IN REPLY REFER TO: N26-N

# UNITED STATES <br> DEPARTMENT OF THE INTERIOR <br> NATIONAL PARK SERVICE <br> WASHINGTON, DC. 20240 

March 12, 1970

Memorandum

TO:
Directorate; All Regional Directors; Director, Office of National Capital and Urban Park Affairs; and All Center Directors

From: Chief, Office of Natural Science Studies
Subject: Office of Natural Science Studies Reports
During the latter part of 1968 , the Office of Natural Science Studies conducted a nationwide study to learn about some of the sociological characteristics of the people who went to a national park during the preceding year. The purpose of this study was to obtain baseline data necessary for additional studies which will be undertaken later. While these data were obtained as an integral part of the scientific work being carried out by the Office of Natural Science Studies, they may also be useful to other divisions for any number of purposes.

Periodically, ONS will issue short reports similar to the enclosure, in which some information about people in the parks will be presented. These will be technical reports presenting the information and explaining it. How it may be useful to each division will, of necessity, be decided within the division. ONS will be available, of course, to answer any questions about the information contained in these reports. Should you require additional copies of this report, please contact this office directly. The reports are provided for administrative use only.


Robert M. Linn

Enclosure

## PEOPLE IN THE PARKS

Age is often cited by observers of the contemporary scene as an important criterion for determining whether some people will or will not behave in certain ways. Within the parlance of recreation experts, however one may wish to define such; one current conceptual distinction is between activities which are inherently active or passive. Basically this distinction is not so much directed towards the activity per se, but is an evaluation of the behavior of people engaged in that activity. Thus, playing football is an active recreation while watching a football game at home on television or as a spectator is considered passive. Apparently the distinction between active and passive reflects a difference between seeking out stimulation from merely letting it come to you. Certainly this descriptive distinction is gross and of limited utility for the understanding of much of recreation behavior. Yet it has been and remains in use when some describe recreation activities. How helpful the distinction is, is not clear.

With reference to activities such as hiking or camping or skiing, etc., it has often been noted in studies of recreation user preferences that proportionately fewer older persons are found among the participants in such activities. The conclusion has often been that the activity is inherently an active one, hence requiring physical and mental effort beyond the reserves of older persons. This argument is, of course, circular but it seems to persist among recreationists. Let's examine its pitfalls.
l. Unless you compare the age distribution of participants in a particular activity with the age distribution of the population as a whole, you cannot know statistically whether certain age categories are under- or over-represented in that activity.
2. Even if you observe that a particular age category is underor over-represented, this alone is not $\%$ sufficient basis for deciding whether it is relevant to your problem. Usually some other variable is needed. Several examples will be presented later in this report which will demonstrate this point.
3. If one wishes to begin to assess the comparative importance of age among recreation activities, the age distributions associated with a number of activities should be obtained and examined relative to each other. This will not, however, indicate whether any particular activity is active or passive by nature.
4. Finally, it is circular to argue that since there are proportionately fewer older persons engaged in a particular activity then that activity must be active; and to explain, in turn, the lack of older persons as participants on the basis of passivityactivity.

In an earlier report in this series, we noted that age per se did not appear in and of itself to distinguish among park-going publics. But perhaps, as we mentioned above, it is age plus something else which helps determine whether a person's park-going behavior occurs in one or another way. For example, what, if any, joint effects are there between age and social class (income used as our index) with reference to membership in a particular park-going aggregate?
(See Table I)
Table I is different from others presented in this series. What it shows is a separate table for each park-going public. For example, Table la shows the relationship between age and income categories for those adults, 18 years and older, who had been in some national park within a year before the study period. If you refer to Report \#6, you will note that this is the social aggregate whose recency and frequency in all kinds of parks is significantly different than other aggregates. You may also recall that this aggregate had an income distribution different from the others. It was observed that income alone was not a sufficient condition for explaining entirely the differences in recency and frequency of going to parks. Examine now the sub-tables in Table $I$.

In Table la we notice that the income distribution within a particular age category is similar across the three categories in the Table, with the exception of the 25-49 year category. In this category we notice that a disproportionate number of persons, compared with the remaining two categories, have incomes of over $\$ 10,000$ per year and of under $\$ 5,000$ a year. What this means is that within this social aggregate of park-goers, adults between the ages of 25 and 49 years possess a disproportionately larger share of the incomes above $\$ 10,000$ and a disproportionately smaller share of the incomes under \$5,000. This comparative superiority within the aggregate should produce a distinct style of going to parks which will characterize the park-going behavior of this aggregate. For example, certain parks may be most intensely gone to by this aggregate. Certain particular activities, like camping, may be most heavily engaged in by the aggregate. Or the periods of the year during which they are in national parks may differ, etc. These and similar hypotheses require data beyond this study to assess their validity.

In a similar vein, examine Table lb. Here we note that adults between 25 and 49 years are disproportionately represented among those with incomes between $\$ 5,000$ and $\$ 9,999$. Likewise, adults over 50 years of age are disproportionately over-represented among persons with incomes under $\$ 5,000$. This social aggregate is one in which persons have never been to a national park although they go to other kinds of parks. Again, the point can be made that the style of park-going is probably quite different among such persons. What its particular characteristics may be requires additional study.

Finally, examine Table lc. Here we note that among adults who never go to any kind of park, the age and income distributions are comparatively similar. This suggests that while the joint effects of the two variables, age and social class, help id nntify differences among park-going publics, they are not sufficient to explain why some persons do or do not go to parks per se.

