United States
Department of
Agriculture

Forest Service

**Southern
Research Station**

General Technical
Report SRS–144

The National Visitor Use Monitoring Methodology and Final Results for Round 1

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Work Agreement: Kocis and Arnold were part of the original National Visitor Use Monitoring (NVUM) team created in 2000. White joined the NVUM team through work on NVUM economic analysis as a graduate student at Michigan State University, subsequently through the Pacific Northwest Station, and currently at Oregon State University. All authors except Kocis are active in the NVUM program.

Cover photo: Table Rock Picnic Area, Pisgah National Forest, NC. Cover background photo: Balsam Gap, Pisgah National Forest, NC. (photos courtesy of Bill Lea)

November 2011

Southern Research Station
200 W.T. Weaver Blvd.
Asheville, NC 28804

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Abstract

A nationwide, systematic monitoring process has been developed to provide improved estimates of recreation visitation on National Forest System lands. Methodology is presented to provide estimates of site visits and national forest visits based on an onsite sampling design of site-days and last-exiting recreationists. Stratification of the site days, based on site type and use level, is used to improve the estimates by reducing variability. Forests are sampled on a 4-year cycle, with a fourth of the forests sampled each year.

The site visit and national forest visit estimates for each of the 121 forests sampled in round 1 (2000 to 2003) are presented along with their coefficients of variation and 90-percent confidence intervals. In addition, these estimates are decomposed into their nonproxy, proxy, and Special Events components which provide a level of transparency important for understanding the estimation process and for building credibility among the users of these National Visitor Use Monitoring estimates.

The concepts, equations, and data presented are reinforced by illustrating a typical analysis of the visitation estimation process for the Beaverhead-Deerlodge National Forest. This includes site-day characteristics of the nonproxy and proxy strata, information about the National Visitor Use Monitoring sampling process, and detailed calculation of the national forest visit estimate for the nonproxy, proxy, and Special Event components of the visitation estimate.

The total national visitation estimate is the summation of all the individual forest visit estimates. The national site visit estimate for 2004 was 239,009,917 with a 90-percent confidence interval of 231,554,913 to 246,464,921 and a coefficient of variation of 1.90 percent. The national forest visit estimate, circa 2004, was 204,358,864 with a 90-percent confidence interval of 197,468,684 to 211,249,044 and a coefficient of variation of 2.05.

Keywords: Model-based estimates, National Visitor Use Monitoring, NVUM, outdoor recreation, recreation sampling.

Introduction

In recent years, outdoor recreation has become increasingly important on national forests across the United States. As a result, Forest Service managers provide a diverse set of recreation opportunities to the public and there is greater recognition of the economic activity that public recreation can generate in local communities. Accurate visitation estimates are required for national, regional, and forest-level decisionmaking and planning. Specifically, the estimators are needed to determine benefits and impacts of recreational use on other forest resources and local economies. Estimates also are needed to determine outdoor recreation trends and to quantify the effectiveness of Federal programs. However, prior to the creation of the National Visitor Use Monitoring (NVUM) Program in 2000 (English and others 2002), no statistically based, uniformly applied methodology was used to estimate national forest recreation visitation.

Before the NVUM Program, data on visits to national forest recreation sites were obtained from individual ranger district estimates which then were aggregated upward to produce forest and national estimates. Kocis (1986) showed that these ranger district estimates were derived by numerous diverse methods that produced results ranging from absolute knowledge to little more than guesses. Moreover, other surveys were of questionable statistical validity because they targeted selected locations and a few types of users. There were also problems of nonresponse bias and sample selection. While there have been outdoor recreation surveys conducted by telephone, such as the National Survey on Recreation and the Environment (NSRE), these surveys do not include information specifically on visits to national forests.

To alleviate some of these problems and obtain statistically valid estimates, the National Recreation Use Pilot Study was formulated in 1996 by the Forest Service, U.S. Department of Agriculture. The study resulted in a national survey design for estimating annual recreation visitation (Zarnoch and others 2002). Building on the pilot study, the Forest Service brought together a team of research scientists and National Forest System personnel to refine this methodology. The team was based on a partnership

of the Forest Service's recreation staff and personnel from strategic planning and resource assessment, research and development, ecosystem management, inventory and monitoring, and the Missoula Technology and Development Center. As a result of the team's work, the NVUM Program was implemented in 2000 to provide statistically reliable estimates of recreation visitation on the national forests, including national grasslands and designated wilderness areas. The initial methodology for the Round 1 estimates was based on sampling 25 percent of the forests each year from 2000 to 2003 and was described by English and others (2002). Since then, the estimation methodology and forest-level visitation estimates have been modified twice to reduce the variability, and thus increase the accuracy of the estimates.

The NVUM process provides estimates of the number of recreation visits to the administrative units in the National Forest System. For example, in Round 1, 121 administrative units[1] across the United States were sampled (table A.1). The NVUM process ensures consistency in data collection and establishes a minimum standard of statistical accuracy. Visitation is estimated in terms of site visits and national forest visits. The site visit estimate measures the number of sites and areas (e.g., wilderness) visited by recreationists to a given forest, while the national forest visit estimate is the number of visits to the entire national forest as one unit. A visit is to be of any length (several minutes, a couple of days, or longer), of one or many activities, and to one or more sites within the national forest. A national forest visit begins when a recreation visitor first enters the forest and ends when the visitor leaves the national forest for the day. The NVUM process samples visitors at the site level and develops recreation visitation estimates at the forest and national levels.

Although the main objective of NVUM is to provide estimates of recreation visitation, it also provides a profile of visitor characteristics. The visitor profile includes standard demographic characteristics such as age, gender, and income level, as well as length of the visit, number of annual visits to the forest, and party size. The profile also provides estimates of the percent of participation in various activities, satisfaction with the recreation site, and economic spending in the local community. The survey questionnaire given on site to exiting recreationists has evolved over the years and, thus, many other estimates are also available.

The main objective of this paper is to present the NVUM methodology, including the sampling design, estimators, and variances. The methods presented here supersede the NVUM methods documented previously in English and others (2002) and are the methods used in current NVUM applications. Secondary objectives of this paper are to: present the final visitation estimates for Round 1 with 90 percent confidence intervals for all 121 administrative units; and to increase transparency by providing sufficient information on estimates of intermediate parameters so that any Round 1 individual national forest estimate can be reproduced and tracked through its intermediate components.

Sampling Design

Overview

The sampling design uses onsite sampling of exit sites at each national forest to obtain average daily estimates of the number of recreation visitors exiting a site for the last time during the sample day. The methodology is based on the concept that identifying all exit sites and counting the number of last-exiting recreationists (LER) for each day of the year will provide a sum total of annual visitation. Counting LER ensures that only recreationists are included in the visitation estimate and that they are not double-counted (i.e., prevents the chance of counting them again if they happen to return to the site on the same day, leave again, and are counted again). An alternative approach that should give similar visitation estimates is to count only first-entering recreationists. However, other information such as length of stay, satisfaction with the facilities, and such was also desired from the survey and would not be obtained by counting first-entering recreationists.

The true visitation for any national forest can be obtained only by counting all LERs from all exiting sites on all days throughout the year. This complete census (Jacobi 2003) provides the correct recreation visitation but is cost prohibitive to administer over virtually all national forests. Thus, a sampling approach is more feasible in obtaining an estimate of visitation along with appropriate variances and confidence intervals.

The NVUM survey was based on a stratified random sampling design (Cochran 1977) adapted to recreation use estimation (Bergstrom and others 1996, Bowker and others 2004, English and others 2002, Gregoire and Buhyoff 1999, James and Schreuder 1971). The sampling frame consisted of the population of all possible recreation site days (i.e. a collection of all days at exiting sites open for recreation in a given national forest during the sampling year). For Round 1, these site days were then placed in 12 potential strata consisting of 4 site types and 3 use levels (Round 2 consisted of an additional use level, resulting in 16 strata). Within each stratum, a random sample of site days was selected and visited by personnel who administered the onsite field survey. The main benefit of stratification

[1]This was the count of administrative units in 2000, although forests and grasslands have administratively merged and new units have been identified since then.

was to reduce the standard error of the visitation estimate. Stratification also allowed a more controlled allocation of the sample throughout the population of site days and, for each stratum, provided separate visitation estimates (which may be helpful to forest managers in addressing management issues).

Sampling Frame

The first step in the NVUM survey of a national forest, originally called prework, was to develop the sampling frame of recreation site-days. The formation of the population of site-days required the classification of all recreation areas in a forest into one of four site-types and the identification of all days these sites were open for recreation. With help from forest personnel, four site-types were identified:

1. Day-use developed sites (DUDS). Day-use developed sites meet the Infrastructure Application (INFRA)[2] definition for development scales of moderate, heavy, or high degrees of modification. Generally, DUDS provide visitor comfort, convenience, and education opportunities. Sites with facilities that provide only for the safety and health of visitors are not sufficiently developed to be included in this site-type. DUDS can include but are not limited to picnic areas, fish viewing sites, fishing sites, interpretive sites, observation sites, playground-park sport sites, ski areas (alpine and Nordic), some wildlife viewing sites, caves, visitor centers, museums, and swimming areas. They do not include overnight sites, boat launches, trailheads, and ranger stations that provide only minimal information services.

2. Overnight-use developed sites (OUDS). Overnight-use developed sites meet the INFRA definition for development scales of moderate, heavy, or high degrees of modification. They include campgrounds (family and group), fire lookouts and associated cabins, hotels, lodges and resorts (both publicly and privately owned), horse camps, organization sites (both publicly and privately owned), and any other overnight-developed sites in Forest Service jurisdiction, whether managed by the Forest Service or by a concessionaire. Organizational camps and recreational residences are not included in the OUDS category but are sampled as part of the general forest area.

3. Wilderness sites (WILD). Wilderness sites include lands and waters that are part of the National Wilderness Preservation System. Wilderness study areas, research natural areas, and other roadless areas are not included in this site-type. Sampling points for WILD sites are typically at trailheads leading into wilderness areas.

4. General forest area sites (GFA). General forest area sites include all of the national forests not included in the DUDS, OUDS, or WILD site-types. Generally, sample points will be at trailheads or on roads where users exit the national forest. The sites are the portals through which visitors engaging in dispersed activities, such as hiking, hunting, and dispersed camping, can access undeveloped areas. In some cases, a GFA entry point will be a river, lake, boat harbor, or airport. Sample points may be on both high-speed and low-speed roads managed by the Forest Service or other jurisdictional agency.

Development of the sampling strata for the site-days was based on formulating strata such that all site-days within a given stratum were as uniform as possible with regard to last-exiting visitors. Generally, when this is accomplished successfully in a stratified random sampling design, the average visitation between all the strata will be as different as possible and the variation within each stratum will be as small as possible (Cochran 1977). This ideal situation is never met in practice, but if reasonably approximated, significant gains in precision of the visitation estimate are possible, resulting in smaller standard errors and narrower confidence intervals.

The Round 1 NVUM stratification combined the four site-types with three levels of recreation use intensity. Thus, the site-days in each site-type were classified into Low (L), Medium (M), or High (H) depending on the anticipated number of LERs exiting the site on the specific day (the Very High [VH] use-level was added in Round 2). Note that this was based on the number of recreationists who were last exiting, not simply all exiting people or people who were beginning their visit. Also, these use-levels were specific to a given site-type. Thus, use-level L for site-type DUDS was different from use-level L for site-type OUDS. A simplified manner of referring to a given stratum is to combine the site-type and use-level. For instance, the stratum site-type DUDS and use-level L will be hereafter referred to as simply stratum DUDS-L. Stratification was formed by the classification of all site-days into the 12 potential strata formed by the combination of the 4 site-types and 3 use-levels.

While performing the very time consuming stratification of the site-days, it became evident that some site-days at various locations would have extremely high visitation due to special events such as annual festivals, club meetings, civic organization events, and other activities. Thus, such site-days would not appropriately fit into the previously defined strata and doing so would increase the variability of the estimates. Thus, these site-days, termed Special Events, were removed from the sampling frame. The estimation of

[2] Infrastructure Application (INFRA) is the U.S. Department of Agriculture Forest Service's corporate database that tracks the resources and infrastructure on Forest Service lands as well as the outputs that come from these lands. Additional information about INFRA data and definitions is available at http://www.fs.fed.us/eng/infomgmt/infra.htm.

visitation for each Special Event site-day was obtained from an auxiliary source independent of the NVUM sampling process. Their visitation was simply added to the onsite sampling visitation estimates obtained at the forest level.

Nonproxy and Proxy Sites

Before the start of the NVUM field season, sites on each national forest are classified as either nonproxy or proxy; the classification is made by knowledgeable forest-level personnel. Nonproxy sites are those for which no reliable information about recreation visitation is available from any sources except the NVUM survey itself. In contrast, proxy sites are those for which information is available from an auxiliary source; the information could be used, either alone or in conjunction with other information, to derive an estimate of recreation visitation. For example, a national forest might keep monthly traffic counts (a permanent traffic counter might track the number of vehicles exiting selected recreation sites). This information—combined with knowledge about the percentage of vehicles that contain LERs and the average number of people per vehicle—could be used to estimate recreation visits.

Several criteria are used to determine if a site qualifies as a proxy site. First, the auxiliary proxy information must represent all users of the site. Second, the proxy count must be an exact tally, not an estimate. Third, only a few types of proxy information are acceptable, primarily data from fee receipts, fee envelopes, mandatory permits, permanent traffic counters, and ticket sales. Fee sites (sites where visitors pay via a fee-envelope system) primarily include campgrounds, ski areas, fee demo sites, and some other day-use recreation sites. Some designated wilderness, backcountry areas, and rivers require permits for all users and these are acceptable for gathering proxy information. However, voluntary permit and trail register systems are not suitable sources of proxy information. The 25 different proxy types identified by NVUM are defined in table A.2.

The number of nonproxy site-days in each stratum (site-type and use-level) for each of the 121 Round 1 forests is shown in table A.3. This total ranged from a low of 1 for stratum DUDS-H in forest R9F14 (R refers to region number and F refers to forest number) to a high of 219,116 for stratum GFA-L in forest R4F17. Note that there are some strata that have no site-days. Similarly, the number of proxy site-days in each stratum (site-type, proxy type, and use-level) for each Round 1 forest is shown in table A.4. Note that some forests are not shown because they do not have proxy sites (R1F17, R6F2, R8F4, R8F6, R8F12, R8F13, R9F8, and R9F14).

Generally, it is beneficial for NVUM estimation to have as many proxy sites as possible. This increases the efficiency of the survey, decreases costs, and allows additional sampling at nonproxy sites, thus increasing the sample size and reducing variability. In addition, the variances of the estimates associated with proxy sites are often much less than that of the nonproxy sites. Therefore, the overall quality of the visitation estimates improves as the number of proxy sites increases.

Although proxy sites can be very advantageous to estimating visits, the sites may present a few difficulties. First, the identification of proxy sites may be difficult, often requiring extensive interaction with field personnel familiar with the sites and knowledgeable of the management activities performed on the site that may qualify the site as a proxy site. Second, the concept of a proxy site is often vague and abstract and must be understood well to optimally identify appropriate proxy sites. Third, individual proxy sites may require unique methods of estimation that add complexity to the sampling methodology. Despite these problems, proxy sites have been found to be worthwhile in terms of cost savings and variance reduction (English and others 2003).

Sample Selection

The sampling frame for each forest was used to randomly select sample days from each stratum. Proportional allocation was evaluated as one option to determine the number of site-days to sample per stratum. However, the Neyman (optimal) allocation approach was considered more efficient due to the selection of more site-days from strata that are larger and/or more variable (Cochran 1977). The prework for creating the sampling frame provided the information on strata size (tables A.3 and A.4), i.e., the number of site days per stratum. However, no information was available to estimate the variability component identified as the differential number of LERs across site-days within a stratum. It was assumed that variability was positively correlated with increasing use-level. Accordingly, the sample allocation assigned to strata increased with increasing use-level. The actual allocation relied upon judgment for the optimal way to use the limited labor and financial resources and, thus, did not strictly follow Neyman allocation. The approach was to balance sufficient sampling in each stratum while also adhering to the Neyman allocation principles of strata size and variability.

The survey design was based on a 6-hour interviewing period for each selected sample site-day. This 6-hour sampling period for nonproxy sites was allocated randomly with equal number of sample days in the AM (8:00 to 2:00) and PM (2:00 to 8:00). At the proxy sites, the traffic counts were not needed and, thus, sampling was assigned so as to contact the maximum number of people exiting each site. This provided the most information possible to produce the calibration factors to convert proxy counts to visitation. A sampling calendar was developed for each forest using a custom-designed computer program to randomly select the

allocated sample size from each stratum. Backup sampling days were generated for use when the scheduled ones from the sample calendar could not be followed for a variety of reasons. The number of sample days actually achieved for each Round 1 forest is shown in table A.5 (all forests except two had a sampling rate of 2 percent or less) along with the number of sample days that had at least one interview and at least one LER. Also shown are the number of interviews attempted, the number that agreed to be interviewed, and the number that were LERs.

Survey Procedures

The sample day survey procedures at nonproxy sites included a 6-hour onsite survey period and a 24-hour traffic count. The 6-hour survey period consisted of a hand clicker tally of all vehicles (vehicles or people, or both) exiting the site and survey interviews on a random sample of those exiting vehicles (or groups). The person interviewed was selected randomly from each vehicle (or group) by asking which member, age 16 or older, had the most recent birthday. All interviewees were screened with a series of initial questions to determine if they were of LER status and if so, they were then asked another set of questions about arrival time, frequency of previous visits, activity participation, and demographics. In addition, a short economic questionnaire was administered to a fourth of the sample, while a short satisfaction questionnaire about recreation services and facilities was administered to another fourth of the sample. One or two additional questions were asked at proxy sites to convert proxy counts to visitation estimates. As mentioned previously, the survey was scheduled to be either AM or PM. Minor departures from the specific times occurred and were recorded and adjusted for appropriately. At the completion of a survey day, the interviewer filled out the Daily Summary Form, which contained information on the interview team, date and time of the survey, the tally, and number of completed interviews.

In addition to the 6-hour onsite survey period, a 24-hour count of all exiting visitor traffic was also obtained. At nonproxy sites, this was done using one of several different types of mechanical traffic counters selected to match the specific characteristics or needs of the site. Proxy site counts relied upon routinely collected data from other sources, such as ski lift tickets, mandatory permits, or fee envelopes, as the basis for conversion to visitation (there will be further explanation later in this paper). By identifying the proportion of last-exiting recreation visitors to total exit traffic, the 24-hour count was calibrated to estimate the number of unique recreation visits that occurred.

Estimation

Visitation Estimators

The total number of site visits to a given national forest is estimated as

$$\widehat{SV} = \sum_h \widehat{NP_h} + \sum_h \widehat{P_h} + SE \qquad (1)$$

where

$\widehat{NP_h}$ = an estimate of the total number of site visits in nonproxy stratum h,

$\widehat{P_h}$ = an estimate of the total number of site visits in proxy stratum h, and

SE = total number of Special Event visits.

Note that the index of summation h for the nonproxy and proxy strata is over all strata that have site-days in the given forest. This, obviously, varies from forest to forest. All three components are independent and SE is assumed to be a known constant so the variance is

$$\hat{V}\left(\widehat{SV}\right) = \sum_h \hat{V}\left(\widehat{NP_h}\right) + \sum_h \hat{V}\left(\widehat{P_h}\right) \qquad (2)$$

To obtain the number of national forest visits, the nonproxy and proxy site visits are converted to national forest visits. The Special Events visits are not converted because it is assumed that those visitors only go to the Special Event sites in that forest. Thus, national forest visits is estimated as

$$\widehat{NFV} = \sum_h \frac{\widehat{NP_h}}{\widehat{SF_h^{NP}}} + \sum_h \frac{\widehat{P_h}}{\widehat{SF_h^{P}}} + SE \qquad (3)$$

where

$\widehat{SF_h^{NP}}$ = the average number of sites visited (nonproxy and proxy) per national forest trip by a visitor in nonproxy stratum h, and

$\widehat{SF_h^{P}}$ = the average number of sites visited (nonproxy and proxy) per national forest trip by a visitor in proxy stratum h.

Note that $\widehat{SF_h^{NP}}$ and $\widehat{SF_h^{P}}$ are based on both nonproxy and proxy sites and areas because the survey question that asked how many other sites and areas (e.g., wilderness) were

visited on this trip did not distinguish between nonproxy and proxy sites; this may lead to a slight estimation problem. Assuming independence between $\widehat{NP_h}$ and $\widehat{SF_h^{NP}}$ and between $\widehat{P_h}$ and $\widehat{SF_h^{P}}$, the variance is estimated as

$$\hat{V}\left(\widehat{NFV}\right) = \sum_h \hat{V}\left(\frac{\widehat{NP_h}}{\widehat{SF_h^{NP}}}\right) + \sum_h \hat{V}\left(\frac{\widehat{P_h}}{\widehat{SF_h^{P}}}\right)$$

$$= \sum_h \left(\frac{\widehat{NP_h}}{\widehat{SF_h^{NP}}}\right)^2 \left[\frac{\hat{V}\left(\widehat{NP_h}\right)}{\widehat{NP_h}^2} + \frac{\hat{V}\left(\widehat{SF_h^{NP}}\right)}{\widehat{SF_h^{NP}}^2}\right] \qquad (4)$$

$$+ \sum_h \left(\frac{\widehat{P_h}}{\widehat{SF_h^{P}}}\right)^2 \left[\frac{\hat{V}\left(\widehat{P_h}\right)}{\widehat{P_h}^2} + \frac{\hat{V}\left(\widehat{SF_h^{P}}\right)}{\widehat{SF_h^{P}}^2}\right]$$

Each of the above visitation components requires a different estimation methodology which is now presented.

