusing with subsets of pool-swimming indoors or outdoors, or swimming in other outdoor environments. The 1960 ORRRC study presented the respondent with a choice of 20 activities, while the 1982-83 NRS Survey presented 34 activities. The 1985-87 Public Area Recreation Visitor Study had a list of 53 activities,

with the option to include others not on that list. A comparison of popularity rankings between surveys is affected by the variation in the number of activities presented to the respondent.

Long-Term Comparisons of Participation Rates

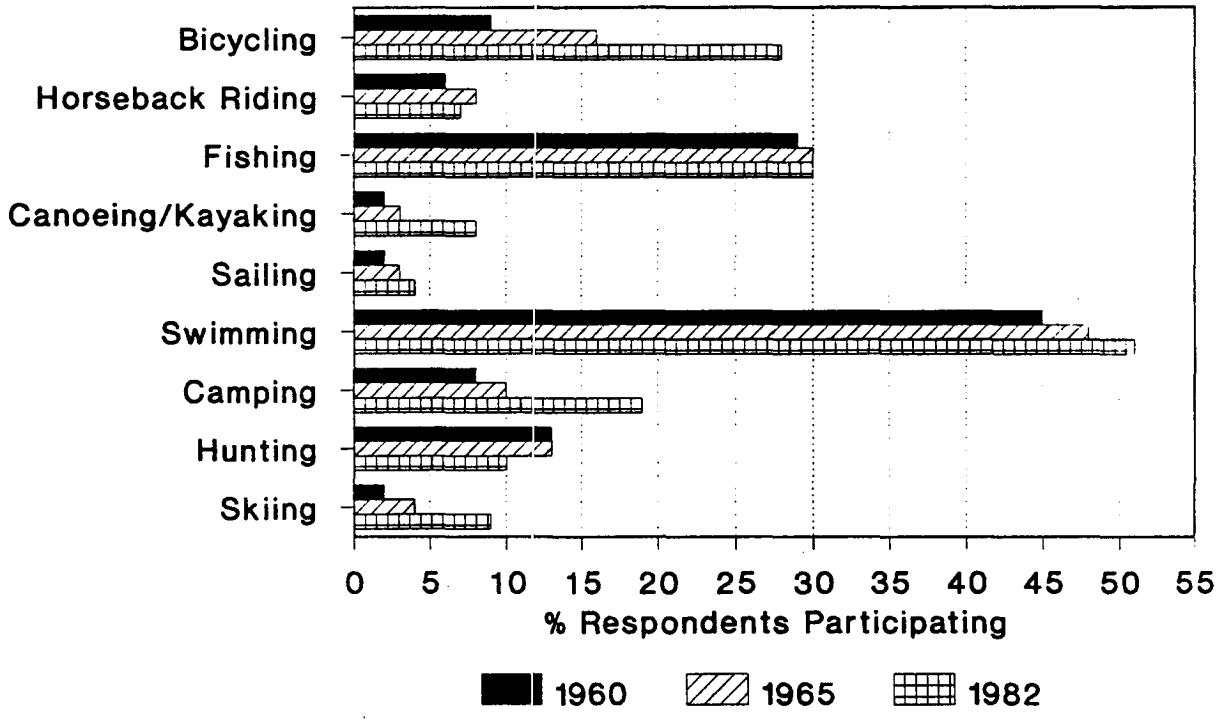
Despite the above-mentioned comparability issues, trends are seen in certain carefully selected surveys. Participation data from the 1960, 1965, and 1982 National Recreation Surveys (NRS) are similar enough to be compared in many respects. In all three surveys the respondents were 12 years and older and the interviews were conducted in-home by the same agency, the Bureau of the Census.

Because of subtle differences in questionnaire wording and activity definitions, the participation rates of only nine activities can be accurately compared across those three surveys. The respondents were asked if they had participated in any outdoor recreation activities during the previous 3 months. Snow-skiing and canoeing/kayaking made the most dramatic gains in participation rates in the 22 years (fig. 1). Only 2 percent participated in 1960, but the participation rate for these activities quadrupled by 1982. Bicycling was not far behind with a tripling of its participation rate from 9 percent to 28 percent with an increase in adult participation in recent years.

Swimming was one of the most popular activities in 1960 and continued to be popular in 1982 with only a small increase, from 45 to 51 percent. In the 1982 NRS Survey, more people said they swam in outdoor pools rather than in other environments. Fishing and hunting have both remained popular and their participation rates have remained stable since 1960, with hunting declining only slightly.

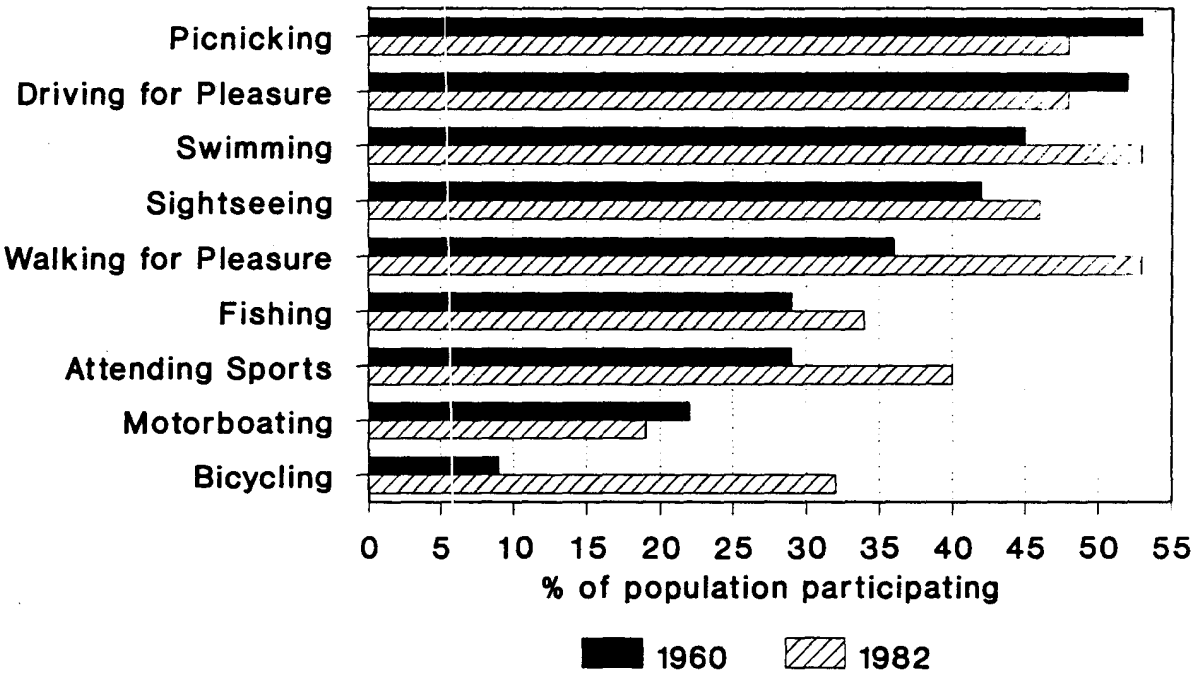
By comparing activities between the 1960 and 1982-83 NRS surveys, it is possible to include additional activities, and other trends become visible. The mix of popular outdoor recreation activities has also changed (fig. 2). In 1960, more than half of the U.S. population over age 11 participated in picnicking and driving for pleasure. In 1982, two other activities, outdoor swimming and walking for pleasure, were done by a majority of the population.

