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# 1982-1983 Nationwide Recreation Survey 

Issued April 1986

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## 1982-1983 Nationwide Recreation <br> Survey

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## Foreword

The 1982-83 Nationwide Recreation Survey (NRS) is the latest in an irregular series of interview surveys of the American public dating back to the 1960 National Recreation Survey sponsored by the Outdoor Recreation Resources Review Commission. Like the earlier efforts, this survey provides current information on what Americans do for recreation in the outdoors and on their perceptions and aspirations with respect to recreation opportunities.

This most recent NRS was sponsored by the Interior Department's National Park Service in cooperation with the Forest Service (Department of Agriculture), the Bureau of Land Management (Department of the Interior) and the Administration on Aging (Department of Health and Human Services). This is the first time that a nationwide recreation survey has been conducted cooperatively by a consortium of agencies. This shared effort resulted in a much larger, better, and more comprehensive outdoor recreation data base than any of the sponsors could have acquired alone in the constrained budgetary climate of the 1980's. The sponsoring agencies have earned our thanks for their cooperation, perseverance, and spint of accommodation.

The computer tape of the 1982-83 NRS data base, with documentation, is available for purchase, and scientists of different disciplinary viewpoints are encouraged to acquire and analyze it. For further information on the NRS data base, contact the Recreation Resources Assistance Division, National Park Service, at 202/343-3780.

Future recreation surveys are in various stages of planning. So that we may serve your information requirements better, we need your comments and suggestions. A response form is provided at the end of this report for your convenience in evaluating the 1982-83 NRS and suggesting improvements in our data collection efforts. I can assure you that your advice will be given the most careful consideration in planning future recreation surveys.

Finally, on behalf of all concerned, I would like to direct a heartfelt word of thanks to the 5,757 Americans who generously consented to be interviewed during the 1982-83 Nationwide Recreation Survey.


William Penn Mott, Jr. Director, National Park Srvice

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## Introduction

An understanding of the outdoor recreation participation patterns and preferences of the American people is necessary for effective policy development, planning, and decisionmaking at all levels of government and in the private sector. To enhance this understanding, the Federal Government periodically conducts nationwide recreation surveys. The results of the most recent Na tionwide Recreation Survey (NRS) conducted between September 1982 and June 1983, are presented in this report.
The data collected include:

1. Participation rates and volume of activity for selected outdoor recreation pursuits.
2. Favonte activities, reasons why people
like them, and constraints on participation.
3. Activities recently started or droppedand prospective new starts.
4. Travel, in miles and time, as it relates to selected activities and types of destination.
5. Utilization and importance of outdoor recreation opportunities at varying distances from home.
6. National parks ever visited.
7. Public opinion on national park fees and on methods of rationing national park visits.
8. Recent and prospective changes in people's allocation of time and money to outdoor recreation and related travel and purchases.
9. Selected aspects of involvement in outdoor recreation by persons aged 60 and over.
10. Socioeconomic characteristics of respondents as they relate to each of the foregoing information categories.

## HISTORIC BACKGROUND

At least 22 nationwide questionnaire surveys of outdoor recreation have been conducted between 1959 and 1978, and
several more have occurred since then. ${ }^{1}$ Five of these surveys may be regarded as direct antecedents of the present effort. ${ }^{2}$
The earliest of these, the 1960 National Recreation Survey, was a four-season survey sponsored by the Outdoor Recreation Resources Review Commission (ORRRC) and conducted, under contract, by the Bureau of the Census in the U.S. Department of Commerce. ${ }^{3}$ The remaining four (1965, 1970, 1972, and 1977) were all sponsored by the Bureau of Outdoor Recreation (BOR), in the Department of the Interior and its successor, the Hentage Conservation and Recreation Service (HCRS). They were conducted as part of the nationwide outdoor recreation planning process established in response to the findings of ORRRC.

The 1965 National Recreation Survey was patterned after the ORRRC survey and was also conducted by the Census Bureau. It was, however, restricted to post-summer (September) interviews. The 1970 survey was a short mail supplement to that year's

[^0]Fishing and Hunting Survey sponsored by the Bureau of Sport Fisheries and Wildlife (since renamed the Fish and Wildlife Service) in the Department of the Interior. The 1972 survey was conducted for BOR by Audits and Surveys, Inc., as part of the data gathering effort for the 1973 Nationwide Outdoor Recreation Plan. The 1977 Nationwide Recreation Survey was a telephone survey conducted by Opinion Research Corporation for HCRS. It was a major source of data for the third Nationwide Outdoor Recreation Plan published in 1979.
Differences of content, wording, and methodology make it difficult-and somewhat hazardous-to compare the results of the present survey to its antecedents of 1970, 1972, or 1977. Comparisons will be made, where possible, to the 1960 and 1965 National Recreation Surveys, which were used as a pattern for certain basic elements of the 1982-83 survey. Additionally, these three surveys share the following characteristics:

1. In-the-home, personal interviews were conducted where possible-with telephone followups where the selected respondent was otherwise unavailable.
2. The eligible population was the United States noninstitutionalized population aged 12 years and older.
3. The survey was conducted by the Census Bureau in accordance with its exacting standards and procedures.

## 1982-83 SURVEY - A PARTNERSHIP EFFORT

By mid-1981, the BOR and the HCRS had been abolished. Hence the task of organizing and coordinating this survey fell to the successor agency, the National Park Service. During the summer of that year, a consortium of four agencies was formed to conduct the survey-the National Park

Service and the Bureau of Land Management (BLM) in the Department of the Interior, the Forest Service in the Department of Agriculture, and the Administration on Aging in the Department of Health and Human Services. Each contributed to the design and financing of the survey and sponsored certain of the questions.
The Forest Service and the Bureau of Land Management jointly sponsored a series of questions about the nature of trips and environments associated with selected outdoor pursuits of concern to wildland managers. (See Appendix C, Survey Questionnaire.) The Administration on Aging sponsored a set of questions which was targeted to aging issues and was asked only of respondents 60 years old or older. The remainder of the survey was sponsored by various elements within the National Park Service.

On September 30, 1981, the prime contract for the conduct of the 1982-83 NRS was let to the Survey Research Center of the University of Maryland. The Center, in turn, subcontracted the conduct of the interviews and the keying of the data to the Bureau of the Census.

## PROCEDURES

The following is a brief summary of the way the survey was developed, conducted, and analyzed. A detailed Methodological Report has been prepared and is furnished to researchers and others who purchase the NRS data tape. ${ }^{4}$

The 1982-83 NRS was conducted as a supplement to an ongoing household sample survey, (The National Crime Survey).
This arrangement resulted in substantial cost-savings and reduced respondent burden, since interviewer travel costs were borne by the basic survey and the necessary socioeconomic data about each respondent were collected as part of the basic survey (hence the lack of any demographic questions in the NRS questionnaire-see appendix C).

The 1982-83 NRS instrument was developed cooperatively by the agencies participating in the survey. The final development and refinement of the instrument were done by the University of Maryland's Survey Research Center and the U.S. Bureau of the Census in consultation with the cooperating agencies.
${ }^{4}$ Robinson, John P., and Cindy Kahn. 1984. The 1982-83 Nationwide Recreation Survey: A Methodological Report. Prepared by Survey Research Center, University of Maryland, for the National Park Service, U.S. Department of the Interior, Washington, D.C.

Others may purchase the Methodological Report as a separate item. Information may be obtained from the Recreation Resources Assistance Division, National Park Service, USDI, P.O. Box 37127, Washington, DC. 20013-7127. Telephone 202/343-3780.

The instrument, instructions, and ancillary materials were pretested in June 1982.

Interviewing took place during September 1982, and in January, April, and June 1983. Since these may be regarded as, respectively, the postsummer, post-fall, post-winter, and postspring months, a seasonally balanced sample was achieved. This is a major advantage in a survey of outdoor recreation, a phenomenon which varies so greatly from season to season. From 1,397 to 1,466 completed interviews were obtained in each of those 4 months, for a total sample of 5,757 .

During the four survey months, the Census Bureau assigned its interviewers 6,720 NRS cases. These were pre-identified individuals in crime survey households-no more than one per household. Crime survey interviews had been conducted previously in these households as many as six times, at intervals of 6 months. After the National Crime Survey's final or exit interview, the selected individual was asked to participate in the Nationwide Recreation Survey. Of the 6,720 assigned cases, 5,757 (about 85 percent) resulted in completed interviews, 315 (5 percent) refused to participate, and 648 ( 10 percent) were unavailable or were not interviewed for a vaniety of reasons.
Of the 5,757 completed interviews, most ( 81 percent) were conducted in the respondent's home at the time of the final Crime Survey visit. If the pre-identified individual was unavailable at that time, the interviewer left an Information Card Booklet ${ }^{5}$ and arranged to conduct the interview by telephone at a later time. Fourteen percent of the completed interviews were conducted in this manner. In the remaining 5 percent of the successfully completed cases, the Information Card Booklet could not be found at the time the interviewer phoned. In that event, an alternative (long form) questionnaire was used, in which the activity list, national park list, and other multiple-choice responses were read to the respondent instead of by the respondent.

As are all sampling surveys, the current NRS is subject to numerous sources of error-most of unknown magnitude but hopefully small. ${ }^{6}$ By contrast, the magnitude of sampling error-the difference between a number derived from a sample and the corresponding (true but unknown) quantity in the sampled population-can be estimated.

[^1]Appendix $B$ examines sampling error as it affects the reliability of the NRS.

## CAUSE AND EFFECTA WORD OF CAUTION

In general, this report presents the results of the 1982-83 NRS in a descriptive, rather than an analytical, manner. In chapter 2 , for instance, changes in the status of certain activities between 1960 and 1982-83 are described with no attempt to suggest reasons or causes for those changes. Other investigators are already analyzing these underlying cause-and-effect relationships, and more such analyses are expected in the future.

In certain instances, where the data may be easily misunderstoood, alternative interpretations are offered as a warning against facile conclusions.

## ORDER OF PRESENTATION

The results of the 1982-83 NRS are presented in this report, generally, in a sequence corresponding to that of the questions in the questionnaire. Certain crosscomparisons are made and, in those cases, information will necessarily be presented out of questionnaire sequence.

This approach will help those readers who wish to refer to the questionnaire (appendix C) periodically to increase their understanding of what the data mean. The question sequence is, moreover, an essential element of the survey method. Each question, or senies of questions, instills in the respondents certain expectations, definitions, and mind sets which will influence their interpretation of the following questions. For example, the questions on activities particularly enjoyed were deliberately placed first on the questionnaire to ensure that the spectrum of activities considered by the respondents would be determined by their own definition of outdoor recreation. After reading the activity list (in the 2-Series of questions), the respondent's definition of outdoor recreation is strongly conditioned by that list throughout the rest of the interview. By contrast, the questions on national park fees and policies were placed after the list of national parks, since the sponsors of those questions wanted responses based on their definition, rather than the respondent's definition, of what a national park is.

Chapters 1 and 2 address the vanious recreation activities from the viewpoints of participation, constraints, choicés of favorites, and the reasons for those choices-as well as certain aspects of starting new activities and quitting old ones. This information was denived from the 1 -Series and the 2-Series of questions (question 1.a, 1.b, etc. See appendix C). Chapter 1 is about the outdoor recreation involvements of different kinds of people. Chapter 2 examines each listed ac-
tivity in terms of the numbers and kinds of people who participated in it or chose it as a favonite. Chapter 3 examines selected spatial aspects of outdoor recreation-certain kinds of trips, and the importance and utilization of recreation resources at different distances from home. The data underlying these results were derived from the 3 -series
and 4 -series of questions. Chapter 4 reports the results of the 5 -series of questions which addressed the respondent's past experience of national park visits, willingness to pay for future visits, and opinions on certain national park policy issues. Chapter 5, based on the 6 -series of questions, examines recent and prospective changes in people's
allocations of time and money to outdoor recreation. Finally, chapter 6 addresses the data derived from the 7 -Series of questions, which are about aging and outdoor recreation. These questions were asked only of those respondents 60 years old or older.


## Summary of Findings

Of the 36 outdoor activities listed in the survey, the respondents participated in an average of 7.2. By their own estimates, they averaged 37 activity-days of the listed activities during the 12 months prior to the interview and spent about $\$ 355$ on outdoor recreation during that period. Figures 1 through 7 illustrate how involvement in outdoor recreation (activities, days, and dollars) differs among various segments of the respondent sample.

## AMERICANS AND THE OUTDOORS

As in past surveys, young Americans are the group most heavily involved in outdoor recreation. None of the identified respondent groupings exceeded the young-aged 12 through 24 -in number of activities pursued nor in activity-days of participation. Both of these indicators of recreation involvement decline steadily throughout adulthood to a minimum in the aged 60 -and-over group. The reverse is true of the respondents' estimate of money spent on outdoor recreation, which rises sharply through young adulthood and then stays in the $\$ 400$-to- $\$ 500$ range even with the decline in activity in later life.

The outdoor recreation patterns of the two sexes are remarkably similar, although there are a few activities for which this does not hold. As figure 2 illustrates, however, there are substantial differences between the sexes in the average amounts of time committed to outdoor pursuits.

Racial differences in free time outdoor activity are shown in figure 3. Some of the dispanity between average White and nonWhite participation may be related to income and other factors.

As in past surveys, all measures of outdoor recreation participation rise with increasing family income and added years of education (figures 4 and 5). The effect of income does not become substantial until an
annual level of about $\$ 15,000$ is reached.
Figure 6 illustrates the association between outdoor recreation involvement and car ownership. The non-car-owning segment was one on the least active groups in the survey.

The size of the locality where a respondent lived (figure 7) bore little relation to outdoor involvement, except that a notable decline occurred in the largest cities-those of more than a million people.

Eleven percent of the survey respondents said they did nothing at all for outdoor recreation during the 12 months prior to the interview. These nonparticipants were concentrated in the aging, non-White, and non-car-owning segments of the sample-and among those with less than a high school education.

## ACTIVITIES

None of the 36 activities listed in the NRS appear to have declined in absolute numbers of participants since the 1960's. Most have grown moderately both in numbers and in the percentage of the respondents who say they participate.

Hunting, horseback riding, and ice skating have maintained a limited following (under 15 percent) or even declined slightly in relative terms since the 1960 and 1965 surveys. Activities which were already mass pursuits-done by about half the respondents-in the 1960's have retained that status. They include swimming, picnicking, walking for pleasure, and driving for pleasure. Among the sports with stable clienteles, fishing and boating were intermediate in popularity between the limited and mass categories.

Four activities-bicycling, camping, jogging, and tennis-have risen from limited popularity (less than 10 percent) to the status of major pursuits over the past two decades. Canoeing and snow skiing have emerged rapidly from a very small base, but
are still limited in the percentage of 1982-83 respondents who participated.

## PLACES AND TRIPS FOR OUTDOOR RECREATION

Most respondents had access to both yards and neighborhood parks for close-tohome recreation. They used nearby recreation areas more frequently than those farther away, but most took at least one trip to an outdoor recreation area more than an hour's travel from home during the 12 months prior to the interview.

Participants in certain activities were queried about the details of trips they took to engage in those pursuits. Trips to go freshwater fishing, small game/waterfowl hunting, and off-road vehicle driving averaged about 100 miles one way. The average distance traveled to go hiking/ backpacking, or to go campground camping was over 200 miles. Canoeing trips were intermediate at 150 miles from home, on the average. Hunters, hikers/backpackers, and off-road drivers had the greatest tendency to penetrate roadless backcountry and to encounter few people.

## AMERICANS AND THEIR NATIONAL PARKS

Of the respondents aged 21 and older, 53 percent could recall at least one visit to a national park. In a 1955 survey, 37 percent could recall such a visit. Disproportionate numbers of nonvisitors were found among respondents who were low income, Black, from a large family, non-car-owning, resident in a big city, or low in educational attainment.

Respondents aged 16 and older were asked for their opinions on certain national park policy matters. There was widespread support for the view that the operating costs of national parks should be shared between the general public (through taxes) and the
visitors (through entrance and user fees). In the case of special visitor services, such as campgrounds and bus rides, there was a tendency to favor charging the users rather than the taxpayers.

Support was also widespread for rationing access to national parks when necessary to prevent overcrowding. Most respondents preferred reservation systems over alternative rationing methods.

## TRENDS IN TIME AND MONEY EXPENDITURES

As in past surveys, the most frequently cited constraint on outdoor recreation participation was lack of time, followed by lack of money. Respondents aged 16 and older were asked about changes in their allocations of time and money to outdoor recreation over the prior 2 years, and about any anticipated changes in the next 2 years (figures 9 and 14). About half cited no change, past or future. Of those whose time allocations had changed, the number who cited a decrease in time spent was almost double the number of those who claimed to be spending more time on outdoor pursuits. By contrast, about four times as many respondents anticipated a rise as expected a decline in time spent over the next 2 years. Relatively few respondents cited a reduction in dollar expenditures for outdoor recreation for the past or anticipated a reduction for the future.

The most common reasons cited for changes in time spent in outdoor pursuits were related to the changing stages of the life cycle. Next to old age, the most constraining life condition seems to be the early child-rearing years. This is followed by a rapid increase as the children become older.

## AGING AND OUTDOOR RECREATION

Despite modest increases in participation since 1960 , respondents aged 60 and older were much less active in outdoor recreation than younger persons. Almost a third of the older group said they did nothing at all for outdoor recreation in the 12 months prior to the interview, compared with 7 percent of those individuals aged 12 through 59. As measured by average number of activities pursued and number of activity-days, older respondents were about one-third to onefourth as active as the rest. Given this low level of activity, the average estimated annual expenditure for outdoor recreation by senior citizens was quite high (\$391)higher; in fact, than that of the younger segment (\$350).

Senior citizens' reasons for enjoying their favonite activities were quite similar to the other respondents' reasons. Seniors were much more likely to cite health problems as a constraint on their favorite pursuits or as a reason for discontinuing a recreation activity.

Only 13 percent of the respondents 60 years and older reported participating in any club- or organization-sponsored outdoor recreation activities. Senior citizen groups and church organizations appeared to be the primary sponsors of these club activities.

Older respondents who were skilled in fishing, hunting, golf, gardening, or team sports, tended to be active in teaching those skills to others. The role of senior citizens in teaching other outdoor skills appears to be very limited.

## FIGURE 1

Involvement in Outdoor Recreation, by Age



Average annual expenditures on outdoor recreation


FIGURE 2
Involvement in Outdoor Recreation, by Sex


Average annual expenditures on outdoor recreation


FIGURE 3
Involvement in Outdoor Recreation, by Race


White
Black
Average annual expenditures on outdoor recreation


White
 -

Black

FIGURE 4
Involvement in Outdoor Recreation, by Family Income

Average number of activities


Average number of activity - days per year



FIGURE 5
Involvement in Outdoor Recreation, by Education

## Average number of activities



Average annual expenditures
on outdoor recreation


FIGURE 6
Involvement in Outdoor Recreation, by Number of Cars Owned by Household

## Average number of activities



Average number of activity-days per year


Average annual expenditures
on outdoor recreation


FIGURE 7
Involvement in Outdoor Recreation, by Size
of Locality of Residence (Population)

## Average number of activities



Average number of
activity-days per year


Average annual expenditures
on outdoor recreation


## CHAPTER 1

## Americans and the Outdoors

As in previous nationwide recreation surveys, respondents were given a list of outdoor recreation activities and asked to identify the ones in which they had engaged one or more times during the previous 12 months. Participation during the 3 months immediately prior to the survey was also ascertained. Before examining the list, the respondents were asked to name any outdoor activities (up to a limit of three) which they particularly enjoyed. Those who named one or more such activities were invited to select, from further listings, any applicable reasons for liking those activities and/or constraints upon their favored pursuits.

Analysis of the resulting data yields certain measures or indicators of the breadth and depth of involvement with outdoor recreation exhibited by the United States population and its various segments. Table 1 lists two such indicators of breadth, two of depth, and three of change. What do these indicators tell about people's involvement in outdoor pursuits?

Respondents participated in an average of 7.2 of the 36 outdoor activities listed in the survey. They cited an average of 1.7 pursuits as particularly enjoyed and logged an estimated 37 activity days ${ }^{1}$ of the listed activities during the 12 months prior to the interview-for all of which they spent about \$355 each.

## INDICATORS OF OUTDOOR RECREATION INVOLVEMENT

Seven measures or indicators are presented in table 1 and described here. They will be utilized in the next section to examine the similarities and differences in

[^2]the outdoor recreation involvements of Americans of various backgrounds.

## Breadth Indicators

The first two columns in table 1 are indicators of the breadth of an individuals (or a grouping of individuals') involvement in outdoor recreation pursuits. The first column lists the average number of outdoor activities (from the 36 listed in the questionnaire) which the respondent claimed to have done once or more in the previous 12 months. The second column is the average number of activities (a maximum of three) cited by the respondent as "particularly enjoyed."

## Depth Indicators

For 22 of the 36 activities listed on the NRS questionnaire, participants (respondents who said they did the activity once or more in the prior 12 months) were asked to give three additional items of information. They were asked to estimate the number of different days on which they did the activity during the prior 3 months and during the prior 12 months, and their age when they started participating in the activity. From this information, one of the indicators of depth (and one of change) were derived.

The last two columns of table 1 are indicators of activity depth or of the commitment of the respondent's personal resources of time and money to outdoor recreation pursuits. The sixth column lists "activity-days," an indicator of time commitment derived from the respondent's estimates of the number of different days on which they did each activity during the previous 12 months-summed over all activities in which they engaged. ${ }^{2}$

[^3]The result is an indicator of time commitment which is useful in drawing comparisons among activities and between population segments. It should not be interpreted as the number of full days committed to outdoor recreation, nor even as the number of calendar days on which any recreation took place. An activity-day was generated for any calendar day on which the respondent did the activity, even if for a very short time. Moreover, more than one activity-day could be generated per calendar day-one for each activity engaged in on that day. Very likely, the average American commits much less than 37 full calendar days to outdoor recreation annually.

The final column is the respondents' estimate of their annual (prior 12 months) dollar expenditure on outdoor recreation as defined in the survey. ${ }^{3}$

## Change Indicators

To permit the estimation of short-run trends, respondents were asked to name any outdoor recreation activities they had stopped doing in the 2 years prior to the interview, and any they anticipated starting in the next 2 years. These items were used, along with the respondents age at the time they started the activity, to generate the three indicators of short-run change presented in the third, fourth, and fifth columns of table 1 .

Activities recently started by respondents were identified by subtracting their age when they began the activity from their age at the time of the interview. If the difference was two or less, the person was counted as having started the activity in the prior 2 years. The figures in the third column are the averages of the number of such recently started activities for each respondent.

[^4]The numbers of activities which respondents said they had stopped in the prior 2 years or expected to start in the next 2 years were used to derive the averages in the fourth and fifth columns of the table. Although the interviewer asked for anticipated new activities which the respondent had never done before, many persons cited activities which they said they had stopped earlier. Since such instances bear little relation to trends, they were dropped from the data-for both stopping and expecting to start-before the averages were derived.

The seven outdoor recreation indicators or yardsticks in table 1 will now be applied to selected categories of the United States population.

## THE VARIETY OF AMERICANS AND THEIR RECREATION INVOLVEMENTS

In table 1, the NRS respondents are divided into numerous categories based on 14 criteria or demographic characteristicssex, age, etc. This information about each respondent was derived from the National Crime Survey interviews (as many as seven) which were conducted during the 3 years preceding the NRS interview. Therefore, no demographic questions will be found in the NRS questionnaire in appendix $C$ of this report. The recreation involvements of these population segments will now be examined on the basis of the seven indicators listed in the table, supplemented by information derived from succeeding tables, especially table 4 which contains the activity participation rates.

Caution should be exercised in inferring causality from the associations between population characteristics and patterns of recreation involvement. Even the associations which are evident in the table may reflect, in part, more deeply underlying factors. For instance, widowed, divorced, or separated status is associated with a more drastic reduction in recreation involvement than would be expected from the loss of a spouse. Widows and widowers are, however, generally in the older age categonies associated with greatly reduced outdoor activity. Also, divorce and separation are often associated with single parenting-a further constraint on free time pursuits. More such instances will be pointed out throughout this report.

Four of the 14 demographic characteristics examined here-place of residence (SMSA), household members under 12 , occupation, and hours worked per week-were found to be associated with rather modest differences in outdoor recreation behavior and will, therefore, be dropped from the tables in the rest of the report. An exception will be found in chapter 5 , where the presence of young children and the number of hours in the work week are found to be important in
understanding the changing allocations of time and money to outdoor recreation.

## Sex

The outdoors is no longer, as in previous centuries, a predominantly male domain. Women still exhibit a somewhat lesser tendency to commit time and money to outdoor pursuits, but their participation patterns are substantially similar to those of men-even in such "rugged" activities as horseback riding and skiing. Exceptions are fishing, golf, and (especially) hunting, in which the traditional male predominance persists.

## Age

As in all previous nationwide surveys of outdoor recreation activity, increasing age is associated with a marked decline in all indicators of involvement with outdoor pursuits. This is especially severe in the age 60 and over category of our sample, 30 percent of which claimed to have participated in no outdoor recreation activities whatever during the prior 12 months. Chapter 6 of this report is a detailed examination of aging and outdoor recreation.

## Place of Residence

The U.S. Office of Management and Budget has established 318 Standard Metropolitan Statistical Areas (SMSA's) in the United States, which typically consist of an aggregation of towns and counties surrounding a central city. ${ }^{\text {. }}$

Though the match is far from perfect, central cities are generally urban in character, areas within SMSA's but not in central cities tend to be suburban, and areas not in any SMSA are mostly rural. Rural-suburban-urban differences in culture, preference, and opportunity have been thought to be major influences on outdoor recreation behavior. The NRS data do not support this belief. There is a general, but slight, tendency of suburbanites to rank highest on the indicators, followed by rural residents and city people. Rural people predominate, however, in hunting, fishing, snowmobiling, and off-road vehicle driving.

## Education

Increasing years of education are associated with substantially higher values for all outdoor involvement indicators and with increased participation in most activities. The principal exceptions are fishing and hunting, in which college graduates among our respondents engaged at lower rates than the population average. In addition to fishing and hunting, respondents of less-than-high-
${ }^{\text {'Status as of January 1, } 1984 .}$
school education tended to participate in walking, picnics, pleasure driving, and visiting events and attractions. Twenty-nine percent of the non-high school graduates said they did nothing at all in outdoor recreation during the 12 months prior to the interview.

## Race

Of the racial categories recorded in the National Crime Survey, only two-White and Black-were sufficiently well represented in the NRS sample to permit a detailed analysis. A third "other" category consisting mainly of Native American and AsianAmerican respondents is examined in chapter 5. Blacks are lower (usually much lower) than Whites on all indicators and all activity participation rates except outdoor team sports and "running or jogging." Other activities with substantial Black participation include bicycling, tennis, swimming, fishing, walking, picnics, pleasure driving, sightseeing, and visiting events and attractions. Black respondents started an average of 0.26 new activities during the 2 years prior to the survey, as compared to 0.39 new starts for Whites (table 1). Since the reported quitting rates for the two races are similar, this suggests that the Black-White gap in most activities probably widened during that period-at least for the age-12-plus population.

## Annual Family Income

As in previous surveys, higher incomes are associated with higher rankings on outdoor recreation indicators including, as might be expected, dollar expenditures. This is consistent with the finding (table 10) that 20 percent of all respondents cite "not enough money" as a constraint on their outdoor recreation participation.

## Number of Persons in Household

Our indicators rise with increasing numbers of household members up to a size of four. Then they flatten out or decline in the highest (five or more) category. The same is true for most of the activity participation rates. It should be remembered, however, that many of the one- and twoperson households consist of older persons who tend to be much less active.

## Household Members Under Age 12

The number of small children seems to have little effect on outdoor recreation indicators or participation rates. However, the data on reasons for changes in time and money allocations, analyzed in chapter 5, suggest that the birth-through-age-11
category is too broad to reveal the relationship of the presence of children to the recreation involvements of family members. A severe drop in family activity in the first few years of the child's life appears to be followed by a rise in later childhood.

## Marital Status

The single (never married) respondents in the survey had the highest participation rates and indicators of involvement, followed by the marrieds, and (at a distance) by the widowed, divorced, or separated. For many
persons, however, these life cycle stages parallel their progression from youth through old age. Hence, the implications of being married, single, etc., for outdoor recreation remain unclear.

## Household Cars Owned

The availability of increasing numbers of cars and similar motor vehicles in a household is strongly associated with more outdoor recreation involvement. Especially dramatic is the severe drop in activity in the
no-car category. Part of this may be explained by the association of non-carownership with poverty and old age. No-car status is, however, often also associated with youth, which is strongly related to high participation. The strong propensity of young people to cite "inadequate transportation or too far to travel" as a constraint on their recreation activities (table 10) suggests a relationship with automobile access which warrants more attention from recreation providers.

## Table 1. Outdoor Recreation Involvement by Demographic Characteristic

|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

See footnotes at end of table.

## Table 1. Outdoor Recreation Involvement by Demographic Characteristic-Continued

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[^5]
## Region

The United States is divided, for Census purposes, into four regions-Northeast, North Central, South, and West-as depicted in figure 8. The NRS respondents are identified with the region in which they lived at the time of the interview. The region where the cited outdoor activities actually took place is not available from the survey data. In many cases, the participation cited by the respondents probably took place outside their region of residence. Examples are ice and snow sports by southem residents and winter outdoor swimming, golf, etc., by northem residents. With few exceptions, however, regional differences in outdoor recreation involvement among the NRS respondents tended to be modest. Overall, the participation rates and involvement indicators tended to be lowest in the South and highest in the North Central States. The South was understandably very low in ice and snow sports participation, but led the country in hunting and fishing. The Northeast and North Central regions together led in most winter sports, with the Northeast topping the list in ice skating. An exception was downhill skiing, in which the West has taken a strong lead. The West was also preeminent in all forms of campingincluding backpacking-as well as in day
hiking. The North Central States led in motorboating and shared with the Northeast a strong lead in canoeing and kayaking.

## Employment Status

The involvement indicators and participation rates suggest that going to school and being unemployed are the conditions most conducive to outdoor recreation (but not to spending money on outdoor recreation). In both cases, youth may have something to do with it.

## Number of Hours Worked

The number of hours in the respondents work week was derived from the response to a National Crime Survey question which asked, "How many hours did you work last week at all jobs?" Since "not enough time" is the most frequently cited constraint on recreation activity (in this and previous surveys), one would expect long work weeks to be associated with a lack of recreation involvement. According to our indicators, the reverse is true, although involvement flattens out at the longest work week (more than 40 hours). Little meaning attaches to the "none" category, which includes a great diversity of life conditions.

## Size of Place of Residence

Population size, as a measure of the character of the respondent's community, is more strongly associated with outdoor recreation than was "place of residence" (SMSA) discussed earlier. And the association is negative. Residence in a city of 1 million or more people appears to be especially inconducive to outdoor recreation. On the basis of these observations, size of place of residence will be retained as a demographic characteristic in the remainder of this report, and place of residence (SMSA) will be dropped.

## SUMMARY

This chapter has examined the extent to which various kinds of Americans pursue the outdoor life in their free time. The demographic segments of the Nationwide Recreation Survey sample will be examined later from the standpoints of trip taking, use of national parks and other recreation areas, attitudes towards fees and other management issues, and the changing allocations of time and money to outdoor recreation. First, however, the outdoor recreation phenomenon will be examined on the basis of the individual activities.

FIGURE 8.

## Census Regions




## CHAPTER 2

## Examining

## Outdoor Recreation

## Activities

The core of every nationwide recreation survey thus far is the part dealing with the individual outdoor recreation activities. This chapter will examine the 36 activities listed on the 1982-83 NRS (plus a few others) on the basis of dimensions or "yardsticks" derived from the survey data.

Table 2 presents the current (1982-83) status of the 36 activities with regard to three national summary statistics: the 12 -month participation rate, selection by respondents as "particularly enjoyed," and the activity's implicit number of participants among the United States non-institutionalized population 12 years old or older. Table 3 compares, where possible, the current participation rates with those derived from the 1960 and 1965 National Recreation Surveys. The remaining tables in this chapter present a more detailed picture of the current activity data as well as constraints on participation and reasons for liking activities. Finally, there will be a brief narrative treatment of each activity's characteristics as inferred from this and other surveys.

With respect to 11 of the listed activities, the Forest Service, a major NRS cooperator, sponsored the collection of detailed trip information-principally travel, cost, and type of environment in which the activity took place. These trip aspects will be treated in chapter 3.