Nonproxy Component $\widehat{NP_h}$

Estimation parameters—The nonproxy component requires estimates of three estimation parameters defined as

$\widehat{PBAR_h}$ = the average proportion of exiting vehicles (groups) in stratum h that are LERs,

$\widehat{PPV_h}$ = the average number of people per vehicle (group) exiting stratum h, and

$\widehat{SF_h^{NP}}$ = the average number of sites visited (nonproxy and proxy) per national forest trip by a visitor in nonproxy stratum h.

Two approaches were evaluated for estimating these three nonproxy estimation parameters for each stratum. The survey-based approach is the traditional methodology where estimators are developed separately for each stratum based on a cluster design with site-days being the primary sampling unit and vehicles (groups) within site-days being the secondary sampling unit. This was the approach initially taken by NVUM and was found to yield very variable estimates with illogical relationships, presumably due to small sample size. When resources are limited, a model-based approach using data from all sampled strata is a reasonable alternative. In an attempt to alleviate the previously discussed problems due to small sample size, the fixed components of a linear mixed model were limited to site-type and use-level. The site-type*use-level interaction was assumed negligible and not included in the model, which resulted in smoothing out the survey-based estimates which can be erratic when strata sample sizes are small. The clustering of the observations within the sampled site-days was addressed by treating them as repeated measures with a covariance structure consisting of a common variance and zero covariance for the observations within a cluster. It was observed that if the interaction term was included in the model with this covariance structure, the estimates were identical to the survey-based approach (the variances were slightly different). Although alternative models with other covariance structures are possible, this covariance structure without the interaction was used for simplicity and to be compatible with the covariance structure of the sample-based estimates, which is equivalent to a model with no repeated measures. To reflect the unequal probability of sampling visitors that visit varying number of sites, a weight defined as the inverse of the number of sites visited was used in the estimation process for $\widehat{SF_h^{NP}}$ only. For simplicity, the survey-based approach was approximated by also using this same mixed linear model but with the site-type*use-level interaction included. The estimated parameters from both models were used to predict the strata means and variances.

These two approaches, along with several other models that included survey time (AM and PM), were compared and evaluated for performance. Results indicated that the model-based approach using only site-type and use-level was most appropriate and produced smoother, more realistic relationships. The assumption of no interaction between site-type and use-level seems reasonable and is a necessary tradeoff for the smoother relationship. In addition, it produced estimates for strata that are not specifically represented in the sample data as long as their site-type and use-level are represented in the data. In this situation the survey-based approach would have to use a more arbitrary, cumbersome method to obtain a pooled estimate. Originally, NVUM used the survey-based approach, which resulted in many problematic issues with pooling and averaging estimates to acquire parameters for strata where observations were limited or totally missing. Moreover, the model-based approach has the potential to yield smaller variances because the estimates are based on data from all strata and not just one stratum as in the survey-based approach. For these reasons, the model-based approach was used for the final estimates. The exact analytical method used to estimate the parameters of the model relies on an iterative solution that is quite complicated and will not be presented here. It was obtained by using PROC MIXED (SAS Institute Inc. 2004). Estimates of the nonproxy parameters $\widehat{PBAR_h}$, $\widehat{PPV_h}$, and $\widehat{SF_h}$ for all Round 1 forests are shown in tables A.6, A.7, and A.8.

Daily exiting vehicle count—To obtain an estimate of nonproxy site visits, a count of the total vehicles exiting the site was needed for each 24-hour sample day. This vehicle

exit count was estimated using information collected during the 6-hour exit interview sample period (observed portion of day) along with a total vehicle count for the remaining 18-hour nonsampled period (unobserved portion of the day). This was usually a vehicle count, but at various sites such as trails, this was actually a people count or at some sites was even a count of both vehicles and people.

The sampling protocol for vehicle counts required the installation of a 24-hour traffic counter near the interview location on each site-day selected for sampling. This counter usually monitored two-way traffic at the interview location, although the protocol could be adapted to support one-way or two-way traffic counts. Two pieces of traffic information were collected during the 6-hour onsite interview period; the interviewer used a hand tally counter to record traffic exiting the site, and the total 6-hour traffic count was recorded from the 24-hour counter. A ratio of the traffic exiting the site (hand tally) to the total traffic count at the site during the 6-hour interview period was used to calibrate the 24-hour counter to estimate exiting vehicles for the unobserved 18-hour portion of the day. The total traffic exiting the site was the sum of the 6-hour hand tally and the exiting traffic estimated for the unobserved portion of the day.

The observed calibration ratio developed during the 6-hour interview period is defined as

$$\hat{R} = \frac{End\_Handtally - Begin\_Handtally}{Endint\_24 - Begin\_24} \qquad (5)$$

where

Begin_Handtally = hand tally at the beginning of the 6-hour interview period

End_Handtally = hand tally at the end of the 6-hour interview period

*Begin*_24 = the 24-hour traffic counter at the beginning of the 6-hour interview period, and

*Endint*_24 = the 24-hour traffic counter at the end of the 6-hour interview period.

For any given site-day, this represented an observed calibration ratio which was estimated with the data from that site-day only. This calibration ratio was used to calibrate the 24-hour vehicle counts for the nonsampled or unobserved periods for each sampled site-day.

Occasionally, the observed calibration ratio could not be computed due to data problems, so an average forest calibration ratio for each of four groups, $\overline{R}_i,\ i = 1,2,3,4$, was used based upon characteristics of the vehicle counter type for the site-day. The groups were defined as:

Group 1 = two-way pneumatic and inductive loop vehicle counters

Group 2 = two-way infrared and seismic vehicle counters

Group 3 = one-way (all one-way counters)

Group 4 = others

It was believed that the average forest calibration ratios were most dependent on traffic direction (one-way or two-way) and to a lesser degree on counter type. Although other factors such as survey time (AM or PM) and counting unit (vehicle, people, or both) may be important and could have been used to develop more specific groupings, doing so would have created too many small datasets and may have resulted in poor estimates. Previous NVUM methods development that were based on modeling have shown that forest and traffic direction were the two most important variables, while counting unit was significant in only some models. This supports use of individual forest calibration ratios and traffic direction to develop these four groups.

The total exiting vehicle count on a given sampled site-day consists of two components: the vehicle count for the observed 6-hour sampled period and the vehicle count for the unobserved 18-hour nonsampled period. The observed exiting vehicle count is defined as

$$\widehat{C_{OBS}} = End\_Handtally - Begin\_Handtally \qquad (6a)$$

This $\widehat{C_{OBS}}$ is a direct observation of exiting traffic by the interviewer and is a known constant which helps reduce the variance of the final estimator. In some sampled site-days, there were problems with the hand tally data and, consequently, the observed exiting vehicle counts (equation 6a) could not be obtained. Therefore, the average forest calibration ratio and the 24-hour traffic counter monitored during the interview period were used to obtain the observed vehicle counts as

$$\widehat{C_{OBS}} = \overline{R}_i\left(Endint\_24 - Begin\_24\right) \qquad (6b)$$

If further data problems existed, then $\widehat{C_{OBS}}$ was simply set equal to the number of interviews performed.

The second component used to estimate the total exiting vehicles is somewhat more complicated because the hand tally was not available during the unobserved 18-hour period.

Thus, the 24-hour traffic counter and calibration ratio had to be used. The unobserved mechanical traffic count for this unobserved period is

$$MECHUNOBS = End\_24 - Endint\_24 \quad (7)$$

where

*End*_24 = the 24-hour traffic counter at the end of the 24-hour survey period

An estimator for the unobserved exit count is the calibrated unobserved mechanical traffic count

$$\widehat{C_{UNOBS}} = \hat{R}(MECHUNOBS) \quad (8a)$$

Note that this uses the observed calibration ratio for the specific site-day; therefore, if it is an AM sampled day, then the calibration is based on AM sampled data. It was felt that using a calibration ratio from similar PM site-days might inflict more error then simply using the calibration ratio from the specific site-day that is being sampled and calibrated. This allows for a valid averaging over all site-days. If there is no observed calibration ratio available for the specific site-day, then the average forest calibration ratio from the appropriate group (i=1, 2, 3, or 4) is used, yielding the estimator

$$\widehat{C_{UNOBS}} = \overline{R_i}(MECHUNOBS) \quad (8b)$$

If data problems exist with the traffic counts where *Endint*_24 is missing and, thus, *MECHUNOBS* could not be obtained, then

$$\widehat{C_{UNOBS}} = \hat{R}\left[\left(End\_24 - Begin\_24\right) - \left(\widehat{C_{OBS}} / \hat{R}\right)\right] \quad (8c)$$

or, if the observed calibration ratio is not available, then

$$\widehat{C_{UNOBS}} = \overline{R_i}\left[\left(End\_24 - Begin\_24\right) - \left(\widehat{C_{OBS}} / \overline{R_i}\right)\right] \quad (8d)$$

If further data problems exist, then the hand tally count is simply expanded to the unobserved period assuming a 16-hour recreation day as

$$\widehat{C_{UNOBS}} = \widehat{C_{OBS}}\left(\frac{16 - H}{H}\right) \quad (8e)$$

where

H = the number of sampled hours which was usually 6.

Ultimately, the total daily exiting vehicle count is then

$$\hat{C} = \widehat{C_{OBS}} + \widehat{C_{UNOBS}} \quad (9)$$

Last-exiting recreationists—The visitation estimate is based upon the concept of a last-exiting recreationist. As vehicles or groups of people are counted as they exit, those who voluntarily stop at the interview site and agree to be interviewed are asked a series of questions to determine last-exiting status. If the purpose for the visit at any of the four site-types is recreation and they are exiting the site for the last time on this visit, then they are considered last-exiting recreationists. In addition, if the site-type is GFA and they respond that their purpose is not recreation but they passed through the GFA for viewing purposes, then they are also considered last-exiting recreationists. Recall that the observed proportion of LER for a sampled site-day is the key input variable in the model-based estimation of PBAR.

Exiting traffic at a sample site can be counted as exiting vehicles or people depending on the characteristics of that site. In addition, sometimes a combination of both people and vehicles are counted. To get an estimate of visitation, the counting units are converted to people and then multiplied by the estimation parameter $\widehat{PBAR_h}$ to get an estimate of last-exiting recreationists.

Let

$\overline{EXIT_h}$ = the average number of people exiting from stratum h,

$\overline{C_h^P}$ = the average number of people exiting a people-sample site from stratum h,

$\overline{C_h^V}$ = the average number of vehicles exiting a vehicle-sample site from stratum h,

$\overline{C_h^B}$ = the average number of both people and vehicles exiting a both people-and-vehicle-sample site from stratum h,

n_h^P = the number of people-sampling days in stratum h,

n_h^V = the number of vehicle-sampling days in stratum h,

n_h^B = the number of both people-and-vehicle-sampling days in stratum h, and

$n_h = n_h^P + n_h^V + n_h^B$.

The $\overline{C_h^P}$, $\overline{C_h^V}$, and $\overline{C_h^B}$ are obtained as simple averages of the estimates $\widehat{C}$ (equation 9) for the appropriate site-days in stratum h. Then, an estimate of the average number of people exiting stratum h is a weighted average of C_h^P, C_h^V, and C_h^B after they each are converted to the people units. Thus,

$$\overline{EXIT_h} = \left(\frac{n_h^P}{n_h}\right)\overline{C_h^P} + \left(\frac{n_h^V}{n_h}\right)\widehat{PPV_h}\,\overline{C_h^V} + \left(\frac{n_h^B}{n_h}\right)\left(\frac{\widehat{PPV_h}+1}{2}\right)\overline{C_h^B} \quad (10)$$

These are shown for all Round 1 forests in table A.9. The nonproxy component for each stratum in equation 1 is then estimated as

$$\widehat{NP_h} = \sum_h N_h \widehat{PBAR_h}\,\overline{EXIT_h} \quad (11)$$

where

N_h= the total number of site-days in stratum h.

The three components in equation 11 are shown in tables A.3, A.6, and A.9.

Converting Nonproxy Site Visits to National Forest Visits

Although site visits $\widehat{SV}$ is interesting, it is the national forest visits $\widehat{NFV}$ that is of most importance to forest managers. To obtain the nonproxy national forest visit estimate, the nonproxy site visit estimator (equation 11) is simply divided by $\widehat{SF_h^{NP}}$, as shown in equation 3. Table A.10 gives the nonproxy national forest visit estimates for each forest.

Proxy Component $\widehat{P_h}$

Conversion coefficient—The proxy component $\widehat{P_h}$ of equation 1 requires a conversion coefficient to convert annual proxy counts obtained from the forests to site visit estimates. This conversion coefficient A_h is defined as

$$\overline{A_h} = \frac{\overline{G_h}}{\overline{R_h}} \quad (12)$$

where generally,

$\overline{G_h}$= the average number of people covered by one proxy for proxy stratum h, and

$\overline{R_h}$= the average number of proxies used per site visit for proxy stratum h.

Each proxy was unique and, thus, exactly how $\overline{G_h}$ and $\overline{R_h}$ were defined depended not only on the proxy type but often on the specific forest, site-type, site, etc. This was quite complicated and yielded a wide range of values for G_h and R_h as shown in table A.11. This will not be further explained but details may be obtained from the NVUM visitation estimation computer program.

$\overline{A_h}$ was estimated as a ratio estimator using PROC SURVEYMEANS (SAS Institute Inc. 2004) for each forest, site-type, and proxy type with the cluster defined as the observations in a site-day. A model was also produced to provide a valid substitute for A_h if sample size was too small and/or variability too large for a particular proxy stratum. It was obtained by fitting separate models for $\widehat{G_h}$ and $\widehat{R_h}$ for each of the four site-types as

$$\widehat{G_h} = \beta_0 + \sum_i \beta_{1i} Forest + \sum_j \beta_{2j} \Pr oxy_j \quad (13)$$

and

$$\widehat{R_h} = \beta_0 + \sum_i \beta_{1i} Forest + \sum_j \beta_{2j} \Pr oxy_j \quad (14)$$

These mixed linear models had the same functional form, where clustering for a specific site-day was incorporated by using a repeated measures design with a compound symmetry covariance matrix using PROC MIXED (SAS Institute Inc. 2004). The conversion coefficient A_h was then simply obtained as defined in equation 12 using $\widehat{G_h}$ and $\widehat{R_h}$ as substitutes for G_h and $\overline{R_h}$. The variance of $\overline{A_h}$ is estimated as

$$\widehat{V}\left(\overline{A_h}\right) = \overline{A_h}^2\left(\frac{\widehat{V}\left(G_h\right)}{G_h^{\,2}} + \frac{\widehat{V}\left(R_h\right)}{R_h^{\,2}}\right) \quad (15)$$

$\overline{A_h}$ based on the $\overline{G_h}$ and $\overline{R_h}$ parameters was used instead of the modeled $\widehat{G_h}$ and $\widehat{R_h}$ according to the following criteria:

1. If any of the following conditions are met:

(a) number of clusters > 3 and number of people > 11

(b) number of clusters > 2 and number of people > 13

(c) number of clusters > 1 and the number of people > 17

(d) number of people > 20

(e) if the proxy is one of the following: SV1, PTC1, MA1 or TB1

2. If $\overline{A_h}$ is still not assigned, the proxy is either DUR5 or SUP4, and the number of people > 9.

3. If $\overline{A_h}$ is still not assigned, the width of the 95 percent confidence interval is less than 1.67, number of clusters > 2, and number of people > 10.

4. If $\overline{A_h}$ is still not assigned, the width of the 95 percent confidence interval is zero and number of people > 11.

In any other situation, $\overline{A_h}$ based on the modeled $\widehat{G_h}$ and $\widehat{R_h}$ was used, which was about 41 percent of the time.

$\widehat{PBAR_h}$ for permanent traffic counters—To convert proxy counts at the permanent traffic counter proxy types PTC1 and PTC3, an estimate of $\widehat{PBAR_h}$ was required. This was estimated as a ratio of means estimator using PROC SURVEYMEANS (SAS Institute Inc. 2004) for each forest, site-type, and proxy type with the cluster defined as the observations in a site-day. A model was also produced to provide a more valid substitute if sample size was too small and/or variability too large. The model was defined as

$$\widehat{PBAR_h} = \beta_0 + \sum_i \beta_{1i} Forest + \sum_j \beta_{2j} Sitetype \qquad (16)$$

This mixed linear model incorporated clustering for a specific site-day by using a repeated measures design with a compound symmetry covariance matrix using PROC MIXED (SAS Institute Inc. 2004).

The estimated value based on the PROC SURVEYMEANS was used instead of the predicted based on the model under the following criteria:

1. If the width of the 95-percent confidence interval is < 0.35, number of clusters > 3, and the number of people >14

2. If $\widehat{PBAR_h}$ is still not assigned, number of clusters > 3, and number of people > 23

In any other situation, the modeled value was used, which was about 34 percent of the time. Note that this $\widehat{PBAR_h}$ is only needed for the permanent traffic proxies PTC1 and PTC3.

The $\widehat{P_h}$ estimator—To obtain the proxy estimator $\widehat{P_h}$ for proxy stratum h for a given forest, the annual proxy count total is needed along with the calibration coefficient A_h and, if the proxy is either PTC1 or PTC3, the $\widehat{PBAR_h}$. For all proxies except PTC1 and PTC3, the $\widehat{P_h}$ estimator is defined as

$$\widehat{P_h} = \overline{A_h}\ PROXY_h \qquad (17a)$$

or for proxies PTC1 and PTC3 as

$$\widehat{P_h} = \widehat{PBAR_h}\ \overline{A_h}\ PROXY_h \qquad (17b)$$

where

$PROXY_h$ = the annual known proxy count for proxy stratum h adjusted for the recreationist compliance rate.

The $PROXY_h$ are known constants which simplifies the variance of equation 17a to

$$\hat{V}\left(\widehat{P_h}\right) = PROXY_h^2 \hat{V}\left(\overline{A_h}\right) \qquad (18a)$$

and the variance of 17b to

$$\hat{V}\left(\widehat{P_h}\right) = PROXY_h^2 \left[\overline{A_h}^2 \hat{V}\left(\overline{PBAR_h}\right) + \overline{PBAR_h}^2 \hat{V}\left(\overline{A_h}\right)\right] \qquad (18b)$$

Converting Proxy Site Visits To National Forest Visits

Although site visits $\widehat{SV}$ is interesting, it is the national forest visits $\widehat{NFV}$ that is of most importance to forest managers. This conversion is easily accomplished by following equation 3 and using the components previously defined. In addition, an estimate of $\widehat{SF_h^P}$ is needed to convert the proxy site visit estimates $\widehat{P_h}$ to proxy national forest visit estimates. This was estimated using PROC SURVEYMEANS (SAS Institute Inc. 2004) for each forest, site-type, and proxy type with the cluster defined as the observations in a site-day. To reflect the unequal probability of sampling visitors that visit varying number of sites, a weight defined as the inverse of the number of sites and areas visited was used in the estimation process in PROC SURVEYMEANS.

A model was also produced for use as a substitute and was obtained by fitting separate models for each of the four site-types as

$$\widehat{SF_h^P} = \beta_0 + \sum_i \beta_{1i} Forest + \sum_j \beta_{2j} \Pr oxy_j \qquad (19)$$

This mixed linear model incorporated clustering for a specific site-day by using a repeated measures design with a compound symmetry covariance matrix using PROC MIXED (SAS Institute Inc. 2004). No weighting was used for this modeling**.**

The estimated value based on the PROC SURVEYMEANS was used instead of the predicted based on the model under the following criteria:

1. If number of clusters > 3 and number of people > 11

2. If number of clusters > 2 and number people > 13

3. If number of clusters > 1 and number of people > 17

4. If number of people > 20

5. If $\widehat{SF_h^P}$ is still not assigned, width of 95-percent confidence interval < 1.0, number of clusters > 3, and number of people > 11

6. If $\widehat{SF_h^P}$ is still not assigned, width of 95-percent confidence interval is zero, and either number of people > 12 or both number of people > 10 and number of clusters is > 2.

In any other situation the modeled value was used, which was 41 percent of the time. Table A.12 gives the proxy national forest visit estimates for each forest.

Special Events Component *SE*

The Special Events *SE* component for a forest is simply the total number of visits that were obtained from forest personnel at sites classified as Special Events, where the level of visitation was usually high. Although this number may be the exact value or an estimate, it is viewed as known without error and, thus, its variance is assumed zero. In addition, they are viewed both as site visits in equation 1 and as national forest visits in equation 3 because it is assumed that these visitors have come to these sites exclusively to partake in the special event only and do not visit other sites during the event. A summary of all the Special Events visits for each forest is shown in table A.13.

Results and Discussion

Forest Level Visitation Estimates

The site visit and national forest visit estimates for each forest are shown in table A.14 along with the coefficients of variation and 90-percent confidence intervals. These estimates could be decomposed into their nonproxy components from table A.10, into their proxy components from table A.12, and into their Special Events from table A.13. This level of detail may be useful to forest managers who are interested in a specific aspect of the visitation estimates or for those investigating questionable properties of their visit estimates. This level of transparency is important for an understanding of the estimation process and for building credibility among the users of these NVUM estimates.