In evaluating these participation percentages, it is important to realize the population has grown almost 30 percent since 1960. The increased population means more potential participants. When looking at the percentage change in number of participants, the growth of some activities appears more dramatic



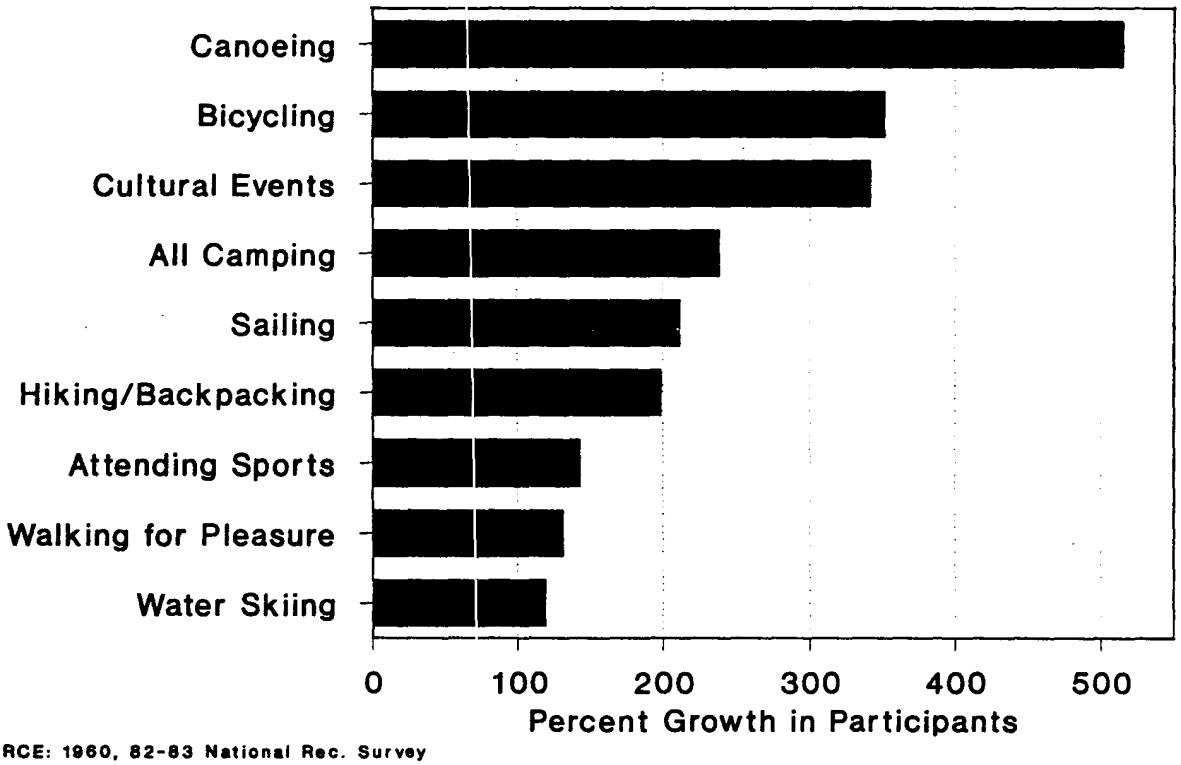
SOURCE: 1982-83 National Recreation Survey Final Report.

Figure 1.—Activity participation trends 1960-82 (summer seasons).



SOURCE: 1960, 1982 National Recreation Surveys

Figure 2. – National population trends in participation in selected activities (12 years old and older), 1960-82.



SOURCE: 1960, 82-83 National Rec. Survey

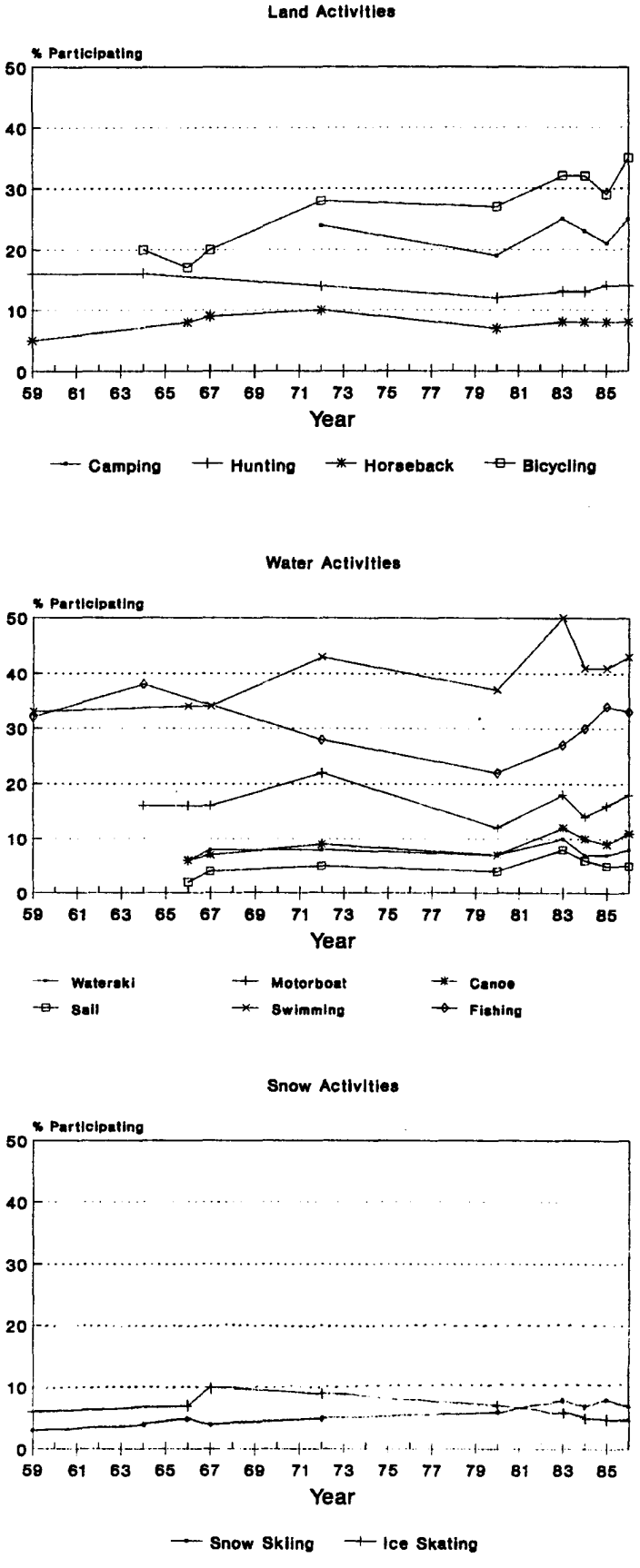
Figure 3. – Percentage change in number of summer participants in nine rapidly growing activities, 1960-82.

(fig. 3). Of the nine activities with the highest growth rates, more than half are physically demanding: canoeing, bicycling, water-skiing, walking, and hiking/backpacking. While some of the high-growth activities are more passive; e.g., attending outdoor cultural activities and sporting events, few are motor or energy dependent (fig. 3).

The Gallup Poll conducts annual surveys of adult participation in over 50 sports. The poll has been conducted continuously since 1959 and is one of the few sources of consistent long-term trend information. Respondents (over the age of 18) are asked to indicate which sport they have participated in within the last 12 months (Gallup 1986). Some of the observed trends are similar to the NRS findings. The results show a substantial growth of sports participation in the 27 years covered by the survey (fig. 4). Of the 12 activities considered here, all have greater participation rates now than when data were first collected in 1959, except for hunting and ice-skating which have declined only slightly. Swimming and fishing have held their positions as the most popular sports since the surveys began. In 1986, 43 percent of the respondents indicated participation in swimming and 33 percent were participating in fishing. Bicycling has gained in popularity over the years, from a 20-percent participation rate in 1964 to 35 percent in 1986—higher than fishing.

