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National Park Service Comprehensive Survey of the American Public

2008–2009

Broad Comparisons to the 2000 Survey

Natural Resource Report NPS/NRSS/SSD/NRR—2011/431

ON THE COVER
James A. Garfield National Historic Site, Ohio
Photograph by the National Park Service Visitor Services Project

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Executive Summary

In 2008 and 2009 the National Park Service (NPS) conducted its second Comprehensive Survey of the American Public (CSAP2), a nationwide telephone survey consisting of 15-minute interviews with more than 4,000 respondents across the United States. Like the first NPS comprehensive survey in 2000 (CSAP1), this research provides policymakers with a wide-ranging source of information about how both visitors and non-visitors relate to national parks, national monuments, and other units of the National Park System.

As one of a series of technical reports based on the survey data, the present paper has a limited objective: to highlight the most comparable findings from the two national surveys, and to place those particular comparisons in the context of methodological differences essential to their interpretation. Results include:

1. The 2008-09 survey incorporated a number of methodological refinements, especially in questions about recent visitation. Nevertheless, in many respects the two surveys yield broadly similar results.

2. Nearly 90% of the public in both survey years said they had visited a unit of the National Park System during their lifetime.

3. One-third (in CSAP1) to nearly one-half (in CSAP2) of respondents could name a valid NPS unit they had visited in the previous two years.

4. More than a third of respondents said they were strongly expecting to visit in the year upcoming. Among recent visitors in both surveys, about six in 10 were planning another visit within the year.

5. In both years, the biggest perceived barriers to visitation included not knowing much about NPS units, the time required to get to one, and the costs of hotels and food. The percentage who strongly agreed that factors such as these inhibited visitation declined somewhat from 2000 to 2008-09.

6. Opinions about the removal of non-native plants and animals were sharply polarized, with little change evident since 2000.

7. Visitor satisfaction remained very high, with only a tiny fraction of recent visitors (3% in both surveys) expressing clear dissatisfaction with the NPS.

The comparisons presented here are suggestive but not definitive regarding trends over time. Any apparent change (or stability) could result from methodological differences in the two surveys. Future iterations of the survey can use the methods and results from CSAP2 as a baseline for determining trends.

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Introduction

For many Americans, the national parks represent a sense of place, a marker of identity, and a reminder of the country's past (see Runte, 1987; Stokowski, 2002). However, the lands set aside as units of the National Park System do not have the same meaning for everyone. Some Americans visit the parks frequently; others, rarely or not at all. There is also wide variation in patterns of outdoor recreation more generally (Cordell *et al.*, 2004; Outdoor Foundation, 2010; U.S. Fish and Wildlife Service and U.S. Census Bureau, 2006).

The National Park Service (NPS) uses data from a variety of social surveys to assess the public's relationship to national parks, national monuments, and the other natural, historical, and cultural sites managed by the NPS. Most of these data sources focus on visitors to a particular NPS unit, but in the past decade two surveys sponsored by the NPS have provided comprehensive national data. The distinguishing characteristic of the two national surveys is that non-visitors as well as visitors were interviewed about their behaviors and opinions concerning national parks.

Each of the two nationwide surveys has generated a national report, regional reports, and numerous topical reports on specific issues. Taken together, the two sets of reports derived from these surveys help NPS policymakers understand how the American public relates to the National Park System.

As just one element of that larger research effort, the present report has a much more limited objective: namely, to highlight the most comparable findings from the two national surveys, and to place those particular comparisons in the context of methodological differences essential to their interpretation.

The first NPS Comprehensive Survey of the American Public (hereafter, CSAP1) was conducted in 2000 by Northern Arizona University. Its reports are archived on the NPS website at http://www.nature.nps.gov/socialscience/archive.cfm#CompSurvey. In 2008-09, the second national survey (CSAP2) was conducted by the Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming. Like its predecessor, CSAP2 was administered through telephone interviews on a nationwide sample. It provided updated information on some of the questions covered in CSAP1, addressed additional topics not covered in 2000, and refined the survey methods. Its various reports will also be made available on the NPS website at http://www.nature.nps.gov/socialscience/.

Early in the planning for CSAP2, the NPS and its technical advisory committee decided that refining the survey methods would have a higher priority than strict replication of CSAP1. As a consequence, only a few items on the surveys can be directly compared. Even for such broadly comparable items, the substantive results presented here are merely suggestive. Any apparent change (or stability) over time could reflect trends in the public's opinions and behaviors, but might also result from methodological differences between the two surveys.