## Age and Education

In Report \#6 we noted the importance of education as a variable which enabled us to distinguish among park-going publics. Now we want to examine in more detail how that educational attainment is distributed among those adults within a particular aggregate. For example, what is the joint effect of age and education, if any, as related to parkgoing behavior? Table II shows entries for several publics. In Table $2 a$ we note that for all age categories a substantial proportion have education beyond high school. Table 2 b shows that comparatively smaller proportions of the adults in the particular age categories have education beyond high school. Finally, in Table 2c we note that almost none of the adults in these age categories have education beyond high school. Indeed in Table 2c few have completed high school. It is important to observe that education beyond high school as a criterion for differential park-going behavior is powerful enough to cut across age categories. Thus, it is not merely the case that since public education has been more broadly available in the last fifty years that younger persons would be disproportionately represented in parks. Instead, as each of these entries shows, the majority of all age categories obtained a high school education or less. This same pattern holds even among the 18 to 24 year olds. Apparently, as with age and income, education and age combine as joint effects to produce partial differences in park-going behavior. These differences are reflected in the recency and frequency with which the adults go to parks.

## Summary

This preliminary analysis of the relationship between age and income, as well as age and education, suggests that if one employs age as a predictor of whether an adult does or does not go to a park (presumably active as contrasted with passive) one is likely to draw false conclusions as to why the population is so distributed in parks. Instead, it appears that income and education are capable of overcoming the age effect alone, such that persons of all ages go to parks in similar patterns. That is, older persons with an education beyond high school are an important component of the social aggregate which goes to parks of all kinds most continuously. Noting the power of education, we can observe that this tends to bind the aggregate together even more than income. This suggests even more strongly than earlier analyses the
presence of sub-cultural differences in the society with respect to park-going. In subsequent reports discussion of such cultural factors will be presented.

Neil H. Cheek, Jr.
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March 12, 1970

Table I. Age and Income Distributions - $\%$

Table la. Adults in a National Park Last Year

| Age |  |  |  | $\begin{aligned} & 18 \\ & 88 \\ & 8 \\ & 0 \\ & \text { no } \\ & \text { n } \\ & 6 \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.8-24 | 28.3 | 45.0 | 16.0 | 5.0 | 1.6 | 4.1 | 100.0 |
| 25-49 | 8.0 | 46.0 | 30.2 | 11.5 | 3.0 | 1.3 | 100.0 |
| 50+ | 23.1 | 43.0 | 16.0 | 12.9 | 2.2 | 2.8 | 100.0 |

T'able lb. Adults Never in a National Park

| Age | $\begin{gathered} 48 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ |  | $\begin{aligned} & 8 \\ & 8 \\ & 8 \\ & 8 \\ & 0 \\ & 0 . \\ & 0-1 \\ & -1 \end{aligned}$ | $\begin{aligned} & 18 \\ & 88 \\ & 8 \\ & 8 \\ & \text { in } \\ & n_{6}^{\prime} \\ & 6 \end{aligned}$ |  |  | - + $\stackrel{+}{0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18-24 | 36.0 | 36.6 | 16.7 | 7.0 | 1.2 | 2.5 | 100.0 |
| 25-49 | 22.1 | 50.0 | 19.0 | 7.0 | 1.9 | --- | 100.0 |
| $50+$ | 53.0 | 29.0 | 10.3 | 5.0 | . 7 | 2.0 | 100.0 |

Table lc. Adults Never in Any Park

| Age | $\begin{aligned} & \text { y } \\ & 0 \\ & 0 \\ & \text { gin } \\ & \hline \end{aligned}$ |  |  |  | $\begin{gathered} 8 \\ 8 \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline \end{gathered}$ | $\stackrel{\text { - }}{\text { ¢ }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18-24 | 68.8 | 31.2 | --- | --- | --- | 100.0 |
| 25-49 | 68.5 | 24.5 | 3.0 | 2.0 | 2.0 | 100.0 |
| $50+$ | 66.0 | 22.0 | 6.5 | 1.0 | 4.5 | 100.0 |

Table II. Age and Education Distribution - $\%$

Table 2a. Adults in a National Park Last Year

| Age | Less than <br> High School | High School | More than <br> High School | No <br> Response | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $18-24$ | 15.0 | 43.3 | 41.7 | $-\ldots$ | 100.0 |
| $25-49$ | 21.5 | 41.0 | 37.0 | .5 | 100.0 |
| $50+$ | 39.0 | 32.0 | 28.0 | 1.0 | 100.0 |

Table 2b. Adults Never in a National Park

| Age | Less than <br> High School | High School | More than <br> High School | No <br> Response | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $18-24$ | 36.0 | 43.0 | 21.0 | --- | 100.0 |
| $25-49$ | 45.4 | 39.2 | 15.0 | .4 | 100.0 |
| $50+$ | 73.0 | 18.0 | 9.0 | --- | 100.0 |

Table 2c. Adults Never in Any Park

| Age | Less than <br> High School | High School | More than <br> High School | No <br> Response | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $18-24$ | 50.0 | 37.5 | 12.5 | -- | 100.0 |
| $25-49$ | 79.0 | 18.0 | 1.5 | 1.5 | 100.0 |
| $50+$ | 76.0 | 14.0 | 4.0 | 6.0 | 100.0 |