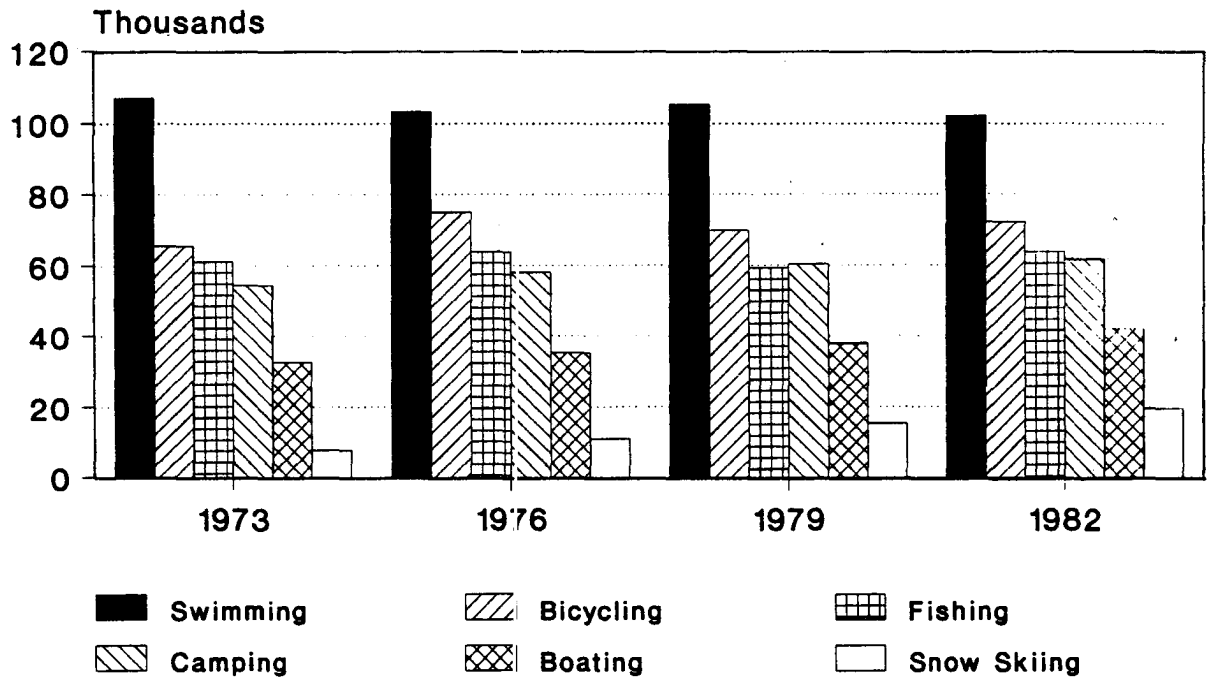
The Gallup Poll reports a high growth rate in general sport participation in the 1960's and the 1970's, and then a leveling off in the 1980's. Swimming, fishing, motorboating, horseback riding, water-skiing, sailing, and camping are maintaining their participation rates from the seventies. Hunting has shown a steady decline since 1959, and ice-skating has declined since the mid-1970's. Canoeing, bicycling, and skiing are continuing to grow into the eighties, though not as rapidly as in the earlier decades.

The A.C. Nielsen Company (reported in Clawson and Van Doren 1984) also monitored sport and outdoor recreation participation between 1973 and 1982. The highest growth reported occurred in snow-skiing (increased 27 percent), sailing (increased 23 percent), and soccer (increased 23 percent), which started with relatively low participation rates. The 10 most popular activities in 1982 were swimming, bicycling, fishing, camping, boating, bowling, physical conditioning, jogging and running, roller-skating, and pool and billiards. Nielsen reported participation rates for specific activities increasing and decreasing in a cyclic fashion. One would expect this as recreation behavior affected by fads.



SOURCE: Gallup Poll

Figure 4.—Long-term trends in outdoor recreation.



SOURCE: A.C. Nielsen. 1982. Ranking of popularity of participation in sports measured, 1973-1982. News release.

Figure 5.—Estimated number of participants in selected outdoor recreation activities, 1973-82.

The Nielsen results differ from the Gallup Poll in a few areas. Nielsen reports an increase in boating participation between 1973 and 1982, whereas Gallup reports a slight decrease. Bicycling has become much more popular according to Gallup, but Nielsen shows a stable number of participants over the same time period (fig. 5).

Relative Popularity of Activities

The relative popularity of activities can be compared across surveys. This is a useful method for obtaining trend data from unlike surveys. Popularity is based on a rank order of percentage of population participating in specific activities. Some caution should be used in comparing rankings because activity lists and activity descriptions vary between surveys. For example, in the 1960 NRS, the respondents were asked to indicate participation in 20 activities. In the 1982 NRS, there was a list of 36 activities from which to choose. Therefore any analysis should emphasize the relative popularity of activities, rather than comparing the actual number of participants determined by the various studies.

Five surveys conducted between 1960 and 1982 were chosen to compare popularity rankings (table 1). Picnicking was the most popular activity in all the surveys except for the most recent. The most dramatic change is seen in bicycling, which gained in popularity over boating between 1960 and 1982. Swimming and walking for pleasure became more popular than picnicking and driving for pleasure. This corresponds to the observed trend toward a more active lifestyle for many Americans.

Table 1.--Relative popularity rankings of selected activities, 1960-82

	Popularity rank by year and study				
Activity	1960 ORRRC[1]	1965 NRS[2]	1972 BOR[3]	1977 BOR	1982 NRS
Picnicking	1	1	1	1	4
Driving for pleasure	2	2	2	2	4
Swimming	3	4	4	3	1
Walking	4	3	3	-	2
Fishing	5	5	5	4	5
Boating	6	6	7	6	7
Bicycling	9	7	9	5	6
Camping	10	10	8	8	8

[1]Outdoor Recreation Resources Review Commission.

[2]National Recreation Surveys.

[3]Bureau of Outdoor Recreation.

Note: This table uses data provided by Bevins and Wilcox (1980), to create relative popularity ranks for activities (1 = most popular) for the activities shown. This method assumes that each survey provides valid popularity ranks while allowing methodology differences among the cited surveys.