## ACTIVITY LIST

Every recreation survey is limited, by factors of cost, respondent attention span, etc., in the number of activities it can ask about. The 36 outdoor pursuits on the 1982-83 NRS questionnaire were chosen in a lengthy design process in which more than twice that number were considered at one stage or another. The principal criteria by which the number was reduced to fit the survey's resources were:

- Comparability to the activity lists of the

1960 and 1965 National Recreation Surveys, and

- The information needs of the survey's sponsoring agencies.

In addition to the 36 listed pursuits, certain others will be examined in this report. Some of these are combinations of the listed activities. Others are unlisted activities cited in response to open-ended questions.

## Combined Activities

Like most phenomena, outdoor recreation can be subdivided into a few large categories or many smaller ones. In four cases-boating, swimming, camping, and skiing, both approaches were used. Participation in boating, for instance, was recorded if the respondent claimed to have gone canoeing or kayaking, or sailing, or motorboating, or waterskiing, or engaged in any other boating or watercraft sport. Swimming was counted if the respondent chose "swimming in an outdoor pool" or "any other outdoor swimming" (or both, of course) from the list. Camping was similarly synthesized from the four camping categories (including backpacking) listed on the questionnaire. Finally, either "downhill skiing" or "cross country skiing or ski touring" was counted as "snow skiing."

## Unlisted Activities From OpenEnded Questions

Respondents were given four opportunities to cite unlisted activities. The results of two of these open-ended questions will be found in table A-1 in appendix A. The first such question, in which the respondents were asked to cite up to three outdoor activities they particularly enjoyed, was asked before the activity list was introduced. The people in the survey cited a great many such activities, some of which-notably
softball-exceeded most of the listed activities on this popularity yardstick.

The second opportunity closely followed the introduction of the list. After the respondents were asked which of the listed activities they had engaged in once or more in the prior 12 months, they were asked: "During the past 12 months, did you take part in any other outdoor recreation activity?" A maximum of four such activities was recorded, but relatively few respondents cited even one. Most appeared to think that the lengthy list exhausted the survey's area of interest. Therefore the participation rates for the unlisted activities (table A-1 in appendix A) are definitely not comparable with those of the listed pursuits.

## YARDSTICKS

In addition to the trip information to be addressed in the next chapter, nine dimensions or yardsticks will be used to describe the status of the listed activities and illustrate trends. Not all of the yardsticks are available for all the activities, as will be seen.

## Population Participation Rate

For each listed pursuit (as noted earlier) the respondents were asked to indicate whether they engaged in the activity during the 12 months prior to the interview. The percentage answering yes is the population participation rate for that activity. These percentages are listed for the whole national sample of respondents in table 2 and for each demographic segment in table 4. For those activities similar enough to be compared with the 1960 and 1965 NRS, the comparison of participation rates for each of those years is made in table 3. These are single-season rates (summer in most cases) since 12 -month rates could not be derived from the earlier data.

Table 2. Status of Activities: Participation Rates, Choice as Favorites, and Number of Participants

| Activity | Total who said they participated in prior year ${ }^{1}$ (percent) | Participants who said they enjoyed activity ${ }^{2}$ (percent) | Implicit number of participants 12 yrs. or older (millions) |
| :---: | :---: | :---: | :---: |
| Bicycling | 32 | 30 | 61 |
| Horseback riding | 9 | 40 | 17 |
| Golfing | 13 | 46 | 24 |
| Tennis outdoors | 17 | 45 | 32 |
| Outdoor team sports | 24 | 72 | 45 |
| Other outdoor games or sports | 13 | ${ }^{(3)}$ | 24 |
| Boating | 28 | 16 | 53 |
| Canoeing or kayaking | 8 | 16 | 15 |
| Sailing | 6 | 19 | 11 |
| Motorboating | 19 | ${ }^{(3)}$ | 35 |
| Other boating or watercraft sport . . . . . | 6 | ${ }^{(3)}$ | 11 |
| Waterskiing | 9 | 32 | 17 |
| Swimming outdoors | 53 | 18 | 99 |
| Swimming in an outdoor pool. | 43 | ${ }^{(3)}$ | 80 |
| Other outdoor swimming. | 32 | ${ }^{(3)}$ | 59 |
| Fishing. | 34 | 58 | 64 |
| Hunting | 12 | 75 | 22 |
| Camping | 24 | 51 | 46 |
| Backpacking. | 5 | 15 | 9 |
| Camping in developed campgrounds | 17 | $\left({ }^{3}\right)$ | 33 |
| Camping in primitive campgrounds | 10 | $\left({ }^{3}\right)$ | 18 |
| Other camping. | 4 | $\left({ }^{3}\right)$ | 8 |
| Day hiking. | 14 | 37 | 26 |
| Walking for pleasure | 53 | 17 | 100 |
| Running or jogging | 26 | 19 | 49 |
| Birdwatching or other nature study activities. | 12 | 7 | 22 |
| Picnicking . . . . . . . . . . . | 48 | 8 | 90 |
| Driving for pleasure | 48 | ${ }^{4} 1$ | 90 |
| Sightseeing | 46 | ${ }^{4} 2$ | 86 |
| Off-road vehicle driving (includes motorcycle but not snowmobiles) | 11 | 9 | 20 |
| Ice skating. | 6 | 10 | 12 |
| Snow skiing | 9 | 49 | 16 |
| Downhill skiing | 6 | $\left({ }^{3}\right)$ | 12 |
| Cross-country skiing or ski touring. | 3 | $\left({ }^{3}\right)$ | 6 |
| Snowmobiling | 3 | 12 | 6 |
| Sledding | 10 | 1 | 8 |
| Other outdoor winter activities | 4 | $\left({ }^{3}\right)$ | 20 |
| Visiting zoos, fairs, or amusement parks | 50 | ${ }^{4} 1$ | 95 |
| Attending outdoor sports events | 40 | ${ }^{4} 2$ | 75 |
| Attending outdoor concerts, plays, or other outdoor performances | 25 | ${ }^{4} 1$ | 48 |
| Other activities (not on list) | 4 | - | - |
| No participation. . . . . . . . | ${ }^{5} 11$ | - | ${ }^{5} 21$ |

## - Not ascertained for certain activities.

${ }^{1}$ Percentage of the total sample of respondents who said they participated in the activity once or more during the prior 12 months. This is the annual participation rate.
${ }^{2}$ Respondents were asked to name up to three activities that they "particularly enjoyed doing."
${ }^{3}$ Eleven activities-largely aggregates or subsets for analytical purposes-were not selected as "particularly enjoyed." Respondents were asked to name their favorites before the activity list was introduced.
${ }^{4}$ May not have been perceived as outdoor recreation activities by some respondents.
${ }^{5}$ Non-participants.

Table 3. Activity Participation Trends, 1960 to 1982
(Percentage of respondents participating)

| Activity | $\begin{array}{r} \text { Summer } \\ 1960 \end{array}$ | Summer 1965 | Summer 1982 |
| :---: | :---: | :---: | :---: |
| Bicycling | 9 | 16 | 28 |
| Horseback riding | 6 | 8 | 7 |
| Fishing | 29 | 30 | 30 |
| Canoeing or kayaking | 2 | 3 | 8 |
| Sailing | 2 | 3 | 4 |
| Swimming | 45 | 48 | 51 |
| Camping | 8 | 10 | 19 |
| Hunting ${ }^{1}$ | 13 | 13 | 10 |
| Skiing ${ }^{2}$ | 2 | 4 | 9 |

${ }^{1} H u n t i n g$ during fall season.
${ }^{2}$ Skiing during winter.
NOTE: Percentage of respondents who said they participated once or more in selected activities during the 3 months before the interview, June, July, and August 1960, 1965, and 1982.

## Favorite Activities

Choice of an activity as "particularly enjoyed" (maximum of three per respondent) or "most enjoyed" (limited to one activity) is an indicator of depth of involvement with, or commitment to, the activity. The percentage of participants who selected each of the 36 listed activities as particularly enjoyed will be found in the second column of table 2. For 29 activities, table 5 presents the percentages of all respondents, and of participants, who said they "particularly enjoyed" or "most enjoyed" the activity. The respondents named their favorites before seeing the NRS list of 36 activities. They could choose any activity they did outdoors, and they selected many that were not listed on the questionnaire (notably softball-see table A-1). These unlisted activities were classified into numerous categones during the survey coding process. The percentages of the respondents who chose each of these as particularly enjoyed will be found in table A-1 in appendix A.

Besides choosing many unlisted activities, the respondents also failed to choose seven of the listed ones. This was no surprise, since some of the activities on the list were artificial constructs foreign to the thought processes of the recreating public. Camping interests, for instance, should not be dismayed that nobody expressed spontaneous enthusiasm for going "other camping." Also, many respondents may not have perceived certain pursuits as "outdoor recreation" before seeing the list. This may account, in part, for the infrequent choice of such activities as pleasure driving and sightseeing.

## Implicit Number of Participants

For each of the 36 activities in table 2, the final figure is the implicit number of par-
ticipants in the United States population (in millions). These estimates are of interest to many data users, but they are hazardous numbers and should be used with the greatest care. Their derivation is deceptively simple: basically they are what is obtained if the population participation rate is multiplied by $188,092,000$-the Census Bureau's estimate of the number of noninstitutionalized persons 12 years old or older in the United States population at the time of the survey.

These population totals tend to create an appearance of greater accuracy than has actually been achieved. ${ }^{1}$ Users of these figures should bear in mind that-

1. In addition to sampling error, recall error, nonresponse error, etc., these figures are now subject to the additional sources of error affecting the intercensal estimates of the number of persons in various segments of the United States population.
2. Even the target or "true" population totals are not the total numbers of fishermen, etc., in the United States, but rather the numbers 12 years old or over. The behavior of the under-12 years old group affects the meaning of the different activity totals in very different ways. The "implicit total" of persons who went swimming is a much more conservative indicator of the "real" total of United States residents who go swimming than is the corresponding "implicit total" for golfing.
[^6]
## Demographic Profiles of Participants

The population participation rates in table 4 are most useful as a source of activity profiles of the various segments of the United States population. They address the question, "What are American women, young people, rural people, etc. doing nowadays in the outdoors?" Using the same data-the respondents' answer that they had gone bicycling, etc., duning the pror 12 months-it is also possible to derive a demographic profile of a specific activity. This information, presented in table 6, addresses the question, "What kinds of people are bicycling nowadays?" Such a profile is derived by first separating out the people who say they did the activity (the participants) and then determining what percentage were women, young people, rural people, etc. This was done for the 24 listed activities for which at least 550 participants were identified among the 5,757 respondents in the survey sample.

## Annual Volume of Activity Per Participant

As noted in chapter 1, persons who identified themselves as participants in 22 of the 36 listed activities were asked to estimate the number of different days on which they did the activity during the 3 -month and 12 -month periods preceding the month of the interview. ${ }^{2}$ Table 7 lists the percentages of the participants in each activity (say bicyclists) who gave various estimates of the number of different days on which they did the activity during the prior 12 months. Note that the percentage base changes from the total sample of 5,757 respondents in the first column to participants in the activity (however many there happened to be) in the remaining columns.

Convenient activities-those which can be done close to home with little preparation or costly equipment-tend to have the highest estimates of activity-days per participant. Birdwatching (etc.), team sports, and bicycling, in which more than a third of the participants claimed they logged in excess of 25 days per year, stand out in this regard.

## Monthly Volume of Activity, by Season

In tables 8 and 9, the participants' (say bicyclists') estimate of the number of different days they did the activity during the

[^7]Table 4. Activity Participation, by Demographic Categories
(Percentage participating)

| Activity | Totalsample | Sex |  | Age |  |  |  | Education ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | $\begin{array}{r} 12 \text { to } \\ 24 \end{array}$ | $\begin{array}{r} 25 \text { to } \\ 39 \end{array}$ | $\begin{array}{r} 40 \text { to } \\ 59 \end{array}$ | 60 or more | Less than high school | High school but less than 4 years of college | 4 or more years of college |
| Percentage of total sample |  |  |  |  |  |  |  |  |  |  |
| included in each category ... | 100 | 48 | 52 | 27 | 29 | 25 | 19 | 26 | 55 | 19 |
| Bicycling | 32 | 33 | 32 | 55 | 37 | 22 | 7 | 11 | 28 | 37 |
| Horseback riding. | 9 | 8 | 10 | 18 | 10 | 5 | 1 | 2 | 8 | 9 |
| Golfing | 13 | 20 | 7 | 16 | 13 | 13 | 7 | 4 | 12 | 24 |
| Tennis outdoors | 17 | 18 | 16 | 32 | 20 | 10 | 1 | 2 | 13 | 31 |
| Outdoor team sports . . . . . . . | 24 | 30 | 18 | 50 | 26 | 11 | 2 | 7 | 18 | 23 |
| Other outdoor games or sports | 13 | 15 | 10 | 24 | 13 | 8 | 2 | 3 | 9 | 15 |
| Boating | 28 | 32 | 24 | 38 | 35 | 25 | 9 | 11 | 28 | 41 |
| Canoeing or kayaking | 8 | 10 | 7 | 14 | 9 | 6 | 1 | 1 | 7 | 13 |
| Sailing | 6 | 7 | 5 | 9 | 7 | 5 | 2 | 1 | 4 | 14 |
| Motorboating $\ldots \ldots \ldots \ldots$ 19 22 16 25 23 17 7 8 19 25 <br> Other boating or watercraft           |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Waterskiing | 9 | 11 | 7 | 17 | 12 | 4 | (x) | 2 | 8 | 12 |
| $\begin{array}{lllllllllll}\text { Swimming outdoors } \ldots \ldots . . & 53 & 55 & 51 & 78 & 63 & 41 & 16 & 19 & \\ \text { Smaimm }\end{array}$ |  |  |  |  |  |  |  |  |  |  |
| Swimming in an outdoor pool. | 43 | 43 | 42 | 67 | 49 | 33 | 11 | 13 | 40 | 53 |
| Other outdoor swimming | 32 | 34 | 30 | 49 | 40 | 21 | 7 | 10 | 30 | 40 |
| Fishing | 34 | 47 | 23 | 43 | 40 | 31 | 17 | 26 | 34 | 30 |
| Hunting. | 12 | 22 | 3 | 15 | 13 | 13 | 5 | 10 | 12 | 7 |
| Camping | 24 | 27 | 22 | 36 | 30 | 19 | 6 | 10 | 25 | 27 |
| Backpacking $\ldots . . . . . .$. 5 6 3 9 5 2 $(x)$ $(x)$ 4 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Camping in primitive campgrounds | 10 | 11 | 8 | 17 | 11 | 6 | 2 | 3 | 9 | 11 |
| Other camping | 4 | 5 | 3 | 6 | 5 | 4 | 1 | 1 | 5 | 4 |
| Day hiking | 14 | 15 | 13 | 19 | 17 | 12 | 5 | 3 | 13 | 25 |
| Walking for pleasure | 53 | 45 | 61 | 57 | 58 | 53 | 42 | 35 | 56 | 67 |
| Running or jogging | 26 | 30 | 23 | 51 | 31 | 13 | 2 | 6 | 20 | 34 |
| Birdwatching or other nature |  |  |  |  |  |  |  |  |  |  |
| Picnics . . . . . . . . . . . . . . . . . . | 48 | 45 | 51 | 52 | 59 | 46 | 29 | 29 | 51 | 61 |
| Driving for pleasure | 48 | 47 | 49 | 48 | 59 | 46 | 35 | 31 | 54 | 59 |
| Sightseeing | 46 | 45 | 46 | 46 | 54 | 47 | 31 | 27 | 50 | 63 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) | 11 | 14 | 8 | 20 | 11 | 6 | 2 | 3 | 10 | 10 |
| Ice skating . . . . . . . . . . . . . . | 6 | 6 | 6 | 15 | 6 | 3 | (x) | 1 | 4 | 8 |
| Snow skiing | 9 | 10 | 7 | 15 | 11 | 5 | (x) | 1 | 6 | 18 |
| Downhill skiing | 6 | 8 | 5 | 12 | 8 | 3 | 1 | (x) | 5 | 12 |
| Cross-country skiing or ski touring | 3 | 4 | 3 | 5 | 4 | 3 | (x) | (x) | 2 | 8 |
| Snowmobiling | 3 | 4 | 2 | 6 | 3 | 2 | (x) | 1 | 3 | 2 |
| Sledding . | 10 | 12 | 9 | 22 | 11 | 5 | (x) | 1 | 7 | 11 |
| Other outdoor winter activities | 4 | 6 | 3 | 9 | 4 | 2 | (x) | 1 | 3 | 4 |
| Visiting zoos, fairs, or |  |  |  |  |  |  |  |  |  | 60 |
| Attending outdoor sports events | 40 | 44 | 36 | 55 | 44 | 36 | 16 | 15 | 39 | 50 |
| Attending outdoor concerts, plays, or other outdoor performances | 25 | 25 | 26 | 34 | 29 | 22 | 12 | 10 | 24 | 40 |
| Other activities (not on list). | 4 | 5 | 3 | 4 | 4 | 4 | 3 | 2 | 4 | 6 |
| No participation ........... | 11 | 9 | 14 | 3 | 5 | 13 | 30 | 29 | 9 | 5 |

## Table 4. Activity Participation, by Demographic Categories - Continued

(Percentage participating)

|  |  | Race |  | Annual family income (dollars) |  |  |  |  | Number of persons in household |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Activity | Total sample | White | Black | Under 5,000 | $\begin{array}{r} 5,000 \\ \text { to } \\ 14,999 \end{array}$ | $\begin{array}{r} 15,000 \\ \text { to } \\ 24,999 \end{array}$ | $\begin{array}{r} 25,000 \\ \text { to } \\ 49,999 \end{array}$ | $\begin{array}{r} 50,000 \\ \text { and } \\ \text { over } \end{array}$ | 1 | 2 | 3 | 4 | $\begin{aligned} & 5 \text { or } \\ & \text { more } \end{aligned}$ |
| Percentage of total sample included in each category . . | 100 | 89 | 11 | 10 | 30 | 27 | 28 | 5 | 11 | 29 | 20 | 20 | 19 |
| Bicycling | 32 | 33 | 29 | 23 | 24 | 35 | 41 | 42 | 19 | 24 | 35 | 44 | 39 |
| Horseback riding | 9 | 10 | 4 | 7 | 6 | 9 | 11 | 15 | 6 | 6 | 9 | 14 | 11 |
| Golfing | 13 | 14 | 3 | 6 | 6 | 13 | 20 | 27 | 9 | 13 | 13 | 17 | 11 |
| Tennis outdoors | 17 | 17 | 13 | 12 | 11 | 18 | 22 | 37 | 12 | 14 | 18 | 23 | 18 |
| Outdoor team sports. | 24 | 23 | 27 | 22 | 19 | 25 | 29 | 28 | 14 | 15 | 26 | 31 | 34 |
| Other outdoor games or sports | 13 | 13 | 7 | 11 | 9 | 13 | 16 | 15 | 7 | 9 | 13 | 18 | 16 |
| Boating | 28 | 31 | 6 | 16 | 20 | 27 | 39 | 43 | 19 | 26 | 31 | 34 | 28 |
| Canoeing or kayaking | 8 | 9 | 1 | 6 | 5 | 8 | 12 | 10 | 5 | 7 | 8 | 11 | 10 |
| Sailing | 6 | 7 | 1 | 4 | 3 | 5 | 9 | 14 | 6 | 7 | 6 | 6 | 6 |
| Motorboating | 19 | 21 | 3 | 10 | 13 | 18 | 27 | 32 | 12 | 17 | 20 | 24 | 19 |
| Other boating or watercraft sport | 6 | 6 | 1 | 3 | 4 | 5 | 7 | 13 | 4 | 5 | 7 | 7 | 5 |
| Waterskiing | 9 | 11 | (x) | 5 | 6 | 10 | 13 | 14 | 5 | 7 | 11 | 12 | 9 |
| Swimming outdoors | 53 | 55 | 32 | 34 | 39 | 56 | 67 | 71 | 31 | 42 | 59 | 67 | 60 |
| Swimming in an outdoor pool. | 43 | 45 | 27 | 26 | 29 | 45 | 57 | 62 | 24 | 33 | 47 | 55 | 50 |
| Other outdoor swimming | 32 | 34 | 11 | 23 | 23 | 34 | 40 | 43 | 19 | 24 | 36 | 40 | 37 |
| Fishing . . . . . . . . . . . . . | 34 | 35 | 27 | 24 | 30 | 38 | 38 | 35 | 19 | 30 | 36 | 42 | 38 |
| Hunting. | 12 | 12 | 7 | 8 | 12 | 14 | 14 | 8 | 5 | 10 | 13 | 13 | 15 |
| Camping | 24 | 27 | 6 | 15 | 19 | 29 | 31 | 25 | 14 | 21 | 27 | 30 | 28 |
| Backpacking | 5 | 5 | 1 | 3 | 3 | 5 | 7 | 5 | 4 | 4 | 5 | 6 | 5 |
| Camping in developed campgrounds. | 17 | 19 | 4 | 8 | 13 | 20 | 25 | 17 | 8 | 15 | 20 | 20 | 20 |
| Camping in primitive campgrounds | 10 | 11 | 2 | 7 | 7 | 12 | 13 | 9 | 6 | 8 | 10 | 13 | 10 |
| Other camping | 4 | 5 | 2 | 3 | 4 | 5 | 6 | 2 | 2 | 4 | 5 | 5 | 4 |
| Day hiking | 14 | 15 | 3 | 10 | 10 | 13 | 18 | 25 | 10 | 14 | 14 | 18 | 13 |
| Walking for pleasure | 53 | 54 | 49 | 45 | 46 | 54 | 61 | 62 | 47 | 52 | 57 | 56 | 53 |
| Running or jogging. | 26 | 26 | 30 | 21 | 20 | 27 | 33 | 37 | 17 | 18 | 27 | 36 | 34 |
| Birdwatching or other nature study activities. | 12 | 13 | 5 | 10 | 10 | 12 | 14 | 19 | 12 | 15 | 10 | 12 | 8 |
| Picnicking . . . . . . . . . . . . . | 48 | 49 | 42 | 36 | 41 | 53 | 56 | 58 | 34 | 41 | 55 | 57 | 52 |
| Driving for pleasure | 48 | 50 | 35 | 29 | 43 | 53 | 55 | 60 | 37 | 48 | 55 | 52 | 43 |
| Sightseeing | 46 | 47 | 36 | 27 | 38 | 48 | 57 | 67 | 35 | 46 | 51 | 52 | 40 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) | 11 | 12 | 3 | 9 | 8 | 10 | 15 | 13 | 6 | 8 | 13 | 14 | 13 |
| Ice skating . . . . . . . . . . . . . . . | 6 | 7 | 1 | 5 | 3 | 7 | 10 | 11 | 3 | 3 | 6 | 10 | 11 |
| Snow skiing | 9 | 10 | 1 | 5 | 5 | 7 | 13 | 21 | 7 | 9 | 8 | 12 | 7 |
| Downhill skiing | 6 | 7 | (x) | 4 | 4 | 5 | 9 | 18 | 6 | 7 | 6 | 9 | 5 |
| Cross-country skiing or ski touring | 3 | 4 | (x) | 2 | 2 | 3 | 5 | 8 | 2 | 3 | 3 | 5 | 3 |
| Snowmobiling | 3 | 3 | (x) | 2 | 2 | 4 | 4 | 4 | 1 | 3 | 4 | 4 | 4 |
| Sledding | 10 | 12 | 2 | 9 | 6 | 12 | 13 | 15 | 3 | 5 | 10 | 18 | 15 |
| Other outdoor winter activities | 4 | 5 | 1 | 4 | 3 | 4 | 6 | 3 | 3 | 2 | 5 | 6 | 5 |
| Visiting zoos, fairs, or amusement parks. | 50 | 51 | 40 | 32 | 40 | 55 | 62 | 62 | 33 | 42 | 54 | 62 | 57 |
| Attending outdoor sports events | 40 | 41 | 33 | 24 | 30 | 43 | 51 | 61 | 23 | 33 | 43 | 49 | 47 |
| Attending outdoor concerts, plays, or other outdoor performances | 25 | 26 | 21 | 17 | 21 | 24 | 32 | 38 | 23 | 24 | 28 | 27 | 24 |
| Other activities (not on list) . . | 4 | 4 | 1 | 4 | 3 | 4 | 4 | 9 | 4 | 5 | 4 | 4 | 4 |
| No participation ........ | 11 | 10 | 18 | 28 | 18 | 7 | 4 | 3 | 25 | 15 | 7 | 6 | 7 |

See footnotes at end of table.

Table 4. Activity Participation, by Demographic Categories - Continued
(Percentage participating)

| Activity | Total sample | Marital status |  |  | Household cars owned |  |  |  |  | Region |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed, divorced, separated | Never married | None | 1 | 2 | 3 | $\begin{aligned} & 4 \text { or } \\ & \text { more } \end{aligned}$ | Northeast | North Central | South | West |
| Percentage of total sample |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bicycling | 32 | 27 | 18 | 44 | 21 | 27 | 35 | 39 | 37 | 34 | 38 | 27 | 31 |
| Horseback riding | 9 | 7 | 4 | 14 | 4 | 6 | 9 | 12 | 16 | 7 | 10 | 8 | 13 |
| Golfing | 13 | 14 | 6 | 13 | 3 | 10 | 15 | 18 | 14 | 14 | 17 | 9 | 14 |
| Tennis outdoors | 17 | 13 | 8 | 30 | 10 | 14 | 18 | 21 | 20 | 16 | 17 | 16 | 19 |
| Outdoor team sports. | 24 | 15 | 12 | 40 | 17 | 19 | 24 | 27 | 34 | 22 | 26 | 24 | 23 |
| Other outdoor games or sports | 13 | 9 | 6 | 18 | 7 | 11 | 13 | 16 | 15 | 12 | 16 | 10 | 15 |
| Boating | 28 | 28 | 17 | 31 | 11 | 21 | 31 | 34 | 40 | 28 | 34 | 24 | 27 |
| Canoeing or kayaking | 8 | 7 | 3 | 11 | 3 | 7 | 9 | 10 | 11 | 12 | 11 | 5 | 6 |
| Sailing | 6 | 5 | 4 | 10 | 3 | 5 | 7 | 7 | 7 | 8 | 6 | 4 | 7 |
| Motorboating | 19 | 19 | 12 | 19 | 5 | 12 | 22 | 22 | 30 | 15 | 24 | 18 | 18 |
| Other boating or watercraft sport | 6 | 5 | 4 | 7 | 2 | 5 | 6 | 6 | 10 | 5 | 6 | 5 | 7 |
| Waterskiing | 9 | 8 | 5 | 14 | 2 | 5 | 11 | 11 | 15 | 7 | 10 | 10 | 9 |
| Swimming outdoors | 53 | 48 | 32 | 66 | 27 | 46 | 56 | 61 | 63 | 57 | 52 | 50 | 52 |
| Swimming in an outdoor pool. | 43 | 38 | 25 | 54 | 21 | 38 | 45 | 50 | 52 | 48 | 40 | 40 | 44 |
| Other outdoor swimming | 32 | 28 | 19 | 43 | 14 | 26 | 34 | 38 | 41 | 36 | 33 | 30 | 27 |
| Fishing | 34 | 36 | 22 | 32 | 15 | 28 | 38 | 43 | 40 | 25 | 37 | 39 | 32 |
| Hunting. | 12 | 13 | 5 | 12 | 3 | 8 | 12 | 16 | 21 | 9 | 13 | 15 | 9 |
| Camping | 24 | 24 | 14 | 27 | 8 | 17 | 27 | 30 | 38 | 19 | 24 | 20 | 33 |
| Backpacking | 5 | 3 | 2 | 8 | 3 | 3 | 5 | 6 | 6 | 5 | 3 | 3 | 9 |
| Camping in developed campgrounds. | 17 | 18 | 9 | 18 | 6 | 12 | 20 | 20 | 27 | 13 | 19 | 14 | 25 |
| Camping in primitive campgrounds. | 10 | 8 | 5 | 13 | 3 | 7 | 10 | 13 | 15 | 7 | 10 | 7 | 16 |
| Other camping . . . . | 4 | 4 | 3 | 5 | 1 | 3 | 4 | 7 | 8 | 4 | 3 | 4 | 7 |
| Day hiking | 14 | 13 | 7 | 19 | 6 | 11 | 16 | 16 | 18 | 13 | 15 | 9 | 23 |
| Walking for pleasure | 53 | 54 | 48 | 56 | 45 | 51 | 57 | 55 | 53 | 54 | 59 | 49 | 52 |
| Running or jogging | 26 | 18 | 14 | 45 | 19 | 22 | 28 | 28 | 34 | 25 | 24 | 26 | 31 |
| Birdwatching or other nature |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Picnicking . . . . . . . . . . . . . | 48 | 51 | 38 | 47 | 30 | 45 | 53 | 53 | 50 | 45 | 56 | 40 | 55 |
| Driving for pleasure | 48 | 53 | 36 | 52 | 19 | 45 | 53 | 55 | 54 | 45 | 54 | 43 | 53 |
| Sightseeing | 46 | 49 | 34 | 48 | 22 | 41 | 52 | 52 | 49 | 44 | 50 | 41 | 49 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) $\qquad$ 11 <br> 8 <br> 5 <br> $\begin{array}{llll}18 & 2 & 6 & 10\end{array}$ <br> 15 <br> 24 <br> 9 <br> 12 <br> 9 <br> 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ice skating. . | 6 | 4 | 2 | 10 | 2 | 6 | 6 | 9 | 9 | 11 | 8 | 3 | 5 |
| Snow skiing | 9 | 7 | 4 | 14 | 2 | 7 | 9 | 10 | 15 | 11 | 9 | 3 | 15 |
| Downhill skiing | 6 | 4 | 3 | 12 | 2 | 5 | 6 | 8 | 11 | 9 | 5 | 3 | 12 |
| Cross-country skiing or ski touring | 3 | 3 | 1 | 4 | 1 | 3 | 3 | 5 | 5 | 4 | 5 | x | 5 |
| Snowmobiling | 3 | 3 | 2 | 4 | 1 | 2 | 3 | 4 | 7 | 5 | 6 | $x$ | 2 |
| Sledding .... | 10 | 7 | 4 | 14 | 3 | 8 | 11 | 15 | 13 | 15 | 13 | 6 | 9 |
| Other outdoor winter activities | 4 | 3 | 2 | 7 | 1 | 4 | 5 | 5 | 6 | 6 | 5 | 2 | 4 |
| Visiting zoos, fairs, or amusement parks | 50 | 50 | 35 | 54 | 31 | 45 | 53 | 58 | 57 | 48 | 57 | 44 | 55 |
| Attending outdoor sports events $\qquad$ | 40 | 37 | 23 | 50 | 23 | 31 | 43 | 49 | 49 | 35 | 44 | 37 | 42 |
| Attending outdoor concerts, plays, or other outdoor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other activities (not on list) . . | 4 | 4 | 3 | 4 | 2 | 4 | 4 | 4 | 5 | 6 | 4 | 3 | 5 |
| No participation | 11 | 11 | 23 | 6 | 29 | 16 | 8 | 6 | 6 | 13 | 10 | 13 | 9 |

See footnotes at end of table.