Beaverhead-Deerlodge National Forest Example

To reinforce the concepts presented in this paper and illustrate the usefulness of the data in the tables, an example of a typical analysis of the visitation estimation process will be performed. This example will examine visitation on the 3.34 million acre Beaverhead-Deerlodge National Forest in southwest Montana. The national forest code is R1F2 from table A.1, which is needed to identify and obtain all intermediate components for the estimation process. This forest consists of 12 nonproxy strata with a total of 47,959 site-days (table A.3) of which a majority (56.1 percent) is in GFA_L. In addition, table A.4 indicates that it has four proxy strata consisting of day use records at campsites (DUR4 OUDS), fee envelopes at campsites (FE4 OUDS), special use permits (SUP4 OUDS), and ski visits (SV1 DUDS) as defined in table A.2, totaling 6,001 proxy site days. This information reveals that the site days for the Beaverhead-Deerlodge National Forest are 88.9 percent nonproxy and 11.1 percent proxy. Comparison of these site day characteristics with other forests within Region 1 (or even in other regions if desired) should show the uniqueness and/or similarity of the Beaverhead-Deerlodge National Forest to other forests. For instance, the average number of nonproxy site-days for this region is 35,648 and average number of proxy site days is 3,333, both of which are exceeded by the Beaverhead-Deerlodge National Forest. The only forest in Region 1 that exceeds the Beaverhead-Deerlodge National Forest is the Lolo National Forest (R1F16) which has a total of 102,453 total site-days as compared to 53,960 for the Beaverhead-Deerlodge National Forest.

Information about the NVUM sampling process can be obtained from table A.5 and compared among the 13 forests in the region. For instance, the NVUM survey consisted

of 193 sampled site-days on the Beaverhead-Deerlodge National Forest, while Region 1 averaged 189 sample site-days and ranged from 147 to 219. The Beaverhead-Deerlodge National Forest had at least one interview on 100 percent of the sampled site-days, while the regional average was only 79 percent. In addition, this forest had at least one LER interview on 65 percent of these site-days, which was slightly above the regional average of 62 percent. The total number of attempted interviews on the Beaverhead-Deerlodge National Forest was 892, with 87 percent agreeing to participate in the interviewing process and of which 70 percent were LERs. This was a little lower than the regional average of 1,000 attempted interviews but was similar with respect to the regional averages of 92 percent agreeing to participate, of which 67 percent were LERs.

The national forest visit estimate of 1,330,965 for the Beaverhead-Deerlodge National Forest (table A.14) is obtained using equation 3 and consists of nonproxy, proxy, and Special Event visit estimates. The site visit nonproxy component $\widehat{NP}_h$ is obtained from equation 11 which sums the site visits for each stratum based on N_h, $\widehat{PBAR}_h$, and $\overline{EXIT}_h$. For example, the site visit estimate for stratum DUDS_L is obtained by multiplying $N_h = 4{,}112$ (table A.3) by $\widehat{PBAR}_h = 0.732$ (table A.6) by $\overline{EXIT}_h = 60.3$ (table A.9) which yields 181,502 site visits. This is then converted to national forest visits as shown in equation 3 by dividing by $\widehat{SF}_h^{NP} = 1.427$ (table A.8) which yields 127,191 (table A.10). Slight discrepancies between any computations and the table values are due to rounding errors. This procedure is followed for each nonproxy stratum in the Beaverhead-Deerlodge National Forest, the summation of which equals the nonproxy national forest visit estimate of 1,227,800 (table A.10). The proxy component is a little more complex and is based on equation 17a for all proxy strata except the permanent traffic counters (PTC1 and PTC3), in which case equation 17b is used. Table A.12 indicates that the Beaverhead-Deerlodge National Forest has four proxy strata. For illustrative purposes, consider the proxy SV1 DUDS, where the site visit estimate (equation 17a) is the product of $A_h = 1.04$ and $PROXY_h = 46{,}600$, which equals 48,464 site visits. Converting this to national forest visits by dividing by $\widehat{SF}_h^{P} = 1.06$ gives 45,721visits (table A.12). The total proxy national forest visits is the sum over all four proxy strata, which is 77,200. There were 22 Special Event site-days, which totaled 22,160 national forest visits (table A.13). Thus, when the nonproxy, proxy, and Special Event components are summed, the total national forest visit estimate for the Beaverhead-Deerlodge National Forest is 1,227,800 + 77,200 + 22,160 = 1,327,160 visits, which is within rounding error of the estimate in table A.14.

National Visitation Estimates

The total national visitation estimate is simply the summation of all the individual forest visit estimates. The national site visit estimate for Round 1was 239,009,917, with a 90-percent confidence interval of 231,554,913 to 246,464,921. The coefficient of variation was 1.90 percent. The national forest visit estimate for Round 1 was 204,358,864, with a 90 percent confidence interval of 197,468,684 to 211,249,044. The coefficient of variation was 2.05. These national estimates assume that the visitation is constant over the four-year survey cycle. Other methods to alleviate this assumption, such as the moving average, are under investigation.

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Appendix

Index of Tables

Table A.1—The 121 national forests sampled by the National Visitor Use Monitoring Program in Round 1 (2000–2003)[a]

Region	Forest	Forest name
1	2	Beaverhead-Deerlodge
1	3(1)	Bitterroot
1	4	Idaho Panhandle
1	5	Clearwater
1	8	Custer
1	10	Flathead
1	11	Gallatin
1	12	Helena
1	14	Kootenai
1	15	Lewis and Clark
1	16	Lolo
1	17	Nez Perce
1	18	Dakota Prairie
2	2	Bighorn
2	3	Black Hills
2	4	Grand Mesa, Uncompahgre and Gunnison
2	6	Medicine Bow-Routt
2	7	Nebraska
2	9	Rio Grande
2	10	Arapaho and Roosevelt
2	11	Routt
2	12	Pike and San Isabel
2	13	San Juan
2	14	Shoshone
2	15	White River
3	1	Apache-Sitgreaves
3	2	Carson
3	3	Cibola
3	4	Coconino
3	5	Coronado
3	6	Gila
3	7	Kaibab
3	8	Lincoln
3	9	Prescott
3	10	Santa Fe
3	12	Tonto
4	1	Ashley
4	19	Wasatch-Cache
5	1	Angeles
5	2	Cleveland
5	3	Eldorado
5	4	Inyo
5	5	Klamath
5	6	Lassen
5	7	Los Padres
5	8	Mendocino
5	9	Modoc
5	10	Six Rivers
5	11	Plumas
5	12	San Bernardino
5	13	Sequoia
5	14	Shasta-Trinity
5	15	Sierra
5	16	Stanislaus
5	17	Tahoe
5	19	Lake Tahoe Management Unit
6	1	Deschutes
6	2	Fremont
6	3	Gifford Pinchot
6	4	Malheur
6	5	Mt. Baker-Snoqualmie
6	6	Mt. Hood
6	7	Ochoco
6	8	Okanogan
6	9	Olympic
6	10	Rogue River
6	11	Siskiyou
6	12	Siuslaw
6	14	Umatilla
6	15	Umpqua
6	16	Wallowa Whitman
6	17	Wenatchee
6	18	Willamette
6	20	Winema

continued

Table A.1—The 121 national forests sampled by the National Visitor Use Monitoring Program in Round 1 (2000–2003)[a] (continued)

Region	Forest	Forest name
4	2	Boise
4	3	Bridger-Teton
4	7	Dixie
4	8	Fishlake
4	10	Manti-La Sal
4	12	Payette
4	13	Salmon and Challis
4	14	Sawtooth
4	15(5)	Caribou-Targhee
4	17	Humboldt-Toiyabe
4	18	Uinta
8	10	Ozark-St. Francis
8	11	National Forests in North Carolina
8	12	Francis Marion and Sumter
8	13	National Forests in Texas
8	16	Caribbean
8	60(88)	Land Between the Lakes
9	3	Chippewa
9	4	Huron Manistee
9	5	Mark Twain
9	7	Ottawa
9	8	Shawnee
9	9	Superior
9	10	Hiawatha
6	21	Colville
6	22	Columbia River Gorge
8	1	National Forests in Alabama
8	2	Daniel Boone
8	3	Chattahoochee-Oconee
8	4	Cherokee
8	5	National Forests in Florida
8	6	Kisatchie
8	7	National Forests in Mississippi
8	8	George Washington and Jefferson
8	9	Ouachita
9	12	Hoosier
9	13	Chequamegon-Nicolet
9	14	Wayne
9	15	Midewin Tallgrass Prairie
9	19	Allegheny
9	20	Green Mountain and Finger Lakes
9	21	Monongahela
9	22	White Mountain
10	2(1)	Tongass-Stikine
10	3	Tongass-Chatham
10	4	Chugach
10	5	Tongass-Ketchikan

[a] In four instances, multiple forest numbers were used for individual forests (identified by the parentheses) during Round 1. This was the count in 2000 of nationally designated forests (i.e., designated by the U.S. Congress), and although forests and grasslands have merged administratively since 2000, the forests were generally sampled, for the sake of consistency, as they were designated and administered in 2000.

Table A.2—The 25 proxy types used in the National Visitor Use Monitoring Program

Proxy code	Definition
DUR4	Daily use record of sites with PAOT of 14 or less (DUDS picnic or OUDS campsites)
DUR5	Daily use record of sites with PAOT of 15 or more (DUDS picnic or OUDS campsites)
FE1	Fee envelopes per person (DUDS or OUDS)
FE3	Fee envelopes per vehicle (DUDS or OUDS)
FE4	Fee envelopes per family site with PAOT of 14 or less ((DUDS or OUDS)
FR1	Fee receipts or tickets per person (DUDS). Not for winter ski area use and not for OUDS.
FR2	Fee receipts or tickets per group of 14 or less.
FR3	Fee receipts or tickets per vehicle.
FR5	Envelopes, permits or tickets per large group of 15 or more
MA1	Mandatory permit per person for day AND overnight use (WILD)
MA2	Mandatory permit per small group for day AND overnight use (WILD)
PTC1	Permanent traffic counter that counts every person (one way) (all site-types)
PTC3	Permanent traffic counter that counts every vehicle (one way and adjusted for axles) (all site-types)
RE1	Registration forms per person yielding total person nights (OUDS)
RE2	Registration forms per small group of 14 or less (all site-types)
RE4	Registration form per room yielding room nights (not where more than one group per room)
RF1	Registration forms per person
RF2	Registration forms per group
RF4	Registration forms per room
SUP1	Special use permit per individual
SUP2	Special use permit per group
SUP4	Special use permit per site or cabin of 14 or less people per visit (not entire season) (OUDS)
SV1	Skier visits yielding total number of skier days (not lift tickets sold) reflecting season pass use (DUDS).
TB1	Toll booth person count (DUDS, OUDS, GFA) (no season passes)
TB3	Toll booth vehicle count (DUDS, OUDS, GFA) (no season passes)

PAOT = People at one time; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; WILD = Wilderness sites; GFA = General forest area sites.

Table A.3—Number of site-days in each of the nonproxy strata for each Round 1 forest

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
1	2	4,112	1,151	1,048	4,770	970	101	26,895	5,257	1,088	2,124	361	82
1	3	1,321	514	44	3,711	792	0	12,514	856	0	6,040	3,202	1,088
1	4	958	201	294	655	132	7	11,568	5,077	270	673	3	14
1	5	2,178	571	415	849	349	40	14,134	4,776	2,498	1,723	132	187
1	8	932	559	196	1,267	678	281	10,324	2,597	846	1,294	975	432
1	10	1,005	915	207	2,986	1,232	384	11,208	8,719	2,225	4,362	2,864	775
1	11	1,609	292	134	873	72	0	21,193	3,197	81	4,682	1,031	288
1	12	744	280	106	344	19	37	17,548	1,720	674	735	123	20
1	14	1,478	977	343	2,067	389	36	15,293	7,454	1,041	1,354	399	30
1	15	632	295	139	3,565	770	103	10,913	6,524	2,798	1,686	945	413
1	16	5,219	1,704	86	5,341	370	20	73,364	7,076	631	2,928	288	253
1	17	5,299	1,583	294	8,682	1,448	141	10,309	2,154	1,481	5,016	1,492	507
1	18	136	72	0	455	65	25	9,622	14,787	4,116	0	0	0
2	2	5,538	276	371	1,284	56	26	9,767	634	305	0	0	0
2	3	3,620	434	148	599	126	73	18,569	7,286	1,912	872	487	236
2	4	1,335	278	181	250	0	6	12,216	3,046	783	2,829	769	181
2	6	884	417	94	1,385	415	35	10,136	3,890	1,622	1,481	459	0
2	7	1,244	233	30	1,351	186	3	8,273	1,936	290	453	0	0
2	9	3,842	710	165	1,737	627	305	24,097	3,577	2,161	4,881	1,447	786
2	10	14,674	1,054	0	7,975	352	156	61,278	5,419	121	15,674	297	126
2	11	1,607	135	130	3,568	255	74	11,905	4,378	1,801	3,445	799	341
2	12	7,791	838	202	1,754	0	0	64,076	16,723	3,412	11,998	1,674	612
2	13	3,579	1,263	474	0	0	0	15,023	7,155	1,149	4,500	2,711	784
2	14	996	364	104	1,582	189	93	14,741	2,590	1,057	5,988	519	104
2	15	2,270	629	248	2,529	282	56	30,536	6,328	962	11,823	2,293	1,200
3	1	5,142	301	281	1,743	47	18	10,203	2,204	601	1,187	133	60
3	2	531	406	85	586	65	24	4,442	1,686	299	689	234	48
3	3	5,682	2,081	376	1,631	329	38	30,435	3,743	592	16,941	4,009	644
3	4	7,288	1,521	507	1,883	405	27	13,708	5,849	2,712	11,398	5,219	1,417
3	5	5,990	695	495	5,141	411	19	14,039	2,533	624	4,188	1,762	1,018
3	6	784	1,405	341	4,598	571	98	9,405	9,980	549	6,898	3,491	1,159
3	7	5,401	755	188	493	0	0	4,660	1,448	312	1,288	80	132
3	8	867	439	164	183	20	16	8,176	1,975	385	947	285	33
3	9	840	540	339	69	27	5	4,140	2,437	921	736	313	161
3	10	1,748	439	124	440	54	22	9,804	1,696	238	605	106	6
3	12	3,202	1,020	581	4,553	1,446	253	5,040	1,505	342	1,011	280	78
4	1	3,439	488	350	4,360	89	49	7,484	2,298	762	941	272	133
4	2	5,407	130	80	9,628	269	86	27,030	2,735	425	3,750	62	32
4	3	361	233	56	1,269	689	188	8,965	3,351	1,154	1,823	667	176
4	7	80	200	30	169	29	18	8,803	4,108	678	366	464	71
4	8	1,104	323	472	583	70	32	6,032	1,532	792	0	0	0

continued

Table A.3—Number of site-days in each of the nonproxy strata for each Round 1 forest (continued)

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
4	10	710	82	50	1,457	114	42	7,544	1,668	535	815	200	273
4	12	369	83	0	329	56	1	6,049	1,774	744	891	414	37
4	13	540	377	48	1,648	355	70	9,431	1,794	430	2,008	735	30
4	14	2,290	611	258	2,242	200	15	17,442	3,165	601	2,108	144	528
4	15	2,395	858	855	5,309	284	25	110,278	1,995	455	2,654	713	64
4	17	2,594	1,308	481	5,081	786	136	219,116	58,020	7,321	31,208	3,458	2,434
4	18	4,463	1,478	265	0	0	0	6,252	3,179	2,393	1,165	373	102
4	19	1,652	1,639	48	554	107	68	21,909	5,219	201	2,485	1,899	44
5	1	7,975	2,196	821	6,783	594	193	6,993	1,805	554	3,462	478	452
5	2	1,490	235	65	2,078	177	42	7,380	1,379	290	712	41	36
5	3	1,098	530	77	337	34	38	6,449	1,047	235	1,321	922	131
5	4	2,515	1,298	890	535	343	10	5,297	1,084	948	1,022	779	136
5	5	1,331	776	64	3,675	327	175	7,101	2,049	578	3,503	1,779	172
5	6	3,357	895	37	307	0	0	9,718	1,789	507	2,166	609	84
5	7	2,649	1,027	159	1,215	48	6	5,692	2,278	741	4,459	773	484
5	8	786	517	109	1,006	202	133	2,414	1,153	638	520	143	61
5	9	869	221	74	1,456	138	0	6,990	1,982	335	989	126	20
5	10	483	317	113	93	10	2	4,261	1,508	425	287	32	32
5	11	2,105	927	137	1,018	0	0	11,434	1,724	396	873	167	46
5	12	1,755	664	270	558	77	13	8,628	1,721	325	802	498	127
5	13	991	516	265	486	44	9	6,697	699	174	1,471	446	104
5	14	1,790	1,344	698	2,178	120	12	12,992	4,963	794	1,228	255	36
5	15	1,112	490	226	306	136	52	1,535	712	369	543	560	157
5	16	710	337	101	269	130	11	3,296	1,057	412	568	169	17
5	17	1,649	204	149	1,488	392	48	17,279	5,062	934	439	118	86
5	19	1,123	528	493	0	0	0	9,624	971	190	762	116	130
6	1	3,522	1,123	244	2,394	658	696	16,421	4,413	1,597	3,461	623	96
6	2	398	249	91	938	913	417	5,660	996	986	106	133	18
6	3	6,965	1,556	1,315	6,726	240	41	15,286	757	188	340	33	0
6	4	995	121	46	1,185	100	16	5,273	1,746	263	791	111	18
6	5	4,043	181	212	195	12	35	17,255	653	262	5,814	551	220
6	6	1,166	270	207	1,319	72	0	8,582	2,438	260	2,746	363	51
6	7	1,228	261	134	3,660	258	35	15,147	2,370	445	1,404	423	99
6	8	291	203	209	5,001	877	383	13,310	1,990	375	1,909	679	252
6	9	686	282	218	416	42	24	10,538	2,116	465	5,856	914	550
6	10	1,065	414	124	748	155	52	4,751	570	239	445	181	24
6	11	2,710	685	44	2,709	287	56	6,717	1,596	644	1,022	219	33
6	12	2,394	1,227	593	218	105	18	11,916	2,013	873	410	317	114
6	14	502	89	16	1,016	479	17	13,144	3,094	890	2,895	354	36
6	15	4,692	524	182	3,328	192	56	23,717	1,639	349	5,345	431	169
6	16	598	129	83	750	128	58	4,707	2,831	996	1,819	196	115
6	17	2,499	364	149	7,542	87	6	19,438	3,215	279	8,151	987	145

continued

Table A.3—Number of site-days in each of the nonproxy strata for each Round 1 forest (continued)

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
6	18	1,973	1,300	384	470	92	39	13,646	3,092	919	1,137	246	97
6	20	845	165	95	1,404	25	0	19,239	773	111	1,436	176	80
6	21	1,780	693	179	870	518	238	19,539	5,297	258	359	39	0
6	22	1,366	618	269	0	0	0	6,909	2,014	2,423	0	0	0
8	1	3,397	160	23	478	43	0	25,810	516	21	3,755	485	67
8	2	2,528	1,216	58	1,679	133	46	42,410	10,185	604	1,070	103	8
8	3	498	1,195	230	24	146	44	15,457	21,791	8,853	1,983	1,532	39
8	4	5,015	837	606	3,757	1,468	121	53,174	6,174	3,115	5,074	1,176	559
8	5	6,261	562	129	9,446	279	4	77,226	0	0	7,817	162	73
8	6	1,316	469	95	1,292	169	64	21,616	2,715	810	784	149	162
8	7	1,362	167	58	365	63	51	100,661	14,528	7,023	1,059	195	55
8	8	21,150	3,500	186	10,985	1,282	36	59,327	17,917	234	7,076	633	252
8	9	10,830	1,120	169	6,066	182	34	132,273	4,174	475	7,215	337	134
8	10	5,498	733	167	6,900	118	27	72,309	37,776	7,485	8,063	1,387	405
8	11	17,783	3,795	1,007	1,539	0	0	71,028	30,487	19,281	8,105	566	458
8	12	5,833	1,262	122	1,963	237	10	68,871	5,353	230	824	265	70
8	13	1,040	1,421	572	2,741	510	181	24,871	13,001	3,917	2,167	1,252	237
8	16	1,762	312	122	0	0	0	2,820	108	0	0	0	0
8	60	1,421	2,714	245	4,263	1,638	304	610	0	0	0	0	0
9	3	3,880	1,269	589	0	0	0	27,916	12,255	2,796	0	0	0
9	4	2,028	67	243	984	123	9	16,177	2,284	636	312	12	51
9	5	4,828	1,360	96	1,699	139	27	33,376	1,021	20	2,923	985	41
9	7	1,110	407	176	38	0	0	9,417	1,800	690	908	60	0
9	8	3,641	1,481	1,603	2,224	767	714	10,214	7,095	4,299	946	2,021	1,616
9	9	5,582	2,572	964	418	224	30	16,915	7,641	2,967	0	0	0
9	10	3,809	746	323	308	0	0	22,715	6,037	802	6,361	275	90
9	12	1,176	696	166	1,209	120	105	4,908	2,114	695	840	152	228
9	13	1,554	221	119	0	0	0	43,554	14,244	3,889	1,768	404	26
9	14	410	243	1	230	24	39	1,885	1,073	1,236	0	0	0
9	15	54	89	48	0	0	0	200	71	21	0	0	0
9	19	1,627	149	187	680	0	0	43,942	3,057	1,298	1,940	171	60
9	20	2,747	611	112	5,745	65	22	31,532	12,611	2,730	6,198	3,862	1,652
9	21	1,042	477	198	858	105	120	8,092	4,691	1,861	2,801	913	407
9	22	2,334	632	715	0	0	0	22,322	6,629	3,197	5,326	1,308	139
10	2	891	152	170	555	0	0	5,118	2,829	279	1,899	682	126
10	3	1,077	951	275	127	0	0	24,221	595	238	19,236	292	0
10	4	1,766	191	107	143	0	0	8,591	1,729	824	0	0	0
10	5	1,262	278	47	776	0	0	9,654	894	0	2,780	366	0

DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = wilderness sites; R = Region; F = Forest; L = low use-level; M = medium use-level; H = high use-level.