Comparing Methods

Details on survey methodology are provided in the main national reports from CSAP1 and CSAP2, which also include the full texts of the respective questionnaires and tables of responses for every item. Here we summarize only those essential aspects of method that need to be considered when comparing results from the two surveys.

Sampling

Both CSAP1 and CSAP2 were designed to represent the U.S. population (adults in the 50 states and the District of Columbia). CSAP1 relied exclusively on a Random Digit Dialing (RDD) sample of landline residential telephone numbers (see NPS, 2001). However, because of the rapid increase in cell-only and cell-reliant households throughout the U.S., a sample of landline telephones can no longer be taken as representing the population as a whole (Brick *et al*., 2007; Keeter *et al*., 2007). Therefore, in CSAP2 a random sample of cell phone numbers supplemented the primary RDD sample of landlines.

In both surveys, the landline sample was disproportionately stratified to produce approximately 500 completed interviews from residents in each of the seven NPS administrative regions. The cell sample in CSAP2 produced about 550 additional completions nationwide. In total, the CSAP1 sample generated 3,515 completed interviews, versus 4,103 in CSAP2.

In CSAP1, all interviewing was conducted in a 90-day period between February 21 and May 21, 2000. Because visitation and activities at NPS units vary seasonally, CSAP2 spread the interviewing across all four seasons of the year, from April of 2008 to March of 2009.

To control for possible seasonal effects, this report provides CSAP2 results not only for the full year of calling but also for the spring calling only (i.e., for the 1,013 interviews completed between April 10 and June 20, 2008). The spring-only results maximize comparability with the CSAP1 findings, although the calling dates do not match exactly. As will be evident below, there are no major differences between the spring-only results and the full 2008-09 data.

Converting a sample of telephone households into a representative sample of individual adults required selecting one adult (18 years of age or older) to complete the interview from each household contacted. In CSAP1, interviewers asked to speak to the adult in the household who had had the *most recent* birthday (cf. Grandjean *et al*., 2004). For a random share of the households in CSAP2, this same approach was replicated. In another part of the CSAP2 sample, interviewers asked to speak with the adult who would have the *next* birthday. For the remaining households, the interviewer asked to speak to a specified respondent who was selected by computer using a random-number generator (e.g., “the second-oldest adult” in the household).

Statistical checks on the three methods of within-household selection used in CSAP2 indicate that all three yield comparable results. Method of respondent selection is significantly related to only one of 33 variables examined in these checks, which is about what would be expected by chance alone. Therefore, the comparisons in this report do not subdivide the results by within-household selection method.

Language of Interviewing

The interviews for CSAP1 occurred exclusively in English. For CSAP2, households that were identified in the initial calling as potentially requiring a Spanish-speaking interviewer were called back by bilingual interviewers who then used either the English or Spanish version of the questionnaire, whichever was more comfortable for the respondent.

Differences by language of interview are not examined here, nor are the results broken out by racial or ethnic group. A separate report in this series shows that Hispanic respondents who were interviewed in English were in general more favorably disposed toward national parks than those interviewed in Spanish. Hispanic Americans were underrepresented among recent park visitors in both surveys, and more so in CSAP2 than earlier, while African Americans appeared to be slightly less underrepresented than before. Further discussion of these important matters is reserved for the companion report (see also Grossman, 2010; Solop, Hagen, and Ostergren, 2003).

Weighting

The methods used for weighting the respondent data for CSAP1 and CSAP2 were not identical, but their close similarity should help to mitigate sampling differences such as those described above. In both surveys, the landline sample was stratified by the seven NPS regions, with the least populous regions being over-sampled to obtain enough completed interviews for separate analyses of each region's residents. Therefore, the nationwide results had to be weighted according to the proportion of the adult population in each of the seven regions.

In CSAP2, the landline sample was first weighted to account for the number of adults in the household and the number of landline telephones. Then the combined landline/cell sample was weighted to reflect regional cell phone usage (as estimated by the National Center for Health Statistics). Weights were iteratively adjusted to bring the national data into correspondence with independent population distributions on region, age, gender, ethnicity, and race (using benchmarks obtained from the Census Bureau's Population Estimates Program). CSAP1 used the same demographics for weighting, but did not have to account for cell phone usage because no cell phone sample was included.

Survey Participation

Survey participation rates may be assessed in various ways. A "completion rate" can be defined as the number of completed interviews divided by the number of respondents who progressed past the introductory screening questions. So defined, the national completion rate for CSAP2 was 91%. The CSAP1 completion rate was reported (with no explicit definition) as 88% (NPS, 2001).