## Table 4. Activity Participation, by Demographic Categories - Continued

(Percentage participating)

| Activity | Total sample | Employment status |  |  |  |  |  |  |  | Size of locality of residence (population) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { At } \\ \text { work } \end{array}$ | Not at work | Unemployed | Keeping house | Going to school | Unable to work | Retired | Other | $\begin{aligned} & \text { Under } \\ & 5,000 \end{aligned}$ | $\begin{array}{r} 5,000- \\ 24,000 \end{array}$ | $\begin{array}{r} 25,000- \\ 99,999 \end{array}$ | $\begin{aligned} & 100,000 \\ & 999,999 \end{aligned}$ | $\begin{array}{r} 1,000,000 \\ \text { or more } \end{array}$ |
| Percentage of total sample |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bicycling | 32 | 33 | 28 | 41 | 18 | 55 | 2 | 9 | 33 | 32 | 34 | 33 | 30 | 26 |
| Horseback riding | 9 | 10 | 8 | 10 | 5 | 13 | 2 | 1 | 9 | 8 | 8 | 10 | 8 | 6 |
| Golfing . . . . . . . | 13 | 16 | 15 | 12 | 4 | 16 | 2 | 9 | 12 | 13 | 18 | 15 | 12 | 6 |
| Tennis outdoors. | 17 | 19 | 18 | 25 | 6 | 36 | 0 | 1 | 18 | 15 | 19 | 20 | 18 | 14 |
| Outdoor team sports | 24 | 25 | 18 | 34 | 7 | 39 | 4 | 1 | 29 | 24 | 24 | 26 | 22 | 15 |
| Other outdoor games or sports | 13 | 13 | 11 | 18 | 6 | 22 | 3 | 2 | 10 | 12 | 14 | 16 | 11 | 8 |
| Boating | 28 | 32 | 30 | 31 | 17 | 34 | 12 | 12 | 25 | 30 | 29 | 28 | 23 | 15 |
| Canoeing or kayaking | 8 | 9 | 8 | 9 | 3 | 10 | 1 | 2 | 10 | 10 | 9 | 8 | 6 | 5 |
| Sailing . . . . . . . . . . | 6 | 7 | 6 | 7 | 3 | 14 | 0 | 2 | 5 | 5 | 5 | 7 | 7 | 5 |
| Motorboating | 19 | 22 | 21 | 22 | 11 | 18 | 11 | 9 | 15 | 22 | 21 | 18 | 14 | 7 |
| Other boating or watercraft sport | 6 | 6 | 6 | 5 | 4 | 7 | 2 | 1 | 6 | 5 | 5 | 6 | 4 | 4 |
| Waterskiing | 9 | 11 | 10 | 15 | 3 | 15 | 0 | (x) | 7 | 9 | 12 | 9 | 7 | 4 |
| Swimming outdoors | 53 | 58 | 51 | 61 | 34 | 73 | 9 | 13 | 46 | 50 | 56 | 54 | 48 | 40 |
| Swimming in an outdoor pool | 43 | 46 | 42 | 47 | 27 | 61 | 4 | 10 | 38 | 41 | 45 | 45 | 39 | 33 |
| Other outdoor swimming. | 32 | 36 | 33 | 39 | 19 | 42 | 8 | 4 | 25 | 30 | 36 | 30 | 27 | 20 |
| Fishing | 34 | 37 | 32 | 45 | 21 | 32 | 22 | 24 | 30 | 38 | 34 | 36 | 28 | 14 |
| Hunting | 12 | 15 | 10 | 19 | 3 | 16 | 8 | 7 | 11 | 19 | 9 | 10 | 4 | 3 |
| Camping | 24 | 27 | 24 | 26 | 16 | 26 | 6 | 7 | 26 | 22 | 25 | 27 | 22 | 15 |
| Backpacking | 5 | 5 | 5 | 6 | 1 | 8 | 0 | 1 | 5 | 4 | 5 | 6 | 5 | 3 |
| Camping in developed campgrounds ...... . | 17 | 19 | 17 | 19 | 13 | 19 | 3 | 6 | 16 | 15 | 18 | 19 | 16 | 11 |
| Camping in primitive campgrounds . . . . . . | 10 | 11 | 10 | 12 | 5 | 13 | 0 | 2 | 8 | 10 | 10 | 11 | 8 | 6 |
| Other camping . . . . | 4 | 5 | 3 | 4 | 3 | 4 | 4 | 1 | 5 | 3 | 4 | 4 | 3 | 1 |
| Day hiking | 14 | 15 | 17 | 14 | 8 | 19 | 2 | 4 | 15 | 11 | 15 | 13 | 13 | 9 |
| Walking for pleasure | 53 | 54 | 59 | 58 | 55 | 51 | 30 | 40 | 57 | 56 | 55 | 53 | 53 | 43 |
| Running or jogging | 26 | 27 | 24 | 36 | 10 | 54 | 2 | 1 | 35 | 24 | 24 | 30 | 27 | 26 |
| Birdwatching or other nature study activities | 12 | 11 | 17 | 9 | 13 | 7 | 13 | 10 | 14 | 15 | 10 | 11 | 10 | 4 |
| Picnicking . . . . . . . . . . . . . | 48 | 51 | 60 | 49 | 44 | 46 | 25 | 25 | 42 | 49 | 49 | 48 | 50 | 35 |
| Driving for pleasure | 48 | 55 | 49 | 55 | 43 | 46 | 22 | 33 | 47 | 49 | 51 | 52 | 46 | 28 |
| Sightseeing Off-road vehicle driving (includes motorcycles but not snowmobiles) | 46 | 51 | 50 | 46 | 40 | 47 | 25 | 28 | 43 | 46 | 47 | 49 | 43 | 28 |
|  | 11 | 12 | 13 | 13 | 5 | 23 | 0 | 2 | 11 | 10 | 11 | 14 | 9 | 5 |
| Ice skating . . . . . . . . . . . . . . . . | 6 | 6 | 4 | 9 | 3 | 13 | 0 | 1 | 4 | 8 | 6 | 7 | 5 | 4 |
| Snow skiing | 9 | 11 | 9 | 4 | 3 | 11 | 0 | 2 | 8 | 7 | 11 | 10 | 7 | 6 |
| Downhill skiing . | 6 | 8 | 6 | 4 | 2 | 10 | 0 | 1 | 5 | 4 | 8 | 7 | 6 | 5 |
| Cross-country skiing or ski touning | 3 | 4 | 4 | 1 | 1 | 3 | 0 | (x) | 4 | 4 | 4 | 4 | 2 | 1 |
| Snowmobiling | 3 | 3 | 5 | 7 | 2 | 2 | 1 | (x) | 2 | 5 | 3 | 2 | 1 | 1 |
| Sledding. | 10 | 10 | 11 | 13 | 5 | 17 | 0 | (x) | 8 | 11 | 10 | 11 | 7 | 3 |
| Other outdoor winter activities | 4 | 4 | 5 | 5 | 2 | 3 | 0 | (x) | 4 | 4 | 5 | 5 | 4 | 2 |
| Visiting zoos, fairs, or amusement parks | 50 | 53 | 52 | 52 | 43 | 50 | 20 | 25 | 49 | 48 | 51 | 53 | 49 | 41 |
| Attending outdoor sports events | 40 | 44 | 44 | 42 | 24 | 58 | 14 | 16 | 35 | 37 | 43 | 41 | 40 | 26 |
| Attending outdoor concerts, plays, or other outdoor performances | 25 | 29 | 26 | 29 | 18 | 32 | 12 | 12 | 26 | 20 | 26 | 30 | 29 | 22 |
| Other activities (not on list) | 4 | 4 | 7 | 3 | 3 | 3 | 3 | 4 | 2 | 4 | 4 | 4 | 4 | 3 |
| No participation . . . . . | 11 | 8 | 6 | 9 | 21 | 6 | 42 | 29 | 14 | 11 | 11 | 9 | 13 | 22 |

$x$ Less than one half of one percent.
${ }^{1}$ Education percentages are based on respondents 22 years old or older.
previous season (monthly basis) is averaged and listed. Table 8 presents these volume estimates for the entire United States, and table 9 gives the breakdown by the four census regions for 12 of the 22 activities. Seasonality is a major constraint on the production of outdoor recreation experiences per unit of resource capacity. That seasonality patterns vary by region, as well as among activities, may be seen in table 9.

## Constraints and Reasons for Liking, by Activity

In chapter 1, it was noted that respondents who cited an activity as particularly enjoyed were asked to select, from a list, their reasons for liking the activity and, if applicable, the constraints upon their pursuit of it. In this chapter, the percentages citing various constraints and reasons for liking

## Table 5. Favorite Activities

| Activity | Total sample |  | Participants |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Participated once or more in last year | Particularly enjoyed | Particularly enjoyed | $\begin{array}{r} \text { Most } \\ \text { enjoyed } \end{array}$ |
| Bicycling. | 32 | 10 | 30 | 7 |
| Horseback riding | 9 | 4 | 40 | 16 |
| Golfing | 13 | 6 | 46 | 19 |
| Tennis outdoors | 17 | 8 | 45 | 12 |
| Outdoor team sports | 24 | 17 | 72 | 33 |
| Boating. | 28 | 5 | 16 | 5 |
| Canoeing or kayaking. | 8 | 1 | 16 | 3 |
| Sailing . . . . . . . . . . . | 6 | 1 | 19 | 7 |
| Waterskiing. | 9 | 3 | 32 | 10 |
| Swimming outdoors | 53 | 10 | 18 | 6 |
| Fishing | 34 | 20 | 58 | 18 |
| Hunting | 12 | 9 | 75 | 28 |
| Camping | 24 | 12 | 51 | 18 |
| Backpacking | 5 | 1 | 15 | 6 |
| Day hiking | 14 | 5 | 37 | 9 |
| Walking for pleasure | 53 | 9 | 17 | 5 |
| Running or jogging. | 26 | 5 | 19 | 5 |
| Birdwatching or other nature study activities. | 12 | 1 | 7 | 2 |
| Picnics | 48 | 4 | 8 | 2 |
| Driving for pleasure ${ }^{1}$. . | 48 | 1 | 1 | (x) |
| Sightseeing ${ }^{1}$. . . . . | 46 | 1 | 2 | (x) |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) . . . . . . | 11 | 1 | 9 | 4 |
| Ice skating | 6 | 1 | 10 | 3 |
| Snow skiing | 9 | 4 | 49 | 17 |
| Snowmobiling. | 3 | (x) | 12 | 3 |
| Sledding . | 10 | (x) | 1 | (x) |
| Visiting zoos, fairs, or amusement parks ${ }^{1}$ | 50 | (x) | 1 | (x) |
| Attending outdoor sports events ${ }^{1}$ | 40 | 1 | 2 | (x) |
| Attending outdoor concerts, plays, or other outdoor performances ${ }^{1}$. | 25 | (x) | 1 | (x) |

[^8]outdoor recreation (tables 10 and 11) are used to characterize selected outdoor activities. This was only done for those activities ( 10 in number) for which at least 300 self-identified enthusiasts were available among the NRS respondents.

## Short-Term Trend Indicators

The percentages of persons identified as having started or stopped participating in each activity in the prior 2 years, or who indicated that they "expected they might" take up the activity in the next 2 years, were introduced in chapter 1 as yardsticks for characterizing people. In this chapter (table 12) these percentages are used to characterize activities. Since future expectations are speculative by comparison with past behavior, the stopping and starting percentages should not be used to derive an indicator of net change. All three of these short-term trend yardsticks are useful for companisons among activities. Even here, however, caution is warranted. Many of the activities on the list are typically begun in early childhood. Hence, with a sample restricted to persons 12 years of age or older, the NRS data may not adequately reveal the rate of recruitment of new participants. Similarly, death is an unmeasured cause of participant loss.

## ACTIVITIES - STATUS AND TRENDS

The 36 listed activities-plus the four synthetic aggregates (boating, outdoor swimming, camping, and snow skiing) - will be examined in order of their appearance in tables 2 and 4 . For the listed pursuits, this is also the order in which they appear on the questionnaire. For the sake of comparability, the order established in the 1960 and 1965 National Recreation Surveys was retained where practicable.

## Bicycling

Bicycling has gained dramatically in the past 22 years on every available yardstick, more than tripling its population participation rate (table 3). Especially noteworthy is the increase in adult bicycling, which was practically insignificant in 1960. In the present survey, cycling is part of the free-time repertoire of 37 percent of the young adults (aged $25-39$ ) and 22 percent of the middleaged (40-59 years). This greatly exceeds the most sanguine predictions of the early 1960's. On the depth yardstick of percentage of participants who cited the activity as particularly enjoyed, bicycling, with 30 percent, topped all the casual activities-those which can be enjoyed on the spur of the moment with little cost or preparation. Unsurprisingly, many (55 percent) of the

## Table 6. Participation in Selected Activities, by Demographic Characteristics

(Percentage of participants ${ }^{1}$ )
Respondents who said they participated once or more in previous 12 months

|  | Total | Bicycling | Golfing | Tennis, <br> outdoors | Team sports, <br> outdoors | Boating | Por <br> Characteristic |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Total. | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |
| Male | 48 | 48 | 73 | 50 | 60 | 56 | 48 |
| Female | 52 | 52 | 27 | 50 | 40 | 44 | 52 |
| Age |  |  |  |  |  |  |  |
| 12 to 24 | 27 | 46 | 34 | 50 | 56 | 35 | 42 |
| 25 to 39 | 29 | 33 | 30 | 35 | 32 | 36 | 34 |
| 40 to 59 | 25 | 17 | 25 | 14 | 11 | 22 | 19 |
| 60 or more | 19 | 4 | 11 | 1 | 1 | 7 | 5 |
| Education |  |  |  |  |  |  |  |
| Less than high school. | 26 | 12 | 8 | 4 | 11 | 12 | 9 |
| High school | 37 | 37 | 29 | 26 | 39 | 38 | 36 |
| Less than 4 years of college | 19 | 23 | 24 | 26 | 23 | 24 | 27 |
| 4 or more years of college | 19 | 28 | 39 | 44 | 26 | 27 | 29 |
| Race |  |  |  |  |  |  |  |
| White | 89 | 90 | 98 | 91 | 87 | 98 | 93 |
| Black. | 11 | 10 | 2 | 9 | 13 | 2 | 7 |
| Annual family income (dollars) |  |  |  |  |  |  |  |
| Under 5,000. . | 10 | 7 | 5 | 6 | 9 | 5 | 6 |
| 5,000 to 14,999 | 30 | 22 | 13 | 19 | 24 | 20 | 20 |
| 15,000 to 24,999 | 27 | 29 | 28 | 28 | 28 | 26 | 28 |
| 25,000 to 49,999 . | 28 | 35 | 43 | 35 | 33 | 40 | 38 |
| 50,000 or more | 5 | 7 | 12 | 12 | 6 | 9 | 8 |

Number of persons in
household


| 11 | 6 | 7 | 8 | 6 | 7 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 22 | 30 | 23 | 18 | 27 | 23 |
| 20 | 21 | 20 | 21 | 21 | 21 | 22 |
| 20 | 28 | 27 | 28 | 27 | 26 | 26 |
| 19 | 23 | 16 | 21 | 28 | 19 | 23 |
| 60 | 55 | 67 | 48 | 45 | 63 | 58 |
| 17 | 10 | 8 | 9 | 10 | 11 | 11 |
| 23 | 35 | 25 | 43 | 45 | 26 | 32 |
| 9 | 6 | 2 | 6 | 6 | 3 | 5 |
| 27 | 22 | 20 | 22 | 21 | 17 | 24 |
| 35 | 38 | 40 | 37 | 36 | 41 | 37 |
| 16 | 20 | 23 | 20 | 18 | 19 | 19 |
| 13 | 15 | 15 | 16 | 19 | 21 | 16 |
| 55 | 62 | 70 | 66 | 68 | 66 | 64 |
| 5 | 5 | 6 | 5 | 4 | 5 | 5 |
| 4 | 6 | 4 | 7 | 7 | 5 | 5 |
| 20 | 13 | 6 | 8 | 7 | 12 | 14 |
| 3 | 6 | 4 | 8 | 6 | 3 | 5 |
| 2 | (x) | (x) | 0 | (x) | 1 | (x) |
| 7 | 2 | 5 | (x) | (x) | 3 | 2 |
| 5 | 6 | 5 | 6 | 7 | 4 | 5 |
| 14 | 14 | 14 | 12 | 15 | 18 | 14 |
| 24 | 26 | 32 | 26 | 26 | 30 | 26 |
| 26 | 27 | 29 | 29 | 29 | 27 | 28 |
| 25 | 23 | 21 | 24 | 24 | 20 | 23 |
| 11 | 9 | 5 | 9 | 7 | 4 | 9 |
| 22 | 34 | 14 | 16 | 22 | 15 | 48 |
| 25 | 38 | 17 | 17 | 26 | 24 | 40 |
| 34 | 27 | 9 | 16 | 24 | 18 | 40 |
| 20 | 31 | 14 | 19 | 23 | 18 | 44 |

See footnotes at end of table.

Table 6. Participation in Selected Activities, by Demographic Characteristics-Continued
(Percentage of participants ${ }^{1}$ )

| Characteristic | Respondents who said they participated once or more in previous 12 months |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Outdoor swimming | Fishing | Hunting | Camping in developed campgrounds | Day hiking | Walking <br> for pleasure |
| Total. . . . . . . . . . . . . . . . . . . . . | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Sex |  |  |  |  |  |  |  |
| Male | 48 | 51 | 65 | 88 | 51 | 52 | 40 |
| Female . . . . . . . . . . . . . . . . . | 52 | 50 | 35 | 12 | 50 | 48 | 60 |
| Age |  |  |  |  |  |  |  |
| 12 to 24 | 27 | 42 | 34 | 33 | 37 | 37 | 29 |
| 25 to 39 | 29 | 37 | 34 | 32 | 37 | 36 | 32 |
| 40 to 59. | 25 | 1 | 23 | 27 | 21 | 21 | 25 |
| 60 or more. | 19 | 5 | 10 | 8 | 5 | 7 | 15 |
| Education 26 |  |  |  |  |  |  |  |
| Less than high school . . . . . . . | 26 | 10 | 22 | 25 | 12 | 7 | 17 |
| High school . . . . . . . . . . . . . . | 37 | 37 | 40 | 44 | 40 | 29 | 38 |
| Less than 4 years of college . . . | 19 | 26 | 21 | 19 | 26 | 26 | 21 |
| 4 or more years of college .... | 19 | 29 | 18 | 13 | 23 | 38 | 24 |
| Race |  |  |  |  |  |  |  |
| White | 89 | 96 | 91 | 93 | 98 | 98 | 90 |
| Black. . | 11 | 4 | 9 | 7 | 2 | 2 | 11 |
| Annual family income (dollars) 10 |  |  |  |  |  |  |  |
| Under 5,000 | 10 | 7 | 7 | 6 | 4 | 7 | 8 |
| 5,000 to 14,999 . . . . . . . . | 30 | 22 | 27 | 28 | 21 | 22 | 26 |
| 15,000 to 24,999 | 27 | 29 | 30 | 32 | 30 | 25 | 27 |
| 25,000 to 49,999 | 28 | 35 | 31 | 31 | 39 | 37 | 32 |
| 50,000 or more . | 5 | 7 | 5 | 3 | 5 | 10 | 6 |
| Number of persons in household |  |  |  |  |  |  |  |
| 1........ | 11 | 7 | 6 | 5 | 5 | 8 | 10 |
| 2 | 29 | 23 | 26 | 26 | 26 | 29 | 29 |
| 3. | 20 | 23 | 21 | 22 | 23 | 20 | 21 |
| 4. | 20 | 25 | 25 | 23 | 24 | 26 | 21 |
| 5 or more | 19 | 23 | 22 | 25 | 23 | 18 | 19 |
| Marital status |  |  |  |  |  |  |  |
| Married. | 60 | 56 | 66 | 69 | 65 | 58 | 60 |
| Widowed, divorced, separated . | 17 | 11 | 12 | 7 | 10 | 9 | 15 |
| Never married. . . . . . . . . . . . | 23 | 33 | 23 | 25 | 25 | 33 | 24 |
| Household cars owned 8 |  |  |  |  |  |  |  |
| None. | 9 | 4 | 4 | 3 | 3 | 4 | 8 |
| 1. | 27 | 22 | 22 | 17 | 18 | 21 | 26 |
| 2 | 35 | 38 | 38 | 35 | 40 | 40 | 37 |
| 3. | 16 | 19 | 20 | 22 | 18 | 18 | 17 |
| 4 or more | 13 | 17 | 16 | 24 | 21 | 17 | 13 |
| Employment status |  |  |  |  |  |  |  |
| At work | 55 | 67 | 63 | 69 | 64 | 64 | 55 |
| Not at work | 5 | 5 | 5 | 4 | 5 | 6 | 5 |
| Unemployed | 4 | 6 | 6 | 7 | 5 | 5 | 5 |
| Keeping house . | 20 | 12 | 13 | 5 | 15 | 12 | 20 |
| Going to school | 3 | 5 | 3 | 5 | 4 | 5 | 3 |
| Unable to work | 2 | (x) | 1 | 1 | (x) | (x) | 1 |
| Retired | 7 | 1 | 5 | 4 | 2 | 2 | 5 |
| Other | 5 | 4 | 5 | 5 | 5 | 6 | 6 |
| Size of place of residence |  |  |  |  |  |  |  |
| Under 5,000 . . . . . . . | 14 | 15 | 17 | 31 | 13 | 13 | 15 |
| 5,000 to 24,999 . | 24 | 29 | 26 | 24 | 27 | 29 | 25 |
| 25,000 to 99,999 | 26 | 27 | 30 | 30 | 30 | 25 | 26 |
| 100,000 to 999,999. | 25 | 22 | 22 | 12 | 24 | 25 | 25 |
| 1,000,000 or more. . | 11 | 7 | 5 | 3 | 7 | 8 | 9 |
| Region |  |  |  |  |  |  |  |
| Northeast . . | 22 | 36 | 25 | 9 | 13 | 13 | 54 |
| North Central | 25 | 33 | 37 | 13 | 19 | 15 | 59 49 |
| South | 34 | 30 | 39 | 15 | 14 | 9 | 49 <br> 52 |
| West . . . . . . . | 20 | 27 | 32 | 9 | 25 | 23 | 52 |

## Table 6. Participation in Selected Activities, by Demographic Characteristics-Continued

(Percentage of respondents)

| Characteristic | Respondents who said they participated once or more in previous 12 months |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total sample | Jogging | Birdwatching, etc. | Picnicking | Driving for pleasure | Sight seeing | Visiting zoos, etc. | Attend outdoor sports | out- <br> tural <br> nces |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 48 | 55 | 45 | 44 | 47 | 47 | 47 | 53 | 46 |
| Female | 52 | 46 | 55 | 56 | 53 | 53 | 53 | 47 | 54 |
| Age |  |  |  |  |  |  |  |  |  |
| 12 to 24 | 27 | 52 | 22 | 29 | 27 | 27 | 35 | 37 | 36 |
| 25 to 39 | 29 | 35 | 29 | 36 | 36 | 35 | 36 | 33 | 34 |
| 40 to 59 | 25 | 12 | 27 | 24 | 24 | 25 | 20 | 22 | 21 |
| 60 or more | 19 | 1 | 22 | 12 | 14 | 13 | 10 | 8 | 9 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than high school. | 26 | 8 | 13 | 16 | 16 | 15 | 15 | 11 | 12 |
| High school . . . . . . | 37 | 32 | 36 | 38 | 38 | 36 | 37 | 36 | 32 |
| Less than 4 years of college | 19 | 26 | 24 | 22 | 23 | 23 | 24 | 26 | 24 |
| 4 or more years of college. | 19 | 34 | 27 | 24 | 23 | 26 | 25 | 27 | 33 |
| Race |  |  |  |  |  |  |  |  |  |
| White | 89 | 87 | 96 | 90 | 92 | 91 | 91 | 91 | 91 |
| Black. | 11 | 13 | 4 | 10 | 8 | 9 | 9 | 9 | 10 |
| Annual family income (dollars) |  |  |  |  |  |  |  |  |  |
| Under 5,000. | 10 | 8 | 8 | 7 | 6 | 6 | 6 | 6 | 7 |
| 5,000 to 14,999 . | 30 | 23 | 25 | 25 | 26 | 24 | 24 | 22 | 25 |
| 15,000 to 24,999. | 27 | 27 | 27 | 29 | 29 | 28 | 29 | 28 | 26 |
| 25,000 to 49,999. | 28 | 35 | 32 | 32 | 32 | 34 | 34 | 36 | 35 |
| 50,000 or more . . | 5 | 8 | 9 | 6 | 7 | 8 | 7 | 8 | 8 |
| Number of persons in household |  |  |  |  |  |  |  |  |  |
| 1.............. | 11 | 7 | 11 | 8 | 9 | 9 | 7 | 7 | 10 |
| 2 | 29 | 20 | 37 | 25 | 29 | 29 | 24 | 24 | 28 |
| 3 | 20 | 21 | 18 | 23 | 23 | 22 | 21 | 21 | 22 |
| 4 | 20 | 27 | 21 | 24 | 22 | 23 | 25 | 25 | 22 |
| 5 or more | 19 | 25 | 14 | 21 | 18 | 17 | 22 | 23 | 18 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Married | 60 | 47 | 67 | 64 | 64 | 64 | 62 | 59 | 54 |
| Widowed, divorced separated | 17 | 10 | 15 | 14 | 13 | 13 | 12 | 11 | 14 |
| Never married. . . . . . . . . . . | 23 | 44 | 19 | 23 | 24 | 24 | 26 | 30 | 32 |
| Household cars owned |  |  |  |  |  |  |  |  |  |
| None. | 9 | 7 | 5 | 6 | 4 | 4 | 6 | 5 | 7 |
| 1 | 27 | 22 | 29 | 25 | 25 | 24 | 24 | 21 | 25 |
| 2 | 35 | 37 | 35 | 38 | 38 | 39 | 37 | 38 | 37 |
| 3. | 16 | 17 | 17 | 18 | 18 | 18 | 19 | 20 | 18 |
| 4 or more | 13 | 17 | 14 | 14 | 15 | 14 | 15 | 16 | 14 |
| Employment status |  |  |  |  |  |  |  |  |  |
| At work | 55 | 64 | 52 | 60 | 60 | 61 | 60 | 64 | 63 |
| Not at work | 5 | 5 | 7 | 6 | 5 | 5 | 5 | 5 | 5 |
| Unemployed | 4 | 7 | 4 | 4 | 5 | 4 | 5 | 5 | 5 |
| Keeping house | 20 | 8 | 22 | 18 | 17 | 17 | 17 | 12 | 14 |
| Going to school | 3 | 8 | 2 | 3 | 3 | 3 | 4 | 5 | 4 |
| Unable to work. | 2 | x | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Retired | 7 | x | 6 | 4 | 4 | 4 | 4 | 3 | 3 |
| Other | 5 | 8 | 6 | 5 | 5 | 5 | 5 | 5 | 5 |
| Size of place of residence |  |  |  |  |  |  |  |  |  |
| Under 5,000. . | 14 | 13 | 21 | 15 | 15 | 15 | 14 | 14 | 11 |
| 5,000-24,999 | 24 | 22 | 24 | 25 | 26 | 26 | 25 | 27 | 24 |
| 25,000-99,999 | 26 | 29 | 28 | 26 | 29 | 29 | 28 | 27 | 29 |
| 100,000-999,999 | 25 | 25 | 23 | 26 | 24 | 24 | 24 | 25 | 27 |
| 1,000,000 or more . . | 11 | 11 | 5 | 8 | 7 | 7 | 9 | 7 | 9 |
| Region |  |  |  |  |  |  |  |  |  |
| Northeast . . | 22 | 25 | 12 | 45 | 45 | 44 | 48 | 35 | 28 |
| North Central | 25 | 24 | 15 | 56 | 54 | 50 | 57 | 44 | 26 |
| South | 34 | 26 | 8 | 40 | 43 | 41 | 44 | 37 | 20 |
| West . | 20 | 31 | 12 | 55 | 53 | 49 | 55 | 42 | 31 |

NOTE: Limited to those activities in which 10 percent or more ( 550 or more) respondents said they participated once or more in the 12 previous months.
self-identified bicycle enthusiasts cited "to get exercise or keep in shape" as a reason for liking the activity. The appreciative component of the bicycling boom is also substantial. Fifty-nine percent of the respondents who particularly enjoyed bicycling cited the reason "to enjoy nature and the outdoors."

## Horseback Riding

More stable in its participation rate since the 1960's, horseback riding is typical of those activities which require substantial investments of time and/or money to participate. It counts only 9 percent of the NRS respondents as participants but, of those who went horseback riding once or more in the prior 12 months, 40 percent cited the activity as particularly enjoyed. That this is a very respectable showing will be seen from
table 5. The demographic patterning of horseback riders is rather typical of outdoor activities and does not support the elite stereotype often associated with the sport. Also, by contrast to most forms of outdoor recreation, more women than men reported niding horseback.

## Golfing

Men participate in golf at almost triple the rate of women. It is, however, one of the least age-related activities. Participation, once begun, holds up well through middle age and into the older years. The participation rates corroborate the popular impression of an upscale sport. Those in the least advantaged categories of education, race, and income participate at less than half the general population rate ( 13 percent) and at

Table 7. Annual Volume of Activity Per Participant
(By activity-day categories)

| Activity | $\begin{array}{r} 1 \text { or more } \\ \text { days } \end{array}$ | $\begin{array}{r} 1 \text { to } 2 \\ \text { days } \end{array}$ | $\begin{array}{r} 3 \text { to } 10 \\ \text { days } \end{array}$ | $\begin{array}{r} 11 \text { to } 25 \\ \text { days } \end{array}$ | More than 25 days |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bicycling | 100 | 12 | 32 | 19 | 38 |
| Horseback riding. | 100 | 47 | 27 | 8 | 17 |
| Golfing | 100 | 28 | 34 | 17 | 21 |
| Tennis outdoors | 100 | 23 | 42 | 19 | 16 |
| Outdoor team sports.... | 100 | 13 | 30 | 18 | 38 |
| Boating |  |  |  |  |  |
| Canoeing or kayaking . . | 100 | 51 | 39 | 8 | 3 |
| Sailing | 100 | 56 | 30 | 6 | 8 |
| Motorboating | 100 | 33 | 39 | 17 | 12 |
| Swimming outdoors |  |  |  |  |  |
| Swimming in outdoor pool | 100 | 14 | 38 | 19 | 29 |
| Other outdoor swimming | 100 | 19 | 42 | 20 | 19 |
| Fishing | 100 | 21 | 43 | 21 | 15 |
| Hunting | 100 | 19 | 42 | 22 | 17 |
| Camping |  |  |  |  |  |
| Backpacking | 100 | 39 | 47 | 9 | 6 |
| Camping in developed campgrounds | 100 | 26 | 51 | 16 | 7 |
| Camping in primitive campgrounds | 100 | 36 | 47 | 12 | 6 |
| Other camping . | 100 | 35 | 44 | 16 | 5 |
| Day hiking | 100 | 28 | 47 | 14 | 12 |
| Birdwatching or other nature study activities | 100 | 15 | 29 | 14 | 42 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) | 100 | 23 | 39 | 21 | 17 |
| Snow skiing |  |  |  |  |  |
| Downhill skiing | 100 | 34 | 44 | 16 | 7 |
| Cross-country skiing or ski touring | 100 | 51 | 35 | 10 | 4 |
| Snowmobiling . . . . . . . . . | 100 | 40 | 36 | 14 | 10 |

NOTE: Percentage of participants (respondents who said they participated in the activity once or more in the prior 12 months) who gave different estimates of the number of different days on which they participated during the 12 months.
only one-fourth to one-sixth the rate of the most advantaged categories. Self-identified golf enthusiasts ( 46 percent of participants) have a strong tendency to cite fitness, enjoyment of the outdoors, and escape (to get away from day-to-day living or problems) as reasons why they enjoy their sport.

## Tennis Outdoors

Though we have no 1960 data, a comparison of the 1965 and 1982 summer rates indicate that the proportion of Americans who play tennis has about tripled. The sport is somewhat less upscale than golf in its relation to income, and Blacks participate at almost as high a rate as Whites. Those who say they particularly enjoy tennis cite fitness as by far the most frequent motive. The social component of their enthusiasm-being with family and friends, and liking people who play tennis-is also substantial.

## Outdoor Team Sports

Participation in outdoor team sports is still mostly a pursuit of young males, though women and mature adults maintain a respectable presence among the players. Team participation is almost totally unrelated to race or income. A slightly higher percentage of Blacks than Whites said they engaged in an outdoor team sport during the 12 months prior to the interview. "Other outdoor games or sports" includes such a diversity of pursuits (from croquet to orienteering, at least) that no demographic analysis will be attempted here.

## Boating

The general population participation rate of 28 percent for boating is impressive, given the investments of time and money involved. The demographic patterns of boaters are somewhat upscale, and participation by Blacks is especially low. Sex is not an important factor, and boating participation holds up well through middle age. Virtually these same relationships are characteristic of the four component activities-canoeing or kayaking, sailing, motorboating, and "other boating or watercraft sport"-from which the "boating" data were synthesized. Canoeing or kayaking, however, had the largest growth with a quadrupling of the summer participation rate since 1960 (from 2 to 8 percent). ${ }^{3}$

## Waterskiing

Self-identified waterskiers were counted in both the "boating" and the "swimming"
${ }^{3}$ In the 1960 survey, the activity was referred to as "canoeing." Theoretically, the absence of kayaking in the earlier version could inflate the appearance of growth. The distortion is probably minimal since kayaking was considered insignificant in the United States at that time.