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest

Region	Forest	Proxy	Sitetype	L	M	H
1	2	DUR4	OUDS	298	387	224
1	2	FE4	OUDS	25	57	27
1	2	SUP4	OUDS	2,984	1,242	552
1	2	SV1	DUDS	20	121	64
1	3	DUR4	OUDS	605	225	26
1	3	DUR5	OUDS	180	33	0
1	3	FR1	DUDS	0	30	34
1	3	RE4	OUDS	1,345	0	0
1	4	DUR4	OUDS	662	93	14
1	4	DUR5	OUDS	67	28	0
1	4	FE3	DUDS	97	49	19
1	4	FE4	OUDS	215	40	17
1	4	FR1	DUDS	62	36	87
1	4	SUP4	OUDS	849	0	0
1	4	SV1	DUDS	14	79	44
1	5	FE4	OUDS	1,668	251	92
1	5	SUP4	OUDS	920	114	116
1	8	DUR4	DUDS	0	105	47
1	8	DUR4	OUDS	259	653	184
1	8	SV1	DUDS	0	80	71
1	10	FE4	OUDS	60	1,057	305
1	10	FR1	DUDS	63	146	34
1	10	FR3	DUDS	90	31	0
1	10	SUP4	OUDS	2,655	0	0
1	11	DUR4	OUDS	1023	738	111
1	11	PTC1	DUDS	0	110	4
1	11	PTC1	GFA	336	0	0
1	11	RE1	OUDS	523	0	0
1	11	SUP4	OUDS	8,047	0	0
1	11	SV1	DUDS	0	0	114
1	12	FE4	OUDS	563	158	23
1	12	RE2	OUDS	651	0	0
1	14	DUR5	DUDS	198	136	33
1	14	FE4	OUDS	460	1,101	191
1	14	FR1	DUDS	0	0	56
1	14	SUP4	OUDS	700	0	0
1	15	FE4	OUDS	610	505	91
1	15	RE1	OUDS	1,414	0	0
1	15	SV1	DUDS	0	35	134
1	16	FE4	OUDS	1,195	609	149
1	16	FR1	DUDS	0	129	123
1	16	FR5	OUDS	365	0	0
1	16	RE2	OUDS	350	0	0

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
1	16	RE4	OUDS	549	0	0
1	16	SUP2	OUDS	730	0	0
1	16	SUP4	OUDS	758	151	65
1	18	DUR4	OUDS	0	115	23
2	2	DUR4	OUDS	3,821	700	518
2	2	FE4	OUDS	563	0	0
2	2	MA2	WILD	2,630	486	169
2	2	SV1	DUDS	43	22	116
2	3	DUR4	OUDS	924	380	76
2	3	DUR5	OUDS	232	0	0
2	3	PTC1	DUDS	0	0	128
2	3	RE2	OUDS	96	20	0
2	3	SUP4	OUDS	34	0	0
2	4	DUR4	OUDS	1,560	325	92
2	4	DUR5	OUDS	29	0	0
2	4	RE1	OUDS	36	0	0
2	4	RE4	OUDS	675	322	69
2	4	SV1	DUDS	130	180	69
2	6	DUR4	OUDS	1,673	755	200
2	6	DUR5	DUDS	45	0	0
2	6	FR1	DUDS	0	3	0
2	6	RE4	OUDS	838	480	160
2	6	SV1	DUDS	19	83	48
2	7	DUR4	OUDS	95	133	47
2	7	DUR5	OUDS	71	103	37
2	7	FE3	OUDS	457	206	74
2	7	FR1	DUDS	78	111	13
2	7	PTC1	DUDS	0	102	138
2	9	DUR4	OUDS	1,180	1,080	381
2	9	RF1	DUDS	81	20	214
2	9	RF4	OUDS	131	112	7
2	9	SUP1	GFA	36	0	60
2	9	SV1	DUDS	0	0	166
2	10	SV1	DUDS	495	431	229
2	10	TB3	DUDS	40	124	60
2	11	DUR4	OUDS	66	59	13
2	11	SV1	DUDS	53	134	145
2	12	DUR4	OUDS	10,213	2,064	350
2	12	FE3	DUDS	1,418	320	39
2	12	FE4	OUDS	442	25	0
2	12	FR3	DUDS	560	202	157
2	12	FR5	OUDS	1,292	111	113
2	12	PTC3	GFA	36	87	41

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
2	12	RE1	OUDS	912	0	0
2	12	RE4	OUDS	722	0	0
2	12	SV1	DUDS	293	220	74
2	12	TB1	GFA	0	30	579
2	13	DUR4	OUDS	3,240	2,051	629
2	13	FR1	DUDS	87	37	0
2	13	SV1	DUDS	93	88	42
2	14	FE3	OUDS	128	204	0
2	14	FE4	OUDS	1,376	445	575
2	14	FR1	DUDS	0	25	0
2	14	PTC1	GFA	63	29	0
2	14	RE1	OUDS	0	0	128
2	14	RE2	OUDS	56	0	67
2	14	RE4	OUDS	871	492	1,643
2	14	SV1	DUDS	0	0	73
2	15	DUR4	DUDS	235	100	0
2	15	DUR4	OUDS	3,828	1,210	227
2	15	DUR5	DUDS	150	0	0
2	15	DUR5	OUDS	417	0	0
2	15	FE4	OUDS	563	43	0
2	15	FR1	GFA	241	119	343
2	15	PTC1	GFA	734	265	308
2	15	RE1	OUDS	2,648	424	0
2	15	SV1	DUDS	1,130	744	245
3	1	DUR4	OUDS	2,926	771	248
3	1	DUR5	OUDS	123	0	0
3	1	FR1	GFA	190	82	4
3	1	PTC1	OUDS	117	22	0
3	1	RE1	DUDS	120	35	12
3	1	RE4	OUDS	365	0	0
3	2	DUR4	OUDS	429	78	28
3	2	DUR5	OUDS	241	6	11
3	2	SV1	DUDS	383	108	40
3	3	FE4	OUDS	912	52	0
3	3	FR1	DUDS	0	462	270
3	3	RF2	DUDS	198	154	46
3	3	RF4	DUDS	1,992	204	0
3	3	RF4	OUDS	1,245	217	48
3	4	DUR4	OUDS	3,256	695	280
3	4	FE4	OUDS	244	22	0
3	4	FR1	DUDS	574	158	0
3	4	FR2	OUDS	199	0	0
3	4	FR3	DUDS	701	623	385

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
3	4	RF4	OUDS	459	0	0
3	4	SUP4	OUDS	244	22	0
3	4	SV1	DUDS	144	35	294
3	5	DUR4	OUDS	73	513	85
3	5	FR5	OUDS	370	0	0
3	5	RE4	OUDS	550	172	0
3	5	SV1	DUDS	19	23	28
3	6	FE3	OUDS	119	125	0
3	6	FE4	OUDS	398	285	51
3	6	FR5	DUDS	507	99	0
3	6	PTC1	DUDS	112	192	61
3	7	DUR4	OUDS	1,222	355	38
3	7	FE4	OUDS	42	14	97
3	7	FR1	DUDS	228	88	304
3	7	RF4	OUDS	400	192	141
3	8	DUR4	OUDS	425	233	39
3	8	DUR5	OUDS	25	67	0
3	8	FE3	OUDS	337	45	4
3	8	FR5	OUDS	4	17	0
3	8	SV1	DUDS	108	27	20
3	9	DUR4	OUDS	434	66	93
3	9	DUR5	OUDS	0	36	4
3	9	FE4	OUDS	91	13	36
3	10	DUR4	DUDS	165	0	0
3	10	DUR4	OUDS	195	192	53
3	10	DUR5	DUDS	43	0	0
3	10	DUR5	OUDS	9	25	0
3	10	PTC1	WILD	357	209	70
3	10	SV1	DUDS	0	100	21
3	12	DUR4	OUDS	429	62	73
3	12	DUR5	DUDS	55	0	0
3	12	DUR5	OUDS	572	20	0
3	12	FE3	OUDS	445	0	0
3	12	PTC1	DUDS	229	44	89
3	12	PTC3	GFA	1,881	1,002	248
3	12	RE4	OUDS	56	8	0
4	1	DUR4	OUDS	3,389	368	260
4	1	DUR5	OUDS	120	0	0
4	1	FR3	DUDS	53	74	124
4	1	RE4	OUDS	485	17	0
4	1	TB1	DUDS	42	32	0
4	2	DUR4	OUDS	1,398	211	16
4	2	FE1	OUDS	101	16	19

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
4	2	FE4	OUDS	2,027	96	20
4	2	PTC3	DUDS	180	48	1
4	2	PTC3	OUDS	123	0	0
4	2	PTC3	GFA	1,855	1,016	35
4	2	SUP4	OUDS	2,341	0	0
4	2	SV1	DUDS	163	0	138
4	3	DUR4	OUDS	1,276	628	44
4	3	DUR5	OUDS	157	85	12
4	3	FR1	DUDS	143	194	92
4	3	RE4	OUDS	286	531	110
4	3	SV1	DUDS	95	161	113
4	7	DUR4	OUDS	1,694	653	106
4	7	DUR5	DUDS	378	54	0
4	7	DUR5	OUDS	299	84	0
4	7	FR1	DUDS	0	60	0
4	7	FR3	DUDS	77	53	0
4	7	RE4	OUDS	42	0	0
4	7	SV1	DUDS	0	34	115
4	8	DUR4	OUDS	1,094	93	32
4	8	DUR5	OUDS	17	87	16
4	8	FE4	OUDS	16	0	0
4	8	FR1	OUDS	3	80	16
4	8	RE4	OUDS	203	99	16
4	10	DUR4	OUDS	1,702	131	7
4	10	DUR5	OUDS	447	138	38
4	12	DUR4	DUDS	61	0	0
4	12	DUR4	OUDS	442	0	0
4	12	DUR5	OUDS	172	32	0
4	12	FE4	OUDS	1,012	311	50
4	12	FR1	DUDS	0	20	0
4	12	MA2	WILD	0	64	28
4	12	PTC3	GFA	248	584	254
4	12	RE4	OUDS	106	0	0
4	12	SV1	DUDS	59	79	34
4	13	DUR5	OUDS	36	24	0
4	13	FE4	OUDS	87	42	46
4	13	MA2	WILD	42	89	102
4	13	RE4	OUDS	55	81	0
4	13	SUP4	OUDS	89	0	0
4	14	DUR4	OUDS	705	443	222
4	14	FR1	DUDS	53	0	0
4	14	RF4	OUDS	45	52	40
4	14	SUP2	DUDS	104	244	104

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
4	14	SV1	DUDS	136	205	86
4	15	DUR4	OUDS	1,837	543	227
4	15	FR1	DUDS	26	47	21
4	15	RF2	OUDS	137	79	32
4	15	SUP1	OUDS	870	138	566
4	15	SV1	DUDS	125	42	171
4	17	DUR4	DUDS	95	0	291
4	17	DUR4	OUDS	1,948	1,246	782
4	17	RF4	OUDS	706	272	34
4	17	SV1	DUDS	0	227	85
4	18	DUR4	OUDS	2,231	992	146
4	18	DUR5	OUDS	333	0	0
4	18	RE4	OUDS	0	365	0
4	19	DUR4	DUDS	90	101	0
4	19	DUR4	OUDS	4,252	691	94
4	19	DUR5	DUDS	188	134	0
4	19	DUR5	OUDS	274	39	83
4	19	FE3	DUDS	590	0	0
4	19	FE3	GFA	31	48	37
4	19	FE4	OUDS	67	13	0
4	19	FR1	DUDS	287	37	0
4	19	FR3	DUDS	121	101	0
4	19	FR3	GFA	0	79	37
4	19	RE4	OUDS	149	0	0
4	19	SUP4	OUDS	37	0	0
4	19	SV1	DUDS	144	367	334
5	1	DUR4	OUDS	1,066	341	61
5	1	FE4	DUDS	366	0	0
5	1	FE4	OUDS	1,647	388	162
5	1	FR1	DUDS	614	287	88
5	1	FR3	DUDS	1,022	521	51
5	1	PTC3	DUDS	195	171	0
5	1	RF2	OUDS	717	106	123
5	1	TB1	DUDS	216	162	0
5	1	TB3	OUDS	104	0	0
5	2	DUR4	OUDS	221	257	57
5	2	FE4	OUDS	204	54	0
5	2	PTC1	WILD	458	332	154
5	2	RE4	OUDS	329	36	0
5	3	DUR4	OUDS	2,290	346	34
5	3	DUR5	OUDS	91	16	0
5	3	RE2	OUDS	124	0	0
5	3	SUP4	OUDS	806	0	0

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
5	3	SV1	DUDS	152	76	28
5	4	DUR4	OUDS	3,217	1,177	543
5	4	DUR5	OUDS	535	17	0
5	4	FR1	DUDS	64	18	120
5	4	RE4	OUDS	1,505	385	399
5	4	SV1	DUDS	76	138	210
5	5	FE4	OUDS	253	181	33
5	5	FR5	OUDS	396	34	0
5	6	DUR4	OUDS	4,875	813	20
5	6	RF4	OUDS	184	0	0
5	7	DUR4	DUDS	222	224	162
5	7	DUR4	OUDS	3,137	851	124
5	7	DUR5	OUDS	151	35	104
5	8	DUR4	OUDS	335	94	110
5	8	DUR5	OUDS	0	31	40
5	8	FE4	OUDS	391	48	24
5	8	SUP4	OUDS	16	0	0
5	9	FE4	OUDS	1,665	290	19
5	9	FR1	DUDS	64	0	0
5	10	DUR4	OUDS	630	304	30
5	10	RE4	OUDS	0	303	61
5	10	SUP4	OUDS	109	0	0
5	11	DUR4	OUDS	3,729	940	120
5	11	RF4	OUDS	1,176	0	0
5	12	DUR4	OUDS	1,411	123	82
5	12	DUR5	OUDS	243	48	0
5	12	FE3	DUDS	227	0	28
5	12	FE4	OUDS	97	16	0
5	12	FR1	DUDS	175	72	0
5	12	PTC1	DUDS	183	147	33
5	12	RE2	OUDS	91	0	0
5	12	SV1	DUDS	162	223	188
5	13	DUR4	OUDS	2,058	215	97
5	13	DUR5	OUDS	72	76	3
5	13	FR1	DUDS	112	12	83
5	13	RE4	OUDS	46	6	9
5	13	SUP4	OUDS	97	0	0
5	14	DUR4	OUDS	1,300	387	160
5	14	DUR5	OUDS	285	48	16
5	14	FE4	OUDS	820	141	18
5	14	RE4	OUDS	401	48	0
5	14	SV1	DUDS	56	26	4
5	15	DUR4	DUDS	43	11	26

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
5	15	DUR4	OUDS	1,389	693	150
5	15	DUR5	OUDS	93	54	13
5	15	FE3	DUDS	54	80	26
5	15	RE4	OUDS	226	111	16
5	15	SV1	DUDS	0	76	24
5	16	DUR4	OUDS	1,713	165	51
5	16	DUR5	OUDS	34	0	0
5	16	FE4	OUDS	58	2	0
5	16	FR1	DUDS	58	61	46
5	16	RE4	OUDS	176	10	0
5	16	SV1	DUDS	16	37	34
5	17	DUR4	OUDS	6,481	1,716	206
5	17	DUR5	OUDS	359	325	36
5	17	FR1	DUDS	822	346	148
5	17	FR2	OUDS	134	0	0
5	17	PTC1	DUDS	13	97	44
5	17	RE2	GFA	15	82	38
5	19	DUR4	OUDS	925	140	55
5	19	FR1	DUDS	209	0	0
5	19	RE4	OUDS	468	23	0
5	19	SV1	DUDS	0	61	80
6	1	DUR4	OUDS	565	46	11
6	1	DUR5	OUDS	167	61	61
6	1	FE3	OUDS	841	136	0
6	1	FE4	OUDS	2,678	821	1,143
6	1	PTC1	DUDS	85	127	112
6	1	PTC3	GFA	100	428	0
6	1	RE4	OUDS	796	187	20
6	1	SV1	DUDS	0	67	213
6	3	DUR4	OUDS	1,925	296	30
6	3	DUR5	OUDS	248	10	0
6	3	FE4	OUDS	496	81	17
6	3	MA2	WILD	8,589	227	55
6	3	PTC3	DUDS	618	322	203
6	3	PTC3	GFA	1,966	416	177
6	3	RE1	OUDS	130	0	0
6	4	FE4	OUDS	957	251	72
6	4	PTC3	GFA	339	223	123
6	4	SUP4	OUDS	128	0	0
6	5	DUR4	OUDS	3,558	166	216
6	5	FR1	DUDS	412	100	60
6	5	MA2	WILD	1,909	171	0
6	5	RF4	OUDS	1,250	15	17

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
6	5	SUP4	OUDS	2,112	0	0
6	6	DUR4	DUDS	243	28	0
6	6	DUR4	OUDS	1,254	175	102
6	6	FE3	DUDS	33	54	20
6	6	RE4	OUDS	309	56	0
6	6	SV1	DUDS	39	169	684
6	7	FE4	OUDS	906	521	105
6	7	PTC3	GFA	1,484	652	318
6	7	SUP2	OUDS	280	142	27
6	8	SV1	DUDS	0	49	12
6	9	DUR4	OUDS	681	39	76
6	9	FE4	OUDS	1,945	112	140
6	9	FR3	DUDS	226	51	89
6	9	PTC1	DUDS	694	137	267
6	9	RF1	OUDS	316	174	452
6	9	RF4	OUDS	220	61	85
6	10	FR1	DUDS	32	48	20
6	10	RE4	OUDS	377	59	30
6	10	SUP4	OUDS	18	0	0
6	11	DUR4	OUDS	176	54	0
6	11	FE3	OUDS	535	30	0
6	11	FR1	GFA	64	98	144
6	11	SUP4	OUDS	716	175	129
6	12	DUR4	OUDS	2,076	1,056	157
6	12	DUR5	OUDS	94	0	0
6	12	FE3	OUDS	556	297	44
6	12	PTC1	DUDS	0	0	128
6	12	PTC3	DUDS	90	91	184
6	12	PTC3	GFA	696	715	719
6	12	RE2	DUDS	0	22	25
6	12	RE2	OUDS	113	18	0
6	12	RE4	OUDS	365	0	0
6	14	DUR4	OUDS	684	56	17
6	14	FE3	DUDS	49	24	0
6	14	FE4	OUDS	619	164	28
6	14	SUP4	OUDS	249	0	0
6	14	SV1	DUDS	0	141	20
6	15	DUR4	OUDS	866	210	101
6	15	DUR5	OUDS	613	14	0
6	15	FE4	OUDS	4,970	133	0
6	15	RE1	DUDS	30	153	0
6	15	SUP4	OUDS	1,349	0	0
6	16	DUR4	OUDS	102	41	20

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
6	16	FE4	OUDS	99	65	34
6	16	FR1	DUDS	82	62	0
6	16	FR3	DUDS	39	0	0
6	16	FR3	GFA	332	313	157
6	16	PTC1	DUDS	158	4	0
6	16	RE4	OUDS	57	0	0
6	16	SUP4	OUDS	208	0	0
6	16	SV1	DUDS	20	25	42
6	17	DUR4	OUDS	4,796	451	74
6	17	FE4	OUDS	2,017	46	0
6	17	FR3	DUDS	653	119	0
6	17	FR3	OUDS	36	15	0
6	17	MA2	WILD	309	34	26
6	17	RE1	OUDS	810	0	0
6	17	RE4	OUDS	97	19	0
6	17	SV1	DUDS	313	261	52
6	18	DUR4	OUDS	2,618	609	146
6	18	DUR5	OUDS	85	81	0
6	18	FE3	OUDS	154	36	9
6	18	MA2	WILD	1,177	171	34
6	18	PTC3	DUDS	358	199	246
6	18	PTC3	GFA	116	40	80
6	18	RE4	OUDS	137	26	0
6	18	SUP4	OUDS	273	0	0
6	18	SV1	DUDS	0	123	88
6	20	FE3	DUDS	252	56	99
6	20	FE3	OUDS	364	97	50
6	20	FE3	GFA	184	20	61
6	21	FE3	DUDS	96	40	0
6	21	FE3	OUDS	882	234	6
6	21	FR1	DUDS	0	0	98
6	21	FR3	DUDS	37	0	0
6	21	FR3	OUDS	48	17	0
6	21	FR5	OUDS	0	4	20
6	21	SUP4	OUDS	76	0	0
6	22	PTC3	GFA	175	38	153
6	22	RF1	OUDS	172	316	52
8	1	DUR4	DUDS	339	65	28
8	1	DUR4	OUDS	922	100	9
8	2	DUR4	OUDS	1,268	209	83
8	2	DUR5	OUDS	138	6	0
8	2	FE4	OUDS	154	0	0
8	2	FR3	DUDS	0	21	122

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
8	2	FR5	DUDS	62	47	0
8	3	FE3	DUDS	1,326	3,974	639
8	3	FE3	OUDS	32	69	42
8	3	FE3	GFA	212	776	597
8	3	FE4	OUDS	396	1,056	675
8	5	FR3	DUDS	366	0	0
8	5	RF2	OUDS	366	0	0
8	5	SUP4	OUDS	366	0	0
8	5	TB1	DUDS	1,148	441	241
8	5	TB1	OUDS	892	461	111
8	5	TB3	GFA	247	111	8
8	7	FE3	DUDS	1,879	375	224
8	7	FE4	OUDS	1,660	297	184
8	7	FR3	GFA	150	9	55
8	7	RE1	GFA	1,072	504	120
8	8	FE4	DUDS	300	70	0
8	8	FE4	OUDS	1,182	126	131
8	8	FR3	DUDS	605	127	0
8	8	FR3	OUDS	105	213	0
8	8	TB3	DUDS	378	33	102
8	8	TB3	OUDS	394	54	4
8	9	SUP4	OUDS	141	58	0
8	10	DUR4	OUDS	303	53	9
8	10	FE4	OUDS	1,044	137	52
8	10	FR1	DUDS	134	131	57
8	10	FR1	GFA	526	126	78
8	10	FR3	DUDS	57	55	26
8	11	DUR4	DUDS	151	122	92
8	11	DUR4	OUDS	748	693	271
8	11	DUR5	OUDS	458	330	98
8	11	FE3	OUDS	350	205	71
8	11	FE4	OUDS	2,744	482	173
8	11	FR1	DUDS	0	138	46
8	11	FR1	OUDS	395	158	41
8	11	FR2	OUDS	1,461	0	0
8	11	FR3	DUDS	363	311	56
8	11	FR5	OUDS	459	198	0
8	11	TB3	DUDS	332	314	84
8	16	FR2	DUDS	365	0	0
8	60	FR1	DUDS	398	335	93
8	60	PTC1	DUDS	277	484	184
8	60	PTC3	DUDS	396	211	123
8	60	PTC3	OUDS	244	121	0