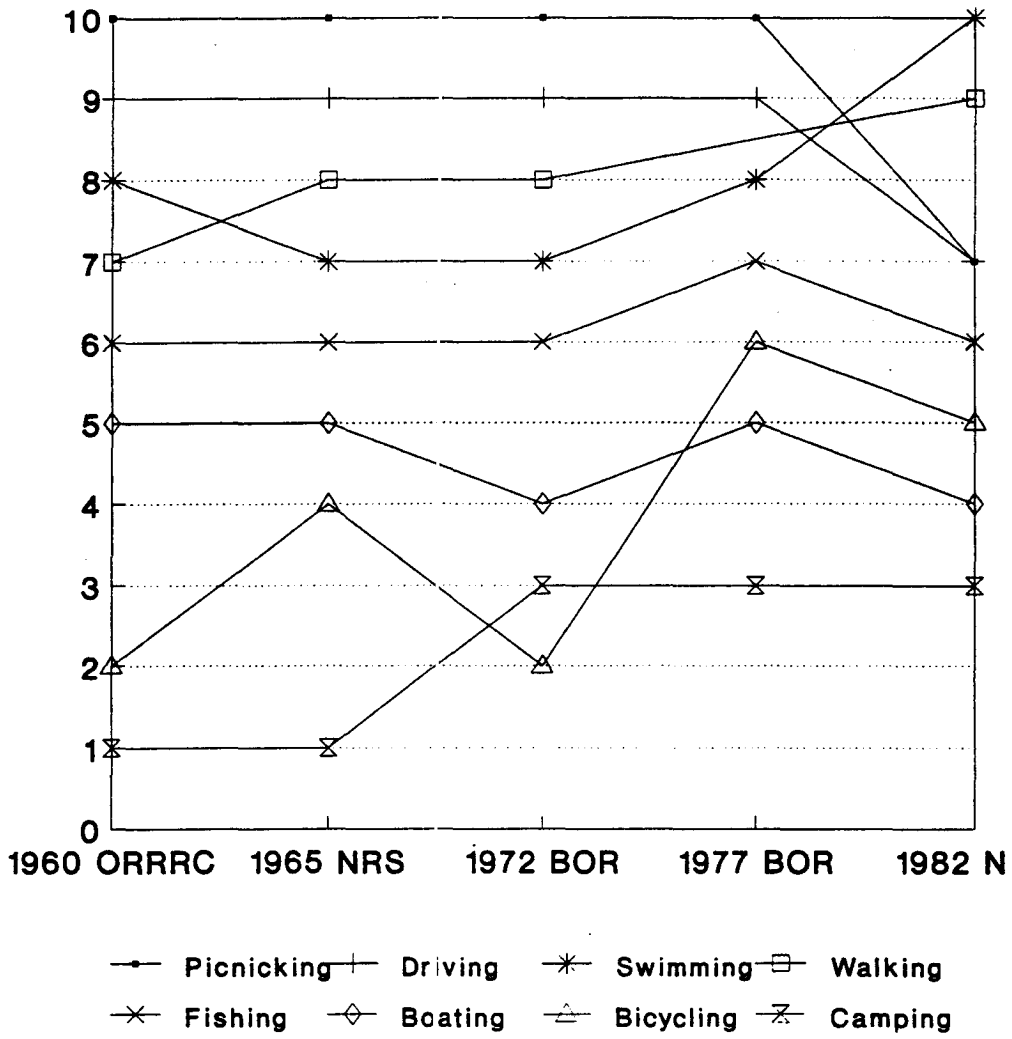


Figure 6.—Relative popularity rankings of selected activities, 1960-1982.

RECENT TRENDS AND CURRENT PARTICIPATION IN OUTDOOR RECREATION

The data source being used most heavily in the RPA Assessment for a description of current participation is the Public Area Recreation Visitor Study (PARVS). PARVS is an interagency onsite survey of visitors to Federal and State recreation areas nationwide. Five Federal agencies and 12 State agencies participated in this survey between 1985 and 1987, contacting over 36,000 visitors and resulting in almost 32,000 usable interviews using a complex survey instrument with over 1,100 variables. The origins of the respondents (using unweighted data) roughly approximate the geographic distribution of the population of the United States (fig. 6). Additional information describing the methods and purposes of PARVS has been documented by Cordell and others (1987). One of the many purposes of PARVS is to provide an examination of the annual outdoor recreation activities of the visitors to public recreation areas represented by the sample.

Sufficient information is available in the survey instrument and other sources (such as the 1982-83 National Recreation Survey and the National Park Service's Fee Reports) to allow weighting to provide an approximation of the annual recreation participation patterns of the recreating U.S. population. PARVS data are weighted to correct for an over-representation of overnight users, and weighted to represent the demographic characteristics of the U.S. population using information from the U.S. Bureau of the Census.

PARVS respondents reported individual annual participation in outdoor recreation activities. This participation was the basis for nationwide estimates of annual participation by residents over 11 years old. These data were developed through personal interviews with visitors to recreation sites, as opposed

to an origin-based sample of the population. As a result, annual profiles of the population had to be derived to adjust for population changes.

The procedure involved adjustment of the distribution of sampled PARVS respondents so that they proportionately represented the distribution of people over age 11 within defined population strata. Weighting these PARVS data in this manner was necessary to enable pooling across strata. Four types of population strata were recognized for each identified community: gender, age, urban or rural residence, and race. These characteristics were common to both the Census of Population and the PARVS sample.

Underrepresentation or overrepresentation among the gender-age-residence-race- defined strata was identified by comparing the percentage distribution of respondents of the PARVS sample to the percentage distribution of the total population. Further adjustment was made to account for differences in probabilities of being included in the PARVS sample. The basic determinant of this probability differential was between day and overnight users and whether the interview site was Federal or State administered. Sampling rates and schedules differed among these sampling strata.

Each PARVS respondent was subsequently assigned a population-to-sample distributional ratio that weighted all data provided by each respondent. This made their responses proportionate to the national proportion of the population in the State matching the respondent's profile. These weighted responses then represented the equivalent of an origin-based survey for obtaining estimates of year-

Table 2.--Comparison of participation in outdoor recreation activities, 1977-87

Activity group and type of activity	Percentage of participants participating at least once annually	
	1977 (households)	1987 (individuals)
Land:		
Camping (developed)	30	35
Camping (dispersed 1977)	21	--
(primitive 1987)	--	14
Driving off-road vehicles	26	9
Hiking	28	24
Horseback riding	15	9
Nature study/photography	50	36
Picnicking	72	46
Pleasure driving	69	45
Sightseeing	62	47
Water:		
Canoeing	16	14
Sailing	11	8
Other boating	34	9
Swimming outdoors	61	--
Outdoor pool swimming	--	50
Nonpool swimming	--	32
Water skiing	16	13
Snow and Ice:		
Cross-country skiing	2	7
Downhill skiing	7	10
Ice-skating	16	6
Sledding	21	9
Snowmobiling	8	3

Source: U.S. Department of Interior, Heritage, Conservation, and Recreation Services. 1977 National Outdoor Recreation Plan, from the Forest Service's 1979 Resources Planning Act Assessment; 1985-87 Public Area Recreation Visitor Survey.

Note: Sampling and methods were somewhat different between the two cited studies. The 1977 study reported percentage of households participating in outdoor recreation in the United States by type of activity. The 1985-87 study reports percentage participation of individuals who use resource-based public recreation areas.

round participation, socioeconomic characteristics, residence situation, population, and other attributes of subregional communities from which recreation trips were generated.

Trends Since the 1979 Assessment

Table 2 presents a basic comparison between outdoor recreation participation at the time of the last RPA Assessment and current participation. Some cautions are in order when making direct comparisons between the Federal Estate Visitor Survey (FEVS) used in the 1979 RPA Assessment of Outdoor Recreation and Wilderness and the 1985-87 Public Area Recreation Visitor Study (PARVS) used in the current RPA Assessment. Although care was taken to ensure comparability between the surveys, differences in the survey instrument and other survey methods may indicate some caution in interpretation of comparisons between the two studies. The FEVS reported percentage of households participating, whereas the PARVS reported percentage of individuals participating. As shown in table 1, the primary viable comparisons that can be made are also in popularity rank. Table 3 provides such a rank comparison and indicates relative increases in popularity in downhill skiing, swimming outdoors, canoeing/kayaking, water-skiing, and cross-country skiing, and relative declines in "other boating" (includes all boating other than canoeing or sailing), driving vehicles off road, sledding, ice-skating, picnicking, and pleasure driving. It appears that some of the more active recreational pursuits have become more popular, and some of the more passive activities have declined in relative popularity.

Current Participation in Outdoor Recreation

PARVS is the primary data set used in the RPA Assessment to describe current participation in outdoor recreation. PARVS is a rich data source, providing many analysis possibilities for annual participation in recreation activities. Space limitations prevent an exhaustive presentation of the findings of that study, but a synopsis of findings plus a sample of the detailed results for some representative activities will be presented here.

Table 4 provides an overview of two important aspects of recreation participation for 25 popular activities—the percentage of the population participating one or more times annually, and the median number days of annual participation by those individuals who participate. Table 5 provides median length of stay and one-way travel miles by the respondents' indicated "main" activity on site, for primary or single destination trips. Figure 7 presents a list of those activities most commonly participated

Table 3.--Rank order popularity of outdoor recreation activities, by percentage of population participating one or more times annually

1977 FEVS	1985-87 PARVS
1 Picnicking	1 Outdoor pool swimming
2 Pleasure driving	2 Sightseeing
3 Sightseeing	3 Picnicking
4 Swimming outdoors	4 Pleasure driving
5 Nature study/photography	5 Nature study/photography
6 Other boating	6 Camping (developed)
7 Camping (developed)	7 Nonpool swimming
8 Hiking	8 Hiking
9 Driving off-road vehicles	9 Camping (primitive 1987)
10 Camping (dispersed 1977)	Canoeing
Sledding	10 Water-skiing
11 Canoeing	11 Downhill skiing
Water-skiing	12 Driving off-road vehicles
Ice-skating	Horseback riding
12 Horseback riding	Other boating
13 Sailing	Sledding
14 Snowmobiling	13 Sailing
15 Downhill skiing	14 Cross-country skiing
16 Cross-country skiing	15 Ice-skating

Source: 1977 Federal Estate Visitor Survey; 1985-87 Public Area Recreation Visitor Survey.