A completion rate generally considers only households that were actually contacted, whereas a "response rate" includes in its denominator all eligible phone numbers in the sample, even if no one ever answered. Response rates, calculated by any of several accepted formulas, often yield much lower numerical values than completion rates. The overall response rate for CSAP2 was 12.5% (using the "RR3" formula defined by the American Association for Public Opinion Research).

The CSAP1 reports did not provide a response rate as such, so a direct comparison of response rates between the two studies cannot be made. However, because response to telephone surveys generally has been dropping over the past decade (see Keeter *et al*., 2006), CSAP1 may have had a higher rate of response than CSAP2. In turn, it may be that the effect of self-selection of survey respondents with an interest in national parks was greater for CSAP2 than for CSAP1. For example, people who were recent or regular visitors to the parks could have been more interested in the stated topic of the survey, and hence more likely to agree to participate.

To mitigate potential problems from non-response, survey procedures routinely involve weighting the survey results (e.g., Brick *et al*., 2007), as in both CSAP1 and CSAP2. To the degree that demographic factors used in the weighting are correlated with other characteristics addressed in the survey, such as opinions and behaviors, weighting helps to reduce the adverse effects of non-response. However, some bias in the estimates is unavoidable when non-respondents have characteristics different from those of interviewed people in the same demographic group. A separate CSAP2 topical report examines potential non-response bias in detail.

Questionnaire Content

Subtle but important differences in questionnaire content constrain the direct substantive comparisons that can be made between the two surveys.

The NPS developed CSAP1 in cooperation with researchers at Northern Arizona University, and then modified the questionnaire for CSAP2 in cooperation with WYSAC's research team at the University of Wyoming. As in 2000, the main body of the CSAP2 survey instrument began with several questions about visitation to units of the National Park System, and included major sections dealing with reasons for not visiting parks more, opinions on specific NPS policies, and the respondent's demographic characteristics.

In other ways, however, the topics covered in CSAP2 departed from CSAP1. The NPS, in consultation with its technical advisory committee, dropped several groups of questions with the understanding that they might be rotated back into the questionnaire in a third iteration of the survey. In their place, CSAP2 asked about some new topics identified by agency staff and advisory committee members, including opinions about several different resource management issues.

Besides modifying the topics covered, CSAP2 sometimes used different question wording or response choices. For example, in CSAP1 the questions asking about agreement with a particular statement provided only four response categories, ranging from "strongly agree" to "strongly disagree." To address concerns that the absence of a middle category might push neutral respondents to one side or the other, or make them decline to answer at all (cf. Kroh, 2007), CSAP2 included an additional response choice, "neither agree nor disagree." All such changes were informed by input from the advisory committee and by two focus groups, 28 cognitive interviews, and a national telephone pretest.

The verbatim wordings and response choices for the two questionnaires are provided in the respective national reports, available at http://www.nature.nps.gov/socialscience/. In presenting substantive findings below, we mention major differences in wording, and where necessary we

combine adjacent response categories to permit some useful, albeit approximate, comparisons over time.

Identifying Recent Visitors

CSAP2 introduced a number of changes in how respondents were identified as either visitors or non-visitors to the National Park System. In both surveys, the main body of the questionnaire began identically: "The National Park System consists of all the units managed by the National Park Service, including national parks, historic and cultural sites, and national monuments. How many times in the past two years have you visited a unit of the National Park System?" Respondents who reported at least one visit over that time span were considered part of the pool of potential recent visitors, subject to validation. Those who said they had not visited in the past two years were then asked if they had ever visited.

Timeline Check

At this point, the two survey instruments diverged somewhat. First, CSAP2 added a timeline check by asking those who said they had ever visited how long ago that was. Twenty respondents who volunteered that it was in fact within the past two years were put back into the pool of potential recent visitors.

Validating Units Visited

Both questionnaires then asked respondents to name the last NPS unit they had visited in the past two years. Only respondents who identified a valid NPS unit on that question were defined as recent visitors. In CSAP1 this classification was finalized by the interviewers as each interview was being conducted, using a list of park names provided by the NPS. The interviewer's decision determined whether a particular respondent was asked the subsequent questions intended for visitors, or only those relevant to non-visitors. In CSAP2, by contrast, all respondents who claimed at any point to have visited in the past two years were subsequently asked the questions intended for visitors. Final validation as a recent visitor was accomplished only after data collection was completed.

Extensive pretesting of CSAP2 had revealed that direct coding of visitation status by interviewers based on respondent reports was not always reliable. With an impatient respondent on the phone, and a list of nearly 400 units to consult, interviewers could easily overlook an unfamiliar unit name. Furthermore, specific recall of an official park name was a very difficult cognitive task for some respondents.