## Table 8. Monthly Volume of Activity, by Season

| Activity | Activity days of participation per month ${ }^{12}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Spring | Summer | Fall | Winter |
| Bicycling | 4.0 | 4.7 | 2.9 | 2.2 |
| Horseback riding | 1.7 | 2.6 | 1.6 | 0.5 |
| Golfing | 1.9 | 2.6 | 1.2 | 0.7 |
| Tennis outdoors | 1.9 | 1.9 | 1.1 | 1.0 |
| Outdoor team sports | 4.2 | 4.1 | 2.6 | 2.5 |
| Canoeing or kayaking | 0.3 | 1.0 | 0.3 | 0.1 |
| Sailing | 0.8 | 1.4 | 0.4 | 0.2 |
| Motorboating | 0.9 | 1.9 | 0.5 | 0.2 |
| Swimming in an outdoor pool | 1.9 | 4.2 | 0.8 | 0.3 |
| Other outdoor swimming | 1.0 | 3.0 | 0.3 | 0.5 |
| Fishing. | 1.9 | 1.8 | 0.7 | 0.6 |
| Hunting | 0.6 | 0.5 | 2.2 | 1.1 |
| Backpacking | 0.8 | 1.2 | 0.5 | 0.2 |
| Camping in developed campgrounds | 0.6 | 1.5 | 0.6 | 0.4 |
| Camping in primitive campgrounds. | 0.6 | 1.4 | 0.5 | 0.3 |
| Other camping | 0.5 | 1.1 | 0.4 | 0.3 |
| Day hiking. . . | 1.4 | 1.8 | 1.2 | 0.9 |
| Birdwatching or other nature study activities | 8.7 | 6.7 | 5.9 | 5.3 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) | 2.2 | 2.8 | 1.4 | 1.5 |
| Downhill skiing | 0.2 | 0.1 | 0.3 | 1.4 |
| Cross-country skiing or ski touring | (x) | 0.1 | 0.2 | 1.1 |
| Snowmobiling | (x) | 0.3 | 0.1 | 1.4 |

$x$ Less than one twentieth of a day.
${ }^{1}$ Average number of activity-days per participant per month. An activity-day was counted for each calendar day on which the respondent said he or she did the activity, even for a very short period.
${ }^{2}$ Not ascertained for certain activities due to limitations on interview length.
figures. This had little effect on those larger aggregates, since most waterskiers identified themselves as both boaters and swimmers in any case. The demographic pattern of waterskiers resembles boaters rather than swimmers, however, and the sport is overwhelmingly a pursuit of youth and young adulthood.

## Swimming Outdoors

Outdoor swimming was already extremely popular in the 1960 survey with relatively little room for growth. There was a rise in the summer participation rate from 45 to 51 percent over the 22 -year period. In this survey, a somewhat larger proportion of the respondents said they swam in outdoor pools rather than in other environments (lakes, rivers, ocean beaches, etc.). Both forms of the sport have a widespread fol'owing among all demographic segments and even hold up fairly well with advancing age. Self-identified swimming enthusiasts ' 18 percent of participants) tended to cite
fitness (exercise-keeping in shape) and social reasons (being with family and friends, liking people who swim) as reasons for their preference.

## Fishing

- Even more than swimming, fishing has been stable since 1960, as inferred from the summer participation rates ( 29 percent in 1960 compared with 30 percent in 1982). More than twice as many men fished as women, but otherwise the sport was well distributed across the various demographic categones. Participation is virtually unrelated to income or education and holds up well with age. Fishing enthusiasts (58 percent of participants!) most frequently cite peace and quiet, getting away from day-to-day living, and enjoying nature and the outdoors as reasons. A much smaller number cited the prospect of catching fish as a motive, but this was not offered on the list of reasons and is, therefore, not directly comparable with the others.


## Hunting

The demographic pattern of hunters among our survey respondents is uniquetotally unlike that of any other activity's participants. The sport is almost entirely male. Of the participants, 88 percent were men and boys. It is also the most predominantly rural pursuit listed in our survey, with nonresidents of a Standard Metropolitan Statistical Area (SMSA) four times more likely to be hunters than central city people-and twice as likely as suburbanites. ${ }^{4}$

As with fishermen, the proportion of Americans who hunt appears to have been stable since 1960. Apart from the predominance of rural males, hunters are very well distributed across the demographic spectrum. Though only 12 percent of our respondents hunted, the sport tops the list for enthusiasm on the part of those who did. Seventy-five percent of the self-identified hunters said they particularly enjoyed the sport, and 28 percent cited it as their absolute favorite outdoor pursuit. Of the hunting enthusiasts, an impressive 71 percent cited enjoyment of nature and the outdoors as a motive. The social aspects were not frequently chosen by companison with other outdoor activities. On the contrary, 30 percent cited solitude, rather than companionship, as a reason why they liked to hunt, while 46 percent said they hunted to get away from day-to-day living or problems. A few said they hunted for the meat but, as with fishing, this consumptive motive was not on the list and hence was not given a fair test.

## Camping

Respondents who said they went backpacking, or camped in developed or primitive campgrounds, or engaged in any other camping activity duning the prior 12 months were counted as camping participants. This is not exactly the same as the camping choice offered in 1960 and 1965, but it should be quite close. It appears (table 3) that camping as a whole has about doubled its population participation rate in the past 22 years. The self-identified campers- 24 percent of the survey's respondents-are well (or at least typically) distributed across the various demographic segments of the sample. Camping enjoys a dedicated following, as evidenced by the 51 percent of participants who cited it as particularly enjoyed and the 18 percent who chose it as the one activity they most enjoyed. The reasons given for enjoying camping were predominantly appreciative
${ }^{4}$ Respondents who lived in an SMSA but not in a central city were presumed suburban. See "place of residence," in chapter 1 , for a more detailed explanation.

## Table 9. Recreation Participation, by Activity and Season

(Selected activities)

| Activity and region | Activity days of participation per month |  |  |  | Activity and region | Activity days of participation per month |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spring | Summer | Fall | Winter |  | Spring | Summer | Fall | Winter |
| Bicycling | 4.0 | 4.7 | 2.9 | 2.2 | Backpacking | 0.8 | 1.2 | 0.5 | 0.2 |
| Northeast | 3.7 | 4.7 | 2.5 | 2.2 | Northeast | 1.6 | 1.2 | . 2 | . 2 |
| North Central | 4.1 | 5.2 | 1.4 | 1.3 | North Central | . 2 | 2.8 | . 2 | . 0 |
| South | 3.3 | 3.9 | 4.1 | 3.3 | South | 1.1 | . 5 | . 4 | . 2 |
| West | 5.0 | 4.8 | 3.3 | 2.4 | West | . 4 | 1.1 | . 9 | . 3 |
| Canoeing or kayaking . | . 0.3 | 1.0 | 0.3 | 0.1 | Camping in developed campgrounds | 0.6 | 1.5 | 0.6 | 0.4 |
| Northeast . . . . . . . | . 2 | 1.0 | . 4 | x | Northeast . . | 0.6 .3 | 2.8 | 0.6 .2 | O. .1 |
| North Central . . . . . . . . . | . 2 | . 9 | . 1 | . 1 | North Central | . 6 | 1.5 | . 4 | . 1 |
| South | . 4 | . 5 | . 2 | . 2 | South . . . . . . | . 7 | 1.5 .7 | . 7 | . 5 |
| West | . 5 | 1.5 | . 2 | . 2 | West : | . 7 | 1.7 | . 9 | . 8 |
| Sailing | 0.8 | 1.4 | 0.4 | 0.2 | Day hiking . . . . . . . . . . . . . . . . | 1.4 | 1.8 | 1.2 | 0.9 |
| Northeast | . 2 | 3.0 | . 1 | . 1 | Northeast . . . . . . . . . . . . . . . | 1.9 | . 9 | . 6 | 1.1 |
| North Central | . 4 | 1.6 | . 1 | . 2 | North Central | 1.6 | 2.2 | 1.6 | . 8 |
| South | 2.0 | . 6 | . 5 | . 4 | South | 1.9 | 2.2 | . 9 | 1.0 |
| West . | 1.6 | . 8 | 1.2 | . 1 | West | . 6 | 1.8 | 1.4 | . 6 |
| Swimming in an outdoor pool | 1.9 | 4.2 | 0.8 | 0.3 | Birdwatching or other nature study activities | 8.7 | 6.7 | 5.9 | 5.3 |
| Northeast | 1.3 | 3.8 | . 5 | . 4 | Northeast . . . . . . . . . . . | 11.3 | 8.5 | 6.9 | 4.6 |
| North Central | 1.0 | 3.8 | . 2 | . 3 | North Central | 11.1 | 6.4 | 5.6 | 7.0 |
| South | 2.4 | 3.8 | . 9 | . 2 | South | 4.1 | 7.6 | 10.4 | 4.9 |
| West | 2.9 | 5.4 | 1.6 | . 6 | West | 7.3 | 4.2 | 2.1 | 2.2 |
| Fishing . . . . | 1.9 | 1.8 | 0.7 | 0.6 | Off-road vehicle driving (includes motorcycles but not snowmobiles) | 2.2 | 2.8 | 1.4 | 1.5 |
| Northeast . . . | 1.4 | 1.8 | . 6 | . 7 | motorcycles but not snowmobiles) <br> Northeast | 2.2 2.9 | 4.8 | 1.4 | 1.5 |
| North Central | 1.9 | 2.2 | . 5 | . 3 |  | 2.9 3.4 | 4.6 1.6 | 1.5 | 2.0 |
| South | 2.6 | 1.7 | . 8 | . 9 |  | 3.4 2.6 | 1.6 2.4 | 1.0 | 2 |
| West | . 9 | 1.8 | . 9 | . 7 | South <br> West | 2.6 .5 | 2.4 3.0 | .9 2.4 | 2.2 1.6 |
| Hunting | 0.6 | 0.5 | 2.2 | 1.1 | Downhill skiing . | 0.2 | 0.1 | 0.3 | 1.4 |
| Northeast | . 5 | . 3 | 2.4 | 2.0 | Northeast | . 6 | . 2 | . 3 | 1.9 |
| North Central | . 6 | . 3 | 3.4 | . 3 | North Central | (x) | (x) | (x) | 1.6 |
| South | . 6 | . 4 | 1.5 | 1.4 | South | . 1 | . 0 | . 2 | . 9 |
| West | . 3 | 1.1 | 1.8 | 1.2 | West . . . . . . . . . . . . . . . . . . . | . 1 | . 2 | . 4 | . 9 |

x Less than one half of one percent.
${ }^{1}$ Average number of activity-days per participant per month. An activity-day was counted for each calendar day on which the respondents said they did the activity, even for a very short period.
(enjoying nature and the outdoors, peace and quiet); change of pace (getting away from day-to-day living, doing something new or different); and social (being with family and friends, liking people who camp).

The same widespread participation pattem was characteristic of the component activities "camping in a developed campground," "camping in a primitive campground," and "other camping." Respondents were not prompted as to the difference between developed and primitive campgrounds. Most applied their own intuitive criteria, but those few who asked were told that primitive campgrounds had no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities. Campgrounds with one or more of these features were to
be considered "developed."

## Backpacking

This is the first nationwide recreation survey to include backpacking-a combination of primitive camping with hiking. Backpacking, though it attracted only 5 percent of our respondents as participants, has become a major concem of land managing agencies. It is the principal means of access to many remote wilderness areas-environments which agencies are just now learning how to manage. Backpacking attracts few Blacks and drops off sharply with age. It attracts disproportionate numbers of the well educated. Otherwise, this pursuit is widely distributed across the income spectrum and other demographic categories.

## Day Hiking

Hiking is another resource-oriented pursuit which shows substantial growth since 1960-to a current participation rate of 14 percent. With the exception of Blacks, only 3 percent of whom said they hiked, participation was very widely distributed across the demographic spectra of our respondent sample. Thirty-seven percent of the participants cited hiking as particularly enjoyed. The reasons given were predominantly in the appreciative and escape categories-enjoyment of nature and the outdoors ( 84 percent!), solitude, peace and quiet, and getting away from day-to-day living or problems. Fitness (to get exercise or keep in shape) was cited as a motive by 42 percent of the self-identified hiking enthusiasts.

Table 10. Percentage Who Gave Selected Reasons for not Engaging in Favorite Activities

| Reason | Percentage of those who cited any activity as particularly enjoyed ${ }^{1}$ | Percentage of those who particularly enjoyed activity ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bicycling | Golf | Tennis | Swimming | Fishing | Hunting | Hiking | Walking | Camping | Softball |
| Not enough time. | 56 | 40 | 56 | 53 | 37 | 53 | 51 | 53 | 41 | 63 | 34 |
| Not enough money. | 20 | 3 | 16 | 6 | 9 | 16 | 20 | 9 | 1 | 31 | 3 |
| No place to do activity . . . . . | 19 | 7 | 2 | 10 | 16 | 9 | 13 | 12 | 4 | 15 | 8 |
| No one to do activity with | 17 | 9 | 10 | 22 | 8 | 8 | 6 | 9 | 8 | 15 | 16 |
| Inadequate transportation or too far to travel | 14 | 3 | 4 | 5 | 9 | 8 | 7 | 11 | 4 | 13 | 5 |
| Crowded activity areas . . . | 13 | 2 | 10 | 13 | 12 | 6 | 5 | 4 | 1 | 13 | 4 |
| Personal health reasons | 8 | 2 | 6 | 4 | 4 | 5 | 5 | 5 | 8 | 4 | 7 |
| Inadequate activity information | 5 | 1 | 0 | 1 | 3 | 3 | 4 | 5 | 1 | 6 | 2 |
| Poorly maintained activity areas | 5 | 2 | 1 | 4 | 4 | 2 | 1 | 2 | 1 | 1 | 2 |
| Personal safety problems in activity areas | 5 | 7 | (x) | 1 | 2 | 2 | 3 | 4 | 7 | 2 | (x) |
| Pollution problems in activity areas | 4 | 1 | - | 1 | 3 | 4 | 1 | 4 | 1 | 1 | - |
| Other reasons (not on list) | 11 | - | - | - | - | - | - | - | - | - | - |

-Not ascertained for certain activities.
${ }^{1}$ Percentages are based on the total ( 76 percent of all respondents) who cited one or more activities they "particularly enjoyed."
${ }^{2}$ These are the ten activities cited as "particularly enjoyed" by the largest numbers of respondents.

## Walking for Pleasure

Roughly equivalent to "taking walks," walking for pleasure was defined, by virtue of being asked after hiking, as the casual residue of recreational walking. The few respondents who asked about the difference were told that hiking was "walking of a substantial nature requiring some degree of preparation, special clothing, supplies, and/or equipment," and that all other recreational walking (except backpacking) was to be counted as "walking for pleasure." Pleasure walking, with 53 percent of the sample participating, was tied with swimming as the most widespread activity in the 1982-83 NRS. The popularity of walking extends across all categones of the respondent sample, with no less than 35 percent participating even in the most disadvantaged groupings. With 42 percent, participation in pleasure walking by the older respondents (aged 60 or more) greatly exceeded their involvement with any other activity in the survey. Seventeen percent of the walkers said they particularly enjoyed the activity, mostly citing fitness and enjoyment of the outdoors as reasons.

## Running or Jogging

As evidenced by this and other surveys, the penetration of running and jogging into the recreational repertoire of the American
people can only be described as extraordinary. In 1960, running was limited to a relatively few young athletes. It was considered so insignificant as not to warrant inclusion in the 1960 National Recreational Survey (which included rock climbing)! In this survey, more than one in four respondents ( 26 percent) claimed to have run or jogged in the prior 12 months, and 19 percent of the runners cited the activity as particularly enjoyed. The proportion of runners among our respondents increases strongly with education and declines sharply with age. (Still, 13 percent of the age 40 to 59 category is respectable for an activity which is regarded as one of the most stressful sports in its demands on the cardiovascular system.) Otherwise, participation in running was well distributed across the demographic categories of respondents, with Blacks participating at a higher rate than Whites.

## Birdwatching or Other Nature Study Activities

Nature study, judged by its rather even distribution across the demographic categories of respondents and the seasons of the year, is one of the most available of outdoor activities. The number of days per year on which participants engaged in this pursuit (table 9) is substantial. Nature study is the only activity on our list which actually
increases in participation-if graduallyacross the entire age spectrum. Given this apparent availability, the population participation rate of 12 percent is unimpressive, as is the 7 percent of participants who cited this activity as particularly enjoyed. The low participation by young people would appear to bode ill for the future of this pursuit. Companison with other surveys indicates, however, that this is too bleak a picture. "Birdwatching or other nature study activities" was included in the NRS to capture, as far as possible in a single label, the wide spectrum of pursuits involving the "appreciative" or "nonconsumptive" enjoyment of nature. A comparison with the 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation suggests that our label captured only a fraction of this type of behavior. ${ }^{9}$
That survey, with a similar but larger sample of a reasonably comparable target population (U.S. residents 16 years old or older), used a much more detailed series of questions to capture a definitionally narrower spectrum of pursuits than our "birdwatching or other nature study activities." The two activity-aggregates of greatest interest in

[^9]Table 11. Percentage of Respondents Who Gave Selected Reasons for Enjoying Favorite Activities

| Reason | Percentage of those who cited any activity as particularly enjoyed | Percentage of those who particularly enjoyed activity ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bicycling | Golf | Tennis | Swimming | Fishing | Hunting | Hiking | Walking | Camping | Softball |
| Enjoy nature and outdoors | 68 | 59 | 51 | 29 | 37 | 68 | 71 | 84 | 61 | 81 | 27 |
| Get exercise or keep in shape | 66 | 55 | 55 | 57 | 52 | 19 | 21 | 42 | 55 | 29 | 55 |
| Get away from day-to-day living or problems. | 56 | 33 | 53 | 31 | 34 | 54 | 46 | 54 | 37 | 66 | 34 |
| Chance to be with family and friends | 53 | 32 | 44 | 39 | 39 | 36 | 27 | 35 | 20 | 58 | 57 |
| It's quiet and peaceful where I go | 47 | 27 | 32 | 9 | 16 | 58 | 48 | 65 | 38 | 59 | 4 |
| Like people who do activity | 34 | 12 | 41 | 25 | 20 | 21 | 20 | 20 | 10 | 29 | 44 |
| Have special equipment for it. Like using equipment. | 27 | 23 | 34 | 20 | 7 | 27 | 26 | 9 | 3 | 26 | 13 |
| Not many people around. . | 25 | 15 | 9 | 6 | 9 | 28 | 30 | 38 | 17 | 32 | 1 |
| To do something new or different | 21 | 13 | 10 | 10 | 10 | 11 | 9 | 16 | 7 | 24 | 8 |
| Other reasons (not on list) | 10 | 4 | 5 | 6 | 5 | 4 | 5 | 5 | 4 | 1 | 7 |

${ }^{1}$ Percentages are based on the total ( 76 percent of all respondents) who cited one or more activities they "particularly enjoyed."
${ }^{2}$ These are the 10 activities cited as "particularly enjoyed" by the largest numbers of respondents.
checking our "birdwatching, etc." data are "primary nonresidential, nonconsumptive, wildlife-related activities," and "primary residential, nonconsumptive, wildlife-related activities." The difference between the two is that residential activities occur within 1 mile of home, and nonresidential activities occur everywhere else. The "primary" specification requires that the recreational occasion have the primary purpose of observing, feeding, photographing, or otherwise enjoying fish or wildlife.

Our "birdwatching, etc." definition is broader on two counts-secondary occasions are not, as such, excluded; and natural phenomena other than wildlife are included, such as plants, rocks, clouds, or stars. Nevertheless, the 1980 Fishing, Hunting, etc. Survey, obtained population participation rates of 49 percent for primary nonconsumptive wildlife-related activities as a whole-whether residential or nonresidential. The rate for the residential segment was 47 percent, and that for the nonresidential was 17 percent. Even the low participation of youth may be less of a cause for concem. This more detailed survey indicates that the proportion of the sample which participates in the nonconsumptive enjoyment of wildlife peaks in young adulthood (ages 25 to 34) with a slow decline thereafter. ${ }^{6}$

[^10]
## Picnics

Many people ( 48 percent of our sample) of all ages and conditions go on picnics, but few cite picnicking as a favorite activity. With a 51-percent participation rate, slightly more women said they picnicked than men (with 45 percent).

## Driving for Pleasure

With summer participation rates of 53 and 52 percent, picnicking and driving for pleasure topped the list of activities in the 1960 National Recreation Survey. In 1965 they maintained their rank and increased their summer participation rates to 57 percent for picnicking and 55 percent for pleasure driving. They have not kept pace in the intenim. Due to Census restrictions on interview length, the summer participation rates were not obtained for these activities in the current survey. However, the 12 -month rate for both activities was 48 percent, and the summer rates could only be the same or (likely) lower. The availability of pleasure driving across all population segments continues to be impressive. With 35 percent participating, pleasure driving was the second most widespread activity among the age 60 and older group in our survey. Only walking for pleasure, with 42 percent, was cited by a larger number of senior citizens.

## Sightseeing

Sightseeing has also fallen off a bit since the 1960 's judged by the criteria stated above (1982-83 twelve-month participation rate compared with the 1960 and 1965 summer rates). Nevertheless, with 46 per-
cent of the sample saying they went sightseeing in the prior 12 months, it is clear that this activity is still very much a part of the nation's leisure patterns. There is a marked tendency of sightseeing participation to increase with more years of schooling. Otherwise, the activity is done widely by all population groups represented in the NRS sample.

## Off-Road Vehicle Driving (Includes Motorcycles but not Snowmobiles)

In addition to motorcycling, this aggregate of off-road motorized travel includes driving four-wheel drives, all-terrain vehicles, and beach buggies. It was not much of a factor in the 1960's and was not included in the earlier surveys. Almost the entire 11 percent participation rate can be considered to represent growth since that time. Driving off-road is well distributed across the various categories of respondents. Only Blacks, with 3 percent, are conspicuously underrepresented. Only 9 percent of the participants cited the sport as "particularly enjoyed."

## Ice Skating

By comparison with the 1960's, ice skating, too, has declined slightly in the percentage of survey respondents participating. Even the 6 percent who did go ice skating tended not to cite the activity as especially enjoyed. This sport is overwhelmingly a pursuit of well-educated, northern, White, young people.

## Table 12. Short-Term Activity Trend Indicators

(Percentage who said they started, stopped, or intended to start activity during a 2-year period)

| Activity | Annual participation rate ${ }^{1}$ | Started in prior 2 years ${ }^{23}$ | Stopped <br> in prior 2 <br> years ${ }^{2}$ - | Expected to start in next 2 years ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| Bicycling | 32 | 5 | 5 | 3 |
| Horseback riding | 9 | 9 | 7 | 15 |
| Golfing | 13 | 21 | 8 | 15 |
| Tennis outdoors | 17 | 17 | 7 | 20 |
| Boating . | 28 | - | 4 | 16 |
| Canoeing or kayaking. | 8 | 27 | 3 | 16 |
| Sailing | 6 | 29 | 3 | 16 |
| Waterskiing . | 9 | - | 8 | 26 |
| Swimming outdoors | 53 | - | (x) | (x) |
| Fishing | 34 | 6 | 5 | 5 |
| Hunting | 12 | 12 | 13 | 7 |
| Camping. | 24 | - | 2 | 5 |
| Backpacking | 5 | 17 | 5 | 14 |
| Day hiking | 14 | 10 | 3 | 9 |
| Walking for pleasure | 53 | - | 1 | 1 |
| Running or jogging. | 26 | - | 5 | 6 |
| Birdwatching or other nature study activities | 12 | 13 | (x) | 2 |
| Picnicking | 48 | - | 1 | (x) |
| Driving for pleasure | 48 | - | (x) | 1 |
| Sightseeing | 46 | - | 1 | 1 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) | 11 | 24 | 3 | 2 |
| Ice skating | 6 | - | 6 | 10 |
| Snow skiing | 9 | - | 5 | 24 |
| Cross-country skiing or ski touring | 3 | 42 | 3 | 33 |
| Snowmobiling | 3 | 24 | 7 | 19 |

-Not ascertained for certain activities.
$x$ Less than one half of one percent.

${ }^{2}$ Expressed as a percentage of current participants (first column).
${ }^{3}$ Based on the difference between age on starting the activity and current age. Not ascertained for certain activities
${ }^{4}$ Persons who said they stopped during the prior 2 years and expect to start in the next 2 years were not included in these percentages.

## Snow Skiing

Snow skiing, by contrast, has enjoyed rapid growth in the interval between 1960 and the current NRS. The 1960 winter participation rate of 2 percent left plenty of room for growth, but a quadrupling of that rate over a 22 -year interval is still impressive. Skiing must be regarded as an upscale sport by any available yardstick, and it declines sharply with age. These conclusions can be drawn for snow skiing in general as well as for downhill skiing, which continues to attract the majonity of snow skiing participants. Almost half ( 49 percent) of the self-identified skiers in our sample said they particularly enjoyed the sport.

## Cross Country Skiing or Ski Touring

Though cross country was the form of skiing originally brought to North America by immigrants from northern Europe, it had declined to insignificance by the 1960's and was omitted, as a separate category, from the 1960 and 1965 surveys. Its resurgence to a population participation rate of 3 percent in 1982-83 ( 4 to 5 percent outside the south) has occurred, therefore, from virtually a zero base. The demographic pattern of participation is similar to that for downhill, except that it is markedly less popular with the city people in our sample and holds up somewhat better into middle age.

## Snowmobiling

Motorized oversnow vehicles have been used for several decades for transportation in regions with long periods of heavy snow cover. The recreational use of these machines was just getting started in the United States in the 1960's, hence snowmobiling was not included in the 1960 and 1965 surveys. The 3 percent of our respondents who said they went snowmobiling can be regarded as representing growth since 1960. The demographic patterning of our self-identified snowmobilers is similar to that of the cross country skiersexcept that snowmobiling is not upscale on the education and income yardsticks.

## Sledding

Judged by the winter participation rates of 9 percent, sledding (which includes tobogganing, tubing-on-snow, etc.) has been flat over the past 22 years with respect to the proportion of Americans who engage in it. The participation rate declines sharply with age, and the predominance of young people among sledders would doubtless be even greater if we had data for the under-12 population. Most of the other apparent demographic relationships of sledding participation (predominance of single persons in large households, etc.) are probably age-related.

## Visiting Zoos, Fairs, or Amusement Parks

With a population participation rate of 50 percent, this first of our "visiting and attending" activities ranked just below swimming and walking for third place on this breadth yardstick. This kind of visitation appears to be almost universally available to our respondents of all ages and conditions. Some of the 26 percent participation by the age 60 and older group is likely a part of the grandparenting process.

## Attending Outdoor Sports Events

Outdoor spectator sports attendance is also widespread among all groupings of the NRS respondents with a population participation rate of 40 percent. A summer companison reveals an approximate doubling of the seasonal rate since 1960 . Women are well represented among sports attendees-a contrast to the traditional male stereotype of the American sports fan.

## Attending Outdoor Concerts, Plays, or Other Outdoor Performances

The final "visiting and attending" activity-and the last listed activity in the survey-includes attendance at a wide
variety of performances, historic pageants, and miscellaneous events. The summer participation rate for this activity more than doubled between the 1960 and the 1982-83 surveys. At 25 percent, however, the 12 -month rate is still well below that for spectator sports. Attendance at outdoor performances nises markedly with increased educational attainment. Otherwise, this is one of the more widespread, and apparently more accessible, forms of outdoor recreation in our survey.

## Other Activities

As noted earlier, respondents were given the opportunity to name as many as four unlisted activities in which they had participated, but few did so. The 12 -month participation rates for those activities are
presented in table A-1 in appendix A. The percentages of survey respondents who cited these activities as particularly enjoyed, also listed in the same table, often exceed the participation rates. This is a further indication that the participation rates are much lower than they would have been had those activities been listed on the questionnaire. The rates are useful for comparisons among the unlisted activities but not between the unlisted and listed activities.

## No Participation

This is the first nationwide recreation survey which analyzes the segment of the respondent sample who said they did nothing at all for recreation in the outdoors during the prior 12 months (table 4). Of the total sample, 11 percent were in this
category-virtually unchanged from the 1960 figure of 10 percent. The preponderance of these people were in the older age groups, did not finish high school, were low on the income scale, and/or lived in one- or two-person households. Almost twice the proportion of Blacks were nonparticipants as compared to Whites.

## SUMMARY

The first two chapters have profiled the 1982-83 NRS respondents on the basis of their participation in outdoor activities and characterized a number of outdoor recreation pursuits on the basis of the numbers and kinds of Americans who engage in them. The next chapter will examine selected aspects of the places where this recreation happens-and of the trips people take to get there.

## CHAPTER 3

## Places and Trips for Outdoor Recreation

Two of the cooperating agencies in the NRS consortium-the Forest Service and the National Park Service-each sponsored a series of questions about the locales where outdoor recreation takes place. The Forest Service required trip and destination data for particular activities to use in a planning model. The National Park Service needed information about the availability and use of outdoor recreation environments in relation to where people live.

## PLACES FOR RECREATION

According to standards published by the National Recreation and Park Association (NRPA) in 1983, a variety of settings are needed to serve the recreation needs of the people in a community. Each type of setting provides different experiences and opportunities to engage in various activities. NRPA recommends provision of "local, close-to-home spaces" and defines these areas as easily accessible by neighborhood residents. These areas typically consist of intensely developed recreation facilities, natural environments, or a combination of both. Facilities on these nearby parks may range from ballfields to picnic areas to specialized equipment for limited populations such as tot lots or senior citizens parks.

In addition, NRPA also recommends the availability of regional parklands. These regional recreation spaces typically serve several communities within 1 hour's drive and are contiguous to or encompass natural environment areas. These areas provide the environment for nature-oriented activities and outdoor recreation dependent on a natural setting, such as boating or hiking. Although not addressed in the NRPA standards manual, other recreation spaces include

[^11]yards or areas located at residences and destination parks located more than 1 hour's travel time from a person's home. The 1982-83 NRS asked the respondents about all four types of recreation spaces-the areas' importance, availability, and personal use during the 12 months prior to the interview. These measures provide an indication of how the recreation estate is distributed, at least as measured through the perceptions of the American public.

The 1977 Nationwide Recreation Survey also asked respondents about the importance, availability, and use of these different outdoor settings. The 1982-83 NRS repeated these questions. Because of methodological differences in the conduct of the two surveys, a strict comparison of the data resulting from these two collection efforts is not recommended.

Table 13 shows that most ( 67 percent) of the respondents said having a yard or play area to use for outdoor recreation was very important. The percentage saying a recrea-
tion area was important decreased as the distance from home increased. However, over half the sample claimed that the existence of parks or outdoor places at each of the four distances was important.

A large majority ( 81 percent) of the respondents had a yard or play area at their residence available for outdoor recreation. Table 14 indicates that people less likely to have a yard included those living in the central city of a SMSA, living in residences with multiple-housing units, in a smaller household, non-White, or with lower incomes. Fewer people ( 63 percent) said they had parks or outdoor recreation areas available within a 15 -minute walk. People living in the central city of an SMSA and in multiunit residences had more nearby parks available, somewhat compensating for the lower likelihood of having a yard located at their residence. People who had a yard or nearby park available for their use were more likely to say these areas were important.

Table 13. Importance of Recreation Areas at Various Distances From Home
(Percentage of respondents assigning levels of importance)

| Area | Very important | Somewhat important | Not very important |
| :---: | :---: | :---: | :---: |
| Yard or play area at residence | 67 | 19 | 14 |
| Neighborhood park and recreation areas (within a 15 -minute walk from home) | 39 | 32 | 30 |
| Regional park and recreation areas (between 15-minute walk and 1 hour's travel time from home). | 34 | 36 | 29 |
| Destination park and recreation areas (more than 1 hour's travel time). | 25 | 27 | 48 |

## Table 14. Availability of Yards and Nearby Recreation Areas

(Percentage of respondents, by selected demographic characteristics, who said they had yards or neighborhood recreation areas available)

| Characteristic | Yard | Neighborhood area | Characteristic | Yard | Neighborhood |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total sample | 81 | 63 | Number of persons in household |  |  |
|  |  |  | 1. | 65 | 63 |
| Number of housing units in residence |  |  | 2 | 78 | 62 |
|  |  |  | 3 | 85 | 66 |
|  |  |  | 4 | 88 | 63 |
|  | 90 | 62 | 5 or more | 85 | 63 |
| 2. | 74 | 81 | Race |  |  |
| 3. | 50 | 88 | White | 83 | 63 |
| 4. | 44 | 72 | Black and other | 70 | 65 |
| 5 to 9. | 52 | 67 |  |  |  |
| Mobile home | 47 | 71 |  |  |  |
|  | 73 | 34 | Annual family income (dollars) <br> Less than 6,000 | 67 | 58 |
|  |  |  | 6,000 to 9,999 | 72 | 59 |
| Place of residence |  |  | 10,000 to 14,999 | 79 | 61 |
| SMSA, ${ }^{1}$ central city | 69 | 81 | 15,000 to 24,999 | 86 | 65 |
| SMSA, not central city | 85 | 64 | 25,000 to 49,999 | 88 | 66 |
| Not SMSA. | 87 | 48 | 50,000 and over | 89 | 74 |

${ }^{1}$ Standard Metropolitan Statistical Area.