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
8	60	PTC3	GFA	421	730	1,769
8	60	RE1	OUDS	399	789	367
9	3	DUR4	OUDS	453	61	11
9	3	FE4	OUDS	2,139	731	140
9	3	FR5	OUDS	147	0	0
9	3	RE1	OUDS	1,487	165	117
9	4	DUR4	OUDS	1,798	195	139
9	5	DUR4	OUDS	702	218	73
9	5	DUR5	OUDS	87	19	0
9	5	FE3	DUDS	693	243	101
9	5	FE3	GFA	37	12	0
9	7	FE4	OUDS	259	99	27
9	7	FR1	DUDS	63	0	39
9	7	FR2	DUDS	57	18	3
9	7	FR3	DUDS	91	0	0
9	7	FR5	OUDS	0	13	0
9	7	MA2	WILD	24	61	30
9	7	PTC1	DUDS	104	0	45
9	9	DUR4	OUDS	2,000	1,303	336
9	9	FE4	OUDS	122	46	0
9	9	MA1	WILD	8,883	2,578	2,375
9	10	FE4	OUDS	3,082	223	83
9	10	SUP4	OUDS	520	0	0
9	10	SV1	DUDS	69	39	0
9	12	FE3	OUDS	204	40	0
9	12	FR3	DUDS	233	172	78
9	12	FR3	OUDS	500	5	88
9	13	DUR4	OUDS	5,674	313	210
9	13	DUR5	OUDS	82	3	14
9	13	PTC1	DUDS	146	129	87
9	15	FR1	GFA	396	124	23
9	15	TB1	GFA	37	0	3
9	19	DUR4	OUDS	2,023	76	40
9	19	FE3	DUDS	73	14	15
9	19	FR3	DUDS	150	15	27
9	20	FE4	OUDS	544	122	41
9	20	SV1	DUDS	276	140	106
9	21	DUR4	DUDS	78	37	0
9	21	DUR4	OUDS	522	234	34
9	21	DUR5	DUDS	92	37	0
9	21	DUR5	OUDS	61	88	17
9	21	FR1	GFA	87	34	0
9	21	RE2	OUDS	148	0	0

continued

Table A.4—Number of site-days in each of the proxy strata for each Round 1 forest (continued)

Region	Forest	Proxy	Sitetype	L	M	H
9	21	SV1	DUDS	41	39	62
9	22	DUR4	OUDS	2,883	446	989
9	22	FE1	OUDS	30	159	0
9	22	FE4	OUDS	418	95	0
9	22	FR1	DUDS	40	149	0
9	22	FR3	DUDS	20	38	29
9	22	PTC1	DUDS	148	307	52
9	22	RF1	DUDS	80	0	0
9	22	RF1	OUDS	2,833	1,168	483
9	22	SUP4	OUDS	1,257	0	31
9	22	SV1	DUDS	191	445	290
10	2	FE4	OUDS	77	15	0
10	2	RE1	GFA	650	208	26
10	2	RE4	WILD	494	0	0
10	2	SUP4	OUDS	6,374	0	0
10	2	SUP4	WILD	1,887	0	0
10	3	FE4	OUDS	0	348	0
10	3	RF4	OUDS	7,816	0	0
10	4	DUR4	DUDS	101	0	0
10	4	DUR4	OUDS	1,089	496	188
10	4	FE4	OUDS	127	0	0
10	4	FR2	DUDS	0	35	79
10	4	RE4	OUDS	7,734	0	0
10	4	SUP2	OUDS	26	0	0
10	4	TB3	DUDS	196	172	0
10	4	TB3	OUDS	66	0	87
10	4	TB3	GFA	118	10	94
10	5	FE4	OUDS	249	192	121
10	5	FR1	DUDS	99	0	0
10	5	PTC1	DUDS	30	42	50
10	5	SUP4	OUDS	7,347	0	0
10	5	SUP4	WILD	3,080	0	0

DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites; L = Low use-level; M = Medium use-level; H = High use-level.

Table A.5—Summary of the daily interview sampling on a forest basis showing number of interviews, number that agreed to be interviewed, number of last exiting recreation interviews, number of sample days, number of days with at least one interview, and number of days with at least one last exiting recreationist

Region	Forest	Number of interviews	Number that agreed	Number of LER	Sample days	Days with at least 1 interview	Days with at least 1 LER
1	2	892	780	544	193	193	126
1	3	889	859	738	170	125	111
1	4	1,496	1,414	932	205	160	146
1	5	687	666	456	168	136	114
1	8	466	455	338	165	69	62
1	10	1,036	893	549	208	208	102
1	11	2,033	1,815	1,434	207	183	169
1	12	868	838	558	170	134	123
1	14	1,371	1,303	867	203	168	154
1	15	1,108	1,061	520	186	140	121
1	16	1,175	1,104	697	212	149	128
1	17	609	479	263	147	147	76
1	18	367	349	189	219	136	95
2	2	1,326	1,233	802	134	113	99
2	3	1,108	1,012	588	203	173	146
2	4	1,894	1,637	1,222	175	159	149
2	6	1,309	1,232	922	181	132	119
2	7	469	409	235	123	89	78
2	9	477	421	359	137	137	87
2	10	2,390	2,146	1,247	182	182	130
2	11	728	713	589	187	128	117
2	12	1,632	1,494	1,240	263	198	179
2	13	1,009	869	589	160	160	121
2	14	1,030	954	562	189	141	123
2	15	2,430	2,147	1,862	271	226	206
3	1	1,757	1,630	1,205	148	129	126
3	2	1,044	798	545	176	133	118
3	3	1,398	1,149	886	184	184	123
3	4	1,543	1,309	908	239	239	157
3	5	1,999	1,611	1,204	193	160	146
3	6	498	475	367	228	129	106
3	7	1,326	1,219	523	122	122	86
3	8	1,162	1,095	631	201	180	154
3	9	2,388	2,085	1,138	164	124	118
3	10	2,258	1,895	1,570	238	209	203
3	12	3,094	2,734	2,027	200	173	166
4	1	1,560	1,338	858	186	155	145
4	2	1,053	970	392	163	163	86
4	3	2,793	2,579	1,755	222	207	194
4	7	1,277	1,157	634	184	152	137
4	8	914	760	449	147	130	112

continued

Table A.5—Summary of the daily interview sampling on a forest basis showing number of interviews, number that agreed to be interviewed, number of last exiting recreation interviews, number of sample days, number of days with at least one interview, and number of days with at least one last exiting recreationist (continued)

Region	Forest	Number of interviews	Number that agreed	Number of LER	Sample days	Days with at least 1 interview	Days with at least 1 LER
4	10	926	876	485	155	115	91
4	12	1,098	981	718	205	151	136
4	13	1,005	934	663	170	154	130
4	14	1,414	1,247	629	146	146	100
4	15	1,192	1,085	850	174	174	112
4	17	1,333	1,070	621	233	233	116
4	18	2,552	2,453	1,990	227	210	204
4	19	2,253	1,713	1,339	222	198	174
5	1	1,816	1,529	1,037	269	269	169
5	2	1,122	1,099	734	157	121	113
5	3	1,705	1,597	1,141	204	182	172
5	4	2,906	2,530	1,783	205	197	192
5	5	589	552	381	199	129	104
5	6	610	515	365	174	174	85
5	7	1,498	1,280	1,048	205	154	148
5	8	1,892	1,707	919	164	143	131
5	9	404	339	209	154	154	75
5	10	1,630	1,332	577	177	153	140
5	11	1,350	1,300	888	172	172	146
5	12	1,826	1,404	997	219	187	161
5	13	2,195	1,880	1,210	192	172	161
5	14	1,888	1,599	970	233	224	201
5	15	1,405	1,196	790	163	135	126
5	16	2,337	1,966	1,257	170	164	152
5	17	2,094	2,008	1,744	245	199	183
5	19	1,857	1,707	1,575	148	143	143
6	1	1,391	1,166	711	235	189	149
6	2	810	764	400	154	125	109
6	3	1,017	856	688	214	157	142
6	4	514	460	319	180	129	103
6	5	1,420	1,247	1,007	131	131	110
6	6	1,796	1,313	944	183	159	150
6	7	470	372	176	183	183	67
6	8	1,027	880	535	186	186	120
6	9	1,325	1,118	854	196	196	124
6	10	616	435	218	100	88	62
6	11	596	514	320	161	95	80
6	12	1,063	884	517	199	157	138
6	14	960	822	649	199	125	111
6	15	968	852	578	188	128	112

continued

Table A.5—Summary of the daily interview sampling on a forest basis showing number of interviews, number that agreed to be interviewed, number of last exiting recreation interviews, number of sample days, number of days with at least one interview, and number of days with at least one last exiting recreationist (continued)

Region	Forest	Number of interviews	Number that agreed	Number of LER	Sample days	Days with at least 1 interview	Days with at least 1 LER
6	16	1,037	858	619	199	155	141
6	17	1,574	1,489	1,171	269	222	200
6	18	2374	2,026	1,390	225	194	187
6	20	852	814	233	142	109	79
6	21	792	680	336	204	149	114
6	22	1,368	1,247	1,213	161	161	143
8	1	717	601	367	159	128	107
8	2	1,187	1,054	734	182	146	135
8	3	723	634	489	209	151	126
8	4	1,271	1,218	769	190	157	133
8	5	888	702	416	133	133	81
8	6	415	397	241	113	71	52
8	7	833	783	524	243	163	126
8	8	1,619	1,427	975	232	232	157
8	9	2,054	1,811	695	161	161	102
8	10	1,445	1,361	741	214	142	112
8	11	1,443	1,317	827	240	181	159
8	12	1,214	948	618	155	135	120
8	13	449	400	192	179	103	68
8	16	1,973	1,353	494	45	45	42
8	60	754	550	302	91	85	70
9	3	1,334	1,296	671	207	177	156
9	4	1,151	1,065	642	133	111	99
9	5	980	865	578	161	121	103
9	7	1,221	1,124	751	179	150	124
9	8	1,182	997	662	265	181	137
9	9	516	455	302	173	173	92
9	10	1,299	1,049	526	152	152	95
9	12	625	572	427	212	162	137
9	13	1,665	1,551	928	227	185	162
9	14	838	744	489	153	120	102
9	15	90	81	80	76	40	38
9	19	1,665	1,516	693	160	140	115
9	20	768	665	535	231	231	130
9	21	2,519	2,284	1,089	258	218	193
9	22	995	858	696	205	205	139
10	2	541	511	222	170	97	77
10	3	740	644	606	143	143	90
10	4	802	728	557	137	100	87
10	5	762	726	413	141	90	70

LER = Last-exiting recreationists.

Table A.6—The nonproxy $\widehat{PBAR}_h$ estimates (proportion of exiting site traffic that was last exiting recreationists) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
1	2	0.732	0.736	0.775	0.451	0.455	0.494	0.659	0.663	0.702	0.750	0.754	0.793
1	3	0.684	0.729	0.859	0.518	0.564	—	0.847	0.892	—	0.836	0.882	1.000
1	4	0.482	0.298	0.464	0.979	0.795	0.961	0.757	0.573	0.739	1.00	0.825	0.991
1	5	0.592	0.536	0.491	0.858	0.801	0.756	0.831	0.775	0.729	0.406	0.349	0.304
1	8	0.485	0.538	0.602	0.727	0.780	0.844	0.773	0.826	0.890	0.818	0.871	0.935
1	10	0.492	0.664	0.600	0.496	0.668	0.604	0.426	0.599	0.534	0.668	0.840	0.776
1	11	0.500	0.741	0.828	0.304	0.544	—	0.682	0.923	1.00	0.439	0.680	0.767
1	12	0.809	0.801	0.809	0.521	0.513	0.521	0.627	0.619	0.626	0.878	0.870	0.878
1	14	0.532	0.649	0.863	0.239	0.356	0.569	0.458	0.575	0.789	0.210	0.327	0.541
1	15	0.074	0.269	0.239	0.325	0.521	0.490	0.495	0.690	0.660	0.662	0.857	0.826
1	16	0.546	0.718	0.606	0.232	0.404	0.292	0.462	0.635	0.522	0.376	0.548	0.436
1	17	0.403	0.531	0.770	0.303	0.431	0.670	0.353	0.482	0.720	0.066	0.195	0.433
1	18	0.240	0.302	—	0.315	0.377	0.559	0.461	0.524	0.705	—	—	—
2	2	0.478	0.553	0.71	0.267	0.341	0.498	0.642	0.717	0.873	—	—	—
2	3	0.513	0.524	0.599	0.414	0.425	0.501	0.482	0.492	0.568	0.715	0.726	0.801
2	4	0.716	0.684	0.563	0.492	—	0.338	0.865	0.833	0.711	0.946	0.914	0.793
2	6	0.547	0.707	0.696	0.463	0.623	0.612	0.659	0.819	0.808	0.774	0.935	—
2	7	0.495	0.598	0.611	0.773	0.876	0.889	0.384	0.487	0.499	0.455	—	—
2	9	0.885	0.908	0.832	0.785	0.808	0.732	0.798	0.821	0.745	0.941	0.964	0.888
2	10	0.476	0.562	—	0.150	0.236	0.302	0.545	0.631	0.696	0.861	0.947	1.000
2	11	0.747	0.904	0.891	0.622	0.780	0.766	0.692	0.850	0.837	0.650	0.807	0.794
2	12	0.551	0.770	0.793	0.500	—	—	0.641	0.861	0.883	0.717	0.936	0.959
2	13	0.686	0.692	0.810	—	—	—	0.570	0.577	0.695	0.906	0.912	1.000
2	14	0.524	0.445	0.553	0.270	0.190	0.298	0.831	0.751	0.859	0.487	0.407	0.515
2	15	0.786	0.783	0.842	0.545	0.543	0.602	0.824	0.822	0.881	0.919	0.917	0.976
3	1	0.626	0.788	0.737	0.653	0.815	0.763	0.617	0.779	0.728	0.803	0.965	0.914
3	2	0.418	0.495	0.421	0.342	0.419	0.346	0.741	0.818	0.745	0.939	1.00	0.943
3	3	0.783	0.852	0.897	0.401	0.469	0.515	0.510	0.579	0.624	0.839	0.907	0.953
3	4	0.737	0.730	0.846	0.768	0.761	0.877	0.501	0.494	0.610	0.945	0.938	1.000
3	5	0.613	0.666	0.797	0.613	0.667	0.797	0.651	0.705	0.835	0.658	0.711	0.841
3	6	0.775	0.784	0.969	0.685	0.695	0.880	0.562	0.571	0.756	0.635	0.644	0.829
3	7	0.485	0.408	0.440	0.667	—	—	0.298	0.222	0.254	0.919	0.842	0.874
3	8	0.845	0.818	0.916	0.081	0.055	0.152	0.539	0.512	0.609	0.859	0.832	0.929
3	9	0.250	0.321	0.353	0.572	0.643	0.675	0.521	0.592	0.624	0.917	0.988	1.000
3	10	0.445	0.539	0.539	0.605	0.699	0.699	0.797	0.891	0.891	0.854	0.948	0.947
3	12	0.539	0.512	0.539	0.697	0.669	0.696	0.898	0.870	0.898	0.990	0.963	0.99
4	1	0.786	0.804	0.798	0.584	0.602	0.597	0.561	0.579	0.574	0.931	0.949	0.944
4	2	0.222	0.435	0.389	0.242	0.456	0.409	0.213	0.426	0.380	0.165	0.379	0.332
4	3	0.418	0.490	0.561	0.451	0.523	0.594	0.709	0.781	0.852	0.540	0.612	0.683
4	7	0.304	0.406	0.422	0.326	0.428	0.445	0.537	0.639	0.656	0.707	0.809	0.826
4	8	0.413	0.355	0.353	0.529	0.471	0.469	0.859	0.801	0.799	—	—	—
4	10	0.379	0.304	0.392	0.279	0.204	0.292	0.710	0.635	0.724	0.466	0.391	0.480

continued

Table A.6—The nonproxy $\widehat{PBAR}_h$ estimates (proportion of exiting site traffic that was last exiting recreationists) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey (continued)

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
4	12	0.445	0.492	—	0.675	0.721	0.928	0.603	0.649	0.856	0.476	0.523	0.730
4	13	0.512	0.654	0.728	0.584	0.725	0.799	0.536	0.678	0.752	0.563	0.704	0.779
4	14	0.501	0.421	0.646	0.540	0.459	0.684	0.327	0.246	0.472	0.613	0.532	0.757
4	15	0.620	0.806	0.783	0.584	0.770	0.747	0.716	0.902	0.879	0.808	0.994	0.971
4	17	0.466	0.379	0.374	0.388	0.301	0.296	0.758	0.671	0.667	0.987	0.900	0.895
4	18	0.813	0.794	0.810	—	—	—	0.784	0.764	0.780	0.975	0.956	0.971
4	19	0.667	0.786	0.819	0.243	0.363	0.396	0.742	0.861	0.895	0.805	0.924	0.958
5	1	0.653	0.679	0.626	0.672	0.698	0.645	0.542	0.567	0.514	1.000	1.000	0.972
5	2	0.170	0.734	0.633	0.390	0.954	0.853	0.379	0.943	0.842	0.725	1.000	1.000
5	3	0.714	0.624	0.538	0.857	0.766	0.681	0.782	0.691	0.605	1.000	0.938	0.853
5	4	0.711	0.696	0.712	0.379	0.363	0.380	0.721	0.705	0.722	0.881	0.866	0.882
5	5	0.502	0.873	0.793	0.000	0.329	0.249	0.478	0.849	0.769	0.541	0.912	0.832
5	6	0.767	0.756	0.727	0.500	—	—	0.673	0.662	0.633	0.954	0.943	0.914
5	7	0.623	0.637	0.687	0.745	0.758	0.809	0.814	0.828	0.878	0.915	0.929	0.979
5	8	0.505	0.543	0.669	0.397	0.435	0.560	0.441	0.479	0.605	0.742	0.780	0.906
5	9	0.529	0.636	0.839	0.296	0.403	—	0.359	0.466	0.669	0.698	0.806	1.000
5	10	0.083	0.259	0.254	0.170	0.347	0.342	0.532	0.709	0.704	0.716	0.893	0.888
5	11	0.586	0.733	0.785	0.708	—	—	0.486	0.633	0.685	0.793	0.940	0.992
5	12	0.462	0.540	0.595	0.395	0.473	0.528	0.683	0.761	0.816	0.840	0.918	0.973
5	13	0.519	0.575	0.646	0.652	0.709	0.780	0.520	0.577	0.648	0.886	0.942	1.000
5	14	0.485	0.553	0.523	0.457	0.525	0.495	0.600	0.668	0.638	0.744	0.812	0.782
5	15	0.651	0.597	0.535	0.846	0.793	0.730	0.773	0.719	0.657	0.859	0.805	0.743
5	16	0.513	0.584	0.649	0.400	0.471	0.536	0.511	0.581	0.647	0.784	0.855	0.920
5	17	0.667	0.820	0.857	0.652	0.805	0.842	0.721	0.874	0.911	0.826	0.979	1.000
5	19	0.850	0.873	0.886	—	—	—	0.927	0.949	0.962	0.972	0.994	1.000
6	1	0.595	0.796	0.702	0.202	0.403	0.308	0.492	0.693	0.599	0.669	0.87	0.776
6	2	0.524	0.631	0.565	0.333	0.439	0.374	0.501	0.607	0.541	0.911	1.000	0.951
6	3	0.864	0.748	0.895	0.729	0.613	0.759	0.849	0.733	0.879	0.576	0.460	—
6	4	0.511	0.666	0.672	0.412	0.567	0.573	0.653	0.808	0.814	0.659	0.814	0.820
6	5	0.738	0.731	0.803	0.882	0.874	0.947	0.698	0.690	0.762	0.937	0.929	1.000
6	6	0.671	0.599	0.625	0.753	0.682	—	0.706	0.634	0.660	0.996	0.925	0.95
6	7	0.222	0.468	0.362	0.244	0.490	0.385	0.354	0.600	0.494	0.468	0.714	0.608
6	8	0.852	0.731	0.757	0.479	0.358	0.383	0.698	0.577	0.603	0.795	0.674	0.700
6	9	0.742	0.818	0.890	0.496	0.571	0.644	0.590	0.665	0.738	0.821	0.896	0.969
6	10	0.409	0.314	0.583	0.615	0.520	0.789	0.555	0.460	0.729	0.468	0.373	0.642
6	11	0.560	0.580	0.566	0.373	0.393	0.380	0.651	0.671	0.658	0.992	1.000	0.998
6	12	0.437	0.468	0.535	0.463	0.494	0.561	0.653	0.684	0.751	0.848	0.879	0.946
6	14	0.948	0.881	0.912	0.465	0.399	0.430	0.772	0.705	0.736	0.642	0.575	0.606
6	15	0.665	0.666	0.567	0.491	0.492	0.394	0.812	0.814	0.715	0.930	0.932	0.833
6	16	0.703	0.750	0.781	0.526	0.573	0.603	0.528	0.575	0.605	0.849	0.896	0.926
6	17	0.781	0.749	0.866	0.539	0.506	0.624	0.811	0.779	0.896	0.923	0.891	1.000
6	18	0.534	0.671	0.725	0.557	0.695	0.749	0.649	0.787	0.841	0.824	0.962	1.000

continued

Table A.6—The nonproxy $\widehat{PBAR}_h$ estimates (proportion of exiting site traffic that was last exiting recreationists) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey (continued)