From the focus groups through the national pilot interviewing, it was clear that respondents often remembered the NPS unit they had visited not by its official name, but by its location, a colloquial alias, or some key geographic, cultural, or natural feature. If their visit was impromptu, or incidental to travel for some other purpose, they might not remember it at all unless given time to reflect.

Because of these problems, it seemed likely that the CSAP1 estimate of the percentage of recent visitors among U.S. households involved an unknown number of false negatives—respondents who had in fact visited recently, but who were not recorded as such by the interviewers. In seeking to minimize false positives—respondents mistakenly claiming to have visited—the

validation protocol in CSAP1 may have tipped toward false negatives. This concern was addressed in CSAP2 by further refining the validation process.

Lists of NPS Units

For CSAP2, the list of NPS units used by the interviewers included not only the official NPS unit names, but also many common aliases. For instance, "Denali National Park and Preserve" (the official name of the park) was on the list, but so was "Mount McKinley," one of Denali's most memorable features (and its former name). For ease of use during the interviews, the list was organized both alphabetically by unit name or alias, and alphabetically by the state or states in which the unit was located. To simplify capturing the most likely responses, an abbreviated list of high-visitation sites was automatically displayed as part of the Computer Aided Telephone Interviewing. The full list was available to interviewers both in hardcopy and as a searchable spreadsheet that they could display on their computer screens at any point during an interview.

Probes

In addition, up to four primary probes were introduced into the interviewing script for optional use by the interviewers when they could not readily find a named unit on the list. The suggested probes were, "Do you know what state that's in? Is it in [state]? Is there any other name for it? Can you spell it for me?" The probes gave interviewers the information and the time they needed to search the cross-referenced list of unit names. By design, these probes did *not* prompt the respondent with the name of any specific NPS unit. The goal of the probes was to reduce false negatives without increasing false positives.

Informally, the interviewers in 2000 probably tried similar probes. In CSAP2, the probes were more systematic and perhaps more effective in validating whether the place visited was indeed a unit of the National Park System.

Prompting for a Unit Name

If the interviewer still could not find the NPS unit on the list, or if the respondent did not immediately recall visiting any NPS unit in the past two years, the CSAP2 script branched to a secondary prompt. The respondent's state of residence was used by the interviewing software to identify two nearby NPS units. These examples included one relatively well-known and one lesser-known unit in or near each state. The software then inserted the unit names into the interviewing script as follows: "A lot of people don't realize that the National Park System includes not only the big units like Yellowstone, but also national battlefields, national seashores, national recreation areas, and small urban sites. In your area, [example 1] and [example 2] are both National Park System units. With this in mind, can you give me the name of any place you've visited in the past two years that you think is part of the National Park System?"

If the respondent replied to this secondary prompt by naming or describing any place that the interviewer could not find on the list, the response was taken down verbatim for subsequent coding. Some of these open-ended responses indeed referred to valid NPS units, but in other cases the respondent was ultimately classified as a non-visitor because the site mentioned, even after prompting, was a national forest, state park, commercial recreation area, or other non-NPS location.

The secondary prompt and post-survey coding should reduce the number of false negatives. On the other hand, the prompting might also add some false positives if respondents felt pushed to name a unit they had not actually visited.

In summary, the methods used in the 2008-09 Comprehensive Survey of the American Public differed from those employed in the 2000 survey in a number of important respects. Within the limitations imposed by those methodological differences, the remainder of this report describes broad changes in selected behaviors and opinions over time.

Comparing Visitation Estimates

Table 1 explores some consequences of the refinements in identifying recent NPS visitors that were introduced in CSAP2. We contrast the results from CSAP1 with the spring completions from 2008, thereby holding season of the interview nearly constant. We also present findings from the entire CSAP2 data set, which yields results very similar to the spring-only data. Missing responses on the visitation questions ("don't know" or no answer) are grouped with the non-visitors. Weights have been applied to both surveys as previously described.

Results are rounded to the nearest whole percentage point to emphasize that all comparisons are approximate because of differences in the survey methods. For the same reason, this report does not present tests of statistical significance. Such tests would imply a degree of precision that is not warranted for the broad descriptive purposes of the present report. As a rough guideline, estimates based on either sample as a whole generally have a statistical margin of error of less than two percentage points (with 95% confidence). When analyzing only visitors in either sample, the margin of error is still less than three percentage points. In CSAP2, the margin of error for the spring-only subsample is about four percentage points, while for visitors in CSAP2's spring-only subsample, it rises to about six percentage points.