Table 4.--Annual participation characteristics of selected outdoor recreation activities

Activity group and type of activity	Percentage of population participating one or more times annually	Median number of days of participation annually by those people who participate
Land-based activities:		
Sightseeing	46.9	12
Picnicking	46.2	6
Walking for pleasure	41.3	29
Driving for pleasure	38.4	19
Nature study/photography	36.2	13
Developed camping	34.9	7
Day hiking	23.8	5
Primitive camping	14.2	5
Other hunting	11.8	9
Backpacking	10.4	4
Big-game hunting	9.9	7
Driving ORVs	9.2	10
Horseback riding	8.6	2
Water-based activities:		
Swimming outdoors	50.3	17
Warmwater & saltwater fishing	30.9	10
Motorboating	22.2	7
Coldwater fishing	16.7	7
Water-skiing	12.9	4
Canoeing/Kayaking	13.9	2
Sailing	7.5	2
Snow and ice-based activities:		
Downhill skiing	9.8	4
Sledding	9.3	3
Cross-country skiing	6.5	4
Ice-skating	6.0	2
Snowmobiling	2.7	3

Source: 1985-87 Public Area Recreation Visitor Survey, compiled by the Outdoor Recreation and Wilderness Assessment Group, Athens, GA. Percentage participation figures represent percentage of the American public who use Federal and State recreation areas and participate in the activities listed. Days of participation figures are the median number of days of participation by those individuals in the sample who participate in the selected activity.

in by recreationists during their stays at the resource-based Federal and State recreation areas included in the PARVS sample.

As can be seen by these data, the various measures of participation do not necessarily result in similar rankings of activities. Swimming outdoors, sightseeing, picnicking, and walking for pleasure are the most "popular" activities in terms of the percentage of the population participating at least once annually (table 4). However, if one considers the number of times participants engage in the activities, the ranking of "popularity" changes dramatically. By this second measure, the most "popular" activities are running/jogging, walking for pleasure, driving for pleasure, bicycling, and swimming outdoors. A third measure of popularity is the length of stay on site for the designated "main" activity. By this measure, the most "popular" activities are developed camping, big-game hunting, primitive camping, backpacking, and "no main activity."

Table 5.--Median length of stay and one-way travel miles of selected "main" outdoor recreation activities

Type of activity	Median length of stay (hours)	Median one-way travel miles (days)
Developed camping	75	81
Big-game hunting	69	70
Primitive camping	62	100
Backpacking	49	160
No main activity	48	98
Saltwater fishing	28	145
Cold freshwater fishing	12	79
Motorboating	11	53
Canoeing or kayaking	9	85
Wildlife observation & photography	7	171
Anadromous fishing	7	55
Warmwater fishing	6	39
Driving ORVs	6	69
Day hiking	5	56
Outdoor pool swimming	4	23
Other outdoor swimming	4	29
Sightseeing	4	79
Small-game hunting	4	30
Picnicking	4	30
Walking for pleasure	3	25
Driving for pleasure	2	20

Source: 1985-87 Public Area Recreation Visitor Survey, compiled by the Outdoor Recreation and Wilderness Assessment Group, Athens, GA. All figures represent responses related to the activity selected as the "main" reason for coming to the site. Length of stay was calculated by subtracting the arrival time from the departure time (or anticipated departure time), and converting to hours. Both sets of figures are for single destination or primary destination trips only.

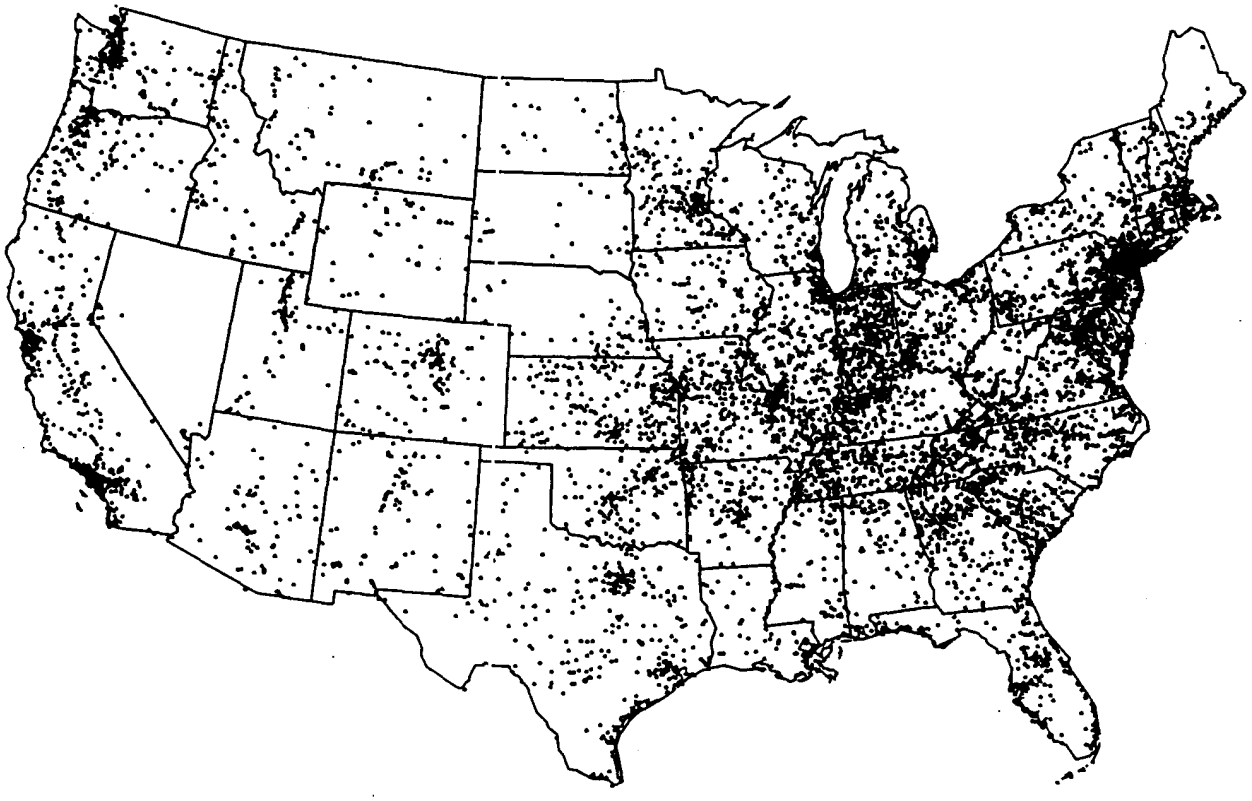


Figure 7.—Origins of all U.S. respondents interviewed in the 1985-87 Public Area Recreation Visitor Survey (PARVS).

Clearly, no single measure of recreation participation adequately measures popularity of the activity. Demographic characteristics such as age, gender, income, and region of the country in which one resides also are related to participation in outdoor recreation. As popularity of various activities may change according to these demographic or regional breakdowns, a clear picture of differences in participation is difficult to obtain. To provide a clear snapshot of the overall amount of participation and the characteristics of the participants, a figure containing six graphics was prepared as background material for each of the activities examined. These graphics were: percentage of the population participating, frequency of participation by participants, gender ratio of participants, age of participants (compared with the U.S. population), income levels of participants (compared with the U.S. population), and region of participation. A sample of these graphics representing sightseeing, walking for pleasure, water-skiing, and big-game hunting are presented in figures 8 to 11.