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
6	20	0.174	0.161	0.000	0.304	0.290	—	0.448	0.434	0.247	1.000	1.000	0.858
6	21	0.349	0.263	0.389	0.412	0.327	0.452	0.704	0.618	0.744	0.842	0.756	—
6	22	0.889	0.953	0.946	—	—	—	0.931	0.995	0.988	—	—	—
8	1	0.560	0.621	0.530	0.663	0.724	—	0.386	0.447	0.355	0.788	0.850	0.758
8	2	0.761	0.779	0.781	0.623	0.640	0.642	0.635	0.652	0.655	0.795	0.812	0.814
8	3	0.908	0.973	0.924	0.630	0.696	0.647	0.593	0.658	0.609	0.855	0.921	0.872
8	4	0.524	0.466	0.727	0.391	0.333	0.594	0.625	0.567	0.828	0.749	0.691	0.952
8	5	0.301	0.782	0.844	0.244	0.725	0.787	0.304	—	—	0.267	0.748	0.810
8	6	0.475	0.592	0.763	0.570	0.686	0.857	0.302	0.418	0.589	0.712	0.829	1.000
8	7	0.501	0.756	0.871	0.417	0.672	0.787	0.378	0.633	0.748	0.708	0.963	1.000
8	8	0.520	0.800	0.887	0.420	0.700	0.788	0.397	0.677	0.764	0.502	0.782	0.869
8	9	0.419	0.524	0.517	0.427	0.532	0.525	0.165	0.270	0.262	0.899	1.000	0.997
8	10	0.366	0.664	0.696	0.255	0.553	0.585	0.119	0.417	0.450	0.270	0.568	0.600
8	11	0.580	0.671	0.734	0.273	—	—	0.519	0.610	0.673	0.738	0.828	0.891
8	12	0.584	0.640	0.739	0.355	0.411	0.510	0.594	0.650	0.750	0.683	0.739	0.838
8	13	0.382	0.415	0.428	0.441	0.474	0.487	0.429	0.463	0.476	0.796	0.829	0.843
8	16	0.203	0.386	0.130	—	—	—	0.422	0.606	—	—	—	—
8	60	0.461	0.471	0.522	0.409	0.419	0.469	0.750	—	—	—	—	—
9	3	0.562	0.685	0.771	—	—	—	0.329	0.452	0.539	—	—	—
9	4	0.644	0.597	0.639	0.681	0.633	0.676	0.562	0.515	0.558	0.785	0.738	0.781
9	5	0.376	0.667	0.571	0.372	0.663	0.567	0.569	0.859	0.763	0.695	0.986	0.890
9	7	0.292	0.640	0.803	0.333	—	—	0.419	0.768	0.930	0.427	0.776	—
9	8	0.638	0.630	0.837	0.380	0.372	0.578	0.445	0.437	0.643	0.689	0.681	0.888
9	9	0.818	0.734	0.765	0.395	0.311	0.342	0.727	0.643	0.674	—	—	—
9	10	0.505	0.5 97	0.821	0.367	—	—	0.156	0.248	0.472	0.587	0.679	0.902
9	12	0.607	0.831	0.845	0.526	0.750	0.765	0.481	0.705	0.719	0.744	0.968	0.983
9	13	0.403	0.608	0.429	—	—	—	0.485	0.691	0.512	0.640	0.846	0.666
9	14	0.345	0.582	0.589	0.282	0.519	0.526	0.603	0.840	0.847	—	—	—
9	15	1.000	1.000	1.000	—	—	—	1.000	1.000	1.000	—	—	—
9	19	0.226	0.372	0.500	0.069	—	—	0.322	0.468	0.596	0.074	0.220	0.348
9	20	0.760	0.900	0.891	0.690	0.830	0.821	0.608	0.748	0.740	0.864	1.000	0.995
9	21	0.424	0.512	0.62	0.144	0.232	0.340	0.390	0.477	0.586	0.796	0.884	0.992
9	22	0.415	0.713	0.692	—	—	—	0.578	0.875	0.854	0.569	0.867	0.846
10	2	0.438	0.591	0.827	0.636	—	—	0.414	0.567	0.803	0.000	0.119	0.354
10	3	0.916	0.966	1.000	0.846	—	—	0.863	0.914	0.955	0.089	0.094	—
10	4	0.697	0.621	0.906	0.667	—	—	0.640	0.563	0.848	—	—	—
10	5	0.580	0.840	0.805	0.706	—	—	0.195	0.455	—	0.099	0.359	—

— = Stratum was not used; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites; R = Region; F = Forest; L = Low use-level; M = Medium use-level; H = High use-level.

Table A.7—The nonproxy $\widehat{PPV}_h$ estimates (people per vehicle) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
1	2	3.066	2.713	2.780	3.029	2.676	2.743	2.400	2.047	2.114	2.568	2.215	2.282
1	3	2.494	2.164	2.164	2.951	2.622	—	2.176	1.847	—	2.666	2.337	2.337
1	4	2.413	2.699	2.851	3.219	3.505	3.658	1.890	2.176	2.329	1.281	1.567	1.719
1	5	3.149	2.446	2.965	2.660	1.958	2.477	2.783	2.081	2.600	3.046	2.344	2.863
1	8	2.543	2.965	3.443	1.932	2.354	2.831	1.707	2.130	2.607	1.581	2.003	2.480
1	10	2.489	2.297	2.538	2.307	2.114	2.355	2.504	2.312	2.552	2.707	2.515	2.755
1	11	2.399	2.979	3.021	2.649	3.230	—	2.291	2.872	2.914	1.788	2.368	2.410
1	12	1.870	1.887	2.241	2.978	2.994	3.348	1.920	1.936	2.290	2.256	2.272	2.626
1	14	2.496	2.571	2.933	2.493	2.568	2.930	2.164	2.239	2.602	1.800	1.875	2.237
1	15	2.564	2.971	3.145	2.604	3.010	3.185	1.857	2.264	2.438	2.607	3.013	3.188
1	16	2.771	2.263	3.217	2.651	2.143	3.096	2.212	1.704	2.658	2.163	1.655	2.608
1	17	3.264	3.578	5.288	1.410	1.724	3.434	1.581	1.895	3.605	5.251	5.565	7.275
1	18	3.247	3.565	—	2.280	2.598	2.551	2.300	2.618	2.571	—	—	—
2	2	3.110	3.443	3.940	1.610	1.943	2.439	2.096	2.430	2.926	—	—	—
2	3	3.155	3.244	3.209	2.487	2.577	2.542	2.083	2.172	2.137	2.798	2.887	2.852
2	4	2.688	2.738	3.139	3.084	—	3.536	2.310	2.361	2.762	2.149	2.199	2.601
2	6	2.329	3.115	2.964	2.363	3.149	2.998	1.860	2.647	2.496	1.757	2.543	—
2	7	3.473	2.852	3.203	3.360	2.739	3.091	2.443	1.822	2.173	2.685	—	—
2	9	1.723	2.813	2.604	1.641	2.731	2.522	2.247	3.337	3.128	2.660	3.750	3.541
2	10	2.422	2.493	—	2.681	2.752	2.818	2.213	2.284	2.349	2.636	2.707	2.773
2	11	2.571	2.639	2.732	2.858	2.925	3.018	2.155	2.223	2.316	2.074	2.142	2.235
2	12	2.622	2.764	2.693	6.00	—	—	2.074	2.216	2.145	2.251	2.393	2.322
2	13	2.377	2.656	3.056	—	—	—	2.142	2.421	2.821	2.213	2.493	2.893
2	14	4.160	3.582	3.976	2.916	2.338	2.731	2.607	2.029	2.422	2.799	2.221	2.614
2	15	2.450	2.864	2.754	2.719	3.133	3.023	1.786	2.200	2.090	2.222	2.636	2.526
3	1	2.558	3.550	3.362	2.028	3.020	2.832	2.021	3.013	2.825	2.160	3.151	2.964
3	2	2.794	2.408	3.101	2.169	1.783	2.476	2.523	2.137	2.830	2.555	2.169	2.862
3	3	3.147	3.185	3.690	2.073	2.110	2.616	1.875	1.912	2.418	1.755	1.793	2.298
3	4	2.700	2.852	2.780	2.261	2.413	2.341	2.139	2.291	2.218	2.266	2.418	2.345
3	5	2.801	2.614	2.659	3.152	2.965	3.011	2.224	2.037	2.083	2.301	2.114	2.160
3	6	1.829	2.138	2.282	1.979	2.288	2.432	1.723	2.032	2.175	1.982	2.291	2.435
3	7	2.654	2.633	2.435	2.154	—	—	2.283	2.262	2.064	2.700	2.679	2.480
3	8	2.635	2.701	2.961	3.031	3.097	3.358	2.358	2.424	2.684	2.409	2.475	2.736
3	9	2.132	2.124	2.547	2.074	2.067	2.490	1.878	1.870	2.293	2.100	2.092	2.515
3	10	2.729	2.829	3.477	2.633	2.733	3.381	2.184	2.284	2.932	2.563	2.663	3.311
3	12	2.607	2.732	2.848	2.646	2.771	2.887	2.289	2.415	2.530	2.782	2.907	3.023
4	1	3.463	3.411	3.117	3.284	3.231	2.937	2.861	2.808	2.514	3.597	3.545	3.251
4	2	4.739	5.265	5.667	2.581	3.108	3.510	2.098	2.624	3.026	1.546	2.072	2.474
4	3	2.635	3.037	2.566	2.720	3.122	2.652	2.194	2.595	2.125	2.528	2.929	2.459
4	7	2.681	3.824	2.924	1.674	2.817	1.917	2.149	3.292	2.392	3.289	4.433	3.532
4	8	2.088	2.701	2.655	2.403	3.016	2.971	2.214	2.827	2.781	—	—	—
4	10	2.846	2.834	3.001	2.386	2.374	2.541	2.682	2.671	2.837	3.776	3.764	3.931

continued

Table A.7—The nonproxy $\widehat{PPV}_h$ estimates (people per vehicle) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey (continued)

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
4	12	2.861	2.680	—	3.261	3.080	3.262	2.353	2.172	2.354	2.991	2.810	2.991
4	13	2.534	2.711	2.709	2.201	2.377	2.376	2.088	2.264	2.263	2.302	2.478	2.477
4	14	2.648	2.391	2.668	2.756	2.499	2.777	2.694	2.437	2.714	2.465	2.208	2.485
4	15	2.234	2.358	2.248	4.116	4.240	4.130	2.385	2.509	2.399	2.829	2.953	2.843
4	17	2.594	2.429	2.946	2.066	1.901	2.418	2.401	2.236	2.753	2.076	1.911	2.428
4	18	2.957	3.541	3.550	—	—	—	2.006	2.591	2.599	2.815	3.400	3.408
4	19	2.989	2.830	2.876	2.992	2.833	2.879	2.485	2.326	2.372	2.120	1.961	2.007
5	1	2.450	2.915	3.436	2.844	3.309	3.830	1.650	2.115	2.636	2.136	2.601	3.122
5	2	2.361	2.521	2.794	2.667	2.827	3.100	1.960	2.120	2.393	2.527	2.687	2.960
5	3	2.656	2.694	3.063	1.998	2.035	2.404	2.130	2.168	2.537	2.371	2.409	2.778
5	4	2.691	2.823	2.831	2.198	2.330	2.339	2.253	2.385	2.393	2.877	3.008	3.017
5	5	2.622	2.900	3.525	1.852	2.130	2.755	2.183	2.461	3.086	1.778	2.056	2.681
5	6	3.309	2.833	2.797	2.000	—	—	3.056	2.580	2.544	3.155	2.679	2.643
5	7	4.166	3.524	4.106	2.800	2.157	2.739	2.353	1.711	2.293	2.983	2.340	2.923
5	8	1.607	1.672	1.854	1.956	2.022	2.204	2.005	2.070	2.252	1.945	2.010	2.192
5	9	2.790	2.433	3.184	2.443	2.086	—	2.397	2.040	2.791	2.666	2.309	3.060
5	10	2.582	2.297	3.056	2.021	1.735	2.494	2.467	2.181	2.940	2.613	2.328	3.086
5	11	2.900	3.033	3.083	2.471	—	—	2.119	2.252	2.302	2.426	2.559	2.609
5	12	3.115	3.178	3.443	3.220	3.283	3.548	2.750	2.813	3.079	3.067	3.130	3.395
5	13	3.121	3.665	3.635	2.407	2.952	2.922	2.552	3.096	3.066	2.584	3.129	3.099
5	14	2.645	2.772	3.023	2.918	3.045	3.296	2.343	2.470	2.721	2.399	2.526	2.777
5	15	3.815	4.028	4.075	2.835	3.048	3.096	2.436	2.649	2.696	2.427	2.640	2.687
5	16	2.511	3.008	3.338	2.016	2.514	2.843	2.067	2.565	2.894	2.190	2.688	3.017
5	17	3.280	3.788	3.904	2.930	3.438	3.554	1.723	2.231	2.346	2.248	2.756	2.871
5	19	3.137	2.634	2.581	—	—	—	2.881	2.378	2.324	3.541	3.038	2.985
6	1	2.484	2.726	2.717	1.919	2.160	2.152	2.051	2.293	2.284	2.531	2.773	2.764
6	2	3.230	3.012	3.054	2.650	2.433	2.475	2.464	2.246	2.288	3.170	2.952	2.994
6	3	2.473	2.822	2.972	2.092	2.442	2.592	1.866	2.215	2.365	1.800	2.150	—
6	4	2.918	2.830	2.699	3.354	3.266	3.135	2.131	2.043	1.912	3.015	2.928	2.797
6	5	2.906	2.677	3.142	1.887	1.657	2.122	2.345	2.116	2.581	2.626	2.397	2.862
6	6	3.368	3.874	3.408	1.935	2.441	—	2.274	2.780	2.314	2.457	2.964	2.497
6	7	2.329	2.723	2.555	1.543	1.937	1.769	1.919	2.314	2.145	2.028	2.423	2.255
6	8	2.176	2.026	2.278	2.409	2.260	2.512	2.301	2.151	2.403	3.242	3.092	3.344
6	9	2.879	2.594	2.918	3.827	3.542	3.865	2.438	2.153	2.476	2.506	2.221	2.545
6	10	2.664	2.857	2.943	2.378	2.571	2.656	2.895	3.088	3.174	2.132	2.325	2.411
6	11	3.476	3.476	3.550	2.811	2.812	2.885	2.507	2.508	2.581	2.439	2.439	2.512
6	12	2.486	2.660	2.786	2.739	2.912	3.039	2.502	2.675	2.801	1.879	2.052	2.179
6	14	2.782	3.671	3.644	2.501	3.389	3.362	1.671	2.559	2.532	1.826	2.715	2.688
6	15	2.755	2.611	2.954	3.408	3.264	3.607	2.188	2.044	2.386	2.636	2.491	2.834
6	16	2.951	3.137	2.990	3.027	3.213	3.066	1.994	2.181	2.033	2.741	2.928	2.780
6	17	2.856	3.063	3.165	2.585	2.792	2.894	2.337	2.544	2.646	2.408	2.615	2.717
6	18	2.499	2.604	2.610	2.700	2.804	2.811	2.156	2.261	2.267	2.512	2.616	2.623

continued

Table A.7—The nonproxy $\widehat{PPV}_h$ estimates (people per vehicle) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey (continued)

		DUD			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
6	20	1.936	2.574	2.814	1.949	2.588	—	1.802	2.440	2.680	1.685	2.323	2.563
6	21	1.958	2.138	2.368	2.351	2.531	2.761	1.870	2.049	2.280	2.305	2.484	—
6	22	2.076	2.374	2.675	—	—	—	2.287	2.585	2.886	—	—	—
8	1	5.762	4.076	4.309	4.295	2.609	—	3.739	2.054	2.286	4.547	2.862	3.094
8	2	2.035	2.617	2.679	2.298	2.880	2.941	1.961	2.543	2.604	2.293	2.875	2.936
8	3	2.158	2.106	2.302	2.690	2.638	2.834	2.302	2.250	2.446	2.447	2.395	2.591
8	4	2.790	2.820	3.368	1.987	2.017	2.565	2.075	2.105	2.654	1.786	1.816	2.364
8	5	3.312	2.551	3.630	5.207	4.447	5.525	2.385	—	—	2.761	2.000	3.079
8	6	3.005	2.122	2.523	2.850	1.967	2.368	2.678	1.796	2.197	3.482	2.599	3.000
8	7	1.764	2.251	2.585	2.285	2.772	3.106	1.392	1.879	2.213	1.923	2.410	2.744
8	8	1.888	2.445	2.700	2.218	2.776	3.030	1.591	2.148	2.403	1.994	2.551	2.806
8	9	2.748	2.782	3.088	2.757	2.791	3.098	1.909	1.943	2.249	2.057	2.092	2.398
8	10	2.483	4.347	4.335	1.000	2.654	2.642	1.000	1.953	1.941	2.148	4.012	4.000
8	11	2.334	2.892	2.460	2.667	—	—	2.122	2.680	2.248	2.657	3.215	2.783
8	12	1.983	2.424	2.537	1.583	2.024	2.137	2.143	2.584	2.697	2.079	2.521	2.634
8	13	3.215	3.207	3.452	2.660	2.652	2.897	1.799	1.792	2.036	2.516	2.508	2.753
8	16	6.323	6.029	5.857	—	—	—	3.554	3.259	—	—	—	—
8	60	1.853	1.769	2.172	2.203	2.119	2.521	2.161	—	—	—	—	—
9	3	2.200	2.867	2.637	—	—	—	1.714	2.381	2.151	—	—	—
9	4	2.813	2.605	3.180	2.236	2.027	2.603	2.089	1.880	2.456	2.545	2.337	2.913
9	5	1.812	2.336	2.970	1.653	2.177	2.811	1.727	2.252	2.886	3.449	3.973	4.607
9	7	2.536	2.710	3.030	2.750	—	—	1.808	1.982	2.302	2.250	2.424	—
9	8	2.385	3.311	3.290	1.982	2.909	2.888	1.284	2.211	2.190	1.514	2.440	2.419
9	9	2.169	2.735	3.012	2.189	2.754	3.032	1.736	2.302	2.579	—	—	—
9	10	2.384	2.685	2.999	1.900	—	—	1.698	1.999	2.313	2.480	2.780	3.094
9	12	1.911	1.942	2.232	1.846	1.877	2.167	1.755	1.786	2.076	2.254	2.284	2.574
9	13	2.460	3.067	2.841	—	—	—	1.658	2.265	2.039	1.715	2.323	2.097
9	14	2.969	2.953	3.490	2.227	2.212	2.749	1.980	1.965	2.501	—	—	—
9	15	1.897	1.913	1.974	—	—	—	1.471	1.487	1.548	—	—	—
9	19	2.699	2.971	2.943	5.000	—	—	1.932	2.204	2.176	2.540	2.812	2.783
9	20	2.178	2.427	2.824	2.189	2.438	2.835	1.804	2.052	2.450	2.033	2.282	2.680
9	21	2.562	2.656	2.715	2.192	2.285	2.345	2.022	2.115	2.174	2.638	2.731	2.790
9	22	2.617	2.531	2.542	—	—	—	2.401	2.316	2.326	2.151	2.065	2.075
10	2	3.213	4.038	6.129	1.571	—	—	1.064	1.889	3.980	1.408	2.232	4.323
10	3	2.797	3.417	9.800	2.818	—	—	1.232	1.851	8.235	3.211	3.830	—
10	4	2.681	2.314	2.595	2.500	—	—	2.962	2.595	2.875	—	—	—
10	5	2.214	2.723	2.553	2.083	—	—	2.383	2.893	—	1.943	2.453	—

— = Stratum was not used; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites; R = Region; F = Forest; L = Low use-level; M = Medium use-level; H = High use-level.