The first row of Table 1 shows that, in both survey years, almost nine of 10 respondents said they had visited a unit of the National Park System at least once in their lifetime. Results varied from 85% in 2000 to 90% in the spring of 2008. These initial figures are based solely on unvalidated responses to the first two items in the main part of the questionnaire; i.e., without requiring that the respondent name a valid NPS unit visited recently.

Table 1. Reported Visitation to Any National Park System Unit

Measure of Visitation	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Says ever visited, unvalidated (including past 2 years)	85%	90%	87%
Says visited in past 2 years, unvalidated (no timeline check, no prompt)	52%	60%	60%
Visited NPS unit in the past 2 years, as validated by interviewers using a unit list (no timeline check, no prompt)	32%	45%	47%
Visited NPS unit in the past 2 years, as validated through post-survey coding (with timeline check, name prompt)	--	62%	61%

The first two visitation questions were asked identically in both surveys, with no checks, probes, or prompts. Therefore, the two to five percentage point increase in lifetime visitation (if it is not merely a chance fluctuation due to random sampling) could indicate somewhat greater self-selection by survey respondents. Previous visitors are probably more willing to participate in a survey about national parks than those who have never visited. With overall response rates to telephone surveys on the decline, CSAP2 may have seen a greater impact from this kind of self-selection than CSAP1. That difference could in turn account for an increase in visitation percentage between the two surveys.

The second row of Table 1 shows that, on the more specific question of visits within the past two years, CSAP2 again showed higher visitation than CSAP1. Based on these unvalidated self-reports, 52% of U.S. adults in the 2000 survey reported at least one recent visit, compared to 60% in 2008. Here too, however, self-selection by survey respondents could explain most or all of the eight percentage point difference. As measured by entrance counts compiled at national parks, the total number of park visits did not change much between 2000 and 2009 (NPS, 2010).

The third row of Table 1 reveals the effect of the primary refinements in the method of validating park units visited. In 2000, interviewers were able to validate only 32% of respondents as visitors based on the NPS list, or about three-fifths of those who said they had visited recently. In spring 2008 the interviewers confirmed a 45% visitation rate, or three-fourths of the claimed visits. They did so by using an improved list of park units and non-directive probes, but without prompting respondents with the names of any nearby parks.

These refinements in the method for identifying visitors seem to have substantially reduced the number of false negatives in the interviewer-based validation process. Absent those design features, the 2000 survey probably underestimated the proportion of recent visitors—apparently, by around five to seven percentage points.

The approximate figure of five to seven percentage points is based on subtracting the 8 point difference in unvalidated visitation between the two survey years (second row of the table) from the 13 to 15 point difference in validated visitation (third row of the table). The 8 point increase in unvalidated visitation seems mainly attributable to self-selection, since actual visits as measured by entrance counts did not increase. Taking this 8 point increase as a baseline, the additional increase of five to seven percentage points in the validated visitation rate is probably due to the efforts made in CSAP2 to avoid false negatives.

The last row of Table 1 shows the further effect of adding a secondary prompt in CSAP2, with the names of two nearby NPS units. No direct comparison is possible here with CSAP1, which did not use any prompts. Combined with the other refinements, the prompt brought to more than six out of 10 the proportion of respondents who could describe a location visited in the past two years that was subsequently confirmed as a valid NPS unit. Allowing for some false positives induced by the prompting, the actual proportion of recent visitors in CSAP2 probably exceeded half of the sample, and might have approached half in CSAP1 as well if all of the refinements had been used.

Both surveys amply demonstrate that the NPS serves, directly and immediately, a very substantial proportion of the U.S. population. About nine of 10 respondents in the 2000 survey, and again in 2008-09, said they had visited a national park unit at some time in their lives. The survey results also suggest that close to a majority have done so within the past two years. And many people made multiple visits, as shown on another item on the questionnaires: recent visitors in both surveys reported a median of three separate visits in the preceding two years.

Survey estimates of visitation are important to the NPS for describing the nature and extent of the connection between the National Park System and the American public. Counts at park entrances tally the number of visits, not unique visitors. They do not distinguish repeat visitors to any one unit during the counting period, nor do they identify those who visit more than one unit.

Finally, they include a large number of international visitors along with the U.S. residents (Myers 2008). The two comprehensive surveys, by contrast, sought to estimate the proportion of visitors in a broadly representative U.S. sample. They give the NPS another valuable perspective on the use of the National Park System by the American public.