These figures provide some of the more important characteristics of participation in outdoor recreation. Clockwise from the top-left graphic of each figure, the first graphic represents the percentage of the U.S. population who participated at least one time in the previous 12 months in the activity. The next figure shows how many days per year those participants engage in the activity. Below that figure, a comparison of the age distribution of people who participate at least one time each year is made with the age distribution of the U.S. population. The bottom-right figure indicates the percentage of the PARVS respondents who participated in the activity according to the RPA region in which they were recreating. The bottom-left figure presents a comparison of the distribution of the annual family income (before taxes) of participants with the income distribution of the U.S. population. The final graphic presents a gender ratio of participants.

These graphic sets show that each of the example activities has a somewhat different clientele and pattern of participation. Figure 8 shows sightseeing to be a common activity across the U.S. population, with half of the participants participating at least 10 or more days each year. Sightseeing is a life-long activity, with a slight over-representation of individuals aged 25 to 35. People recreating in the Pacific Coast sightsee more commonly than in other regions, and individuals with midrange family incomes of $20,000 to $50,000 are common participants in this activity. Most participants in sightseeing are women, by a slight margin.

Figure 9 presents a similar capsule of participants in walking for pleasure. This is also a popular activity; individuals who participate tend to engage in this activity quite frequently—with 20 percent participating 120 days or more annually. This activity is also lifelong, more evenly distributed among the RPA regions, favored by mid-income individuals, and also favored by women.

Figure 10 provides statistics on an activity with a smaller clientele—water-skiing. Only about 13 percent of the U.S. population participates in water-skiing, and half of those individuals participate only about 4 days annually. A review of these graphics reveals that participants are largely young, more likely to be upper-income males, with somewhat higher percentages of participation in the Rocky Mountains/Great Plains region.

Big-game hunters are represented in figure 11. This activity also has a specific group of participants. About 10 percent of the U.S. population who use resource-based Federal and State recreation areas participate in big-game hunting. For this activity, the number of days of participation is limited by hunting seasons—only about half the big-game hunters participate over 7 days annually. The most dominant characteristic of these recreationists is the gender ratio, with less than 20 percent females. Those individuals under age 45 are overrepresented as participants, although many older individuals continue to hunt big game.

Space limitations prohibit additional examination of specific activities, but many more activities will be examined in the RPA Assessment of Outdoor Recreation and Wilderness and in a planned final descriptive report of the Public Area Recreation Visitor Study.

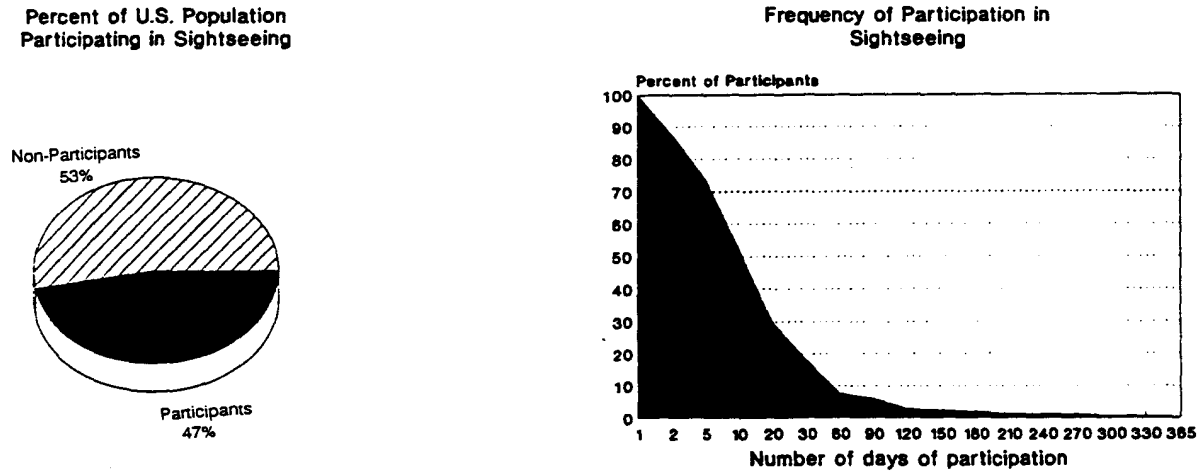


Figure 8.—Characteristics of participants in sightseeing.

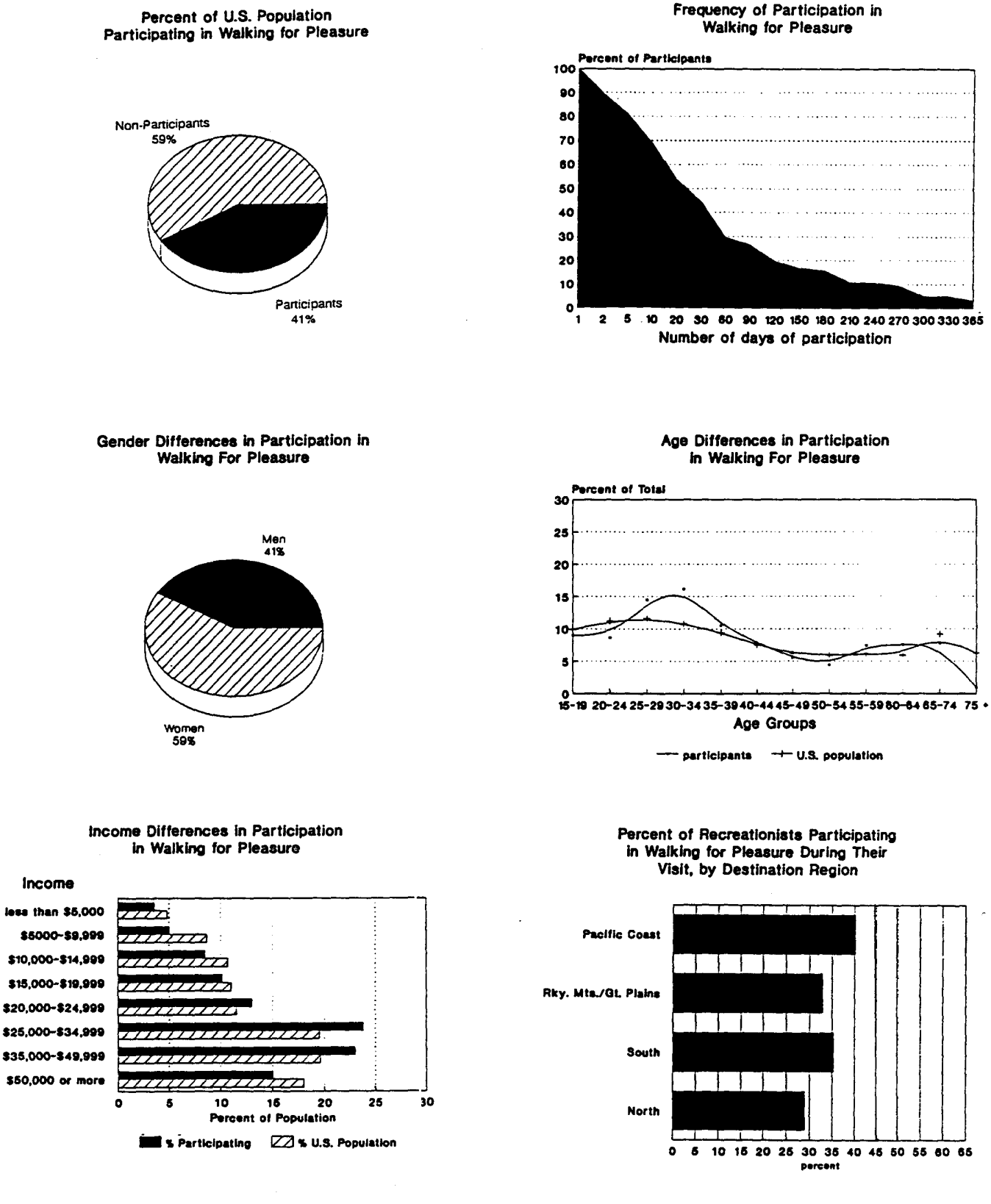
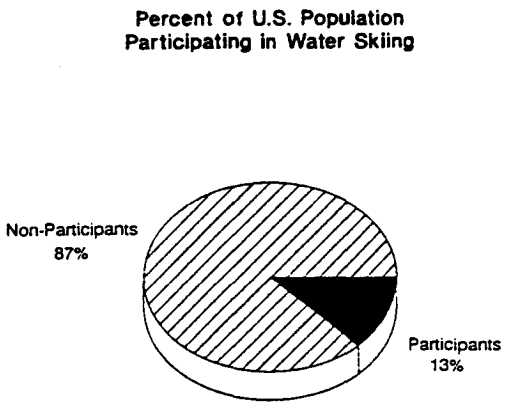
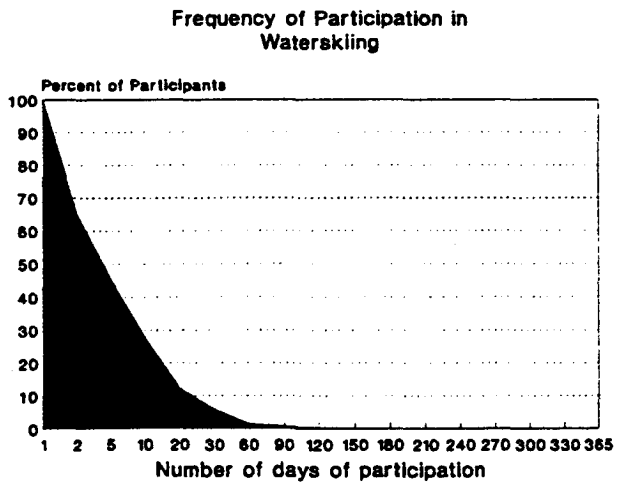
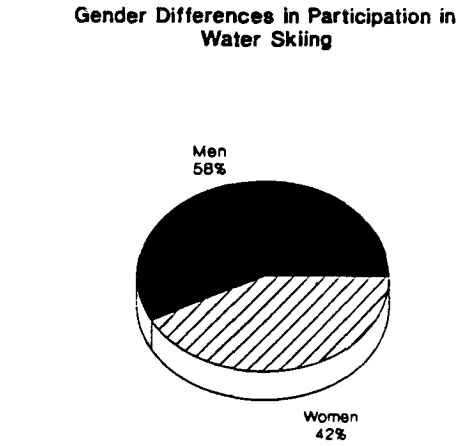
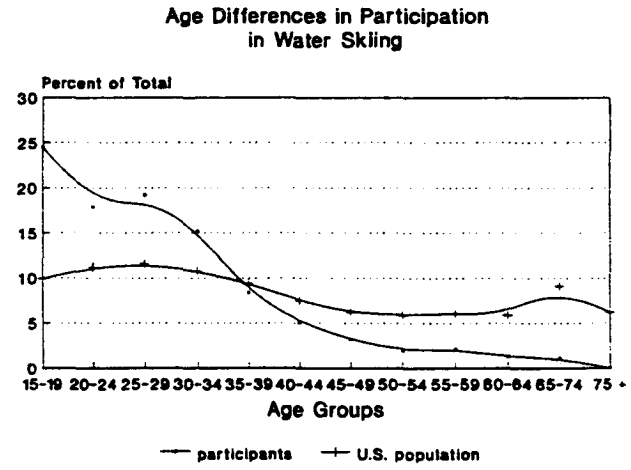