Table A.8—The nonproxy $\widehat{SF_h^{NP}}$ estimates (number of sites and areas visited) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
1	2	1.427	1.402	1.419	1.379	1.355	1.371	1.055	1.031	1.047	1.240	1.216	1.232
1	3	1.158	1.150	1.003	1.610	1.602	—	1.054	1.046	—	1.270	1.262	1.115
1	4	1.494	1.769	1.789	2.354	2.629	2.649	1.000	1.116	1.136	2.282	2.557	2.577
1	5	1.459	1.505	1.554	1.232	1.278	1.327	1.019	1.065	1.114	1.595	1.641	1.690
1	8	1.160	1.138	1.113	1.306	1.284	1.259	1.098	1.076	1.051	1.235	1.213	1.188
1	10	1.000	1.209	1.101	1.254	1.519	1.411	1.000	1.119	1.011	1.461	1.726	1.618
1	11	1.222	1.149	1.127	1.203	1.130	—	1.102	1.029	1.007	1.150	1.077	1.055
1	12	1.048	1.086	1.072	1.088	1.126	1.112	1.000	1.015	1.001	1.050	1.088	1.074
1	14	1.168	1.172	1.152	1.275	1.279	1.259	1.059	1.063	1.043	1.158	1.162	1.142
1	15	1.000	1.092	1.088	1.170	1.268	1.263	1.000	1.047	1.043	1.000	1.073	1.069
1	16	1.078	1.033	1.083	1.090	1.046	1.096	1.068	1.023	1.073	1.236	1.191	1.242
1	17	1.449	1.609	1.440	1.212	1.372	1.203	1.053	1.214	1.044	1.000	1.108	1.000
1	18	1.368	1.432	—	1.163	1.227	1.198	1.000	1.058	1.029	—	—	—
2	2	1.393	1.512	1.316	1.185	1.304	1.108	1.138	1.257	1.062	—	—	—
2	3	1.393	1.391	1.507	1.236	1.235	1.350	1.114	1.113	1.228	2.116	2.114	2.230
2	4	1.543	1.418	1.409	1.267	—	1.133	1.192	1.067	1.058	1.576	1.450	1.442
2	6	1.454	1.274	1.239	1.404	1.224	1.189	1.270	1.091	1.055	1.567	1.388	—
2	7	1.052	1.000	1.022	1.128	1.068	1.097	1.047	1.000	1.017	1.350	—	—
2	9	1.563	1.670	1.877	1.438	1.545	1.752	1.215	1.322	1.529	1.356	1.463	1.670
2	10	1.534	1.490	—	1.376	1.332	1.328	1.114	1.070	1.067	1.390	1.347	1.343
2	11	1.184	1.341	1.371	1.265	1.422	1.452	1.000	1.140	1.170	1.365	1.522	1.552
2	12	1.305	1.362	1.333	1.000	—	—	1.055	1.112	1.083	1.207	1.264	1.235
2	13	1.516	1.482	1.442	—	—	—	1.148	1.113	1.073	1.384	1.349	1.309
2	14	1.603	1.597	1.606	1.377	1.371	1.380	1.092	1.086	1.095	1.324	1.318	1.326
2	15	1.242	1.256	1.228	1.283	1.296	1.268	1.086	1.099	1.072	1.222	1.236	1.208
3	1	1.253	1.246	1.152	1.131	1.124	1.030	1.199	1.192	1.097	1.423	1.416	1.322
3	2	1.287	1.192	1.249	1.122	1.026	1.083	1.101	1.005	1.062	1.227	1.131	1.188
3	3	1.126	1.154	1.115	1.073	1.100	1.061	1.025	1.052	1.013	1.028	1.055	1.016
3	4	1.266	1.257	1.307	1.127	1.118	1.168	1.110	1.101	1.152	1.196	1.187	1.238
3	5	1.520	1.727	1.688	1.455	1.663	1.624	1.000	1.160	1.122	1.057	1.264	1.225
3	6	1.546	1.718	1.281	1.397	1.569	1.133	1.226	1.398	1.000	1.652	1.825	1.388
3	7	1.521	1.347	1.431	1.749	—	—	1.194	1.020	1.103	1.396	1.223	1.306
3	8	1.215	1.213	1.284	1.191	1.189	1.260	1.067	1.065	1.136	1.290	1.288	1.359
3	9	1.161	1.127	1.124	1.414	1.380	1.377	1.089	1.055	1.052	1.124	1.090	1.087
3	10	1.320	1.332	1.381	1.291	1.303	1.352	1.059	1.071	1.120	1.244	1.255	1.304
3	12	1.145	1.138	1.129	1.102	1.095	1.086	1.043	1.036	1.027	1.044	1.036	1.027
4	1	1.225	1.213	1.196	1.079	1.067	1.050	1.076	1.063	1.046	1.158	1.145	1.128
4	2	1.543	1.513	1.500	1.209	1.179	1.166	1.061	1.031	1.018	1.488	1.458	1.445
4	3	1.317	1.370	1.352	1.166	1.219	1.201	1.011	1.065	1.047	1.235	1.289	1.271
4	7	1.339	1.254	1.229	1.383	1.297	1.273	1.154	1.069	1.044	1.443	1.358	1.333
4	8	1.258	1.235	1.241	1.102	1.080	1.086	1.057	1.035	1.041	—	—	—
4	10	1.454	1.480	1.385	1.238	1.264	1.169	1.042	1.069	1.000	1.255	1.281	1.186

continued

Table A.8—The nonproxy $\widehat{SF}_h^{NP}$ estimates (number of sites and areas visited) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey (continued)

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
4	12	1.544	1.505	—	1.346	1.306	1.353	1.038	1.000	1.046	1.846	1.807	1.854
4	13	1.356	1.359	1.304	1.329	1.332	1.278	1.095	1.098	1.043	1.564	1.567	1.513
4	14	1.461	1.524	1.492	1.074	1.137	1.105	1.117	1.180	1.149	1.773	1.836	1.804
4	15	1.420	1.545	1.538	1.000	1.029	1.022	1.000	1.052	1.046	1.097	1.222	1.215
4	17	1.225	1.221	1.215	1.382	1.378	1.372	1.068	1.064	1.059	1.186	1.182	1.177
4	18	1.218	1.310	1.306	—	—	—	1.000	1.059	1.055	1.000	1.073	1.070
4	19	1.245	1.205	1.262	2.241	2.202	2.259	1.086	1.047	1.104	1.104	1.064	1.121
5	1	1.120	1.086	1.076	1.166	1.132	1.122	1.104	1.070	1.060	1.070	1.037	1.027
5	2	1.141	1.180	1.215	1.000	1.019	1.054	1.004	1.042	1.077	1.000	1.036	1.071
5	3	1.783	1.754	1.734	2.248	2.218	2.198	1.253	1.224	1.204	1.236	1.206	1.186
5	4	1.941	1.903	1.984	1.847	1.809	1.890	1.280	1.241	1.322	1.564	1.526	1.607
5	5	1.127	1.129	1.188	1.637	1.639	1.698	1.115	1.117	1.176	1.147	1.149	1.208
5	6	1.192	1.369	1.307	1.000	—	—	1.179	1.355	1.293	1.327	1.503	1.441
5	7	1.145	1.158	1.198	1.337	1.350	1.389	1.017	1.030	1.069	1.429	1.443	1.482
5	8	1.326	1.275	1.282	1.932	1.881	1.887	1.270	1.219	1.226	1.859	1.808	1.815
5	9	1.275	1.276	1.302	1.350	1.351	—	1.221	1.222	1.248	1.621	1.622	1.648
5	10	1.404	1.366	1.405	1.656	1.618	1.657	1.095	1.056	1.096	1.675	1.636	1.675
5	11	1.268	1.261	1.243	1.393	—	—	1.161	1.154	1.136	1.548	1.541	1.523
5	12	1.346	1.304	1.326	1.487	1.445	1.467	1.159	1.117	1.140	1.162	1.120	1.143
5	13	1.683	1.686	1.745	1.305	1.308	1.367	1.173	1.176	1.235	1.374	1.377	1.435
5	14	1.363	1.379	1.333	1.102	1.118	1.072	1.090	1.106	1.059	1.229	1.245	1.198
5	15	1.303	1.236	1.265	1.539	1.473	1.501	1.171	1.105	1.134	1.391	1.325	1.354
5	16	1.478	1.462	1.431	1.415	1.398	1.368	1.179	1.163	1.132	1.405	1.389	1.358
5	17	1.460	1.448	1.528	1.983	1.971	2.050	1.165	1.153	1.233	1.397	1.385	1.464
5	19	1.374	1.413	1.390	—	—	—	1.118	1.157	1.134	1.210	1.249	1.226
6	1	1.610	1.490	1.495	1.422	1.301	1.307	1.272	1.151	1.157	1.402	1.282	1.288
6	2	1.419	1.282	1.219	1.381	1.244	1.181	1.232	1.095	1.032	1.479	1.342	1.279
6	3	1.430	1.647	1.786	1.000	1.034	1.173	1.118	1.335	1.474	1.041	1.258	—
6	4	1.287	1.307	1.262	1.489	1.508	1.464	1.075	1.095	1.051	1.233	1.253	1.209
6	5	1.386	1.332	1.423	1.121	1.066	1.157	1.093	1.038	1.129	1.139	1.085	1.175
6	6	1.214	1.251	1.232	1.048	1.085	—	1.149	1.186	1.167	1.121	1.157	1.139
6	7	1.059	1.129	1.078	1.098	1.168	1.117	1.010	1.079	1.029	1.533	1.602	1.552
6	8	1.333	1.379	1.433	1.214	1.260	1.314	1.104	1.150	1.204	1.146	1.192	1.246
6	9	1.200	1.226	1.203	1.285	1.311	1.288	1.144	1.170	1.147	1.124	1.150	1.127
6	10	1.522	1.759	1.525	1.178	1.415	1.181	1.147	1.384	1.150	1.273	1.509	1.276
6	11	1.497	1.600	1.498	1.128	1.231	1.128	1.048	1.151	1.049	1.493	1.597	1.494
6	12	1.579	1.695	1.715	1.021	1.138	1.157	1.062	1.178	1.198	1.470	1.587	1.606
6	14	1.119	1.062	1.041	1.269	1.212	1.191	1.086	1.030	1.009	1.275	1.218	1.198
6	15	2.216	1.723	1.535	1.949	1.456	1.268	1.767	1.273	1.085	2.051	1.558	1.370
6	16	1.334	1.279	1.363	1.447	1.392	1.476	1.040	1.000	1.070	1.362	1.307	1.391
6	17	1.218	1.284	1.260	1.324	1.390	1.366	1.000	1.065	1.041	1.046	1.111	1.087
6	18	1.709	1.655	1.665	1.897	1.843	1.853	1.219	1.166	1.175	1.667	1.613	1.623

continued

Table A.8—The nonproxy $\widehat{SF_h^{NP}}$ estimates (number of sites and areas visited) for each stratum for the 121 Round 1 forests in the National Visitor Use Monitoring Program survey (continued)

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
6	20	1.272	1.251	1.262	1.152	1.131	—	1.053	1.032	1.044	1.111	1.090	1.102
6	21	1.351	1.411	1.342	1.466	1.526	1.457	1.024	1.084	1.015	1.619	1.679	—
6	22	1.000	1.175	1.591	—	—	—	1.300	1.479	1.895	—	—	—
8	1	1.131	1.214	1.141	1.013	1.095	—	1.000	1.082	1.009	1.176	1.259	1.186
8	2	1.319	1.303	1.387	1.311	1.295	1.379	1.045	1.030	1.113	1.259	1.243	1.327
8	3	1.312	1.228	1.284	1.293	1.209	1.265	1.139	1.055	1.111	1.288	1.205	1.260
8	4	1.169	1.118	1.157	1.164	1.112	1.151	1.106	1.055	1.094	1.302	1.251	1.290
8	5	1.339	1.000	1.038	1.681	1.333	1.380	1.226	—	—	1.421	1.073	1.121
8	6	1.308	1.140	1.387	1.947	1.779	2.026	1.263	1.095	1.342	1.000	1.000	1.000
8	7	1.063	1.046	1.016	1.045	1.028	1.000	1.042	1.025	1.000	1.154	1.137	1.106
8	8	1.121	1.086	1.066	1.252	1.218	1.197	1.083	1.049	1.028	1.251	1.217	1.196
8	9	1.508	1.606	1.578	1.189	1.287	1.258	1.058	1.156	1.128	1.211	1.309	1.281
8	10	1.076	1.018	1.028	1.130	1.073	1.082	1.058	1.001	1.011	1.548	1.490	1.500
8	11	1.737	1.586	1.630	1.200	—	—	1.262	1.111	1.155	1.405	1.253	1.297
8	12	1.230	1.196	1.189	1.166	1.132	1.125	1.089	1.055	1.048	1.145	1.112	1.104
8	13	1.056	1.185	1.135	1.176	1.306	1.256	1.000	1.079	1.029	1.150	1.279	1.229
8	16	2.283	2.022	1.895	—	—	—	2.088	1.826	—	—	—	—
8	60	1.402	1.597	1.267	1.084	1.279	1.000	1.126	—	—	—	—	—
9	3	1.313	1.199	1.242	—	—	—	1.186	1.072	1.116	—	—	—
9	4	1.576	1.505	1.570	1.146	1.075	1.141	1.094	1.023	1.089	1.085	1.014	1.080
9	5	1.029	1.184	1.440	1.232	1.387	1.643	1.021	1.176	1.432	1.549	1.703	1.959
9	7	1.566	1.557	1.558	1.263	—	—	1.108	1.098	1.100	1.180	1.170	
9	8	1.620	1.539	1.518	1.382	1.301	1.280	1.240	1.159	1.138	1.727	1.646	1.625
9	9	1.841	1.906	1.742	2.101	2.166	2.001	1.749	1.814	1.649	—	—	—
9	10	1.324	1.246	1.246	1.875	—	—	1.108	1.030	1.030	1.333	1.255	1.255
9	12	1.146	1.140	1.164	1.052	1.046	1.070	1.041	1.035	1.059	1.112	1.106	1.130
9	13	1.195	1.226	1.155	—	—	—	1.034	1.065	1.000	1.075	1.106	1.035
9	14	1.048	1.116	1.094	—	—	—	1.000	1.053	1.031	—	—	—
9	15	1.003	1.056	1.039	—	—	—	1.000	1.050	1.033	—	—	—
9	19	1.294	1.339	1.356	1.333	—	—	1.006	1.051	1.068	1.185	1.230	1.247
9	20	1.111	1.087	1.047	1.271	1.247	1.207	1.054	1.030	1.000	1.275	1.251	1.211
9	21	1.563	1.682	1.630	1.340	1.459	1.407	1.059	1.178	1.125	1.260	1.379	1.327
9	22	1.678	1.856	2.031	—	—	—	1.007	1.186	1.360	1.000	1.082	1.257
10	2	1.597	1.467	1.278	1.273	—	—	1.377	1.246	1.058	1.558	1.427	1.239
10	3	1.096	1.105	1.134	1.019	—	—	1.153	1.161	1.190	1.276	1.284	—
10	4	1.529	1.495	1.431	3.000	—	—	1.144	1.110	1.046	—	—	—
10	5	1.062	1.032	1.008	1.043	—	—	1.136	1.106	—	1.062	1.032	—

— = Stratum was not used; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites; R = Region; F = Forest; L = Low use-level; M = Medium use-level; H = High use-level.

Table A.9—The average number of exiting people for each stratum for all 121 Round 1 forests

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
1	2	60.3	44.9	146.0	24.6	72.0	20.8	37.0	63.8	102.7	7.9	12.3	18.5
1	3	100.8	147.0	507.9	16.6	23.3	—	24.3	163.2	—	8.4	15.4	40.3
1	4	89.3	120.4	199.6	29.5	30.4	36.6	37.6	92.2	566.8	1.1	1.7	1.8
1	5	82.8	68.4	455.9	144.6	38.0	83.5	43.7	55.5	69.8	14.2	5.9	36.9
1	8	11.0	232	558.1	1.2	6.7	116.1	14.5	85.2	376.9	0.3	3.9	30.3
1	10	33.0	65.4	227.0	11.5	29.1	69.8	17.2	53.8	146.9	1.8	5.8	15.7
1	11	43.4	105.1	84.3	89.9	67.3	—	37.9	242.8	1551.2	2.6	31.3	75.5
1	12	10.8	30.5	596.1	29.7	26.2	63.5	22.9	67.6	75.9	2.9	7.6	7.6
1	14	35.7	56.3	281.9	31.7	21.6	109.4	71.1	123.9	214.7	41.1	35.6	133.1
1	15	12.6	167.9	403.6	8.6	66.1	172.7	9.2	37.7	70.0	2.4	12.9	44.0
1	16	17.8	124.4	439.2	18.7	23.1	95.3	13.1	114.6	156.4	13.4	12.3	52.6
1	17	20.4	69.8	571.2	15.0	46.1	175.3	27.1	61.0	89.3	17.6	75.6	128.1
1	18	35.6	75.2	—	51.8	48.0	63.7	25.7	41.6	75.1	—	—	—
2	2	68.3	213.9	531.3	28.9	25.1	34.0	72.7	94.7	219.7	—	—	—
2	3	87.6	144.9	414.7	17.0	36.3	65.6	76.4	83.4	321.5	22.5	37.2	138.9
2	4	137.8	291.9	421.1	54.6	—	36.8	176.5	206.2	451.9	9.6	23.9	40.8
2	6	26.9	167.7	240.6	35.4	58.6	121.9	48.6	107.1	189.8	5.2	11.6	—
2	7	34.6	33.0	24.9	19.8	20.9	186.9	17.0	11.2	41.6	0.4	—	—
2	9	27.4	177.9	317.2	7.9	32.3	12.3	32.0	94.5	84.7	8.0	9.2	24.1
2	10	42.8	203.3	—	110.9	163.3	567.7	100.1	505.5	517.5	13.4	118.2	171.7
2	11	45.8	102.0	622.1	54.4	106.2	158.2	21.1	60.5	84.5	7.4	29.4	11.3
2	12	13.1	308.5	462.3	47.2	—	—	24.8	75.4	242.3	2.8	23.1	34.6
2	13	42.8	181.6	167.7	—	—	—	94.6	147.6	635.9	12.6	31.5	40.5
2	14	25.0	80.0	436.5	30.6	67.7	134.2	17.0	65.0	172.3	3.6	33.9	16.8
2	15	111.6	266.7	555.1	24.2	54.3	92.4	30.7	92.2	245.5	9.3	35.6	96.2
3	1	162.1	1772.3	541.6	82.0	81.9	160.6	60.7	202.3	503.0	22.3	112.9	42.5
3	2	29.6	121.7	388.3	74.2	87.7	133.2	66.4	151.4	479.0	25.5	41.2	154.2
3	3	101.2	178.8	821.5	38.6	31.0	100.4	34.9	113.4	216.9	28.4	34.7	77.5
3	4	41.9	177.4	170.5	28.9	75.2	89.3	80.4	207	234.3	5.7	14.2	98.4
3	5	65.9	245.7	1283.9	41.6	159.8	269.4	59.4	65.7	742.2	45.0	97.6	328.9
3	6	39.8	112.7	144.1	23.3	44.2	193.6	115.6	94.0	51.4	21.8	14.3	13.6
3	7	44.0	117.8	632.0	40.5	—	—	199.8	117.3	61.0	5.0	15.6	33.3
3	8	44.5	59.5	72.1	32.5	46.2	62.1	89.2	165.7	291.8	10.9	45.2	111.7
3	9	201.3	190.8	213.4	65.4	12.9	2.5	88.3	208.7	277.6	9.7	18.3	22.2
3	10	79.6	99.6	154.6	63.1	49.0	107.2	73.5	121.2	884.6	15.9	17.2	82.2
3	12	196.4	549.2	1046.7	216.8	201.1	416.7	75.0	229.6	533.8	49.6	128.6	323.4
4	1	44.0	269.4	300.3	51.4	147.2	144.3	35.3	229.2	712.1	4.1	7.4	36.6
4	2	139.8	377.1	423.5	22.1	80.9	149.9	35.7	151.9	291.8	7.5	15.6	15.2
4	3	127.0	326.4	495.8	58.5	120.1	177.8	125.4	301.7	338.2	32.8	49.1	51.7
4	7	155.2	94.6	130.7	10.0	78.1	42.5	33.9	96.5	187.0	3.5	12.6	24.2
4	8	14.0	57.7	350.2	64.3	77.4	193.7	29.2	108.0	186.4	—	—	—
4	10	30.7	74.0	247.5	38.6	27.2	42.0	59.2	267.0	309.0	0.6	2.1	2.0

continued

Table A.9—The average number of exiting people for each stratum for all 121 Round 1 forests (continued)