When a third iteration of the comprehensive survey is undertaken, the NPS will have the option of adopting some or all of the refinements that were explored in CSAP2. However, the definition of visitor status used in the remainder of this report parallels the original method employed in CSAP1 as closely as possible. It is not a strict replication of that method, mainly due to improvements in the list of NPS units, but it is broadly comparable. Under this definition, recent visitors include only those respondents who could name, with systematic probes from the interviewer but without any prompt naming nearby parks, a listed unit of the National Park System that they had visited in the preceding two years.

Comparing Planned Visitation

Tables 2 and 3 summarize the results from items on the two surveys concerning whether the respondent planned to visit any NPS unit "within the next 12 months." In CSAP1, this was posed as a question with four possible responses, ranging from "very likely" to "not at all likely." In CSAP2, the item was reworded as a declarative statement, with five responses ranging from "strongly agree" to "strongly disagree" and including a neutral option.

To improve comparability between the two surveys, the most extreme response choices are contrasted in the tables, and the middle categories (somewhat likely or somewhat agree, somewhat unlikely or somewhat disagree, and neither agree nor disagree) are combined with the missing responses (don't know, no answer). The differences in question wording and response choices make comparisons imprecise, but the results are informative nonetheless.

Table 2 shows that, among all respondents (including recent visitors and non-visitors), at least a third indicated strong expectations for visiting an NPS unit within the next year. The most affirmative responses garnered about 10 percentage points more endorsement in CSAP2 than in CSAP1. Aside from the variations in wording and response options, much of this difference could be due to an increasing self-selection of survey participants interested in national parks. Such participants are not only more likely to have visited recently, but also more likely to plan a future visit.

Table 2. Reported Plans to Visit, All Respondents

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Most positive response (very likely; strongly agree)	33%	43%	42%
Mixed responses (not very/somewhat/neither/missing)	47%	43%	44%
Most negative response (not at all likely; strongly disagree)	20%	14%	14%
Total	100%	100%	100%

Table 3. Reported Plans to Visit, Recent Visitors Only

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Most positive response (very likely; strongly agree)	61%	58%	59%
Mixed responses (not very/somewhat/neither/missing)	35%	36%	35%
Most negative response (not at all likely; strongly disagree)	4%	6%	6%
Total	100%	100%	100%

Table 3 limits the comparison to confirmed visitors (as validated by the interviewers in both surveys), which should largely control for self-selection. That is, visitors in either year would be expected to have similarly high levels of interest in the parks, even if self-selection produced a

greater proportion of recent visitors in CSAP2 than in the earlier survey. And indeed, with a control for visitor status in place, the difference between survey years on planned future visitation is negligible. In both surveys, about six in 10 recent visitors report strong expectations for another visit within the next year.

Visitation plans are certainly not perfect predictors of actual future visits. Nevertheless, the results in Table 3 serve as a reminder to the NPS that repeat visitors form an important segment of the clientele for the National Park System.

Comparing Perceived Barriers to Visitation

Near the middle of both interview scripts, the surveys presented a series of statements about "why people do not visit National Park System units more often." Both visitors and non-visitors were asked to report how strongly they agreed or disagreed with each statement.

The wording of most of the items in this group changed very little between the two survey years. Two of the statements used in CSAP1 were replaced in CSAP2 with substantially new ones; therefore, all four of these items are omitted here. In CSAP1 the items dealing with fees and costs were always asked first in the series, at the conclusion of an extensive module of related economic questions, while the remaining items were randomized to reduce the possibility of ordering effects (see Farrar and Ryan, 1999). In CSAP2 all items in the group were presented in random order, without the prefatory module of economic questions.

CSAP1 offered only four response choices for each item, whereas CSAP2 added a neutral category. To improve comparability, only the most positive response choice ("strongly agree") is tabulated. The base for the percentages includes missing data ("don't know," no answer), along with all the remaining response choices.

Table 4 provides the results for all respondents, and Table 5 shows them for recent visitors only. In both tables the items are shown in order of the degree of agreement (among all respondents in CSAP1) that the factor mentioned is indeed a barrier to visitation.

Table 4. Percent Strongly Agreeing with Reasons for Not Visiting More, All Respondents.

Reason	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Don't know much about NPS units	29%	20%	20%
Takes too long to get there	28%	16%	17%
Hotel and food costs too high	21%	16%	15%
Reservations needed too far in advance	14%	11%	11%
Too crowded	12%	10%	7%
Difficult to find parking	12%	7%	8%
Lack of information about what to do there	9%	10%	9%
Entrance fees too high	9%	8%	8%
Not accessible to the physically disabled	5%	3%	4%
NPS units not safe	2%	3%	2%
NPS employees give poor service	2%	2%	2%

For most of the items in Table 4, there was a decline between the two survey years in the percentage of respondents who strongly agreed that these factors were barriers to visitation. In other words, opinions on these items were generally more favorable about NPS units and services in CSAP2 than in CSAP1. This pattern is again consistent with an increasing self-selection of survey participants who are positively disposed toward national parks.