The use of parks or outdoor areas was inversely related with distance-the closer the area to a person's residence, the greater number of days it was used. However, as table 15 shows, a majority of the respondents used outdoor recreation areas at each distance at least once during the year. Those people who did not indicate they had a yard or nearby park available were not questioned about their use of these two areas.

## TRIPS AND OUTINGS FOR RECREATION

Only about a third of the respondents ( 32 percent) to the 1982-83 NRS answered
the questions about trips and outings. The subsample included persons aged 16 years or older who had made an outing or trip during the 12 months prior to the survey interview "primarily" to engage in at least one of the following activities: canoeing or kayaking, freshwater fishing other than trout or salmon, hunting other than big game, backpacking or hiking, camping in campgrounds, any other camping not in campgrounds, driving motorized vehicles off improved roads (including motorcycles), cross country skiing or ski touring, and snowmobiling. Information was collected only about trips and outings taken for the primary purpose of engaging in the specific recreation activity. The Forest Service, as

## Table 15. Utilization of Outdoor Recreation Opportunities

(Percentage of respondents using outdoor recreation areas at various distances from home)

|  | Days area used in prior 12 months |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Area | Never | 1 to 2 | 3 to 10 | More than |  |  |

[^12]sponsor of this series of questions, wanted to apply the travel and cost information to each specific activity, therefore they excluded multiple-purpose trips. The activities were, moreover, selected with a view to the data requirements of the assessment process mandated by the Forest and Range Lands Renewable Resources Planning Act. Hence the data analyzed here reflect only a limited sample of the total recreation travel engaged in during a 12 -month period by a subsample of the NRS respondents. The activity definitions also reflect Forest Service analytical requirements. They frequently differ from those used in the rest of the survey (e.g., "non-big-game hunting"). The results should be interpreted with these limitations in mind.

Table 16 shows the percentage of respondents who reported information about outings or trips. The table also displays the percentage of the participants (respondents who said they did one of the nine selected activities in the past year) who took a trip primarily for that activity. A higher percentage ( 16 percent) traveled to go freshwater fishing than to engage in any of the other selected activities. As shown, of all the people who engaged in at least one of the nine selected activities, 70 percent took a trip or outing to pursue that activity. Participants were more likely to travel to engage in camping in campgrounds or hunting other-than-big-game animals. They were less likely to take trips to go snowmobiling or to go driving off improved roads.
Table 17 illustrates the number and percentage of trips or outings by activity and length of the outing. Figures in this table were left unweighted in order to show the numbers of trips or outings. Ovemight trips accounted for half of the trips taken in these
activities. More trips or outings were taken to engage in fishing and campground camping than in any of the other activities.

For the remainder of the tables, information about other camping, cross country skiing, and snowmobiling has been eliminated because of small subsample size.

Respondents were asked about their most recent trip taken for each activity. To aid the respondent in recalling the trip, the interviewer asked the name of the main place where the activity was pursued. This information was recorded only to assist the interviewer in the conduct of the survey. Therefore, references to place refer to a specific area identified by the respondent.

Information about transportation mode, size of travel party, length of stay, distance and time traveled, and fees or charges paid were collected about each activity trip.

Table 18 aggregates the information about each activity trip. Multiple trips per year were taken to go driving off improved roads, freshwater fishing, or non-big-game hunting. People took shorter trips, in terms of time and distance, to drive off-road vehicles or to go freshwater fishing. More distance was traveled to go backpacking or hiking, but people traveled a longer period of time to go camping in campgrounds. Cars, trucks, or vans transported the majority of the recreation travelers. Pick-up campers,

## Table 16. Trips or Outings to Engage in Selected Outdoor Recreation Activities

(Percent)

| Activity | Respondents who took trip to engage in selected activity | Participants who took trip to engage in selected activity ${ }^{1}$ |
| :---: | :---: | :---: |
| All activities ${ }^{2}$ | 32 | 70 |
| Canoeing/kayaking | 4 | 54 |
| Freshwater fishing other than trout or salmon. | 16 | 54 |
| Hunting, other than big game | 7 | 63 |
| Backpacking/hiking . | 6 | 43 |
| Campground camping . | 13 | 68 |
| Other camping | 2 | 52 |
| Off-road driving. | 4 | 39 |
| Cross-country skiing | 2 | 57 |
| Snowmobiling | 1 | 40 |

${ }^{1}$ Participants are those respondents who said they engaged in the activity once or more in the 12 months prior to the interview-whether or not on a trip or outing taken specifically for that purpose.
${ }^{2}$ Refers to activities listed on this table only.
camper-vans, and motor homes represented the second most popular mode of travel for not only camping but canoeing/kayaking, fishing, and hunting as well. Nearly 30 percent of the travelers driving off-road vehicles drove mopeds or motorcycles for travel to the recreation site as well.

The majority ( 80 percent) of travelers went to one destination to pursue the activity. A greater percentage of people traveling to backpack/hike or camp in campgrounds visited other places to do the same activity. Most trips regardless of activity lasted 2 days. Campground campers tended to stay longer ( 4 days) and off-road drivers typically completed their outing in a day or less.

Travel for these activities tended to be a social event, with an average of four persons in the traveling party. Canoeing or kayaking trips appeared to be taken in larger groups, averaging seven persons. Less than a third of the travelers paid any entry fees, activity fees, rentals, or other charges to engage in the activity. However, the majority of canoeing/kayaking or campground camping trips required payment of some fees. People who traveled to hunt or to fish in freshwater paid the highest fees.

The Recreation Opportunity Spectrum (ROS) is a system used by the Forest Service and other land-managing agencies to classify their land areas. The spectrum includes a range of settings from highly developed, more urban environments to wilderness areas with no evidence of human intrusion. According to the theory behind the ROS system, each setting results in a different experience for the recreationist, and land managers strive to provide a balance of these experiences. Therefore, the respondents were asked to provide further details about the environment in which they

Table 17. Trips for Recreation, by Activity and Length of Trip

| Activity | Length of trip |  |  |  |  |  | All trips ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 hours or less |  | 5 to 24 hours |  | Over 24 hours |  |  |  |
|  | Number | Percent ${ }^{2}$ | Number | Percent ${ }^{2}$ | Number | Percent ${ }^{2}$ | Number | Percent ${ }^{2}$ |
| All trips or outings | 573 | 20 | 863 | 30 | 1455 | 50 | 2909 | 100 |
| Canoeing/kayaking | 34 | 15 | 91 | 44 | 82 | 40 | 208 | 7 |
| Freshwater fishing | 222 | 25 | 354 | 39 | 327 | 35 | 905 | 31 |
| Hunting | 79 | 22 | 128 | 36 | 145 | 41 | 355 | 12 |
| Backpacking/hiking | 103 | 32 | 92 | 29 | 125 | 39 | 320 | 11 |
| Campground camping | - | . | 83 | 12 | 699 | 100 | 703 | 24 |
| Other camping | - | - | 14 | 16 | 87 | 100 | 88 | 3 |
| Off-road driving | 87 | 48 | 54 | 32 | 42 | 23 | 187 | 6 |
| Cross-country skiing | 37 | 39 | 34 | 36 | 23 | 25 | 94 | 3 |
| Snowmobiling. | 11 | 22 | 13 | 27 | 25 | 51 | 49 | 2 |

[^13]NOTE: Figures are unweighted.

Table 18. Characteristics of Trips and Outings

|  |  |  | Trips or outings to engage in: |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: |

'Rounded to the nearest hour. ${ }^{2}$ Rounded to the nearest day. ${ }^{3}$ Rounded to the nearest person.
'Rounded to the nearest dollar. Zeroes (trips not subject to a user fee) not included in average.
Table 19. Destination Characteristics of Trips and Outings

|  |  |  |  | Trips or outings to engage in: |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |

${ }^{1}$ Figures based only on outings or trips where the activity was pursued in a place away from cities or towns.
${ }^{2}$ Refers to roads or trails open to motor vehicle use. For outings or trips to drive off improved roads, the question was rephrased to refer to the distance from an improved road, rather than a trail or road open to motor vehicle use.
${ }^{3}$ Figures represent an average on a scale from 1 to $5.1=$ not noticeable; $5=$ extremely noticeable and prominent.
recreated at their trip destination in order to place their experience in an ROS category. Table 19 describes the information obtained about these trips. As shown in the table, nearness of the place to an urban area, accessibility of the place to motor vehicles, number of people encountered while pursuing the activity, and prominence of human activity or presence represent measures which place the experience on a wilderness-to-urban spectrum.

A higher percentage of trips for backpacking or hiking took place in the wilder settings. More freshwater fishing trips and trips for camping in campgrounds took place at the opposite end of the spectrum, in strongly man-modified environments. However, the majority of trips or outings tended to depict wildland experiences.

The figures in tables 18 and 19 were based on a small number of cases. The reader is cautioned against using these data to generalize about trips for outdoor recreation. ${ }^{2}$
"For further information and more detalled analyses about the use of the data in the travel cost model and ROS planning, contact the Southeastern Forest Experiment Station, USDA Forest Service, Athens, GA 30602.

## SUMMARY

Most respondents had access to both yards and neighborhood parks for close-tohome recreation. They used nearby recrea-
tion areas more frequently than those farther away, but most took at least one trip to an outdoor recreation destination more than an hour's travel from home during the 12 months prior to the interview.
Participants in certain activities were queried about the details of trips they took to engage in those pursuits. Most respondents in these activities took an average of six trips traveling about 150 miles to reach their destination. A large majority traveled by automobile, and stayed an average of 2 days. Four people usually made up the traveling party, and approximately $\$ 20$ per person were spent on user fees for the particular activity. Differences in these averages by activity illustrate the types of experiences generally encountered by outdoor recreationists.
Hovery

## CHAPTER 4

## Americans and Their National Parks

All respondents to the 1982-83 NRS were shown a list of the 48 national parks and asked to recall which, if any, of them they had ever visited. In this chapter, the results of this question will be used to examine the penetration of national park visits into the life-experience of various segments of the respondent sample. Where possible, comparisons will be drawn to the responses to a virtually identical question in a methodologically similar survey conducted in 1955. ${ }^{2}$

Based on the respondent's answers about his or her past experience of the national parks and future expectations of visiting them, two further sets of questions were asked to elicit public opinion about how park operations should be paid for and how park visits should be rationed in case of overcrowding. The responses to these questions will also be examined briefly in this chapter.

## WHY ASK PEOPLE ABOUT NATIONAL PARKS?

The National Park Service, which sponsored the questions examined in this chapter, currently administers 334 areas and sites, all of which are visited by the recreating public. Only 48 of these have been established by Congress as national parks. The rest range from remote national monuments through a variety of historic sites to the Statue of Liberty and the White House. Together with the national parks, these resources reflect the full richness and

[^14]complexity of the American heritage. The National Park Service, entrusted with their care, is interested in the various interactions between all of these areas and the American public.

It was deemed impractical, however, to cover such a large and conceptually unwieldy aggregation in a survey of the general public. Hence this series of questions was based on the 48 national parks, narrowly defined, and the respondent was shown the complete list of them to minimize doubt as to what was meant. This limitation has two principal effects on this examination of the results:

1. A direct comparison to the 1955 survey, referred to earlier, is possible and,
2. The responses to the public opinion questions are directly applicable only to the 48 national parks. It is not unreasonable to expect, however, that public attitudes would be similar in the case of other resources-other Federal lands, State parks, etc.-which provide similar visitor services, such as camping or interpretive programs.

## NATIONAL PARK VISITS AS AN AMERICAN EXPERIENCE-1950's AND 1980's COMPARED

The park visit experience will be examined first as it affects the entire NRS sample of today's United States population. A comparison will be made to the situation in 1955 as reflected in the Audience Research survey mentioned earlier. Finally, the 1982-83 sample of respondents will be broken down into the various demographic categories introduced in chapter 1 to see in what ways their national park visit experiences are similar or different.

## "Audience Penetration" of Today's National Parks

Table 20 lists the 48 national parks by region and, in the first column, the percentage of the total sample of 5,757 NRS respondents who recalled ever having visited each of them. The second and third columns-listing, respectively, the estimated total number of visits to the park in 1982 (in thousands) and the year the park was established-are included to help in interpreting the "audience penetration" figures in the first column.

Great Smoky Mountains National Park ranks first both in 1982 visits and in the percentage of the NRS sample who recalled having gone there. The Alaska parks, and Isle Royale National Park in Michigan, are near the bottom of both measures. Apart from these extremes, however, the numbers in the first and second columns are almost totally unrelated. A comparison between two of these parks, Acadia and Redwood, will illustrate the very different roles which the various national parks appear to fulfill for the visiting public.

Acadia National Park ranks just behind Great Smoky Mountains in 1982 visits with an impressive 3.6 million. However, although it has existed as a national park since 1919, only 4 percent of the NRS respondents recalled having gone there. By contrast, Redwood National Park recorded fewer than half a million visits in 1982, but 13 percent of our respondents said they had gone there. For a relatively new national park-established in 1968-such a penetration into the life-experience of the American people is most impressive.

Clearly, many millions of Americans have placed Redwood National Park on their lifetime must list of places to see, while relatively few have made a habit of going there. The reverse appears to be the case for Acadia which, if our sample accurately reflects the situation, draws its visitors from a

Table 20. National Park Visits

| Region/ <br> National park | Percentage of respondents calling visit | Thousands of visits to park in $1982^{1}$ | Year established ${ }^{2}$ | Region/ <br> National Park | Percentage of respondents calling visit | Thousands of visits to park in $1982^{1}$ | Year established ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NortheastAcadia (Maine) | 4 | 3572 | 1919 | West |  |  |  |
|  |  |  |  | Channel Islands (California) | 2 | 172 | 1980 |
| South |  |  |  |  |  |  |  |
| Big Bend (Texas) | 3 | 180 | 1944 | Crater Lake (Oregon) | 6 | 436 | 1902 |
| Biscayne (Florida) | 3 | 348 | 1968 | Glacier (Montana) | 6 | 1666 | 1910 |
| Everglades (Florida) | 10 | 550 | 1934 | Grand Teton (Wyoming) | 9 | 2534 | 1929 |
| Great Smoky Mountains |  |  |  |  |  |  |  |
| (N.Carolina, Tennessee) | 20 | 8178 | 1934 | Kings Canyon (California) | 4 | 531 | 1890 |
|  |  |  |  | Lassen Volcanic (California) | 3 | 415 | 1916 |
| Guadalupe Mountains (Texas) | 2 | 141 | 1972 |  |  |  |  |
| Hot Springs (Arkansas) | 7 | 1016 | 1880 | Mount Rainier (Washington) | 6 | 1007 | 1899 |
| Mammoth Cave (Kentucky) | 8 | 1527 | 1941 | North Cascades (Washington) | 3 | 857 | 1968 |
| Shenandoah-Skyline Drive(Virginia) . . . . . . . . . |  |  |  | Olympic (Washington) | 4 | 2479 | 1938 |
|  | 12 | 1752 | 1935 | Redwood (California) | 13 | 467 | 1968 |
|  |  |  |  | Sequoia (California) | 9 | 1021 | 1890 |
| Midwest |  |  |  | Yellowstone (Wyoming, |  |  |  |
| Badlands (S. Dakota) | 10 | 1031 | 1929 | Montana, Idaho) | 15 | 2369 | 1872 |
| Isle Royale (Michigan) | 1 | 13 | 1931 | Yosemite (California) | 11 | 2416 | 1890 |
| Theodore Roosevelt ( N . Dakota) | 3 | 677 | 1947 |  |  |  |  |
|  |  |  |  | Alaska,Hawall, Virgin Island |  |  |  |
| Wind Cave (S. Dakota) | 3 | 467 | 1903 | Denali (Alaska) | 1 | 322 | 1917 |
| Voyageurs (Minnesota) | 1 | 144 | 1975 | Gates of the Arctic (Alaska) | (x) | 1 | 1980 |
|  |  |  |  | Glacier Bay (Alaska) | 1 | 90 | 1925 |
| Southwest |  |  |  | Haleakala (Hawaii) | 3 | 772 | 1960 |
| Arches (Utah) . | 2 | 339 | 1971 | Hawaii Volcanoes (formerly |  |  |  |
| Bryce Canyon (Utah) | 6 | 472 | 1924 | Hawaii National Park) | 4 | 1995 | 1916 |
| Canyonlands (Utah) | 2 | 97 | 1964 | Katmai (Alaska) | (x) | 14 | 1980 |
| Capitol Reef (Utah) | 1 | 290 | 1971 | Kenai Fjords (Alaska) | (x) | 16 | 1980 |
| Carlsbad Caverns (New Mexico) | 9 | 782 | 1930 |  |  |  |  |
| Grand Canyon (Arizona) | 17 | 2293 | 1908 |  |  |  |  |
| Mesa Verde (Colorado) | 5 | 603 | 1906 | Kobuk Valley (Alaska) | (x) | 4 | 1980 |
| Petrified Forest (Arizona) | 10 | 712 | 1962 | Lake Clark (Alaska) | (x) | 10 | 1980 |
| Rocky Mountain (Colorado) | 15 | 2564 | 1915 | Wrangell-Saint Elias (Alaska) | (x) | 15 | 1980 |
| Zion (Utah) | 6 | 1246 | 1919 | Virgin Islands | 2 | 674 | 1956 |

$x$ less than one half of one percent.
${ }^{1}$ Source: U.S. Department of the Interior, National Park Service. 1983. National park statistical abstract 1982. Denver, Colorado.
${ }^{2}$ Source: U.S. Department of the Interior, National Park Service. 1982. Index of the national park system and related areas. Government Printing Office, Washington, DC.
small segment of the population. To amass such impressive annual visitation totals, therefore, it must be very highly regarded by a loyal-if limited, and probably regionalclientele. It is evident from this comparison that it would be hazardous to rely on any single measure of value, performance, or output in the case of a phenomenon as complex as a national park.

The foregoing comparison also illustrates the reason why the date of establishment is included in the third column of table 20. All 48 currently existing national parks have not had an equal chance to establish themselves in the American consciousness and attract visitation. Some of the visits recalled by our respondents occurred many decades ago. Indeed, one respondent's most recent national park visit was in 1903. Hence older
parks have had a greater opportunity to become part of the direct experience of the American people. ${ }^{3}$ This should be kept in mind, especially, when interpreting the percentage figures for the most recently established national parks.

[^15]
## 1950's and 1980's Compared

In table 21, a comparison is made between the current NRS and the 1955 Survey of the Public Concerning the National Parks. The figures listed in each case are the percentages of the total sample of respondents who said they recalled having visited each park. Conceptually, this is the same measure of audience penetration as was used in the first column of table 20. Two differences should be noted:

1. There were only 28 national parks in 1955. Only these are available for comparison, and they are the only ones listed in table 21. In fact, one of these, Platt National Park (Oklahoma), lacks any entry for the current survey. In 1976, it was redesignated as Chickasaw National

## Table 21. Changes in Lifetime Recall of National Park Visits

(Percentage of respondents in 1955 and 1982-83 surveys who recalled having visited selected national parks ${ }^{12}$ )

| National park | $\begin{array}{r} 1955 \\ \text { survey } \end{array}$ | 1982 to 1983 survey | National park | $\begin{array}{r} 1955 \\ \text { survey } \end{array}$ | 1982 to <br> 1983 <br> survey |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Geat Smoky Mountains | 11 | 21 | Zion | 3 | 7 |
| Yellowstone . . . . . | 11 | 17 | Acadia | 2 | 4 |
| Grand Canyon | 10 | 18 | Lassen Volcanic | 2 | 3 |
| Carlsbad Caverns | 7 | 10 | Mesa Verde | 1 | 6 |
| Yosemite | 6 | 13 | Olympic | 1 | 4 |
| Hot Springs. | 5 | 7 | Wind Cave | 1 | 4 |
| Mammoth Cave | 5 | 9 | Big Bend | 1 | 3 |
| Shenandoah | 5 | 13 | Platt | 1 | $\left({ }^{2}\right)$ |
| Rocky Mountain | 5 | 16 | Hawaii Volcanoes (form- |  |  |
| Sequoia | 4 | 10 | erly Hawaii National Park) | 1 | 5 |
| Everglades | 4 | 11 | Kings Canyon | 1 | 4 |
| Bryce Canyon | 4 | 7 | Denali (formerly Mt. |  |  |
| Mt. Rainier | 4 | 7 | McKinley) | 1 | 1 |
| Grand Teton | 4 | 10 | Isle Royale | (x) | 2 |
| Crater Lake . | 3 | 7 | Did not recall having |  |  |
| Glacier | 3 | 1 | visited a national park | ${ }^{3} 63$ | ${ }^{3} 44$ |

$x$ Less than one half of one percent.
${ }^{1}$ Respondents age 21 or older.
${ }^{2}$ These were the 28 national parks existing in 1955. Platt National Park was redesignated Chickasaw National Recreation Area in 1976 and was excluded from the 1982-83 survey.
${ }^{3}$ Total number of parks available for visiting was 28 in 1955 and 48 in 1982-83.

Recreation Area and hence did not meet the criteria for inclusion in the 1982-83 list.
2. The 1955 survey was limited to persons 21 years of age or older. To meet this criterion, respondents younger than 21 were eliminated from the 1982-83 sample before the percentages in the second column of table 21 were generated. This accounts for the minor discrepancies in 1982-83 percentages between table 20 and 21.
A comparison of the 1955 and current percentages of respondents who recalled visits indicates that, to the degree that both samples are representative, all the thenexisting national parks have increased, at least slightly, their penetration into the lifeexperience of the American people. In most cases, the percentage recalling a visit has at least doubled. In only a few instancesnotably advances by Shenandoah, Rocky Mountain, and Grand Teton-did the relative standing of the national parks on this audience penetration measure shift dramatically.

## National Parks -Those Who Go and Those Who Don't

In the 1955 Audience Research survey, 63 percent of the respondents did not recall ever having visited a national park. In the 1982-83 NRS, less than half-46 percent of the sample-were unable to remember at
least one national park visit. ${ }^{4}$ As will be seen in the first column of table 22, these nonvisitors are concentrated in the lower educational and income categories, and Blacks are greatly overrepresented among them. The last column of the table-the people with a life list of at least 10 national parks-shows essentially a mirror image of this pattern.
The demographic segments most seriously underrepresented in this heavy visitor group are Blacks (who are altogether absent) and those of low educational attainment.

## PAYING FOR NATIONAL PARKS WHO AND HOW MUCH?

Reflecting a widespread concern with recreation fee policy, the National Park Service sponsored four NRS questions to elicit public opinion on this subject. The survey pretest showed that younger respondents found these questions irrelevant and difficult to answer. In the full-scale survey therefore, these fee and policy questions were asked only of respondents 16 years old or older. This limitation applies to the remainder of this chapter and to the

[^16]following chapter on Trends in Time and Money Expenditures as well.

The first two fee questions elicited the respondent's maximum willingness to pay for a one-time entry as well as for an unrestricted annual pass to the national parks. For these questions, the spectrum of respondents was further restricted to those who had indicated they were at least "somewhat likely" to visit a national park in the next 3 years. The results are depicted in table 23. The first four columns list the percentages of respondents who said they would pay various maximum one-time entry fees, and the final four columns give the same information for annual passes.

Maximum willingness to pay declines clearly with age. It increases, though less consistently, with income. There is little difference between educational levels or between people who claim various likelihoods of visiting a national park in the future.

These willingness-to-pay questions are predictions of personal behavior. Little can be inferred from them regarding the respondent's perception of the fairness, wisdom, or desirability of various fee policies. Therefore, two direct, fee-policy questions were also asked. Here, since these issues of fiscal policy are relevant to the population at large, the respondents with little likelihood of future national park visits were again included.

In the first of these fee policy questions, the respondent was asked to choose the most desirable of five ways of splitting an assumed 5 -dollar-per visit park operating cost between the visitor (fees) and the taxpayer. The choices ranged from "all from the visitor" through "half and half" to "all from the taxpayer." The results, displayed in table A-2, in appendix A, indicate that cost sharing between the taxpayer and the visitor was preferred by 53 percent of the eligible respondents. Seven percent said they preferred to have no visitor fees (to pay the whole operating cost from taxes), but 28 percent said to charge the entire cost to the visitor.

In the last of the national park fee questions, the respondent was shown a list of four services provided to park visitors, and asked "As I read the list, please tell me whether the costs of each should be paid for by visitors or from taxes." The results are summarized in tables A-3 through A-6, in appendix A. Again, the response pattern was highly consistent across the various categories of respondents. Regardless of previous national park experience or expectation of future visits, respondents chose visitor charges over taxes by margins of 2 or 3 to 1 . This was especially pronounced in the case of "ndes on buses or other ways of getting around the park" with 61 percent favoring visitor fees, and least so for "special talks and exhibits" with 41 percent. The other two services-"operating campgrounds" and "operating advance reservation systems

Table 22. Number of National Parks Ever Visited, by Demographic Characteristic

|  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |

for camping and other services"-fell between these extremes.

This was a forced-choice question. The respondent was given no alternatives beyond those of charging the visitor or charging the taxpayer. Perhaps the most remarkable result was that a substantial proportion of the respondents ( 17 to 26 percent) rejected both of these choices and insisted that the four services should be paid for by a combination of fees and taxes. This insistence on the middle ground, in the absence of any indication that this would be an acceptable answer, suggests that a preference for costsharing of visitor service expenses is very widespread among the public-that a much higher percentage would have chosen the combination option if explicitly offered.

## HOW TO RATION NATIONAL PARKS - RANKING OF FOUR OPTIONS

Peak season crowding has become a major problem in the more popular national parks. Various methods of limiting visits during such periods have been under discussion for many years. A question was inserted in the 1982-83 NRS to test the public's reaction to four such possibilities. Again, the response pattern was consistent across our groupings of respondents with various past park experiences and different expectations of future visits. The non-park-visiting segment deviated somewhat from this consistency, in that they, and they alone, showed a substantial tendency to reject the rationing of park visits outright. The results of the responses to this rationing question are summarized in tables A-7 through A-10 in appendix A.

Of the four rationing methods presented, letting people reserve park visits ahead of time with reservations taken on a first-come, first-serve basis" was clearly the most popular, with 65 percent of the respondents citing it as their first choice. Next was "letting people apply in advance to reserve their park visits, then drawing names to find out who gets reservations." This option received 42 percent of the second choice votes. The other two rationing methods-turning people away who come after a limit of people are in the park" and "charging an extra 5 dollars per adult visitor duning the summer in crowded parks" were not ranked highly by most of the survey respondents.

## SUMMARY

Chapters 3 and 4 have examined, from the recreation visitor's standpoint, the various locales-from back yards to national parks-where outdoor recreation takes place. In the final two chapters, the focus will shift back to individuals where they live. These chapters will examine people's changing commitments of time, money, and personal involvement to outdoor recreation throughout the life cycle.

## Table 23. Maximum Acceptable National Park Entry Fees

(Percentage of respondents who said they would pay various maximum amounts for one-time entries and annual passes to national parks by demographic characteristic ${ }^{1}$ )

| Demographic characteristic | Maximum amount for one-time entry (dollars) |  |  |  |  | Maximum amount for annual pass (dollars) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} .25 \text { to } \\ 2.49 \end{array}$ | $\begin{array}{r} 2.50 \text { to } \\ 7.49 \end{array}$ | $\begin{array}{r} 7.50 \text { to } \\ 14.99 \end{array}$ | $\begin{array}{r} 15.00 \text { to } \\ 29.99 \end{array}$ | $\begin{array}{r} 30.00 \text { to } \\ 100.00 \end{array}$ | $\begin{array}{r} 5.00 \text { to } \\ 9.99 \end{array}$ | $\begin{array}{r} 10.00 \text { to } \\ 19.99 \end{array}$ | $\begin{array}{r} 20.00 \text { to } \\ 29.99 \end{array}$ | $\begin{array}{r} 30.00 \text { to } \\ 59.99 \end{array}$ | $\begin{array}{r} 60.00 \text { to } \\ 100.00 \end{array}$ |
| Total sample | 17 | 53 | 20 | 8 | 2 | 13 | 18 | 35 | 22 | 12 |
| Likelihood of visiting a national parl |  |  |  |  |  |  |  |  |  |  |
| Very likely in next 12 months ... | 17 | 51 | 21 | 9 | 2 | 11 | 17 | 39 | 21 | 12 |
| Less likely in next 12 months but very likely in next 3 years .... | 14 | 53 | 22 | 9 | 3 | 11 | 19 | 35 | 23 | 13 |
| Somewhat likely in next 3 years. | 18 | 55 | 19 | 7 | 2 | 16 | 18 | 32 | 22 | 11 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 17 | 53 | 20 | 8 | 3 | 12 | 19 | 35 | 20 | 14 |
| Female | 17 | 53 | 20 | 8 | 2 | 14 | 17 | 35 | 24 | 11 |
| Age |  |  |  |  |  |  |  |  |  |  |
| 16 to 24 | 15 | 52 | 19 | 10 | 4 | 10 | 11 | 31 | 30 | 19 |
| 25 to 39 | 17 | 55 | 21 | 7 | 1 | 13 | 19 | 38 | 22 | 9 |
| 40 to 59 | 19 | 51 | 21 | 7 | 2 | 16 | 22 | 36 | 15 | 11 |
| 60 and over | 17 | 54 | 19 | 9 | 1 | 17 | 25 | 33 | 15 | 11 |
| Education |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 24 | 49 | 16 | 9 | 3 | 21 | 18 | 27 | 20 | 14 |
| High school. | 19 | 55 | 19 | 6 | 1 | 14 | 20 | 35 | 21 | 11 |
| Less than 4 years of college | 16 | 51 | 22 | 8 | 2 | 12 | 19 | 39 | 20 | 10 |
| 4 or more years of college | 12 | 56 | 22 | 8 | 2 | 10 | 22 | 41 | 21 | 6 |
| Race |  |  |  |  |  |  |  |  |  |  |
| White | 17 | 54 | 20 | 7 | 2 | 13 | 18 | 36 | 22 | 12 |
| Black and other | 20 | 41 | 19 | 14 | 6 | 17 | 15 | 31 | 21 | 17 |
| Annual family income (dollars) |  |  |  |  |  |  |  |  |  |  |
| Under 5,000. | 23 | 46 | 19 | 6 | 7 | 17 | 19 | 22 | 27 | 15 |
| 5,000 to 14,999 | 20 | 51 | 19 | 9 | 1 | 15 | 18 | 30 | 22 | 16 |
| 15,000 to 24,999 | 17 | 54 | 21 | 7 | 2 | 12 | 18 | 36 | 23 | 11 |
| 25,000 to 49,999 | 16 | 56 | 20 | 7 | 1 | 13 | 18 | 38 | 21 | 10 |
| 50,000 or more | 12 | 45 | 30 | 10 | 2 | 11 | 17 | 47 | 18 | 8 |
| Family size |  |  |  |  |  |  |  |  |  |  |
| 1 | 17 | 51 | 20 | 10 | 2 | 14 | 19 | 36 | 18 | 13 |
| 2 | 14 | 54 | 22 | 9 | 2 | 11 | 20 | 35 | 24 | 11 |
| 3 | 20 | 52 | 20 | 6 | 2 | 15 | 16 | 36 | 23 | 10 |
| 4 | 16 | 56 | 20 | 7 | 1 | 11 | 19 | 38 | 23 | 9 |
| 5 or more | 21 | 51 | 18 | 8 | 3 | 17 | 16 | 30 | 18 | 19 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 18 | 54 | 19 | 7 | 1 | 15 | 21 | 36 | 20 | 9 |
| Widowed, divorced, separated | 19 | 49 | 23 | 8 | 1 | 16 | 18 | 35 | 18 | 13 |
| Never married. | 15 | 51 | 20 | 10 | 4 | 9 | 12 | 33 | 27 | 19 |
| Household cars owned |  |  |  |  |  |  |  |  |  |  |
| None | 17 | 47 | 23 | 11 | 3 | 15 | 20 | 30 | 19 | 16 |
| 1. | 18 | 52 | 19 | 10 | 2 | 15 | 16 | 32 | 22 | 14 |
| 2 | 18 | 53 | 20 | 8 | 1 | 12 | 20 | 35 | 23 | 9 |
| 3. | 16 | 54 | 21 | 7 | 2 | 14 | 18 | 34 | 23 | 12 |
| 4 or more | 14 | 54 | 22 | 6 | 4 | 12 | 15 | 40 | 18 | 15 |
| Employment status |  |  |  |  |  |  |  |  |  |  |
| At work. | 16 | 54 | 20 | 8 | 2 | 11 | 19 | 36 | 22 | 12 |
| With job, not at work | 18 | 50 | 24 | 7 | 1 | 21 | 19 | 33 | 17 | 9 |
| Unemployed | 20 | 62 | 11 | 7 | 0 | 15 | 23 | 25 | 22 | 14 |
| Keeping house | 20 | 53 | 23 | 6 | 1 | 19 | 17 | 35 | 20 | 10 |
| Going to school | 23 | 38 | 23 | 14 | 2 | 13 | 7 | 26 | 34 | 20 |
| Unable to work | 27 | 47 | 19 | 8 | 0 | 16 | 14 | 39 | 31 | 0 |
| Retired | 20 | 51 | 19 | 8 | 2 | 16 | 26 | 31 | 16 | 11 |
| Other | 19 | 47 | 15 | 10 | 8 | 13 | 15 | 35 | 22 | 15 |
| Size of locality of residence (population) |  |  |  |  |  |  |  |  |  |  |
| Under 5,000. | 18 | 55 | 22 | 5 | 1 | 17 | 21 | 29 | 24 | 10 |
| 5,000 to 24,999 | 17 | 51 | 22 | 9 | 2 | 10 | 17 | 37 | 22 | 15 |
| 25,000 to 99,999. | 14 | 53 | 21 | 9 | 3 | 13 | 17 | 38 | 22 | 11 |
| 100,000 to 999,999 . . . . . . . | 22 | 51 | 18 | 7 | 2 | 14 | 15 | 34 | 24 | 12 |

${ }^{1}$ Respondents who were 16 years old or older and indicated that they were at least somewhat likely to visit a national park in the next 3 years.