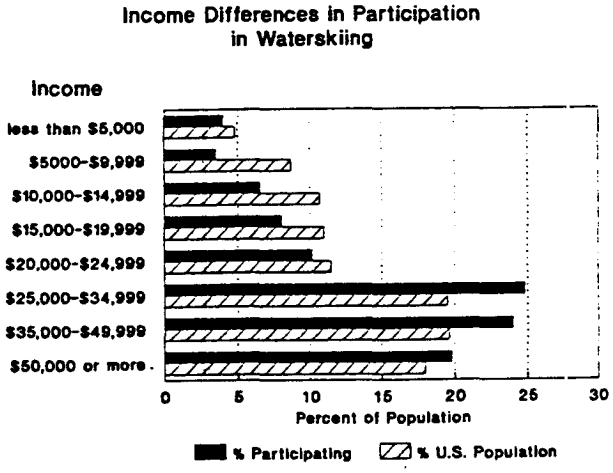
Figure 9. – Characteristics of participants in walking for pleasure.











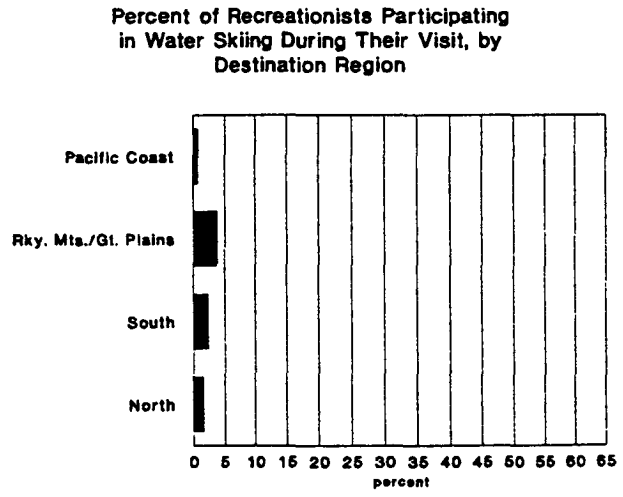
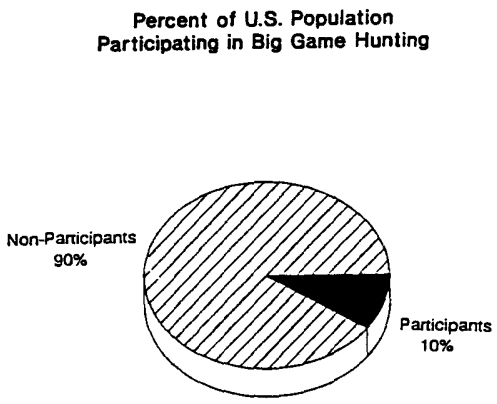
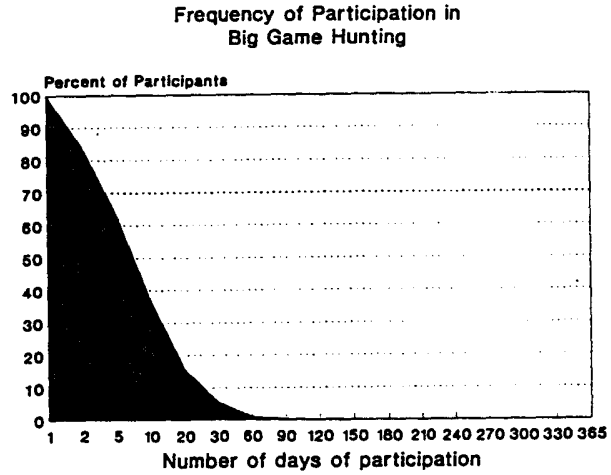
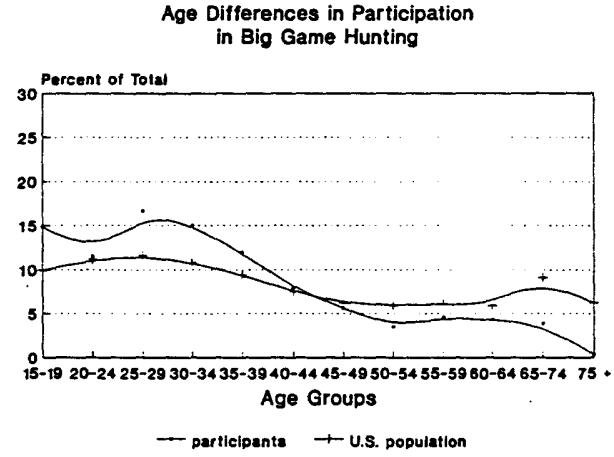
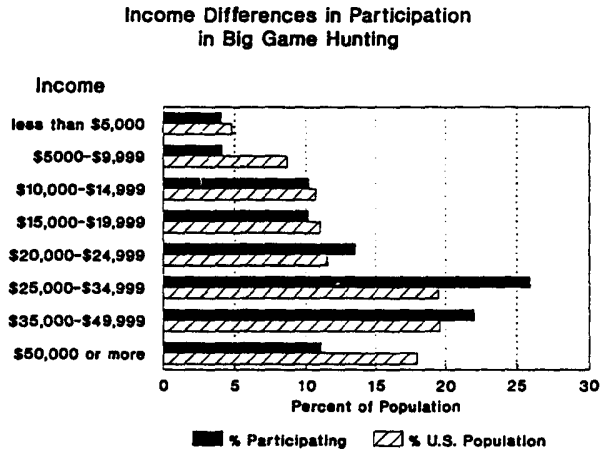


Figure 10.—Characteristics of participants in water skiing.