However, a very similar decline in agreement is also evident in Table 5, where positive predispositions about the parks should to a large extent be controlled by limiting the comparison to recent visitors. As noted above, visitors in either year would be expected to have a similar high regard for the parks, even if self-selection produced a greater proportion of recent visitors in

CSAP2. Hence self-selection seems not to account completely for the more favorable opinions in 2008-09. It may be that the decline in agreement with these barriers indicates, at least in part, successful efforts made by the NPS since 2000 to mitigate their effects.

In both years, the biggest perceived barriers included not knowing much about NPS units, the time required to get to a park, and the costs of hotels and food. Time and costs may be beyond the reach of NPS policymakers to affect substantially. However, NPS policies do influence how information about the National Park System is disseminated. The decline in agreement with the "don't know much" barrier might be taken as positive reinforcement for the NPS in its on-going efforts to spread the word about the parks.

Not surprisingly, Table 5 shows that visitors in either year were less likely to agree that the listed barriers reduced the frequency of visiting than was the sample as a whole. As noted above, many recent visitors have plans for a repeat visit, which implies they do not see these barriers as prohibitively important.

Among recent visitors, the decline in the percentage strongly agreeing is especially evident for the item about parking. Though modest, this decline might indicate that the use of shuttle buses at some of the busiest NPS sites has perhaps begun to alleviate parking problems.

Table 5. Percent Strongly Agreeing with Reasons for Not Visiting More, Recent Visitors Only

Reason	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Don't know much about NPS units	12%	6%	8%
Takes too long to get there	14%	9%	11%
Hotel and food costs too high	15%	10%	11%
Reservations needed too far in advance	12%	12%	11%
Too crowded	12%	9%	6%
Difficult to find parking	13%	6%	7%
Lack of information about what to do there	4%	6%	6%
Entrance fees too high	7%	6%	6%
Not accessible to the physically disabled	5%	2%	3%
NPS units not safe	1%	<.5%	1%
NPS employees give poor service	1%	1%	1%

Comparing Overall Satisfaction

CSAP1 asked all validated recent visitors the following question: "Please consider all your experiences to date with National Park System units, including national parks, historic or cultural sites, or monuments. Using a 10-point scale on which 1 means very dissatisfied and 10 means very satisfied, how satisfied are you with the National Park System?" A somewhat similar question in CSAP2 read as follows: "We'd like to know how satisfied you are with the way the National Park Service manages the national parks, national historic and cultural sites, and national monuments. In general, are you very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied?"

With differences in both question wording and response choices, comparisons of these two items must be approached with caution. As a further complication, in CSAP2 the satisfaction question was asked during the initial household contact, before selection of a particular respondent (so as to provide household-level data for a separate report on non-response bias). Therefore, in the CSAP2 data the individual who reported on satisfaction was not necessarily the same person who answered the visitation items in the main questionnaire.

With these caveats, the results are summarized in Table 6. For comparison purposes, both the 10-point scale from CSAP1 and the five-point scale from CSAP2 have been collapsed into three broad categories encompassing the predominantly positive, the neutral or missing, and the predominantly negative responses.

Table 6. Satisfaction with National Parks, Recent Visitor Households Only

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Positive responses (very/somewhat satisfied;10/9/8/7)	86%	87%	88%
Mixed responses (neither; 6/5; missing)	11%	11%	10%
Negative responses (very/somewhat dissatisfied; 4/3/2/1)	3%	3%	2%
Total	100%	100%	100%

Despite the complications, overall visitor satisfaction appears to have remained remarkably stable and quite high. In general, recent visitors (or their households) seem very satisfied with the National Park System. In both survey years, nearly nine out of 10 respondents scored on the positive end of the satisfaction scales; only three in 100 scored on the negative end.

This high level of satisfaction is consistent with results of the NPS Visitor Survey Card (VSC), which is administered each year in approximately 320 units of the National Park System. The VSC's data collection methods, question format, time frame, and sample differ substantially from those used in the national surveys. Nevertheless, in recent years 97% of visitors responding to the VSC reported that the overall quality of facilities, services, and recreational opportunities in the park they were visiting was either "good" or "very good" (University of Idaho Park Studies Unit, 2009).