## Trends in <br> Time and Money Expenditures

Since the nationwide survey conducted by the Outdoor Recreation Resources Review Commission in 1960-61, samples of the American public have listed reasons why they do not participate in outdoor recreation as often as they would like. As shown in table 24, two of the more frequent

Table 24. Outdoor Activity Constraints
(Percentage of respondents citing constraint)

| Constraint | 1960 | $1982-83$ |
| :--- | :---: | ---: |
| No constraints . . . . . . . . . | 28 | 6 |
| Lack of time . . . . . . . . . . | 52 | 13 |
| Lack of money . . . . . . . . | 84 | 56 |
| Other reasons . . . . . . . | 84 | 54 |

historically listed constraints have been lack of time and lack of money. In the 1982-83 NRS, the respondents aged 16 and over were asked if their time and money expenditures had changed in the past 2 years and if they expected changes in the next 2 years. If they indicated a change in expenditures, the respondents were asked the reason(s) for the change.

The purpose of these questions was twofold: to find out if time and money expenditures were changing in the short term and to discover the reasons people gave for changing the amount of time and money they spent on outdoor recreation. The results provide some insight into what facilitates or limits participation in outdoor recreation.

## CHANGES IN TIME EXPENDITURES

Only persons 16 years and older were asked the questions about time expenditures. The first question asked if the respondent was spending more, less, or
about the same amount of time on outdoor recreation in the present (1982 or 1983) compared to 2 years earlier ( 1980 or 1981). The second question asked if the respondent expected to spend more, less, or the same amount of time on outdoor recreation 2 years in the future ( 1984 or 1985). Figure 9 shows that 18 percent of the adult respondents were spending more time presently compared to 2 years ago, but 33 percent were spending less time. A
slightly greater percentage ( 53 percent) of respondents said they would maintain their present time commitments for the next 2 years compared with those ( 48 percent) who had not changed during the 2 years prior to the survey. People were optimistic about spending more time in the future. Thirty-seven percent intended to spend more time engaging in outdoor recreation in the next 2 years and only 9 percent intended to spend less.

FIGURE 9

## Recent and Expected Changes in Time Spent on Outdoor Recreation <br> (Percentage of Respondents Age 16 or Older Who Cited Increasing, Decreasing, or Unchanging Allocations of Time.)



1
Recent change in time spent on outdoor recreation compared to 2 years prior to the interview.


The NRS activity questions provided two approximate indicators of the amount of time people spent in outdoor recreationnumber of activities and number of days engaged in these activities during the 12 months prior to the interview. Figure 10 shows that the people who said they were spending more time now than 2 years ago were doing more activities than other respondents-an average of 10 in a list of 36 . The entire sample aged 16 and over participated in an average of six activities. The people who said they planned to spend more time in the next 2 years already were slightly more active, with an average of eight activities in a year. Those spending less time or not changing their present or future level of activity averaged six activities, reflecting the sample's average. It appears from these results that about half of the adult population did not alter their allocation of time to outdoor recreation significantly over a 4 -year time span.

Figure 11 shows the number of activitydays people said they engaged in outdoor recreation. ${ }^{1}$ Respondents at least 16 years old spent an average of 35 activity-days participating in the recreation activities listed on the NRS questionnaire. The pattern was the same as that for the number of activities. People who spent more activity-days than the average also said they spent or intended to spend more time in outdoor recreation.

The typical respondents indicating decreased time expenditures for both the present and the future were aged 40 and over; earning an annual income of $\$ 10,000$ to $\$ 15,000$; Black; separated, divorced, or widowed; and/or engaged in 1 to 10 recreation activities from the NRS list. Those persons with increased time expenditures for both the present and the future typically were aged 25 to 40 ; working 1 to 20 hours per week; earning annual incomes of over $\$ 25,000$; married; engaged in over 15 outdoor recreation activities; in a family of at least four persons; college educated; and/or living in the suburbs within an SMSA. ${ }^{2}$ People in a family of three indicated a reduced time expenditure over the prior 2 years but expected to spend more time in the future. In the opposite case, persons aged 16 to 24 expected to engage in less outdoor recreation 2 years in the future but were presently spending a great deal of time. In appendix A, tables A-11 and A-12 illustrate the relationship of these demographic characteristics to changes in time expenditure.

The respondents who did not indicate a change in their time expenditures over the prior 2 years or in the future included many people not working; with annual incomes of

[^17]FIGURE 10
Average Number of Activities Engaged in by Persons Citing Various Changes in Time Spent on Outdoor Recreation
(Respondents Age 16 or Older)


FIGURE 11
Average Annual Number of Activity - Days of Participation by Persons Citing Varions Changes in Time Spent on Outdoor Recreation
(Respondents Age 16 or Older)

less than $\$ 10,000$; not engaged in any outdoor activities; in a family of one or two persons; with an education less than a high school level; and/or living in rural areas.

Open-ended questions asked the respondents why they changed the amount of time spent on outdoor recreation to find out from the respondents directly what they perceived as limiting or facilitating the time they spent in outdoor recreation. Table 25 lists the percentages of responses to these followup questions concerning expenditure of time. In appendix A, tables A-13 through A-16 define the system used to code these open-ended responses and detail the percentages obtained for each response.

The facilitating factors that coincided with spending more time in outdoor recreation included the family, certain lifestyle changes (such as gain of a companion, doing more, enjoyment of a particular recreation activity, change in recreation activity), more time and/or money available, work-related reasons, gain of equipment, and access to or availability of physical resources. Increasing age of children was the most consistent response given for spending more time. Work-related reasons such as retirement or change in number of working hours also accounted for more time spent. As shown in chapter 1, the pursuit of outdoor recreation decreases as age increases. Retirement is perceived by the individual as an opportunity to spend more time in outdoor recreation. However, the amount of activity individuals pursue will likely be less than they pursued in younger years. As shown in table 4, the decline in activity begins when individuals are in their forties, well before retirement age for the majority of workers.
The primary competitors with outdoor recreation for an individual's time were work and school. Lifestyle changes, health problems, and lack of time/money also contributed to less time spent in outdoor recreation. Lifestyle changes in this category included "getting older" or "aging", the most consistent response. Family responsibilities such as child care also contributed to less outdoor recreation time spent. The age of children, not simply the presence of children in the household, influenced the amount of time parents spent in outdoor recreation.

## CHANGES IN MONEY EXPENDITURES

The survey also asked similar questions regarding the expenditure of money on outdoor recreation. Only those respondents aged 16 and older who had spent money for outdoor recreation in the 12 months prior to their interview were asked the ques-
tions on how their expenditures had changed. A total of 65 percent of the sample spent money on outdoor recreation. Table 26 lists the demographic characteristics of the persons who said they had spent money on outdoor recreation during the past year. They were typically people who were in smaller households, White, earning greater incomes, and college graduates. Most respondents aged 60 and older said they did not spend money on outdoor recreation.

Figure 12 illustrates how much the respondents said they spent on outdoor recreation duning the 12 months prior to the interview. A wide range of expenditure patterns is evident. Before the question about how much money they spent, the respondents were asked what they spent money on and were given a list of items. Figure 13 illustrates that user fees, sporting goods, and travel accounted for most of the spending with clothing and equipment as other major expense items. Other expenses included license fees, rentals, and special classes.

Respondents who cited more than one type of expenditure were asked, "On which one of these did you spend the most money?" "Travel costs for outdoor recreation" was the most frequent response.

Figure 14 indicates a slightly different picture for money expenditure changes than that shown for time expenditures.
Respondents tended to spend a larger percentage of their money on outdoor recreation in 1982-83 than they did 2 years before, and expected to spend even more in the next 2 years. Less than half of the respondents said their expenses had remained the same or expected them to stay the same. Inflation appears to have influenced these responses, as an examination of the reasons for the change illustrates.

Income, age, marital status, and employment status showed a relationship with the expenditure of money. About one in five respondents in each age category said they were spending a smaller percentage of their income on outdoor recreation in 1982 than 2 years before. However, a disproportionate number of the younger respondents spent more in the present than 2 years ago, and -most of the respondents aged 40 and over were spending about the same amount. The older respondents also intended to remain at the same expenditure level for the next 2 years. People who had never married claimed to be spending more of their income on outdoor recreation than 2 years before and expected to spend an even larger percentage in the future. As income level increased, the proportion of persons spending a larger percentage of their income on outdoor recreation increased. In appen-
dix A, tables A-17 and A-18 list the demographic characteristics of persons by their expenditures of money for outdoor recreation.

When the respondents were queried about why they were decreasing their money expenditures, about half listed lack of money or lack of time, as shown in table 27. Spending money on outdoor recreation was associated with lifestyle changes such as doing more activities and purchasing equipment. Inflation was a common constraint. Many people said they were spending an increasing percentage of their money (both over the prior 2 years and in the future) because of inflation; however, they did not indicate a decrease in their pursuit of outdoor recreation.

Figure 15 illustrates the relationship between time and money expenditures. Only respondents who spent money on outdoor recreation and were at least 16 years old are reflected in these percentages. The majority of the respondents who claimed they spent a larger percentage of their income on outdoor recreation also said they spent more time. The same correlation was shown for those spending the same or a smaller percentage of their income. However, this correlation was not perfect, showing that different factors influenced the amount of time and the amount of money spent on outdoor recreation.

## SUMMARY

As in past surveys, the most frequently cited constraint on outdoor recreation participation was lack of time, followed by lack of money. Respondents aged 16 and older were asked about changes in their allocations of time and money to outdoor recreation over the prior 2 years, and about any anticipated changes in the next 2 years (figures 9 and 14). About half cited no change, past or future. Of those whose time allocations had changed, the number who cited a decrease in time spent was almost double the number of those who claimed to be spending more time on outdoor pursuits. By contrast, about four times as many respondents anticipated a rise as expected a decline in time spent over the next 2 years. Relatively few respondents cited a reduction in dollar expenditures for outdoor recreation, either past or future.

The most common reasons cited for changes in time spent in outdoor pursuits were related to the changing stages of the life-cycle. Next to old age, the most constraining life-condition seems to be the early child-rearing years. This is followed by a rapid increase as the children become older.

Table 25. Reason for Spending More Time or Less Time on Outdoor Recreation
(Percent)

| Reason for spending more time | Respondents citing reason' | Reason for spending less time | Respondents citing reason ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
| Lifestyle changes, includes gain of companion, |  | Work, includes school | 26 |
| change in recreation activity, enjoyment of a specific activity | 25 | Lifestyle changes, includes aging. | 25 |
| More time and/or money available | 23 | Lack of time and/or money available | 18 |
| Family | 22 | Poor health | 16 |
| Work, includes retirement | 14 | Family responsibilities | 11 |
| Health | 8 |  |  |
| Equipment gain . | 4 | Lack of equipment | 2 |
| Resource opportunity | 4 | Resource opportunity | 2 |

${ }^{1}$ Age 16 and older

Table 26. Characteristics of Respondents Who Spent Money on Outdoor Recreation

| Demographic characteristic | Percentage who spent money | Demographic characteristic | Percentage who spent money |
| :---: | :---: | :---: | :---: |
| Total Sample | 64 | Family size | 44 |
| Sex |  | 2 | 61 |
| Male . | 73 | 3 | 70 |
| Female | 56 | 4 | 73 |
| Age |  | 5 or more | 68 |
| 16 to 24 | 70 | Residence |  |
| 25 to 39 | 78 | SMSA ${ }^{1}$, center city | 57 |
| 40 to 59 | 65 | SMSA, not center city | 69 |
| 60 and older | 37 | Not SMSA . . . . . . . . | 65 |
| Race |  |  |  |
| White | 67 | Work hours per week <br> 0 | 53 |
| Black | 46 | 1 to 20 . . . . . . . | 69 |
| Other | 60 | 21 to 39 | 76 |
| Education |  | 40 | 73 |
| 0 to 11 years | 5 | 41 or more | 79 |
| 12 to 15 years. | 48 | Activity participation |  |
| 16 or more years. | 47 | Activity participaion | 5 |
| Annual income (dollars) |  | 1 to 5 activities | 53 |
| Less than 10,000 | 38 | 6 to 10 activities | 81 |
| 10,000 to 14,999 | 52 | 11 to 15 activities | 92 |
| 15,000 to 24,999 | 72 | 16 to 20 activities | 96 |
| 25,000 to 49,999 | 78 | Over 20 activities. | 99 |
| 50,000 or more . . . . | 83 | Region |  |
| Marital status |  | Northeast | 64 |
| Single, never married | 67 | North Central. | 64 |
| Single, formerly married | 44 | South. | 62 |
| Married | 69 | West | 69 |

[^18]FIGURE 12
Money Spent for Outdoor Recreation During 12 Months Prior to Interview
(Percentage of Respondents Age 16 and Older Who Cited
Different Expenditures')


Percentages refer to the population of repondents age 16 or over who said they spent money for outdoor recreation in the 12 months prior to the interview ( $65 \%$ of the surveys respondents).

FIGURE 13
Purchases for Outdoor Recreation in Prior Year
(Percentage of Respondents 16 Years and Older Citing Each Purpose )

${ }^{1}$ Percentages refer to the population of respondents age 16 or over who said they spent money for outdoor recreation in the 12 months prior to the interview ( $65 \%$ of the survey's respondents).
Respondents were asked to indicate all categories in which they spent money.

FIGURE 14

## Recent and Expected Changes in Money Spent on <br> Outdoor Recreation

(Percentage of Respondents 16 Years and Oider ${ }^{1}$ )

${ }^{1}$ Percentages refer to the population of respondents age 16 or over who said they spent money for outdoor recreation in the 12 months prior to the interview ( $65 \%$ of the survey's respondents).

2
Reported change in percentage of respondent's available money which was spent on outdoor recreation compared to 2 years prior to interview.
${ }^{3}$ Expected change in percentage of respondent's available money which will be spent on outdoor receation during 2 years following invterview.

FIGURE 15

## Relationship of Recent Change in Time and Money

 Expenditures for Outdoor Recreation(Percentage of Respondents 16 Years and Older ')

Of those respondents who spent a smaller percentage of their money (20\% of all eligible respondents):


Of those respondents who spent a larger percentage of their money
( $39 \%$ of all eligible respondents):

Expected Change ${ }^{3}$



Table 27. Reason for Spending a Larger Percentage or a Smaller Percentage of Money on Outdoor Recreation (Percentage of respondents)

| Reason for spending a larger percentage | Respondents citing reason ${ }^{1}$ | Reason for spending a smaller percentage | Respondents citing reason ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
| Lifestyle changes,includes doing more recreation activities | 26 | Lack of time and/or money available | 38 |
| Time and/or money availability, includes inflation | 49 | Lifestyle changes <br> No need for or lack of equipment. | 23 21 |
| Equipment gain | 11 | Family responsibility | 8 |
| Family | 9 | Work responsibility | 6 |
| Work | 3 | Poor health | 3 |
| Resource opportunity | 2 | Lack of resource opportunity . | 2 |

${ }^{1}$ Age 16 and older.

## CHAPTER 6

## Aging and Outdoor Recreation

As a result of modern technology, longer life expectancies and the maturing of the baby boom generation, there is now and will continue to be a higher proportion of individuals over 60 years than ever before in the history of the United States. This aging of the population has spawned increased interest in studying the leisure behavior of the elderly. The importance of leisure and recreation activities in the lives of older persons has become clear in recent years. Past research, using a life-cycle perspective, has examined numerous aspects of leisure behavior including such areas as activity involvement, participation in physical activities, and barriers to participation. These studies, however, have been inconsistent in their findings, indicating a need for further research in the leisure patterns of the elderly and how those leisure pattems have changed over time.

The final series of questions in the NRS was sponsored by the Administration on Aging to further investigate the involvement of older Americans in outdoor recreation pursuits. The results, presented here, cover three broad areas.

The first section compares respondents aged 60 and older with respondents under 60 years with respect to a variety of leisure behaviors and perceptions. Included here are comparisons related to the average number of activities engaged in during the previous 12 months; the average annual number of activity-days of participation; recent and prospective changes in expenditures of time and money; the importance of having recreation areas at varying distances rom home; and the importance of different easons why individuals: (1) enjoy an activi$y$, (2) don't do an activity as often as they
'McGuire, F.A. and F.D. Dottavia 1984. Outdoor I zcreation participation across the lifespan: Abandonrent, continuity, or liberation. Clemson University, lemson, SC.
would like, and (3) stop participating in an activity.

The second and third sections deal exclusively with respondents 60 years old and older. These sections examine participation in club-sponsored outdoor recreation activities, club memberships, outdoor recreation skills and interests, and the role of older Americans in transmitting those skills to others by teaching or coaching. The specific questions identify whether or not an individual participated in any recreational activities sponsored by clubs or organizations, the clubs sponsoring the activities, club memberships, skills the respondent has, which if any are actually being taught and to whom, and what the barriers are to teaching these skills.

## COMPARISON OF RESPONDENTS 60 YEARS AND OLDER WITH THOSE UNDER 60

Table 28 summarizes the recreational involvements of respondents 60 years and older. When compared to respondents less than 60 years, as well as to the entire sample, in almost every instance, those respondents 60 years and older showed less involvement in outdoor recreation. Almost one-third ( 30 percent) of the older group reported no participation in outdoor recreation activities, compared to 7 percent of those under 60 years and 11 percent of the

## Table 28. Involvement in Outdoor Recreation, by Age Groups

| Indicators of involvement summarized over all activities | Age |  | Total sample |
| :---: | :---: | :---: | :---: |
|  | 60 years and over | Less than 60 years |  |
| Average number of activities participated in once or more in prior 12 months.. | 2.9 | 8.2 | 7.2 |
| Percentage of respondents indicating they participate in no outdoor recreation activities $\qquad$ | 30 | 7 | 11 |
| Average number of activity days of participation in previous 12 months | 12.4 | 42.9 | 37.1 |
| Average number of days respondents used various recreation areas in previous 12 months: |  |  |  |
| Yards and similar areas | 5.4 | 7.6 | 7.2 |
| Neighborhood parks, etc. | 2.5 | 5.1 | 4.6 |
| Community or regional parks, etc. | 1.8 | 4.6 | 4.0 |
| More distant parks | 1.5 | 3.1 | 2.8 |
| Average estimated expenditure for outdoor recreation in previous |  |  |  |
| 12 months (dollars) | 391 | 350 | 355 |

total sample. The findings presented in table 28 indicate that respondents 60 years old and older participated, on the average, in about 3 activities during the prior 12 months and logged a total of approximately 12 activity-days. Again, these figures are substantially less than those cited for respondents under 60 years and the total sample. The average number of activities engaged in for the two groups was 8.2 and 7.2 , respectively, and the average number of days of participation reported was 42.9 and 37.1, respectively.

Similar patterns emerged when the respondents were asked to indicate how many days in the past 12 months they used recreation areas at various distances from home. While the average number of days of use, in all instances, decreased steadily from yards and similar areas through neighborhood and regional parks to more distant destinations, the more elderly group showed consistently lower averages (ranging from 5.4 days for yards to 1.5 days for more distant parks) than either those under 60 years ( 7.6 to 3.1 days) or the total sample ( 7.2 to 2.8 days). The final row in table 28 summarizes the respondents' estimates of how many dollars they spent altogether on outdoor recreation during the prior 12 months. Results here indicate that respondents 60 years and older were spending more money-an average of \$391-on outdoor recreation than those under $60(\$ 350)$ and the total sample ( $\$ 355$ ). This is the only index of involvement in outdoor recreation on which the respondents aged 60 and older exceeded the other age categories.

Table 29 details the percentages of respondents who gave selected reasons (from a list) why they enjoy their favorite activities. The reasons given were consistent across all age categories, the most frequent being "to enjoy nature and the outdoors" and "to get exercise or keep in shape."

Table 30 reports selected constraints to participation in respondents' favorite activities. The most frequently cited reason, in all cases, for not participating as often as an individual would like was lack of time. Almost one-third ( 30 percent) of those 60 years and older, twice as many under 60 ( 60 percent) and over half ( 56 percent) of the entire sample mentioned lack of time as a barrier to participation. The second most frequently cited constraint for the older group was personal health ( 22 percent) followed by not having anyone to do the activity with ( 14 percent). For those respondents under 60 , as well as for the entire sample, the second and third most frequent constraints were "not enough money" and "no places to do the activity around here."

Table 31 identifies selected reasons why people have stopped participating in particular recreation activities. When respondents were asked to indicate whether or not during the prior 2 years, they had stopped participating in any outdoor recrea-

Table 29. Reasons for Enjoying Favorite Activities, by Age Groups
(Percentage of respondents who gave selected reasons why they enjoy their favorite activities')

| Reason | Age |  | $\begin{aligned} & \text { Total } \\ & \text { sample } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | 60 years and over | Less than 60 years |  |
| Enjoy nature and outdoors. | 72 | 68 | 68 |
| Get exercise or keep in shape. | 59 | 68 | 66 |
| For peace and quiet | 46 | 47 | 47 |
| Get away from problems ${ }^{2}$ | 44 | 57 | 56 |
| To be with family or friends | 35 | 55 | 53 |
| Like people who do activity | 30 | 35 | 34 |
| Own and enjoy using equipment | 23 | 27 | 27 |
| Enjoy solitude | 21 | 26 | 25 |
| Something new or different. | 18 | 22 | 21 |
| Other reasons (not on list). | 14 | 9 | 10 |

> 'Percentages are based on the respondents who cited one or more activities they "particularly enjoyed."
> 2"To get away from day-to-day living or problems."

## Table 30. Constraints on Favorite Activities, by Age Groups

(Percentage citing constraint')

| Reasons | Age |  | Total sample |
| :---: | :---: | :---: | :---: |
|  | 60 years and over | Less than 60 years |  |
| Not enough time. | 30 | 60 | 56 |
| Personal health reasons. | 22 | 6 | 8 |
| No one to do activity with. | 14 | 18 | 17 |
| Not enough money. | 12 | 21 | 20 |
| No place to do activity | 11 | 20 | 19 |
| Inadequate transportation or too far | 10 | 15 | 14 |
| Crowded activity areas | 7 | 14 | 13 |
| Personal safety problems in activity areas | 4 | 5 | 5 |
| Poorly maintained activity areas | 3 | 6 | 5 |
| Pollution problems in activity areas | 2 | 4 | 4 |
| Inadequate information on activity areas | 1 | 5 | 5 |
| Other reasons (not on list) | 14 | 11 | 11 |

[^19]Table 31. Reasons for Discontinuing a Recreation Activity, by Age Groups (Percentage citing reason ${ }^{1}$ )

| Reason | Age |  |  |
| :---: | :---: | :---: | :---: |
|  | 60 years and over | Less than 60 years | Total sample |
| Personal health reasons. | 67 | 23 | 33 |
| No one to do activity with. | 12 | 21 | 19 |
| Not enough time. | 9 | 39 | 33 |
| No place to do activity around here. | 8 | 15 | 14 |
| Inadequate transportation or too far to travel. | 5 | 9 | 8 |
| Personal safety problems in activity areas | 3 | 5 | 5 |
| Not enough money. | 3 | 18 | 15 |
| Crowded activity areas | 1 | 10 | 8 |
| Poorly maintained activity areas. | (x) | 4 | 3 |
| Pollution problems in activity areas Inadequate information on | (x) | 2 | 2 |
| activity areas . ....... | (x) | 3 | 2 |
| Other reasons (not on list). | 15 | 23 | 21 |

$x$ Less than one half of one percent.
'Percentage of respondents who gave selected reasons why they stopped doing a recreation activity.
NOTE: Percentages are based on those respondents who said they stopped an activity in the prior 2 years (19 percent of the total sample).

Table 32. Changes in Time and Money Spent for Outdoor Recreation, by Age Groups
(Percentage of respondents ${ }^{1}$ )

|  | Age |  |  |
| :--- | ---: | ---: | ---: |
|  |  | Less than | Total |
| Type of expenditure | 60ars <br> and over | 60 years | sample |

Current time spent on outdoor
recreation compared to 2 years ago

| More | 8 | 21 | 18 |
| :---: | :---: | :---: | :---: |
| About same | 58 | 46 | 48 |
| Less | 34 | 33 | 33 |
| Estimated future time spent on outdoor recreation |  |  |  |
| More | 16 | 43 | 37 |
| About same | 65 | 51 | 53 |
| Less . . | 19 | 7 | 9 |

Current percentage of money spent
on outdoor recreation compared to
2 years ago
Larger . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 29
About same . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 51
41
Smaller .......................................... . . . . 20
Estimated future percentage of money
to be spent on outdoor recreation
Larger
About same
27
48
Smaller
60
43
${ }^{1}$ Percentage of respondents who gave various estimates of past and future changes in expenditures of ime and money for outdoor recreation.
to the interview and to estimate how that time and money expenditure would change in the next 2 years. Table 32 compares the responses to each of these questions for individuals 60 years and older and those under 60 years. The largest numbers ( 58 percent of those 60 and older and 46 percent of those under 60) of individuals in both groups indicated they were spending about the same amount of time on outdoor recreation compared to 2 years ago. Over one-third in each group said they were spending less time while only 8 percent of those 60 and older and 21 percent of those under 60 reported spending more time on outdoor recreation than they did 2 years before.

Different results occurred when respondents were asked to project future outdoor recreation involvement. Again, the majority of individuals in both groups reported they would be spending about the same amount of time on outdoor recreation in 2 years. However, 19 percent of the more elderly respondents said they would spend less time compared to only 7 percent of those under 60 . The reverse was true of the spending more time category with 43 percent of those under 60 and 16 percent of those 60 and over indicating increasing involvement over the next 2 years.
Results of the questions about the amount of money spent on outdoor recreation revealed that over half of the respondents 60 and older were spending about the same as they did 2 years before and expected to be spending about the same 2 years later. A little more than one-fourth ( 27 percent) of the aging respondents expected to be spending more in the future. Just the reverse was true for those under 60, the largest proportions of whom said they were spending more than 2 years earlier ( 41 percent) or expected to be spending a larger percentage of their money on outdoor recreation in the future ( 48 percent). Slightly fewer people cited no change in expenditure over the prior 2 years or expected to be spending the same proportion of their money on outdoor recreation in the future ( 39 and 43 percent, respectively).

## CLUB ACTIVITY AND MEMBERSHIPS OF INDIVIDUALS 60 YEARS AND OLDER

Table 33 summarizes the recreational involvement of individuals 60 years and older in club-sponsored recreational activities. Specifically, respondents were asked to indicate whether or not they had participated in any outdoor recreation activities which were sponsored by a club or organization, the names of the organizations or clubs, and whether or not they held memberships in these clubs or organizations.

Table 33. Club-Sponsored Outdoor Recreation Activities by Respondents Aged 60 and Older

| Type of club or organization | Percentage participating ${ }^{1}$ | Type of club or organization | Percentage participating ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
| Senior citizen group | 22 | Union/employee organization | 3 |
| Church group | 19 | Garden club | 3 |
| Country club | 11 | Cultural organization | 3 |
| Sportsmen club | 10 |  |  |
| Fraternal organization | 7 | Ethnic organization | 3 |
| Charitable organization | 6 | Other club or organization | 21 |

${ }^{1}$ Percentages based on those respondents aged 60 and older who said they participated in one or more club sponsored outdoor recreation activities during the prior 12 months.

Table 34. Outdoor Recreation Skills and Teaching Activities of Respondents Aged 60 and Older
(Percentage of respondents)

| Skill | Having skill | Teaching skill ${ }^{1}$ | Skill | Having skill | Teach ing skill ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total having or teaching |  |  | Hunting | 14 | 20 |
| any outdoor recreation |  |  | Camping | 12 | 9 |
| skill | 16 | 24 | Hiking | 2 | 0 |
| Bicycling | 2 | 0 | Birdwatching or other |  |  |
| Horseback riding | 1 | 0 | nature study | 6 | 3 |
| Golf | 12 | 19 | Downhill skiing | 2 | 7 |
| Tennis | 5 | 7 | Frisbee-horseshoes, | 4 | 7 |
| Team sports | 12 | 19 | Archery . . . . . . . . | 1 | 4 |
| Canoeing . | 1 | 0 | Target shooting | 3 | 6 |
| Sailing | 2 | 2 | Training exhibit animals | 2 | 3 |
| Motor boating | 6 | 6 | Game skill | 4 | 4 |
| Swimming | 13 | 9 | Gardening | 13 | 17 |
| Fishing . | 25 | 29 | Coaching, officiating | 1 | 0 |

${ }^{1}$ For each skill, the "actively teaching" percentage (second column) is based only on those respondents (first column) who claimed to have a teachable level of proficiency in that skill.

Table 35. Reasons for Not Teaching Outdoor Skills
(Cited by respondents aged 60 and older)
$\left.\begin{array}{lr|l}\hline \text { Reasons } & \begin{array}{r}\text { Percent- } \\ \text { age }\end{array} & \text { Reasons }\end{array} \begin{array}{r}\text { Percent- } \\ \text { age }\end{array}\right]$

NOTE: Percentages are based on those respondents who indicated having one or more teachable skills.

Results indicated that only 13 percent of those respondents aged 60 and older had taken part in any outdoor recreation activities sponsored by a club or organization during the last 12 months. Twenty-two percent of these individuals cited senior citizen groups as the sponsoring organization. Nearly one-fifth (19 percent) cited church groups and only about 1 out of 10 indi-
viduals indicated participating in country club- and sportsmen's club-sponsored activities. Other groups cited included fraternal, charitable, union/employee, cultural, and ethnic organizations, as well as garden clubs. More than half of the participants in clubsponsored outdoor activities were members of the sponsoring group.

## OUTDOOR RECREATION INTERESTS AND SKILLS OF INDIVIDUALS 60 YEARS AND OLDER

This section of the survey looks exclusively at respondents 60 years and olderwhat skills they have, which skills they teach and to whom, and what keeps the nonteachers from teaching. To examine these questions, respondents were first asked if they had any outdoor recreation skill or interest which they thought they could help others leam or practice. The 16 percent who responded yes to that question were then asked to list those skills (up to three). An additional question asked the same individuals if they were currently teaching those skills to others. Nearly one-quarter ( 24 percent) indicated that they were actually teaching their skills to others.

Table 34 combines all this information and compares which skills individuals say they have and which of those skills they were actually teaching at the time of the interview. The teachable skills most frequently cited by respondents 60 years old and older were fishing ( 25 percent); hunting ( 14 percent); swimming and gardening ( 13 percent each); and golf, camping, and team sports ( 12 percent each). The second column shows the percentage of those respondents citing each skill who said they were actually teaching at the time of the interview. As was true of the first column, fishing and hunting led the list. Twenty-nine percent of the fishermen and 20 percent of the hunters reported actually teaching their sport. Nearly one-fifth of the repondents having golf, team sport, and gardening skills said they were actively teaching.