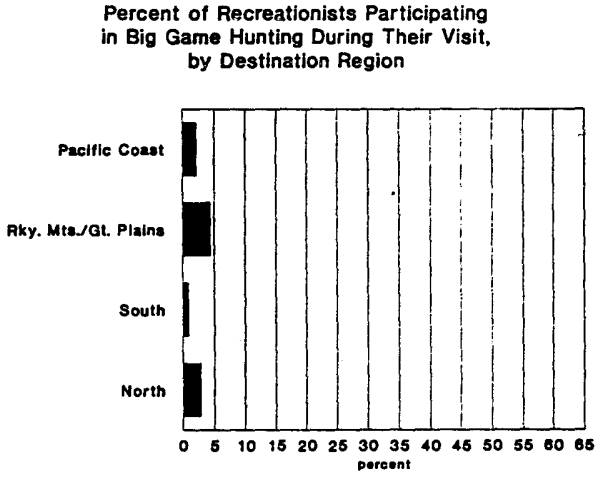


Figure 11.—Characteristics of participants in big-game hunting.

CONCLUSIONS AND INTERPRETATION OF RESULTS

Conclusions

Overall descriptions of participation in outdoor recreation such as presented in this paper are essential for identifying trends in participation and obtaining a better understanding of which segments of the U.S. population are being served by resource-based outdoor recreation opportunities. Some of the primary findings from this latest examination of recreation participation are:

1) Although the amount of leisure available for the average American has been increasing for many years, it appears that this trend has reversed recently, with declining amounts of leisure due to changes in societal structure.

2) Differences in methods used in different national surveys make trend identification very difficult, with only the most general conclusions possible.

3) There has been a gradual change in the popularity of outdoor recreation activities over the past 20 years, with the more active pursuits becoming more popular.

4) Swimming and walking for pleasure are now done by a majority of recreationists on State and Federal lands.

5) It appears that the extended vacation of 2 or more weeks is being replaced by more frequent but shorter trips.

6) Several measures of participation are necessary to give an accurate representation of the participants in any single activity.

Opportunity or Need for Improved Resource Management

Although this paper did not specifically address resource management issues, some observations are applicable to managers. There appears to be a continuing trend of increased participation in more active forms of outdoor recreation. Managers should be aware of this trend, and perhaps place additional emphasis on provision of these sorts of activities on their areas. Also specific activities may have very different clientele, with different needs. For example, while walking for pleasure is common across many strata of the population, big-game hunters are a much more narrow group (considering demographic characteristics), and would require different management techniques.

Future Significance of the Topic

Identifying current outdoor recreation participation levels and patterns will continue to be an important area of investigation, especially for long-range planning. Data presented in this paper and in the RPA Assessment of Outdoor Recreation and Wilderness highlight differences in activity participation, depending on social characteristics. For example, some activities have specific clientele groups, such as big-game hunting (male dominated), and water-skiing (youth-oriented). Other activities are much more common throughout the general population, such as walking for pleasure and sightseeing.

With predicted changes in demographics of the U.S. population, some activities will likely be affected more than others, based on the above findings. For example, with an aging population, it is possible to draw the conclusion that youth-dominated activities such as water-skiing will decline in relative popularity, while other lifelong activities such as walking for pleasure will maintain or perhaps increase their current level of participation.

Barriers and Constraints

The issue of barriers and constraints can be addressed from several perspectives. First, collection of population-level data of this sort is very expensive, and may be prohibitive for any single agency or organization. However, the need for these sort of data will remain for all resource management agencies. In an era of reduced government budgets, the most cost-effective manner of data collection is through multiple-agency cooperative working arrangements, such as evidenced by the PARVS project.

Second, the data presented in this paper and the RPA Assessment illustrate the importance of sociodemographic constraints on participation. Age is the most obvious related factor—recreationists under about age 45 (depending on activity) are overrepresented in comparison with the U.S. population. For most activities, older individuals are strongly underrepresented as recreationists. For some activities, income seems to be an important restriction to participation, as does gender. There is little that recreation providers can do to alleviate these constraints, however.

Third, the regional differences in the resource itself either permit or prohibit participation in certain activities. In this paper, sightseeing was shown to be more popular in the Pacific Coast region than other regions. The RPA Assessment shows that other activities also have regional participation biases, probably indicating differences in supply and demand.

Guidelines for Improving Baseline

There is a clear need for long-term coordination of national data on outdoor recreation participation. With major and minor differences in survey instruments and methods, it is often very difficult to make comparisons between national surveys to develop long-term trends in outdoor recreation participation. Often, only the most general trend identification is possible. It is strongly recommended that future national studies pay careful attention to the work that has gone before, to make trend identification more precise in future studies. It is recommended that the Public Area Recreation Visitor Study be used as a benchmark for future national studies, which would use comparable methods and survey instruments, to allow identification of long-term trends.

There are many measures of recreation participation, each with its own advantages. Participation should not be measured only by the percentage of the general population who participates one or more times annually. By itself this measure represents only a part of the story. Frequency of participation by those who participate is also an important indicator of popularity of an activity. Other measures may also provide clues of future participation. For example, the data presented here indicate that older individuals continue to participate in sightseeing more than many other activities. With an aging population, it is logical to assume that participation in sightseeing will increase relative to some of the other activities whose major participation group is younger people. The authors have concluded that the most useful form of presentation of participation data is to present several measures of participation for each activity considered, as has been demonstrated in this publication.

QUESTIONS FOR THOUGHT AND DISCUSSION

It seems that most research raises more questions that it answers, as was the case with this investigation. The following questions are provided to provoke the reader to think beyond the observations and conclusions provided above.

1) Data from this study show that fewer individuals participate in outdoor recreation as they age, but also that the population as a whole is more active than in previous years. As this age cohort grows older, will their more active lifestyle act to compensate for the general decline in participation as people age? In other words, will the future elderly be more active than the current population of elderly?

2) What innovative methods are available to compare marginally comparable data sets?

3) It is clear that to identify long-term trends in outdoor recreation, someone must have the responsibility for collecting data and maintaining comparability. Who should have that responsibility, and what sorts of data should be collected? Should the emphasis be on maintaining continuity of data collection, or improvements in methods?

4) Societal changes influence recreational use of public lands. When the children of today grow into adults, how will the changes in family structure, economics, and land ethic values influence their use of natural resources for recreation and other purposes?

ACKNOWLEDGMENTS

The authors gratefully acknowledge the PARVS Working Group (Forest Service, National Park Service, Corps of Engineers, Tennessee Valley Authority, National Oceanic and Atmospheric Administration, and State park agencies in Georgia, Indiana, Kansas, Minnesota, Missouri, New Jersey, New Mexico, North Carolina, South Carolina, Tennessee, and Virginia) for permission to use the full PARVS data set in this study, prepared for the RPA Assessment.

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