Comparing Opinions about Resource Management

Both national surveys addressed NPS management of non-native plants and animals. In 2000, respondents were told, "Now I'd like to hear your opinions on two resource management issues faced by park managers. There are plants growing in parks that are not naturally found within the boundaries of those parks. Removing the plants can be expensive, but leaving the plants alone could result in other native plants being harmed. Which of the following options comes closest to your own point of view – park managers should remove these plants, or park managers should leave these plants alone?" This item was immediately followed by an analogous description and question concerning non-native animals, again with two possible responses: remove them, or leave them alone.

In CSAP2, two similar but less detailed items were imbedded in a series of other resource management questions. This series was introduced as follows: "The large national parks like Yellowstone, Grand Canyon, and Great Smoky Mountains are known for their natural resources. For example, they have interesting plants and animals, remote areas and wilderness, lakes or rivers, and starry night skies. I'm going to read you some statements about these parks and ask you how much you personally agree or disagree with each statement." The 10 specific resource statements, which were presented in random order, included "Plants that do not occur naturally in these parks should be removed" and "Animals that do not occur naturally in these parks should be removed." For each statement, the five-point response scale ranged from "strongly agree" to "strongly disagree" and included a neutral response option.

Tables 7 through 10 display results of these questions. Here too, the differences in wording and response choices dictate caution in interpreting the comparisons.

In general, public attitudes toward managing non-native species were quite polarized but remained fairly stable through the decade. In both survey years, about half of respondents supported removing non-native plants, but more than a third opposed it. Similarly, nearly half favored removing non-native animals, but well over one-third disagreed with such removal. Neutral or missing responses occurred a little more often on the question about animals than on the one about plants. In fact, the greatest difference over time was an increase in this middle category, but that shift is most likely due to adding the explicitly neutral choice in CSAP2.

Table 7. Percent Supporting Plant Removal, All Respondents

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Positive response (remove; strongly/somewhat agree)	50%	50%	49%
Mixed responses (neither/missing)	9%	13%	14%
Negative response (leave alone; strongly/somewhat disagree)	42%	37%	37%
Total	100%	100%	100%

Table 8. Percent Supporting Plant Removal, Recent Visitors Only

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Positive response (remove; strongly/somewhat agree)	55%	53%	51%
Mixed responses (neither/missing)	8%	15%	15%
Negative response (leave alone; strongly/somewhat disagree)	38%	32%	33%
Total	100%	100%	100%

Table 9. Percent Supporting Animal Removal, All Respondents.

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Positive response (remove; strongly/somewhat agree)	48%	44%	45%
Mixed responses (neither/missing)	10%	14%	15%
Negative response (leave alone; strongly/somewhat disagree)	42%	42%	40%
Total	100%	100%	100%

Table 10. Percent Supporting Animal Removal, Recent Visitors Only.

Response Categories	CSAP1 Spring 2000	CSAP2 Spring Only	Full CSAP2 2008-09
Positive response (remove; strongly/somewhat agree)	50%	42%	42%
Mixed responses (neither/missing)	11%	18%	20%
Negative response (leave alone; strongly/somewhat disagree)	39%	40%	38%
Total	100%	100%	100%

Discussion

Despite major refinements in methods and content between the first and second iterations of the NPS Comprehensive Survey, on broadly similar questions the two sets of data yield similar results in most respects.

Nearly 90% of the public in both survey years reported visiting a unit of the National Park System in their lifetime. More than a third said they were strongly expecting to visit in the upcoming year.

Among validated recent visitors in both surveys, about six in 10 were planning another visit within the year. Only a tiny fraction of recent visitors (3% in both surveys) expressed clear dissatisfaction with the parks or the NPS.

Barriers to visiting were perceived similarly in the two surveys, but most such barriers were cited somewhat less often in 2008-09. Opinions about the removal of non-native plants and animals were polarized, but have not changed much since 2000.

All of these similarities hold true, whether the comparisons are limited to interviews conducted in the spring of each survey year or include all 12 months of CSAP2 data.

The 2008-09 iteration of the survey did yield a higher estimate of the percentage of U.S. adults who had visited a park in the preceding two years. One-third of respondents in CSAP1, but almost one-half in CSAP2, could readily name a valid NPS unit they had recently visited. About half of that difference seems attributable to improvements in how information on visits was elicited. However, the difference also suggests a growing gap between visitors and non-visitors in willingness to participate in a survey about national parks.

The comparisons presented here should not be used to draw definitive conclusion about trends over time. Any apparent change (or stability) could also be influenced by methodological differences. Future iterations of the survey can use the methods and results from CSAP2 as a baseline for determining time trends.

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