Most were teaching skills to family or friends ( 56 percent and 46 percent, respectively). Nearly one-quarter of those teaching were teaching members of various organizations, while only 12 percent reported teaching other persons.

The final table in this section (table 35) lists selected reasons why people don't teach the skills they have. Specifically, respondents were asked to indicate, by choosing reasons from a list, why they don't teach the recreation skills or interests they have. From the results reported here, it appears that the primary reason is that they haven't been asked ( 44 percent). Over one-third cited lack of time ( 35 percent) while over onequarter ( 28 percent) were simply not interested in teaching. Only 10 percent indicated that they didn't know how to teach or wouldn't feel comfortable teaching.

## SUMMARY

In general, respondents 60 years and older can be characterized as much less active than those under 60 years. During the 12 months prior to the interview, they par-
ticipated on the average in three activities for approximately 12 activity-days and spent almost 400 dollars. They typically cited enjoyment of nature as the reason for enjoying their favonte activities; not enough time as their reason for not doing their favorite activities as often as they would like; and personal health as the reason for discontinuing a recreational activity. Respondents 60 years
and over were spending about the same amount of time and money as they had in the 2 years prior to the survey and predicted this to be the case in the future. Overall, few individuals reported participating in club-sponsored activities. Of those that did, however, it was primarily with senior citizen or church groups of which they were members. Lastly, results indicated that the
role of senior citizens in teaching outdoor recreation skills seems to be centered around hunting, fishing, golfing, gardening, and team sports-most of which were being taught to friends and family. The primary reason cited by respondents for not teaching skills to others was never being asked.

## Appendix A

## Table A-1. Outdoor Recreation Activities not Listed on Questionnaire or Information Card Booklet, by Annual Participation Rate and Choice as Favorites

(Percentage of total sample)


## x Less than 0.05 percent.

${ }^{1}$ Percentage who said they participated once or more during the prior 12 months. As many as four unlisted activities per respondent were recorded.
${ }^{2}$ Respondents were asked to name up to three activities that they "particularly enjoyed doing."
NOTE: Apparent discrepancies between the two columns result from question-order. The example of baseball will illustrate. Before the activity list was introduced, respondents were asked to name the activities they "particularly enjoyed doing." Baseball was cited by 5.2 percent of them. After extensive exposure to the list, the respondents were asked to name any other outdoor recreation activities they had taken part in during the prior 12 months. Few ( 0.1 percent) named baseball since they had already cited any baseball participation under "outdoor team sports."

## Table A-2. Preferences for Allocating National Park Operating Costs

(Percentage choosing each of five cost breakdowns ${ }^{1}$ )
$1 / 2(\$ 2.50)$
'Percentage of respondents aged 16 or older who preferred each of five allocations of an assumed five dollar per visit operating cost between visitor charges and taxes.

Table A-3. Respondent Views on Operating Costs of National Park Campgrounds
(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of operating national park campgrounds)

| Respondent characteristic | Visitor fees | Taxes | Visitor fees and taxes | No opinion and other ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |
| None. | 38 | 25 | 22 | 15 |
| 1 to 4 | 47 | 20 | 30 | 3 |
| 5 to 9 | 53 | 17 | 29 | 1 |
| 10 or more | 51 | 19 | 28 | 1 |
| Likelihood of visiting a national park |  |  |  |  |
| Very likely in next 12 months | 49 | 22 | 28 | 2 |
| Less likely in next 12 months but very likely in next 3 years | 49 | 22 | 27 | 2 |
| Somewhat likely in next 3 years. | 46 | 23 | 29 | 2 |
| Not very likely in next 3 years | 39 | 20 | 23 | 18 |
| Total sample . | 44 | 22 | 26 | 8 |

${ }^{1}$ Includes approximately one percent who offered the view that campgrounds should not be provided in national parks.

## Table A-4. Respondent Views on How to Cover Costs of Special Talks and Exhibits in National Parks

(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of special talks and exhibits in national parks)

| Respondent characteristic | Visitor fees | Taxes | Visitor fees and taxes | No opinion and other ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |
| None . | 39 | 25 | 19 | 17 |
| 1 to 4 | 45 | 26 | 23 | 6 |
| 5 to 9 | 44 | 29 | 24 | 3 |
| 10 or more | 38 | 34 | 26 | 2 |
| Likelihood of visiting a national park |  |  |  |  |
| Very likely in next 12 months | 46 | 28 | 23 | 3 |
| Less likely in next 12 months but very likely in next 3 years | 41 | 31 | 25 | 3 |
| Somewhat likely in next 3 years. | 45 | 30 | 22 | 4 |
| Not very likely in next 3 years | 37 | 23 | 19 | 21 |
| Total sample . | 41 | 27 | 22 | 10 |

${ }^{1}$ Includes approximately one percent who offered the view that special talks and exhibits should not be provided in national parks.

## Table A-5. Respondent Views on How to Cover Costs of Reservation Systems in National Parks

(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of operating advance reservation systems for camping and other activities in national parks)

| Respondent characteristic | Visitor fees | Taxes | Visitor fees and taxes | No opinion and other |
| :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |
| None. | 42 | 22 | 19 | 17 |
| 1 to 4 | 55 | 18 | 22 | 5 |
| 5 to 9 | 58 | 18 | 20 | 3 |
| 10 or more | 58 | 16 | 21 | 5 |
| Likelihood of visiting a national park |  |  |  |  |
| Very likely in next 12 months | 58 | 20 | 19 | 4 |
| Less likely in next 12 months but very likely in next 3 years | 56 | 19 | 22 | 3 |
| Somewhat likely in next 3 years. | 49 | 24 | 23 | 4 |
| Not very likely in next 3 years | 44 | 17 | 18 | 21 |
| Total sample . | 50 | 20 | 20 | 10 |

'Includes approximately one percent who offered the view that advance reservation systems for camping and other activities should not be provided in national parks.

Table A-6. Respondent Views on How to Cover Costs of Rides on Buses or Other Ways of Getting Around in National Parks
(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of buses and other public transportation systems)

| Respondent characteristic | Visitor fees | Taxes | Visitor fees and taxes | No opinion and other ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |
| None. . . . . . . . . . . . . . . . . . . . . . | 54 | 16 | 15 | 15 |
| 1 to 4 | 65 | 14 | 18 | 4 |
| 5 to 9 | 67 | 12 | 18 | 3 |
| 10 or more | 69 | 13 | 17 | 2 |
| Likelihood of visiting a national park |  |  |  |  |
| Very likely in next 12 months | 66 | 15 | 18 | 2 |
| Less likely in next 12 months but very likely in next 3 years | 65 | 14 | 18 | 2 |
| Somewhat likely in next 3 years. | 64 | 16 | 18 | 3 |
| Not very likely in next 3 years | 55 | 13 | 14 | 18 |
| Total sample . | 61 | 14 | 17 | 9 |

${ }^{1}$ Includes approximately one percent who offered the view that rides on buses or other ways of getting around the park should not be provided.

Table A-7. Preference Rankings for "Turning People Away Who Come After a Limit of People are in Park" to Reduce Overcrowding in National Parks
(Percentage of respondents 16 years old or older selecting each ranking)

| Respondent characteristic | First choice | Second choice | Third choice | Fourth choice | Unacceptable | No opinion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |  |  |
| None | 7 | 11 | 27 | 34 | 17 | 4 |
| 1 to 4 | 7 | 14 | 31 | 41 | 6 | 1 |
| 5 to 9 | 7 | 16 | 28 | 42 | 7 | 1 |
| 10 or more | 7 | 15 | 36 | 36 | 6 | (x) |
| Likelihood of visiting a national park |  |  |  |  |  |  |
| Very likely in next 12 months. | 8 | 15 | 29 | 40 | 6 | (x) |
| Less likely in next 12 months but very likely in next 3 years | 5 | 14 | 34 | 42 | 5 | 1 |
| Somewhat likely in next 3 years | 7 | 13 | 32 | 41 | 6 | 1 |
| Not very likely in next 3 years. | 7 | 11 | 26 | 34 | 20 | 3 |
| Total sample | 7 | 13 | 29 | 38 | 11 | 2 |

$x$ less than one half of one percent.

Table A-8. Preference Rankings for "Letting People Apply in Advance Then Drawing Names" to Allocate Reservations as a Means of Reducing Overcrowding in National Parks
(Percentage of respondents 16 years old or older selecting each ranking)

| Respondent characteristic | First choice | Second choice | Third choice | Fourth choice | Unacceptable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |  |  |
| None | 11 | 38 | 21 | 10 | 16 | 4 |
| 1 to 4 | 11 | 47 | 23 | 12 | 6 | 1 |
| 5 to 9 | 9 | 42 | 29 | 14 | 6 | x |
| 10 or more | 12 | 43 | 24 | 14 | 7 | 1 |
| Likelihood of visiting a national park |  |  |  |  |  |  |
| Very likely in next 12 months | 11 | 40 | 30 | 13 | 6 | (x) |
| Less likely in next next 12 months but very |  |  |  |  |  |  |
| likely in next 3 years . . . . . | 9 | 48 | 24 | 13 | 5 | 1 |
| Somewhat likely in next 3 years | 11 | 48 | 22 | 12 | 6 | 1 |
| Not very likely in next 3 years. | 11 | 37 | 21 | 9 | 19 | 3 |
| Total sample | 11 | 42 | 23 | 12 | 11 | 2 |

x Less than one half of one percent.

Table A-9. Preference Rankings for "Taking Reservations on a First-Come, First-Serve Basis" to Reduce Overcrowding in National Parks
(Percentage of respondents 16 years old or older selecting each ranking)

| Respondent characteristic | First choice | Second choice | Third choice | Fourth choice | Unacceptable | No opinion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |  |  |
| None | 58 | 16 | 6 | 2 | 15 | 4 |
| 1 to 4 | 72 | 18 | 4 | 1 | 4 | 1 |
| 5 to 9 | 71 | 19 | 4 | 1 | 4 | 1 |
| 10 or more | 71 | 19 | 4 | 1 | 4 | 1 |
| Likelihood of visiting a national park |  |  |  |  |  |  |
| Very likely in next 12 months | 68 | 22 | 5 | 1 | 4 | (x) |
| Less likely in next next 12 months but very likely in next 3 years | 77 | 15 | 4 | 1 | 3 | 1 |
| Somewhat likely in next 3 years | 71 | 17 | 5 | 2 | 5 | 1 |
| Not very likely in next 3 years. . . . . . | 56 | 18 | 5 | 1 | 17 | 3 |
| Total sample | 65 | 18 | 5 | 1 | 9 | 2 |

$x$ Less than one half of one percent.

Table A-10. Preference Rankings for "Charging an Extra 5 Dollars Per Adult Visitor" to Reduce Overcrowding in National Parks
(Percentage of respondents 16 years old or older selecting each ranking)

| Respondent characteristic | First choice | Second choice | Third choice | Fourth choice | Unacceptable | No opinion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of national parks ever visited |  |  |  |  |  |  |
| None | 6 | 15 | 26 | 33 | 17 | 4 |
| 1 to 4 | 7 | 15 | 33 | 38 | 7 | 1 |
| 5 to 9 | 9 | 16 | 31 | 36 | 7 | 1 |
| 10 or more | 7 | 17 | 28 | 39 | 8 | 2 |
| Likelihood of visiting a national park |  |  |  |  |  |  |
| Very likely in next 12 months | 8 | 17 | 30 | 38 | 6 | 1 |
| Less likely in next 12 months but very likely in next 3 years | 6 | 18 | 33 | 38 | 5 | 1 |
| Somewhat likely in next 3 years | 6 | 16 | 33 | 37 | 6 | 1 |
| Not very likely in next 3 years. | 6 | 13 | 25 | 32 | 20 | 4 |
| Total sample | 7 | 15 | 29 | 36 | 11 | 2 |

Table A-11. Time Expenditure Changes for Outdoor Recreation: Present Compared With 2 Years Earlier
(Percentage of respondents age 16 and older)

| Demographic characteristic | Spending more time | Spending less time | Spending same time | Demographic characteristic | Spending more time | Spending less time | Spending same time |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total sample. | 18 | 33 | 48 | Family size |  |  |  |
|  |  |  |  | 1. | 12 | 34 | 54 |
| Sex |  |  |  | 2 | 16 | 33 | 52 |
| Male | 19 | 33 | 48 | 3 | 19 | 37 | 45 |
| Female | 18 | 34 | 49 | 4 | 22 | 33 | 45 |
| Age |  |  |  | 5 or more | 23 | 31 | 46 |
| 16 to 24 | 25 | 37 | 39 | Residence |  |  |  |
| 25 to 39 | 24 | 34 | 42 | SMSA ${ }^{1}$, center city | 18 | 34 | 48 |
| 40 to 59 | 14 | 31 | 56 | SMSA, not center city | 20 | 33 | 47 |
| 60 or more | 8 | 34 | 58 | Not SMSA | 16 | 33 | 50 |
| Race |  |  |  | Work hours per week |  |  |  |
| White | 19 | 33 | 49 | 0 | 18 | 32 | 50 |
| Black. | 15 | 37 | 48 | 1 to 20 | 25 | 27 | 48 |
| Other | 25 | 40 | 36 | 21 to 39 | 18 | 37 | 46 |
| Education |  |  |  | 40. | 18 | 33 | 49 |
| 0 to 11 years | 5 | 32 | 63 | 41 or more | 19 | 35 | 45 |
| 12 to 15 years | 18 | 35 | 48 | Activity participation |  |  |  |
| 16 or more years | 23 | 33 | 44 | No activities .... | 1 | 29 | 70 |
| Annual income (dollars) |  |  |  | 1 to 5 activities | 12 | 37 | 51 |
| Less than 10,000 | 13 | 37 | 50 | 6 to 10 activities | 22 | 36 | 43 |
| 10,000 to 14,999 . | 15 | 37 | 48 | 11 to 15 activities | 27 | 29 | 43 |
| 15,000 to 24,999 . | 19 | 33 | 48 | 16 to 20 activities | 41 | 22 | 36 |
| 25,000 to 49,999. | 24 | 29 | 47 | Over 20 activities | 46 | 15 | 40 |
| 50,000 or more | 28 | 24 | 49 | Region |  |  |  |
| Marital status |  |  |  | Northeast | 19 | 31 | 48 |
| Single, never married | 24 | 33 | 43 | North Central | 19 | 30 | 50 |
| Single, formerly married | 13 | 36 | 52 | South | 15 | 36 | 47 |
| Married . . . . . . . . . . . | 18 | 33 | 49 | West | 21 | 34 | 45 |

[^20]Table A-12. Estimated Time Expenditure Changes in Outdoor Recreation For Next 2 Years
(Percentage of respondents 16 years or older)

| Demographic characteristic | Will spend more time | Will spend less time | Will spend same time | Demographic characteristic | Will spend more time | Will spend less time | Will spend same time |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total sample . | 37 | 9 | 53 | Family size |  |  |  |
|  |  |  |  | 1...... | 23 | 16 | 61 |
| Sex |  |  |  | 2 | 32 | 10 | 58 |
| Male | 36 | 9 | 54 | 3 | 43 | 7 | 50 |
| Female | 38 | 9 | 52 | 4 | 46 | 7 | 47 |
| Age |  |  |  | 5 or more | 41 | 8 | 51 |
| 16 to 24 | 40 | 12 | 48 | Residence |  |  |  |
| 25 to 39 | 49 | 4 | 46 | SMSA ${ }^{\text {a }}$, center city | 39 | 9 | 51 |
| 40 to 59 | 36 | 6 | 58 | SMSA, not center city | 40 | 9 | 52 |
| 60 or more. | 16 | 19 | 65 | Not SMSA | 33 | 10 | 57 |
| Race . |  |  |  | Work hours per week |  |  |  |
| White | 38 | 9 | 54 | 0 | 30 | 13 | 57 |
| Black. | 36 | 12 | 52 | 1 to 20 | 44 | 12 | 44 |
| Other | 44 | 13 | 43 | 21 to 39 | 43 | 6 | 51 |
| Education |  |  |  | 40. | 42 | 5 | 53 |
| 0 to 11 years | 14 | 16 | 70 | 41 or more | 45 | 6 | 49 |
| 12 to 15 years | 36 | 10 | 54 | Activity participation |  |  |  |
| 16 or more years | 45 | 7 | 48 | No activities . . . | 10 | 15 | 75 |
| Annual income (dollars) |  |  |  | 1 to 5 activities 6 to 10 activities | 32 | 12 | 57 |
| Less than 10,000 . | 25 | 16 | 59 |  | 47 | 6 | 47 |
| 10,000 to 14,999 . | 35 | 11 | 54 | 11 to 15 activities | 50 | 6 | 44 |
| 15,000 to 24,999 . | 40 | 7 | 52 | 16 to 20 activities Over 20 activities | 39 | 10 | 51 |
| 25,000 to 50,000 . | 45 | 7 | 48 |  | 47 | 8 | 45 |
| 50,000 or more | 44 | 3 | 53 | Region |  |  |  |
| Marital status |  |  |  | Northeast | 33 | 10 | 50 |
| Single, never married |  | 11 | 50 | North Central | 36 | 8 | 51 |
| Single, formerly married | 30 | 14 | 57 | South | 34 | 9 | 51 |
| Married . | 39 | 7 | 54 | West | 41 | 7 | 48 |

[^21]Table A-13. Reasons For Spending More Time in Outdoor Recreation
(Percentage of respondents 16 years and older citing each reason)

| Reasons ${ }^{2}$ | Spending more time compared to 2 years prior to survey | Will spend more time 2 years after survey | Reasons ${ }^{2}$ | Spending more time compared to 2 years prior to survey | Will spend more time 2 years after survey |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Work/school-related changes . | 13.1 | 16.4 | Health-related changes | 7.0 | 8.4 |
| Working more/less . | 2.9 | 4.6 | Good/better health . | 9 | 2.7 |
| Getting/having a job | . 4 | . 9 | Poor/worse health | 2 | . 0 |
| Unemployed | 2.7 | . 9 | To improve health | 4.5 | 3.5 |
| Retired | 4.0 | 5.5 | To reduce stress | 1.1 | 1.8 |
| Entering/in school | . 3 | . 2 | Other health changes | . 3 | . 4 |
| Leaving school | 1.6 | 2.8 | Equipment/transportation-related |  |  |
| Other work/school changes | 1.2 | 1.5 | changes ................... | 6.3 | 2.4 |
|  |  |  | Have more equipment . .... | 3.2 | 1.6 |
| Family-related changes | 18.0 | 25.9 | Have less equipment | . 1 | . 0 |
| Family responsibilities | . 6 | . 9 | Gain automobile . . . | 1.3 | . 4 |
| Marriage | . 9 | . 8 | Gain other transportation | . 5 | . 1 |
| Loss of spouse | . 4 | . 2 | Other equipment/transportation |  |  |
| Child care responsibilities | . 5 | . 6 | changes. | 1.2 | . 3 |
| Increasing age of children . . . . | 13.2 | 19.7 | Resource access-related changes | 5.6 | 2.1 |
| No children at home. | . 8 | 1.2 | Resource access-related changes | $\begin{array}{r} \\ \hline\end{array}$ | 2.1 |
| Spouse's schedule . | . 7 | 1.1 | Gain of a yard.. More opportunity | 1.4 | . 4 |
| Dependent's health . | . 0 | . 4 | More opportunity ..... | 1.4 .2 | . 4 |
| Other family changes | . 9 | 1.0 | Resource characteristics Gain park access .... | . 2 | . 2 |
|  |  |  | Gain second home | . 3 | . 1 |
| Lifestyle-related changes. | 29.3 | 19.7 | Other resource access changes | 3.1 | 1.1 |
| Getting older/aging | 1.9 | . 9 |  |  |  |
| Doing more | 3.6 | 2.2 | Money/time-related changes | 20.1 | 24.8 |
| Moving . . . | 1.2 | 1.8 | More/enough income. . | 2.8 | 5.1 |
| Travel. | . 7 | 1.2 | Less/insufficient income | . 4 | . 2 |
| Gain companion | 5.0 | 2.0 | Inflation. . . . . . . . | . 3 | . 2 |
| Like specific activity | 7.6 | 7.6 | More/enough time | 13.4 | 10.2 |
| Competition with nonrecreation |  |  | Less/insufficient time | . 2 | . 1 |
| activities . . . . . . . . . . . . . . . | 1.0 | 1.1 | Schedule more time | 2.8 | 8.7 |
| Change in recreation behavior | 6.1 | 1.8 | Other money/time changes | . 2 | . 3 |
| Other lifestyle changes | 2.2 | 1.1 | Don't know | . 5 | . 5 |

[^22]Table A-14. Reasons for Spending Less Time for Outdoor Recreation
(Percentage of respondents 16 years and older citing each reason)

| Reasons ${ }^{1}$ | Spending less time compared to 2 years prior to survey | Will spend less time 2 years after survey | Reasons ${ }^{1}$ | Spending less time compared to 2 years prior to survey | Will spend less time 2 years after survey |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Work/school-related changes. | 26.0 | 24.8 | Health-related changes . | 13.1 | 18.3 |
| Working more/less | 9.3 | 4.6 | Poor/worse health . | 7.4 | 18.3 |
| Getting/having a job | 10.5 | 10.9 | Other health changes | 5.7 | 9.5 |
| Unemployed | . 5 | . 0 | Other healh changes | 5.7 | 9.5 |
| Retired | . 3 | . 0 | Equipment/transportation- |  |  |
| Entering/in school | 2.6 | 4.6 | related changes ...... | 2.3 | 1.5 |
| Leaving school | . 3 | . 5 | Have less equipment | 2.3 .3 | 1.5 2 |
| Working and in school .... | 1.8 | 3.7 | Poor equipment condition | . 3 | . 2 |
| Other school/work changes | . 7 | . 5 | Loss of automobile ..... | 4 | . |
| Family-related changes | 13.9 | 7.8 | Loss of other transportation | 4 | . 3 |
| Family responsibilities | 1.3 | 7 . | Other equipment/transportation |  |  |
| Marriage | 1.0 | . 9 | changes................. . | 1.1 | . 9 |
| Loss of spouse | . 6 | . 3 |  |  |  |
| Child care responsibilities | 6.0 | 2.3 | Resource access-related changes | 3.2 | 2.1 |
| Increasing age of children... | . 5 | . 8 | Loss of a yard | . 1 | . 0 |
| No children at home. | 1.0 | . 6 | Less opportunity. | . 5 | . 2 |
| Spouse's schedule. | 1.1 | . 1 | Resource characteristics | . 8 | 7 |
| Dependent's health | 2.1 | 2.0 | Resource restraints | 4 | 7 |
| Other family changes | . 3 | . 6 | Loss of park access. . . . . . . . . | . 1 | . 0 |
| Lifestyle-related changes. | 17.6 | 32.0 | Other resource/access changes | 1.3 | . 5 |
| Getting older/aging | 6.4 | 21.3 | Money/time-related changes |  |  |
| Doing less. | . 5 | . 6 | Less/insufficient money . . | 22.6 4.8 | 12.8 |
| Moving | . 8 | . 9 | Inflation. . . . . . . . . . . . | 4.8 1.8 | 2.9 2.9 |
| Travel. | . 4 | . 0 | Competing demands for money | 1.8 .1 | 2.9 .9 |
| Loss of companion . . . . . . . . . | 1.3 | . 9 | More/enough time . . . . . . . . . | . 2 | . 9 |
| Dislike specific activity. . . . . . . | 2.1 | 3.5 | Less/insufficient time | 15.4 | 5.6 |
| Competition with nonrecreation |  |  | Schedule less time . | 15.4 .2 | 5.6 .0 |
| Change in recreation behavior . | 4.4 6 | 3.4 | Other money/time changes | . 1 | . 5 |
| Other lifestyle changes | 1.1 | . 6 | Don't know | . 9 | 9 |

${ }^{1}$ Codes were developed from responses to open-ended questions number 6 b and 6 d .

## Table A-15. Reasons Given for Spending a Smaller Percentage of Income for Outdoor Recreation

(Percentage of respondents citing each reason')

| Reason ${ }^{2}$ | Spending smaller percentage of income compared to 2 yrs. prior survey | Will spend smaller percentage of income 2 years after survey | Reason ${ }^{2}$ | Spending smaller percentage of income compared to 2 yrs. prior survey | Will spend smaller percentage of income 2 years after survey |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Work/school-related changes . | 5.3 | 6.9 | Health-related changes | 4.3 | 1.8 |
| Working more/less | 1.9 | . 5 | Good/better health. | . 1 | . 2 |
| Getting/having a job | . 8 | 1.6 | Poor/worse health | 2.6 | 1.1 |
| Unemployed | 1.8 | . 7 | Other health changes | 1.7 | . 5 |
| Retired | . 0 | . 9 |  |  |  |
| Entering/in school | . 4 | 2.9 | changes | 8.8 | 33.5 |
| Leaving school | . 0 | . 3 | Have more equipment . . . . . . . | 8.8 .6 | 3.5 .7 |
| Working and in school .... | . 1 | . 0 | Have less equipment . . . . . . . . | 6.7 | 30.1 |
| Other work/school changes | . 3 | . 0 | Poor equipment condition .... | $\begin{array}{r}\text {. } \\ \hline\end{array}$ | 30.1 .9 |
|  |  |  | Loss of automobile . . . . . . . . . | . 1 | . 0 |
| Family-related changes | 7.8 | 7.5 | Loss of other transportation ... | . 2 | . 6 |
| Family responsibilities | 1.1 | . 2 | Other equipment/transportation |  |  |
| Marriage | . 6 | . 5 | changes | . 5 | 1.2 |
| Loss of spouse | . 8 | . 5 | Resource access-related changes | 3.5 | . 9 |
| Child care responsibilities | 3.4 | 1.7 | Loss of a yard . . . . . . . . . . . | . 5 | . |
| Increasing age of children | 6 | . 9 | Less opportunity | . 9 | . 0 |
| No children at home. | 2 | 3.0 | Resource restraints | . 2 | 0 |
| Spouse's schedule. | . 2 | . 2 | Loss of park access. . . . . . . . . | . 2 | 0 |
| Dependent's health | . 7 | . 5 | Loss of second home . . . . . . . | . 3 | 2 |
| Other family changes | . 2 | . 0 | Other resource access changes . | 1.4 | 7 |
|  |  |  | Money/time-related changes . . . | 45.0 | 28.7 |
| Lifestyle-related changes. | 24.6 | 20.4 | More/enough income. . . | 3.8 | 5.2 |
| Getting older/aging | . 5 | 5.0 | Less/insufficient income | 14.9 | 4.7 |
| Doing less | 16.0 | 9.4 | Inflation. | 8.3 | 9.1 |
| Moving | . 7 | . 3 | More competing demands for |  |  |
| Travel | 3.2 | 2.1 | money | 1.2 | 2.0 |
| Loss of companion. . | . 7 | . 0 | Less competing demands for |  |  |
| Dislike specific activity. | . 2 | . 4 | money | 1.3 | 1.4 |
| Competition with nonrecreation |  |  | Less/insufficient time | 13.7 | 3.7 |
| activities . . . . . . . . . . . . . . | 1.4 | . 7 | Schedule less time | . 1 | . 4 |
| Change in recreation behavior | 1.9 | 1.6 | Other time/money changes | 1.7 | 2.2 |
| Other lifestyle changes . . . . . . | . 0 | . 8 | Don't know . . . . . . . . . . . . . . . | . 5 | . 0 |

[^23]
## Table A-16. Reasons Given for Spending a Larger Percentage of Income on Outdoor Recreation

(Percentage of respondents 16 years and older who said they spent money for outdoor recreation in the 12 months prior to their interview)

| Reasons ${ }^{1}$ | Spending a larger percentage of income compared to 2 years prior to survey | Will spend a larger percentage of income 2 years after survey | Reason ${ }^{1}$ | Spending a larger percentage of income compared to 2 years prior to survey | Will spend a larger percentage of income 2 years after survey |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Work/school-related changes . | 2.2 | 3.6 | Health-related changes-cont. |  |  |
| Working more/less | . 2 | . 3 |  |  |  |
| Getting/having a job | . 9 | 1.0 | To improve health | . 0 | . 1 |
| Unemployed | . 2 | . 0 | To reduce stress | . 0 | . 1 |
| Retired | . 7 | 1.4 | Other health changes | . 1 | . 2 |
| Entering/in school | . 0 | . 1 |  |  |  |
| Leaving school | . 1 | . 7 | Equipment/transportation-related |  |  |
| Other work/school changes | . 1 | . 1 | changes . . . . . . . . . . . . . | 15.2 | 6.8 |
|  |  |  | Have more equipment | 11.2 | 5.4 |
| Family-related changes . | 5.7 | 10.9 | Have less equipment . . . | . 2 | . 0 |
| Family responsibilities | . 3 | . 2 | Poor equipment condition | . 2 | . 3 |
| Marriage | . 4 | . 4 | Gain automobile . . . . . . . . . . . | . 3 | . 1 |
| Loss of spouse | . 1 | . 0 | Gain other transportation | . 2 | . 1 |
| Child care responsibilities | . 1 | . 1 | Other equipment/transportation changes |  |  |
| Increasing age of children. | 3.8 | 8.5 |  | . 3.1 | . 9 |
| No children at home . . . . . . | . 4 | . 4 | Resource access-related changes |  |  |
| Spouse's schedule . | . 0 | . 5 |  | 2.2 | 1.1 |
| Dependent's health | . 0 | . 2 | Gain of a yard | . 1 | . 0 |
| Other family changes | . 6 | . 6 | More opportunity Resource restraints | . 5 | . 1 |
| Lifestyle-related changes. | 23.6 | 28.4 | Other resource access changes . | 1.0 | . 7 |
| Getting older/aging | . 9 | . 3 | Money/time-related changes | 49.8 | 47.7 |
| Doing more | 11.7 | 18.9 | More/enough income . . . . . . . | . 5.9 | 6.4 |
| Moving | . 4 | . 3 |  | . 7 | . 0 |
| Travel | 4.6 | 4.6 | Inflation. . . . . . . . . . . . . . . | 38.8 | 31.4 |
| Gain companion. | . 3 | . 5 | More competing demands for |  |  |
| Like specific activity | 1.2 | . 9 | money | . 1 | . 0 |
| Competition with nonrecreation activities | . 3 | . 4 | Less competing demands for | 1 | . 7 |
| Change in recreation behavior | 4.2 | 2.3 | More/enough time . . . . . . | 2.2 | 6.3 |
| Other lifestyle changes | . 0 | . 2 | Less/insufficient time | . 1 | . 0 |
|  |  |  | Schedule more time . . . . . Other money/time-related | . 5 | 2.6 |
| Health-related changes | . 8 | 1.4 |  |  |  |
| Good/better health | . 4 | 1.0 | changes. . . . . . . . . . . . . | 1.4 | . 3 |
| Poor/worse health | . 3 | . 0 | Don't know. | . 4 | . 1 |

${ }^{1}$ Codes were developed from responses to open-ended questions number 6 j and 61.

Table A-17. Present Money Expenditures for Outdoor Recreation Compared With 2 Years Prior to Interview
(Percentage of respondents 16 years and older who had spent money on outdoor recreation in past year)

| Demographic characteristic | Spending larger percentage | Spending smaller percentage | Spending same percentage | Demographic Characteristic | Spending larger percentage | Spending smaller percentage | Spending same percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total sample . | 39 | 20 | 41 | Family size |  |  |  |
|  |  |  |  | 1..... . | 36 | 22 | 43 |
| Sex |  |  |  | 2 | 39 | 18 | 43 |
| Male | 40 | 20 | 40 | 3 | 37 | 21 | 42 |
| Female | 39 | 20 | 42 | 4 | 39 | 20 | 41 |
| Age |  |  |  | 5 or more | 46 | 19 | 36 |
| 16 to 24 | 50 | 18 | 32 | Residence |  |  |  |
| 25 to 39 | 41 | 21 | 38 | SMSA ${ }^{1}$, center city | 39 | 19 | 42 |
| 40 to 59 | 33 | 19 | 48 | SMSA, not center city | 40 | 21 | 39 |
| 60 or more | 29 | 20 | 51 | Not SMSA | 39 | 19 | 42 |
| Race |  |  |  | Work hours per week |  |  |  |
| White | 40 | 20 | 41 | 0 . | 38 | 20 | 42 |
| Black | 37 | 16 | 48 | 1 to 20 | 44 | 13 | 43 |
| Other | 49 | 21 | 30 | 21 to 39 | 41 | 18 | 41 |
| Education |  |  |  | 40. | 40 | 20 | 41 |
| 0 to 11 years | 35 | 14 | 51 | 41 or more | 39 | 24 | 37 |
| 12 to 15 years. | 40 | 20 | 40 | Activity participation |  |  |  |
| 16 or more years | 40 | 20 | 40 | No activities .... | 32 | 19 | 49 |
| Annual income (dollars) |  |  |  | 1 to 5 activities | 30 | 22 | 48 |
| Less than 10,000 | 37 | 21 | 43 | 6 to 10 activities | 39 | 19 | 42 |
| 10,000 to 14,999 . | 37 | 21 | 42 | 11 to 15 activities | 42 | 20 | 38 |
| 15,000 to 24,999 . | 38 | 19 | 43 | 16 to 20 activities | 55 | 20 | 25 |
| 25,000 to 49,999. | 45 | 18 | 37 | Over 20 activities | 64 | 12 | 24 |
| 50,000 or more. | 37 | 19 | 44 | Region |  |  |  |
| Marital status |  |  |  | Northeast . . . . . . . . . . . . . . 40 |  | 17 | 41 |
| Single, never married | 48 | 16 | 36 | North central. | 41 | 20 | 38 |
| Single, formerly married | 35 | 20 | 44 | South | 39 | 19 | 41 |
| Married | 37 | 21 | 42 | West | 36 | 22 | 41 |

[^24]Table A-18. Estimated Changes in Money Expenditures for Outdoor Recreation During Next 2 Years
(Percentage of respondents 16 years and older who had spent money on outdoor recreation in past year)

| Demographic characteristic | Will spend larger percentage | Will spend smaller percentage | Will spend same percentage | Demographic characteristic | Will spend larger percentage | Will spend smaller percentage | Will spend same percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total sample. | 46 | 10 | 45 | Family size |  |  |  |
| Sex |  |  |  |  | 38 | 15 | 47 |
| Male | 44 | 10 | 46 | 2 | 39 | 11 | 50 |
| Female | 47 | 10 | 44 | 4 | 47 | 9 | 45 |
| Age |  |  |  | 5 or more | 52 | 9 | 41 |
| 16 to 24 | 53 | 10 | 37 | Residence |  |  |  |
| 25 to 39 | 50 | 9 | 41 | SMSA ${ }^{1}$, center city |  |  |  |
| 40 to 59 | 41 | 8 | 51 | SMSA, not center city ... | 52 | 8 | 40 |
| 60 or more | 27 | 12 | 60 | Not SMSA . . . . . . . | 46 | 10 | 44 |
| Race |  |  |  | Work hours per week |  | 10 | 49 |
| White | 44 | 10 | 46 | 0 . | 43 | 10 | 47 |
| Black. | 58 | 9 | 33 | 1 to 20 | 51 | 10 | 40 |
| Other | 53 | 10 | 37 | 21 to 39 | 48 | 11 | 41 |
| Education |  |  |  |  | 46 | 8 | 46 |
| 0 to 11 years | 32 | 9 | 59 | 41 or more | 46 | 9 | 45 |
| 12 to 15 years | 46 | 10 | 44 | Activity participation |  |  |  |
| 16 or more years | 47 | 9 | 45 | No activities | 28 | 12 |  |
| innual income (dollars) |  |  |  | 1 to 5 activities | 39 | 10 | 52 |
| Less than 10,000 . | 45 | 12 | 43 | 6 to 10 activities | 47 | 9 | 44 |
| 10,000 to 14,999 | 40 | 11 | 49 | 11 to 15 activities | 51 | 9 | 40 |
| 15,000 to 24,999 . | 48 | 9 | 43 | 16 to 20 activities | 50 | 13 | 37 |
| 25,000 to 49,999. | 47 | 10 | 44 | Over 20 activities | 39 | 19 | 42 |
| 50,000 or more | 40 | 6 | 54 |  |  |  |  |
| 1arital status |  |  |  | Region |  |  |  |
| Single, never married | 52 | 10 | 38 | Northeast . . | 42 | 8 | 44 |
| Single, formerly married | 41 | 12 | 47 | North Central | 44 | 10 | 42 |
| Married | 44 | 9 | 47 | Weoth | 44 | 9 | 42 |
|  |  |  |  | West | 44 | 9 | 44 |

[^25]Appendix B

## APPENDIX B. SAMPLING ERROR

The usual measure of sampling error is called the standard error. Table B-1 lists the theoretical standard errors, that is, the standard errors for simple random samples of various sizes encountered in the NRS. A percentage estimated from such a sample is expected to be within one standard error of the true population value two times out of three. It is expected to be within 1.96 standard errors of the true value 19 times out of 20 . This is referred to as a 95 -percent confidence interval. It clearly depicts the degree of precision of the estimated percentage.

The NRS sample was not a simple random sample but a multistage cluster sample. The sampling method is described in detail in the Methodological Report. This type of sample is generally less precise than a simple random sample of the same size, so the theoretical standard error is multiplied by a factor known as the design effect in order to estimate the standard error actually achieved in the survey. Design effects for 10 of the estimated percentages in the NRS were derived by a method called half sample analysis and are described in the Methodological Report.

Two 95-percent confidence intervals are computed here as examples. They represent the worst case (largest standard error-i.e,. pool swimming) and the best case (smallest standard error-i.e., playing tennis) of the
trial standard errors based on the entire sample of 5,757 respondents.

Percentage who said they went swimming in an outdoor pool 43\%
Theoretical standard enror (from table B-1) 0.65\%
Multiplied by observed

| design effect | $\times 1.10$ |
| :--- | :--- |
| Observed standard error | $0.72 \%$ |

95-percent confidence interval $=$ $43 \% \pm(1.96 \times 0.72)$ or $43 \% \pm 1.4 \%$

Percentage who said they played tennis
Theoretical standard error $0.47 \%$
Multiplied by observed $\begin{array}{ll}\text { design effect } & \times 1.01 \\ \text { Observed standard error } & 0.47 \%\end{array}$

95-percent confidence interval $=$ $17 \% \pm(1.96 \times 0.47)$ or $17 \%+0.9 \%$

Design effects based on smaller subsamples ranged from 0.79 to 1.19 and averaged 1.03 over all the instances tested. The Methodological Report contains instructions on how to derive design effects for other estimates-averages and totals as well as percentages-by using the 16 half sample codes recorded for each respondent on the NRS data tape.

Table B-1. Theoretical Standard Errors for Various Size Samples and Estimated Population Proportions

|  | Estimated population proportion |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Appendix $C$


## INTRODUCTION

- IF PERSONAL INTERVIEW - Now I have some questlons about how you spend your free time in outdoor recreation activities. The Bureau of the Census is coilecting this informetion for the Netionsi Park Service. (Hand respondent Privacy Act Statement on the back of the information card booklet, NRS-100. I This expiains the legal authority for conducting this survey. It eiso explains that the survey is voiuntary and ail informetion provided wili be used for stetisticei purposes oniy. You were chosen at random to participate in this survey and your enswors wili represent those of thousands of other peopio like yourself. These questions thet $i$ em going to ask you refer to just yourseif and not to other members of your househoid. Now. . .
- IF TELEPHONE INTERVIEW - Now I have some questions about how you spend your free time in outdoor recreation activities. The Bureau of the Census is collecting this informetion for the Netionel Perk Service. You were chosen at random to perticipete in this survey end your enswers wili represent those of thousands of other peopie iike yourseif. When I visited your househoid recentiy, I left en information card bookiet for this survey. Wouid you piease get it before we begin?

INTERVIEWER - Does respondent have $\{\square$ Yes - Read remainder of introduction below and continue with form NRS-1 information card booklet? $\square \square$ No - Go to form NRS-2 and continue introduction
These questions thet $i$ em going to esk you refer to just yourseif and not to other members of your househoid. Now . . .

1 a. Are there any outdoor recreetion ectivitios thet you particuiarly onjoy doing?

| 002 | $\square$ Yes |
| :--- | :--- |
|  | $2 \square$ No - Skip to introduction on page 2 |

1b. What are the 3 most importent to you?

| 003 |  |  |
| :--- | :--- | :--- |
| 004 | (1) |  |
| 005 | $(2)$ |  |
|  |  | $(3)$ |

Is there more than 1 activity listed in 1b?
CHECK
$\square$ No - Skip to 1 d
1 c . Of these ectivities, which do you enjoy doing most?

## 008


$\times \square$ No one favorite

|  | ACTIVITY (1) | ACTIVITY (2) | ACTIVITY (3) |
| :---: | :---: | :---: | :---: |
| 1d. Ask for each activity. <br> Do you go (activity) es often as you wouid like? | 007 $\square$ Yes <br>  $2 \square$ No | 018 $\square$ Yes <br>  ${ }_{2} \square$ No | $\begin{array}{ll} 025 & 1 \square \text { Yes } \\ & 2 \square \text { No } \end{array}$ |
| 10. Ask for each activity with "No" marked in Id. Turn to page 2 in the bookiet. Hara is a list of reesons why peopie don't do activities as often as they wouid lika. Which, If eny, of these are reasons thet kept you from (activity) more often during the past 12 months? Any other ressons? Mark all that apply. <br> (1) There are no places to do the activity around here. | 008 - $1 \square$ | 017 * $1 \square$ | 026 * $\square \square$ |
| (2) The places to do the activity are poorly maintained. | $2 \square$ | ${ }_{2} \square$ | ${ }_{2} \square$ |
| (3) The places to do the activity are too crowded. | ${ }_{3} \square$ | ${ }_{3} \square$ | ${ }_{3} \square$ |
| (4) The places to do the activity have pollution problems. | $4 \square$ | ${ }_{4} \square$ | ${ }_{4} \square$ |
| (5) The places to do the activity have personal safety problems. | ${ }_{5} \square$ | $5 \square$ | $5 \square$ |
| (6) Not enough money. | ${ }_{6} \square$ | ${ }_{6} \square$ | $6 \square$ |
| (7) Not enough time. | 009 [ $7 \square$ | 018. $7 \square$ | 027 $7 \square$ |
| (8) Inadequate transportation or too far to travel. | ${ }_{8} \square$ | ${ }_{8} \square$ | ${ }_{8} \square$ |
| (9) Inadequate information on places to do the activity. | $9 \square$ | $9 \square$ | $9 \square$ |
| (10) Personal health reasons. | 010 | 019 10] | 028 10 |
| (11) Don't have the people to do the activity with. | 011 11 $\square$ | 020 11口 | 029 |
| (12) Some other reason - Specify | $012 \quad 12 \square$ | 021 $12 \square$ | 030 $\quad 12 \square$ |
|  | $12 \square$ | $12 \square$ | $12 \square$ |
|  | $12 \square$ | $12 \square$ | $12 \square$ |
| 1f. Ask for all activities listed. Peopis anjoy outdoor recrestion sctivitiss for diffarent ressons. On psgs 3 of ths bookist, there is s ilst of such ressons. Which, If sny, of these sre ressons why you snjoy (activity) ? Any othar ressons? Mark all that apply. <br> (1) It's quiet and peaceful where I go. | 013 * $\square \square$ | 022 * , $\square$ | 031 * , $\square$ |
| (2) There aren't many people around. | $2 \square$ | $2 \square$ | $2 \square$ |
| (3) I have the special equipment for it. I like using the equipment. | ${ }_{3} \square$ | ${ }_{3} \square$ | $3 \square$ |
| (4) It gives me a chance to be with family or friends. | $4 \square$ | ${ }_{4} \square$ | $4 \square$ |
| (5) To do something new or different. | $5 \square$ | ${ }_{5} \square$ | ${ }_{5} \square$ |
| (6) To enjoy nature and the outdoors. | ${ }_{6} \square$ | $8 \square$ | $6 \square$ |
| (7) I like the people who do that activity. | $014 * 7$ | 023* $7 \square$ | 032 * 7 |
| (8) To get exercise or keep in shape. | ${ }_{8} \square$ | $6 \square$ | $8 \square$ |
| (9) To get away from day-to-day living or problems. | ${ }_{6} \square$ | ${ }_{6} \square$ | $6 \square$ |
| (10) Some other reason - Specify | 018 $10 \square$ | $02410 \square$ | $03310 \square$ |
|  | $10 \square$ | -10 $\square$ | $10 \square$ |
|  | $10 \square$ | $10 \square$ | $10 \square$ |

Do you go (activity) es ofton as you wouid like?
10. Ask for each activity with "No" marked in Id. Turn to page 2 in the bookiet.

Hara is a list of reesons why peopie don't do activities as often as they wouid
often during the past 12 months? Any other ressons? Mark all that apply.
the are no places to do the activity around here.
(3) The places to do the activity are too crowded.
(6) Not enough money.
(7) Not enough time.
(8) Inadequate transportation or too far to travel.
10) Personal health reasons.
(11) Don't have the people to do the activity with.
(12) Some other reason - Specify

1f. Ask for all activities listed. Peopis anjoy outdoor recrestion sctivitias for diffarent these sre ressons why you snjoy (activity) ? Any othar ressons? Mark all that apply.
(1) It's quiet and peaceful where I go.
(2) There aren't many people around.
(4) It gives me a chance to be with family or friends

To do something new or different.
(7) I like the people who do that activity
(8) To get exercise or keep in shape.
(9) To get away from day-to-day living or problems.
10) Some other reason - Specify

INTRODUCTION - Look at pages 4 and 5 in the bookiet. This is a list of various outdoor racraation activitias and a caiandar. I'd lika you to think about tha outdoor racraation activitias you took part in whather it was on vacations, trips, outings, or at any othar timas during tha past 12 months, from $\qquad$ 198 _. 10 $\qquad$ of this yaar.


2a. During the past 12 months, did you go (read each activity in Group 1 in column 2a)?
Record "Yes" responses in $2 b$ for each activity, then ask for next group. Ask for ALL groups and then go to Check Item B at the bottom of page 3.

GROUP I


2f. During the pest 2 yeers, thet is since 198 _, heve you stopped doing eny outdoor recreetion ectivities thet you used to do?
$178{ }^{17}$ Yes
$\square$ No - Skip to $2 i$
2g. Which activities heve you stopped doing? Any other ectivities? Code from $2 b$, if possible. Record up to the first three.

180
 (1)

181
 (2)

182
 (3)


2i. During the next two years, that is, between now and $198 \ldots$, do you expect you might stert doing any outdoor recreetion ectivities that you haven't done before?


2J. Which ectivities ere those? Any other ectivities?
Record up to the first three. (Code from $2 b$ if possible)
199 $\square$ (1)

200 $\square$ (2)

201 $\square$ (3)

## Is respondent 16 years old or older?



For next "Yes" entry in Check Item D, say -
3e. Other then the outings or trips you toid me ebout before, during the pest 12 months did you go on eny outings or trips primerily to go lactivity from Check Item DR
, $\square$ No - Enter code and activity

Go to next page for next activity in Check Item D. If this is last "Yes" activity, go to 4a.

303
$2 \square$ Yes - Enter code and activity, and ask 3b.
304
How meny outings or trips did you go on In the pest 12 months to go (activity)?

305
Number of trips
3c. Whet ls the neme of the mein plece you went (activity) on your iest trip?

3d. About how meny miies is (place from 3c) from your residence?

306 $\qquad$ Miles
3e. Look et the cerd on pege 7 in the booklet. How did you get there? Any other wey? (Mark all that apply.)


3f. How many other peopie went there with you?
311 $\qquad$ Number of people
$\mathbf{3 g}$. How long did it teke you to get there?


3h. Did you heve to pey eny entry fees, ectivity fees, rentels, or other cherges to go (activity) et (place from 3c)?

$$
\begin{array}{ll}
314 & 1 \square \text { Yes } \\
& 2 \square \text { No - Skip to } 3 j
\end{array}
$$

3i. About how much money wes thet per person?

3). How long did you stey there?


3k. Wes the piece where you were (activity) IN a city or town, Just outside e clty or town, or ewey from clties end towns?

| 18 | $1 \square$ In a city or town |
| :---: | :---: |
|  | $3 \square$ Away |

36. is thet e plece you cen get to by motor vehicie end where motor vehicies ere eliowed?

## 319 <br> $\qquad$

${ }_{2} \square \mathrm{No}$
${ }_{3} \square$ Don't know
Is code 27 marked in 3a?
CHECK
ITEM F
$\square$ Yes - Skip to $3 n$
$\square$ No

3m. Now, pieese think ebout the iend eround (place from 3c) where you were (activity). We ere interested in how deveioped thet eree is. Whlie you were (activity) there were you usuelly less then $1 / 2$ mile, $1 / 2$ mile to 3 miles, or more then 3 milles from the neerest road or trell open to motor vehicie use, Including motorcycies?
320 ,

$\square$ Less than $1 / 2$ mile$\square 1 / 2$ mile to 3 miles
$\qquad$ More than 3 miles Skip to 30Don't know

3n. Now, pieese think ebout the lend eround (place from 3c) where you were (activity). We ere interested In how developed thet eree is.
While you were driving motor vehicles off improved roeds, were you usueliy less then $1 / 2 \mathrm{mlie}, 1 / 2 \mathrm{mile}$ to 3 miles, or more then 3 milies from the neerest improved roed?
321$\square$ Less than $1 / 2$ mile$1 / 2$ mile to 3 milesMore than 3 milesDon't know
30. Turn to pege 8 in the booklet. In the eree eround the plece where you were (activity), how noticeeble or prominent were menmede structures such es power ilines, dems, reliroeds, or bulldings?

322Not noticeableHardly noticeable $3 \square$Moderately noticeableQuite noticeable but not prominent
$\square$ Extremely noticeable and prominent

3p. In the eree eround the piece where you were (activity) how noticeeble or prominent were signs of other ectivities such es logging, ferming, mines, querries, end grevel pits?
323Not noticeableHardly noticeableModerately noticeable 4Quite noticeable but not prominent
$5 \square$ Extremely noticeable and prominent
Look at 3 m . Is entry 2 or 3 ?
CHECK
ITEM G $\square$
$\square$ Yes
$\square$ No - Skip to $3 r$
3q. About how meny other persons, besides those in your own perty, did you see or heer per dey in the eree eround (place from 3c) where you (activity)?
$324, \square$ Less than 3
${ }_{2} \square 3$ to 10
${ }_{3} \square 11$ to 50
$4 \square 51$ to 100
$5 \square$ More than 100
3r. On this trip did you go to eny other pieces?

$$
325, \square \text { Yes }
$$

${ }_{2} \square$ No - Go to Check Item H
3s. About how many milias did you travel during thet entire trip?

326
Miles
Are there any more activities with "Yes" responses
CHECK
in Check Item D?
ITEM H
$\square$ Yes - Ask 3a for next activity with "Yes"
No - Go to 4a



4a. Now, I would like you to think about tha relativa importance TO YOU of varlous types of parks and outdoor recreation areas.

FIrst, would you say that . . .
Having a yard or piay area to use for outdoor recreation Is very Important, somowhat Important, or not very ImporVery important Somewhat important
$3 \square$ Not very important
4b. Having parks or outdoor recreation areas within a 15-minuta walk from home is very Important, somewhat Important, or not very important?
337Very important
$2 \square$ Somewhat important
$\qquad$ Not very important

4c. Having parks or outdoor recreation areas that are farther than a 15 -minute walk, but within an hour's travel time from home is very Important, somewhat important, or not very Important?
338Very importantSomewhat importantNot very important
4d. Having parks or outdoor recreation areas even farther away, more than an hour's travel, maybe saveral hours' or oven days' travel, is very Important, somowhat Important, or not very Important?

339Very important
$2 \square$ Somewhat important
$3 \square$ Not very important
4e. Now let's talk about the different places where you ongage in outdoor recreation.
Does your residence have a yard or play area that you can use for outdoor recreation?
340

$$
1 \square \mathrm{Ye}
$$

$\square$ No - Skip to $4 g$
4f. During the past 12 months, from $\qquad$ 1,198_, of thls year, on how many difforent days did you use this yard or play area for outdoor recreation?
Read answer categories.
341
$1 \square$ Never1 to 2 days
$3 \square$ 3 to 10 days

4g. Are there parks or outdoor recraation areas within a 15-minute walk from your residence?
342Yes ${ }_{2} \square$ No - Skip to $4 i$

4h. During the past 12 months (from $\qquad$ 1, 198_, to of this year), on how many diffarent days did you go to parks or outdoor recreation areas within a 15-minute walk?
Read answer categories.

```
343
\(1 \square\) Nevar
```

```1 to 2 days
```

```3 to 10 days
```

```More than 10 days
```

41. During tha past 12 months, on about how many diffarent days did you go to parks or outdoor recreatlon areas that wara more than a 15 -minute walk, but within an hour's travel from home?
Read answer categories.

| 344 | ,$\square$ Naver |
| :--- | :--- |
|  | $2 \square 1$ to 2 days |
|  | $3 \square 3$ to 10 days |
|  | 4 More than 10 days |

4]. During tha past 12 months, on about how many different days did you vist any parks or outdoor recreation areas that wera more than an hour's traval from homa?
Read answer categories.
345
$1 \square$ Nover
$2 \square 1$ to 2 days
$3 \square 3$ to 10 days
$4 \square$ Mora than 10 days

5a. Turn to paga 9 In the booklet. Here ls a llet, by reglon, of the country's natlonal parks. Can you recall ever golng to any of these national parks?

346Yes
$2 \square$ No - Skip to 5d

5b. Which national parks hava you gone to?
Interviewer - Refer to page 10 in the booklet, enter code for each response.

## Any others?



If more than 20, how many mora?
357
$\mathbf{5 c}$. In what year did you last visit one of these natlonal parks?

368


5d. How llkely are you to visit ona of the national parks in the next 12 months; very likely, somawhat likaly, or not very likely?
369
$1 \square$ Very likely - Skip to Check Item I
$2 \square$ Somewhat likely
$3 \square$ Not very likely
$4 \square$ Don't know

5e. How likely are you to viste one of the natlonal parks in the noxt 3 years?
360
$\left.\begin{array}{l}1 \square \text { Very likely } \\ 2 \square \text { Somewhat likely } \\ 3 \square \text { Not very likely }\end{array}\right\}$ Don't know

Skip to Check Item J

## CHECK <br> 'ITEM I

Is respondent 16 years old or older?

5f. Many national parks charge entry foes. Additional foes ara charged for the use of certaln facllites and sarvicas Inside the parks. Thinklng now about any amount from $\mathbf{2 5}$ cants to $\mathbf{1 0 0}$ dollars, whet is tha highest antry fee that you would pay par adult to vist any national park In the next 3 years?

## 361



5g. Now please think about a yaarly pass which would admk you to all natlonal parks as oftan as you wanted to go during tha yaar. Thinking about any amount from 5 dollars to 100 dollars, how much would you be willing to pay for such a pass In tha naxt 3 yaars?

## 362



363
$1 \square$ Not interestedt know

## CHECK <br> ITEM J

Is respondent 16 years old or older?

5h. Look at the card on paga 10 In the booklet. Assume that to operate a national park costs an averags of 5 dollers for aach visitor. Thinking now about aach INDIVIDUAL vistor, how much of tha 5 -dollar cost do you think should be paid directly by that vishor through antry snd othar fees, and how much should be paid by the ganaral public from tax revanue?

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$\qquad$ All ( $\$ 5.00$ ) from park visitor - nothing from taxes $2 \square 1 / 4(\$ 3.75)$ from park visitor - the rest from taxes $3 \square 1 / 2(\$ 2.50)$ from park visitor - the rest from taxes $4 \square 1 / 4(\$ 1.25)$ from park visitor - the rest from taxes $5 \square$ Nothing from park visitor - all $(\$ 5.00)$ from taxes ${ }_{6} \square$ Don't know




## READER COMMENT SHEET

## Dear Reader:

The National Park Service is interested in your comments and suggestions regarding this report. If you would like to comment, please remove this evaluation page and fold it so that the National Park Service mailing address appears on the outside. After folding, use tape or staples to close. No postage is required.

1. How useful was the information in the report? Was it complete and sufficiently detailed? Place a checkmark ( $r$ ) under the answer you select.

| HOW USEFUL? |  |  |
| :---: | :---: | :---: |
| Some- |  |  |
| Very | what | Not |
| useful | useful | useful |


| HOW MUCH DETAIL? |  |  |
| :---: | :---: | :---: |
| Too |  | Not |
| much | About | enough |
| detail | right | detail |


2. Specifically, for what purpose will you use the information?
3. Regarding the presentation of information, was it understandable and in the form that you needed? Which parts of the report, if any, were difficult to understand or use? How could the presentation be improved?
4. Can you suggest any additional information that may be suitable for inclusion in future Nationwide Recreation Surveys?
5. Any other comments or suggestions? Use additional paper, if necessary.
6. (This part is optional).

## Name

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National Park Service
Recreation Resources Assistance Division (765)
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Washington, D.C. 20013

ATTN: NRS Report



[^0]:    ${ }^{1}$ Bevins, M.I., and D.P. Wilcox. 1980. Outdoor Recreation Participation-Analysis of National Surveys, 1959-1978. Vermont Agricultural Experiment Station Bulletin 686. Burlington, VT.
    ${ }^{2}$ The first four of these surveys, conducted in 1960, 1965,1970 , and 1972, resulted in one or more final reports which have since become difficult to find, even in major libraries. Fortunately, all of them (plus a less directly relevant survey conducted in 1971) are described and evaluated in Kirchner Associates, Inc. Evaluation of Five Previous Nationwide Outdoor Recreation Surveys, which is Survey Technical Report 1, in Appendix II of The Third Nationwide Outdoor Recreation Plan. 1979. U.S. Department of the Interior, Heritage Conservation and Recreation Service, Washington, D.C. The most recent antecedent is the 1977 Nationwide Recreation Survey, which is described in appendix I, Survey Summary and appendix II, Survey Technical Reports, of The Third Nationwide Outdoor Recreation Plan.
    ${ }^{3}$ An earlier, limited purpose survey, the 1955 Survey of the Public Concerning the National Parks, will be referred to in Chapter 4, Americans and Their National Parks.

[^1]:    ${ }^{5}$ The Information Card Booklet, often called a "flashcard booklet" was used by the respondent as an aid in answering certain questions designed to elicit reactions to a limited or structured array of choices. The booklet is described and illustrated in the Methodological Report.
    ${ }^{6}$ Examples are nonresponse error (compensated, in part, by a weighting procedure described in the Methodological Report), recall error, and those interviewer and data processing errors which remain undetected after editing.

[^2]:    "Much less than 37 calendar days. An "activity-day" was counted for each different calendar day on which the respondent engaged in a given activity, even if for a very short time.

[^3]:    ${ }^{2} A$ conservative estimate based on the midpoints of the first three ranges from which the respondent chose an estimate ( $A=1-2$ days, $B=3-10$ days, $C=11-25$ days) and the low point of the highest range ( $\mathrm{D}=$ more than 25 days).

[^4]:    ${ }^{3}$ Outdoor recreation was implicitly defined by exposing the respondent to the activity list, various arrays of outdoor locales, etc. See questionnaire.

[^5]:    ${ }^{1}$ Conservative estimate based on midpoints of ranges of days selected by respondents.
    ${ }^{2}$ On a given calendar day, a person generates an activity-day for each activity participated in.
    ${ }^{3}$ Average of midpoints of ranges from which the respondent selected an estimated expenditure level for outdoor recreation. See question 6 h in the questionnaire, appendix C .
    ${ }^{4}$ Standard Metropolitan Statistical Area.

[^6]:    'Since percentages are inherently abstractions from reality, it may be easier to keep in mind what they imply and-more importantly-do not imply.

[^7]:    ${ }^{2}$ Due to scheduling difficulties, it was necessary to postpone the post-fall interviews from December 1982 to January 1983. Therefore, the fall season was, in fact, 4 months long (September through December, 1982); and the spring season was 2 months (April and May, 1983). To compensate for these discrepancies, the seasonal estimates of activity-days were placed on a per month basis. (See tables 8 and 9.)

[^8]:    $x$ Less than one half of one percent.
    'May not have been perceived as an "outdoor activity" by all respondents. The respondents were asked to name the activities they "particularly enjoyed doing" and "most enjoyed doing" before they were shown the activity list.

    NOTE: Percentage of total sample and of participants who said they "particularly enjoyed" or "most enjoyed" selected activities. Respondents who said they engaged in the activity once or more during the prior 12 months were counted as participants.

[^9]:    s.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of the Census. 1982. 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. U.S. Govemment Printing Office, Washington, DC. Table 49 and tables 69-70.

[^10]:    ${ }^{6}$ The behavior surveyed was that during calendar year 1980 in the Fishing, Hunting, etc. Survey, in which the interviews took place early in 1981. In the Nationwide Recreation Survey, the 12 -month recall periods ranged from the fall of 1981 through the spring of 1983. These should be very comparable time periods, since there is little evidence of faddishness or instability in these nature observation activities.

[^11]:    ${ }^{1}$ Lancaster, Roger A. (ed.). 1983. Recreation, park and open space standards and guidelines. National Recreation and Park Association, Alexandria, VA.

[^12]:    ${ }^{1}$ Only respondents who indicated they had a yard or play area at their residence or a neighborhood park available were questioned about their use of these two areas.

[^13]:    - Not ascertained for certain activities.
    ${ }^{1}$ Totals do not add up across columns because of missing data about length of stay. The final column represents the total number of trips taken for these activities.
    ${ }^{2}$ Percent of all activity trips.

[^14]:    'Visits are not the only ways in which people experience these parks. The national parks are part of the hentage of all Americans, and they are experienced in numerous vicarious ways-through the media, word-of-mouth, etc.-in addition to visits.
    ${ }^{2}$ Audience Research Incorporated. 1955. A Survey of the Public Concerning the National Parks. Conducted for the National Park Service, Department of the Interior. Princeton, NJ.

[^15]:    ${ }^{3}$ For this reason, the year in the third column is not always that in which the area in question was designated by Congress as a national park. Many current national parks were formerly national monuments or other administrative units, but would be recognized by the public by their proper names. $V$ isits to these areas during the prepark years would likely be recalled and cited in this survey. In such a case, therefore, the year given is that of its establishment as an area designated for public visitation under its current proper name. Badlands, for instance, was not established as a national park until 1978. The date given, 1929, is that of its establishment as Badlands National Monument.

[^16]:    ${ }^{4}$ This apparent 18 -percent difference reflects more than an increased propensity of present-day
    Americans to visit national parks. The opportunity to $\log$ a visit has increased dramatically with the creation of 21 new national parks since 1955. In some regions, it would now require a modicum of care and planning to maintain an unblemished lifetime record of national park avoidance.

[^17]:    ${ }^{1}$ Activity days are defined in chapter 1 and listed in table 1.
    ${ }^{2}$ These generalizations are based on a combination of central tendencies. Few individuals share all of these characteristics.

[^18]:    'Percentage of respondents aged 16 and older who answered "yes" to the question "Did you spend any money in the past 12 months on outdoor recreation?"
    ${ }^{2}$ Standard Metropolitan Statistical Area.

[^19]:    'Percentage of respondents who gave selected reasons why they do not do their favorite activities "as often as they would like". Percentages are based on those respondents who cited one or more activities they "particularly enjoyed."
    tion activities that they used to do, only 16 percent of those 60 years and older said yes compared with 21 percent of those under 60. A followup question asked respondents who had stopped an activity why they stopped. The reasons given mirrored those found in table 30. Sixtyseven percent of the older respondents reported health-related reasons for stopping an activity followed by "no people to do the activity with" ( 12 percent). All other reasons listed for stopping an activity were cited by less than 10 percent of those respondents 60 years and older. Conversely, respondents
    under 60 most frequently cited lack of time ( 39 percent) as the reason they quit an activity. For the nonelderly, health reasons (23 percent) and lack of people to do the activity with ( 21 percent) also played fairly substantial roles in their decisions to stop participating. For all groups, poor maintenance and pollution at the activity sites were the least frequently cited reasons for stopping an activity.

    Several other questions in the NRS asked respondents to compare the time and money they currently spend on outdoor recreation to what they spent 2 years prior

[^20]:    'Standard Metropolitan Statistical Area.

[^21]:    ${ }^{1}$ Standard Metropolitan Statistical Area.

[^22]:    ${ }^{1} 16$ years and older.
    ${ }^{2}$ Codes were developed from responses to open-ended questions number 6 b and 6 d .

[^23]:    ${ }^{1}$ Percentage of respondents 16 years and older who said they spent money on outdoor recreation in 12 months prior to their interview.
    ${ }^{2}$ Codes were developed from responses to open-ended questions number $6 j$ and 61.

[^24]:    ${ }^{1}$ Standard Metropolitan Statistical Area.

[^25]:    ${ }^{1}$ Standard Metropolitan Statistical Area.