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
4	12	17.8	21.8	—	37.7	81.4	75.0	48.3	116.6	175.4	3.4	19.2	7.3
4	13	45.0	76.2	220.8	35.2	41.7	75.2	18.5	70.5	350.5	13.3	8.8	13.3
4	14	36.2	124.7	226.9	86.4	57.3	173.9	31.7	99.2	608.3	16.7	27.2	38.9
4	15	25.2	245.1	128.7	67.4	199.8	488.6	23.9	148.9	117.7	2.0	17.7	125.3
4	17	60.7	110.4	384.8	47.5	58.9	136.9	9.3	20.6	56.4	7.3	26.8	48.9
4	18	106.7	217.4	707.8	—	—	—	89.5	235.8	625.4	20.2	107.2	165.5
4	19	103.4	146.5	1195.8	66.3	76.8	60.6	115.5	155.1	397.0	19.8	50.6	201.4
5	1	105.7	145.2	211.4	27.9	52.2	98.8	158.0	342.6	1542.3	21.5	9.5	104.0
5	2	170.8	119.3	182.9	17.8	91.5	226.3	92.9	131.0	314.5	56.0	24.2	31.4
5	3	32.7	91.2	101.6	56.3	65.9	191.8	169.0	582.5	1705.1	9.5	58.6	142.5
5	4	162.0	385.2	398.8	81.7	137.5	188.3	108.7	675.5	1961.6	56.6	81.0	149.6
5	5	31.3	49.4	142.6	6.9	29.0	46.8	61.5	103.3	102.7	2.3	8.5	14.0
5	6	92.3	212.9	428.6	11.7	—	—	26.0	161.7	156.6	4.8	6.4	10.9
5	7	212.4	360.7	291.4	143.6	82.1	308.0	80.9	118.0	208.4	12.5	93.8	9.0
5	8	54.4	102.0	141.3	34.0	53.7	79.6	49.5	112.1	247.4	0.6	8.0	11.9
5	9	48.3	40.9	141.4	10.5	23.2	—	19.8	29.1	46.3	5.0	11.4	29.0
5	10	521.6	597.7	293.1	35.7	54.6	61.6	94.2	92.4	189.7	3.1	8.3	5.5
5	11	60.2	194.7	120.5	37.1	—	—	51.5	335.4	635.6	5.7	20.1	26.8
5	12	174.6	167.1	355.0	50.1	24.2	81.0	69.2	119.0	497.4	53.5	47.0	141.2
5	13	98.0	119.8	435.3	71.2	77.9	151.2	133.0	1767.6	1584.2	4.2	9.9	24.3
5	14	165.0	177.7	355.2	104.8	75.7	28.0	95.8	397.2	617.5	26.8	68.4	221.0
5	15	174.3	433.9	532.5	64.1	81.3	212.9	347.4	492.5	1409.4	21.9	20.0	7.4
5	16	278.0	1043.5	2476.5	50.9	79.6	167.8	222.8	968.6	779.6	23.7	47.3	80.6
5	17	115.4	266.4	422.8	47.6	19.2	63.9	74.7	225.7	369.7	9.7	43.8	89.0
5	19	676.5	893.4	1446.5	—	—	—	103.1	352.0	397.0	95.0	138.8	207.7
6	1	97.8	206.7	331.0	89.9	25.1	225.7	68.8	183.9	712.5	22.9	40.3	22.7
6	2	18.5	33.8	70.4	39.2	59.3	41.8	57.5	77.5	111.8	6.6	9.1	6.5
6	3	31.4	102.2	247.5	9.4	37.6	177.0	33.3	156.3	197.0	10.0	10.5	—
6	4	42.8	39.8	89.8	15.0	29.5	16.8	28.6	30.6	85.4	9.6	25.5	88.5
6	5	36.9	313.0	580.7	32.1	43.1	86.5	105.5	232.5	284.6	53.7	73.5	40.7
6	6	47.6	1331.5	3353.7	13.5	35.8	—	453.9	210.0	718.1	55.1	72.5	234.9
6	7	80.5	79.4	108.8	9.1	37.1	54.5	25.1	59.2	113.1	6.4	5.2	31.8
6	8	46.5	66.0	200.0	11.8	51.2	91.9	24.3	40.6	96.2	19.3	13.5	24.4
6	9	33.0	117.6	87.2	31.9	95.7	41.7	33.2	65.3	162.1	6.2	6.5	18.6
6	10	99.0	148	348.2	46.8	46.9	39.0	107.5	30.1	173.0	11.4	9.6	13.9
6	11	30.9	27.2	185.5	81.4	244.4	79.1	50.9	176.8	235.1	3.4	6.5	8.9
6	12	92.6	270.4	237.6	43.0	78.1	106.8	51.7	56.0	319.6	46.1	9.5	26.5
6	14	53.0	67.0	169.9	22.1	17.6	70.6	26.4	37.9	149.2	18.5	5.3	3.3
6	15	47.0	162.0	754.7	15.4	67.5	102.8	17.3	144.5	472.7	1.7	14.3	63.1
6	16	88.4	129.6	133.2	6.8	10.4	32.0	49.0	86.1	161.6	17.7	101.3	68.9
6	17	96.1	129.8	346.1	27.4	73.5	66.1	53.0	140.8	336.5	8.6	29.1	40.9
6	18	85.4	176.5	315.4	102.1	9.3	173.9	68.1	154.9	418.9	13.6	10.3	45.4

continued

Table A.9—The average number of exiting people for each stratum for all 121 Round 1 forests (continued)

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
6	20	7.3	322.2	517.5	12.6	40.9	—	6.7	138.5	439.6	2.1	13.3	29.6
6	21	46.1	40.1	145.1	19.2	34.8	71.6	13.1	34.2	57.8	20.5	19.0	—
6	22	74.0	175.0	1293.5	—	—	—	95.1	160.5	476.6	—	—	—
8	1	98.2	142.3	187.3	119.3	135.4	—	91.0	105.3	78.2	3.0	22.3	41.1
8	2	43.8	59.1	202.4	21.0	99.0	105.4	64.3	136.0	294.8	21.4	57.9	84.5
8	3	40.1	14.7	51.9	27.4	32.6	117.1	20.0	80.3	80.9	31.2	77.9	37.3
8	4	61.7	222.3	199.1	97.5	168.4	293.5	36.8	80.9	243.3	5.4	5.8	11.7
8	5	77.5	125.8	352.7	64.5	167.4	97.5	51.8	—	—	185.8	22.4	349.6
8	6	76.7	60.6	246.3	41.7	23.6	155.3	81.5	63.9	124.8	0.3	1.4	0.5
8	7	23.9	73.1	159.1	24.1	113.7	220.2	44.1	87.3	121.4	1.0	6.5	6.5
8	8	40.1	198.0	390.4	67.7	67.0	266.6	46.2	82.4	238.3	7.4	47.0	119.4
8	9	41.6	97.1	231.3	61.1	247.5	562.4	39.3	111.8	926.9	6.1	8.2	8.3
8	10	134.9	253.9	577.3	18.3	85.9	137.1	12.1	72.0	70.1	0.7	0.9	21.3
8	11	153.9	263.2	321.5	24.8	—	—	47.0	82.7	166.9	18.0	154.9	74.6
8	12	88.5	111.1	115.1	23.4	120.0	50.5	18.1	77.1	189.0	8.0	37.0	90.0
8	13	95.8	25.3	144.2	25.9	60.6	138.9	17.2	23.5	31.6	18.3	1.1	6.3
8	16	25.7	719.1	440.8	—	—	—	582.4	2257.9	—	—	—	—
8	60	27.3	69.0	140.2	36.3	55.3	56.6	89.9	—	—	—	—	—
9	3	21.2	58.2	60.9	—	—	—	70.8	195.3	319.5	—	—	—
9	4	128.8	217.4	802.0	41.1	67.2	172.8	113.1	131.1	254.8	29.4	42.2	66.7
9	5	41.1	164.6	455.2	35.2	74.9	72.8	17.6	37.2	412.3	7.4	6.0	39.6
9	7	26.8	172.5	199.5	25.8	—	—	54.0	181.9	264.6	19.2	6.9	—
9	8	31.1	77.7	194.4	13.9	53.7	89.1	8.4	42.0	34.4	2.8	10.2	10.6
9	9	38.1	69.9	111.2	8.5	23.0	30.5	98.8	433.9	532.6	—	—	—
9	10	77.6	89.5	273.5	29.2	—	—	41.1	131.2	294.2	7.2	19.0	11.0
9	12	17.8	25.4	29.9	28.9	43.8	61.8	136.8	38.2	140.6	6.8	5.8	39.4
9	13	147.7	207.6	369.4	—	—	—	70.8	69.6	78.5	16.0	3.4	13.7
9	14	119.5	213.0	436.2	64.2	175.4	276.1	109.8	165.8	243.0	—	—	—
9	15	8.4	1.7	13.7	—	—	—	3.9	2.2	5.5	—	—	—
9	19	193.3	327.6	374.1	16.1	—	—	81.7	164.8	210.9	42.1	51.3	150.0
9	20	34.0	62.4	161.5	51.7	93.5	159.9	56.2	131.6	163.3	2.2	7.2	11.3
9	21	162.1	288.5	414.7	85.8	108.8	157.4	38.2	100.9	191.4	6.5	11.0	13.0
9	22	74.6	123.9	299.4	—	—	—	6.5	44.3	138.8	18.0	22.6	103.9
10	2	114.8	108.4	99.7	3.2	—	—	50.3	79.8	184.9	54.4	201.2	302.4
10	3	128.7	314.7	2354.5	74.9	—	—	35.1	155.4	290.2	174.5	860.1	—
10	4	69.9	448.3	1239.1	4.0	—	—	51.6	88.2	38.6	—	—	—
10	5	28.9	187.9	483.6	19.0	—	—	55.4	107.3	—	118.1	0.7	—

— = Stratum was not used; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites; R = Region; F = Forest; L = Low use-level; M = Medium use-level; H = High use-level.

Table A.10—The Round 1 nonproxy national forest visit estimates (1,000s) for each stratum and forest

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
1	2	127.3	27.1	83.6	38.4	23.5	0.8	622.5	215.8	74.9	10.2	2.7	1.0
1	3	78.6	47.9	19.1	19.9	6.5	—	244.5	119.2	—	33.4	34.5	39.3
1	4	27.6	4.1	15.2	8.0	1.2	0.1	329.4	240.4	99.5	0.3	0.0	0.0
1	5	73.2	13.9	59.7	85.5	8.3	1.9	503.7	192.9	114.2	6.2	0.2	1.2
1	8	4.3	61.3	59.2	0.9	2.8	21.9	105.3	169.8	270.0	0.3	2.7	10.3
1	10	16.3	32.8	25.6	13.5	15.7	11.5	82.0	250.7	172.8	3.7	8.1	5.8
1	11	28.6	19.8	8.3	19.8	2.3	—	497.3	696.2	124.7	4.7	20.4	15.8
1	12	6.2	6.3	47.7	4.9	0.2	1.1	252.5	70.8	32.0	1.8	0.8	0.1
1	14	24.1	30.5	72.4	12.3	2.3	1.8	470.7	499.7	169.1	10.1	4.0	1.9
1	15	0.6	12.2	12.3	8.5	20.9	6.9	49.9	162.0	124.0	2.7	9.7	14.0
1	16	47.0	147.4	21.1	21.3	3.3	0.5	417.4	502.8	48.0	12.0	1.6	4.7
1	17	30.0	36.5	89.8	32.5	21.0	13.8	93.8	52.2	91.2	5.9	19.9	28.1
1	18	0.9	1.1	—	6.4	1.0	0.7	114	304.5	212.0	—	—	—
2	2	130.0	21.6	106.3	8.4	0.4	0.4	400.5	34.2	55.1	—	—	—
2	3	116.8	23.7	24.4	3.4	1.6	1.8	613.3	268.9	284.1	6.6	6.2	11.8
2	4	85.4	39.2	30.5	5.3	—	0.1	1,564.1	490.3	237.9	16.2	11.6	4.1
2	6	8.9	38.8	12.7	16.2	12.4	2.2	255.6	312.8	235.8	3.8	3.6	
2	7	20.3	4.6	0.4	18.3	3.2	0.5	51.6	10.6	5.9	0.1	—	—
2	9	59.5	68.7	23.2	7.5	10.6	1.6	506.9	209.9	89.2	27.1	8.7	10.1
2	10	195.2	80.9	—	96.6	10.2	20.1	3,001.7	1,614.5	40.9	130.5	24.7	16.1
2	11	46.4	9.3	52.6	95.5	14.8	6.2	173.5	197.4	108.8	12.1	12.5	2.0
2	12	43.0	146.3	55.5	41.4	—	—	964.8	976.3	674.3	20.2	28.7	16.4
2	13	69.2	107.1	44.6	—	—	—	706.5	547.4	473.1	37.2	57.7	24.3
2	14	8.1	8.1	15.6	9.5	1.8	2.7	190.3	116.4	143.0	8.0	5.4	0.7
2	15	160.2	104.7	94.5	26.0	6.4	2.5	712.6	436.3	194.3	82.6	60.7	93.4
3	1	416.8	337.5	97.4	82.5	2.8	2.1	318.6	291.4	200.5	15.0	10.2	1.8
3	2	5.1	20.5	11.1	13.3	2.3	1.0	198.6	207.8	100.4	13.5	8.5	5.9
3	3	399.9	274.8	248.6	23.5	4.3	1.9	529.3	233.5	79.1	392.7	119.6	46.8
3	4	177.8	156.8	55.9	37.1	20.7	1.8	497.5	543.1	336.5	50.9	58.5	112.7
3	5	159.3	65.9	299.8	90.2	26.3	2.5	543.6	101.1	344.8	117.5	96.8	229.9
3	6	15.6	72.2	37.2	52.7	11.2	14.7	498.3	383.1	21.4	57.7	17.7	9.4
3	7	75.7	26.9	36.6	7.6	—	—	232.3	36.9	4.4	4.2	0.9	2.9
3	8	26.9	17.6	8.4	0.4	0.0	0.1	368.3	157.4	60.3	6.9	8.3	2.5
3	9	36.5	29.4	22.7	1.8	0.2	0.0	175.0	285.3	151.6	5.8	5.2	3.3
3	10	46.9	17.7	7.5	13.0	1.4	1.2	542.3	171.2	167.6	6.6	1.4	0.4
3	12	296.3	251.9	290.4	623.6	177.7	67.6	325.6	290.4	159.6	47.6	33.5	24.3
4	1	97.0	87.1	70.2	121.3	7.4	4.0	138.0	287.0	297.8	3.1	1.7	4.1
4	2	108.6	14.1	8.8	42.7	8.4	4.5	193.3	171.7	46.3	3.1	0.3	0.1
4	3	14.5	27.2	11.5	28.7	35.5	16.5	788.2	741.6	317.7	26.2	15.6	4.9
4	7	2.8	6.1	1.3	0.4	0.7	0.3	138.9	236.9	79.6	0.6	3.5	1.1
4	8	5.1	5.4	47.0	18.0	2.4	2.7	143.0	128.1	113.3	—	—	—
4	10	5.7	1.2	3.5	12.7	0.5	0.4	304.4	264.6	119.6	0.2	0.1	0.2
4	12	1.9	0.6	—	6.2	2.5	0.1	169.6	134.3	106.8	0.8	2.3	0.1

continued

Table A.10—The Round 1 nonproxy national forest visit estimates (1,000s) for each stratum and forest (continued)

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
4	13	9.2	13.8	5.9	25.5	8.0	3.3	85.6	78.1	108.7	9.6	2.9	0.2
4	14	28.5	21.0	25.3	97.3	4.6	1.6	161.7	65.5	150.1	12.2	1.1	8.6
4	15	26.3	109.7	56.0	208.9	42.5	8.9	1,885.3	254.6	45.0	3.8	10.2	6.4
4	17	59.9	44.8	56.9	67.7	10.1	4.0	1,448.9	753.4	259.7	189.0	70.6	90.6
4	18	318.1	194.8	116.3	—	—	—	438.7	541.0	1,106.2	22.9	35.6	15.3
4	19	91.5	156.5	37.3	4.0	1.4	0.7	1,728.9	666.1	64.7	35.9	83.4	7.6
5	1	491.6	199.2	100.9	109.0	19.1	11.0	542.3	327.9	414.7	69.6	4.4	44.5
5	2	38.0	17.4	6.2	14.5	15.2	7.7	258.8	163.5	71.3	28.9	1.0	1.1
5	3	14.4	17.2	2.4	7.2	0.8	2.3	679.7	344.5	201.6	10.1	42	13.4
5	4	149.3	182.8	127.5	9.0	9.5	0.4	324.3	416.0	1015	32.6	35.8	11.2
5	5	18.5	29.6	6.1	4.5	1.9	1.2	187.3	160.8	38.8	3.8	12.0	1.7
5	6	199.4	105.2	8.8	1.8	—	—	144.3	141.2	38.8	7.5	2.5	0.6
5	7	306.0	203.6	26.6	97.2	2.2	1.1	368.9	216.1	126.9	35.8	46.7	2.9
5	8	16.3	22.5	8.0	7.0	2.5	3.1	41.6	50.8	77.9	0.1	0.5	0.4
5	9	17.4	4.5	6.7	3.3	1.0		40.6	22.0	8.3	2.1	0.7	0.4
5	10	14.8	36.0	6.0	0.3	0.1	0.0	195.1	93.5	51.8	0.4	0.1	0.1
5	11	58.7	105.0	10.4	19.2	—	—	246.5	317.3	151.8	2.5	2.1	0.8
5	12	105.3	46.0	43.0	7.4	0.6	0.4	352.0	139.5	115.7	31.0	19.2	15.3
5	13	29.9	21.1	42.7	17.3	1.9	0.8	395.0	606.1	144.6	4.0	3.0	1.8
5	14	105.1	95.8	97.4	94.7	4.3	0.2	684.8	1,190.5	295.3	19.9	11.4	5.2
5	15	96.8	102.6	50.9	10.8	5.9	5.4	351.8	228.2	301.3	7.3	6.8	0.6
5	16	68.5	140.4	113.4	3.9	3.5	0.7	318.0	512.0	183.5	7.5	4.9	0.9
5	17	86.9	30.8	35.4	23.3	3.1	1.3	798.4	865.6	255.2	2.5	3.7	5.2
5	19	470.4	291.4	454.4	—	—	—	821.9	280.2	63.9	58.1	12.8	22.0
6	1	127.3	124.0	37.9	30.6	5.1	37.1	437.3	488.7	589.0	37.9	17.1	1.3
6	2	2.7	4.1	3.0	8.9	19.1	5.5	132.4	42.8	57.8	0.4	0.9	0.1
6	3	131.9	72.2	163.1	46.1	5.4	4.7	386.4	65.0	22.1	1.9	0.1	—
6	4	16.9	2.5	2.2	4.9	1.1	0.1	91.7	39.4	17.4	4.1	1.8	1.1
6	5	79.5	31.1	69.5	4.9	0.4	2.5	1,162.0	100.9	50.3	256.8	34.7	7.6
6	6	30.7	172.3	352.1	12.8	1.6	—	2,394.7	273.9	105.6	134.6	21.0	10.0
6	7	20.7	8.6	4.9	7.4	4.0	0.7	133.1	78.0	24.2	2.7	1.0	1.2
6	8	8.6	7.1	22.1	23.3	12.7	10.3	204.5	40.6	18.1	25.6	5.2	3.5
6	9	14.0	22.1	14.1	5.1	1.8	0.5	180.1	78.6	48.5	26.7	4.7	8.8
6	10	28.3	10.9	16.5	18.3	2.7	1.4	247.1	5.7	26.2	1.9	0.4	0.2
6	11	31.3	6.7	3.1	73.0	22.4	1.5	212.2	164.4	95.0	2.3	0.9	0.2
6	12	61.4	91.6	44.0	4.3	3.6	0.9	379.0	65.4	174.9	10.9	1.7	1.8
6	14	22.5	4.9	2.4	8.2	2.8	0.4	246.1	80.4	96.9	27.0	0.9	0.1
6	15	66.1	32.8	50.8	12.9	4.4	1.8	189.0	151.4	108.7	4.1	3.7	6.5
6	16	27.9	9.8	6.3	1.9	0.5	0.8	117.1	140.0	91.1	20.1	13.6	5.3
6	17	154.0	27.6	35.4	83.9	2.3	0.2	836.7	330.9	80.8	61.9	23.0	5.5
6	18	52.6	93.1	52.8	14.1	0.3	2.7	494.4	323.3	275.3	7.6	1.5	2.7
6	20	0.8	6.8	6.5	4.7	0.3	—	54.8	45.1	11.6	2.8	2.2	1.8

continued

Table A.10—The Round 1 nonproxy national forest visit estimates (1,000s) for each stratum and forest (continued)

		DUDS			OUDS			GFA			WILD		
R	F	L	M	H	L	M	H	L	M	H	L	M	H
6	21	21.2	5.2	7.5	4.7	3.9	5.3	175.9	103.3	10.9	3.8	0.3	—
6	22	89.9	87.7	206.9	—	—	—	470.6	217.5	602.1	—	—	—
8	1	165.2	11.7	2.0	37.3	3.9	—	905.4	22.4	0.6	7.7	7.3	1.8
8	2	63.9	42.9	6.6	16.8	6.5	2.3	1,658.2	877.8	104.7	14.5	3.9	0.4
8	3	13.8	13.9	8.6	0.3	2.7	2.6	160.5	1,092.1	392.6	41.1	91.3	1.0
8	4	138.8	77.5	75.8	122.9	73.9	18.3	1,106.9	268.5	573.8	15.9	3.8	4.8
8	5	109.2	55.3	37.0	88.2	25.4	0.2	992.5	—	—	273.2	2.5	18.5
8	6	36.7	14.7	12.9	15.8	1.5	4.2	421.0	66.3	44.4	0.2	0.2	0.1
8	7	15.3	8.8	7.9	3.5	4.7	8.8	1,612.7	783.6	638.0	0.7	1.1	0.3
8	8	393.9	510.1	60.5	249.8	49.4	6.3	1006	951.9	41.4	21.1	19.1	21.9
8	9	125.2	35.5	12.8	133.2	18.6	8.0	808.6	108.9	102.4	32.7	2.1	0.9
8	10	252.5	121.4	65.3	28.5	5.2	2.0	98.9	1,133.9	233.3	1.0	0.5	3.5
8	11	914.2	422.5	145.8	8.7	—	—	1,371.9	1,383.4	1,874.1	76.8	57.9	23.5
8	12	245.0	75.0	8.7	14.0	10.3	0.2	680.9	254.5	31.1	3.9	6.5	4.8
8	13	36.0	12.6	31.1	26.6	11.2	9.8	184.0	131.3	57.3	27.4	0.9	1.0
8	16	4.0	42.8	3.7	—	—	—	332.4	80.9	—	—	—	—
8	60	12.8	55.3	14.1	58.5	29.7	8.1	36.5	—	—	—	—	—
9	3	35.3	42.2	22.3	—	—	—	548.5	1,009.5	431.3	—	—	—
9	4	106.8	5.8	79.3	24.0	4.9	0.9	940.8	150.7	83.0	6.6	0.4	2.5
9	5	72.5	126.1	17.3	18.1	5.0	0.7	326.5	27.8	4.4	9.6	3.4	0.7
9	7	5.5	28.9	18.1	0.3	—	—	192.3	228.8	154.3	6.3	0.3	
9	8	44.6	47.1	171.8	8.5	11.8	28.7	30.9	112.1	83.6	1.0	8.5	9.4
9	9	94.5	69.2	47.1	0.7	0.7	0.2	694.6	1,175.3	645.6	—	—	—
9	10	112.8	32.0	58.2	1.8	—	—	131.5	191.0	108.0	20.1	2.8	0.7
9	12	11.1	12.9	3.6	17.5	3.8	4.6	309.9	55.0	66.3	3.8	0.8	7.8
9	13	77.3	22.8	16.3	—	—	—	1,446.8	643.0	156.1	16.8	1.0	0.2
9	14	16.1	27.0	0.2	3.8	1.9	5.0	124.8	141.9	246.7	—	—	—
9	15	0.5	0.1	0.6	—	—	—	0.8	0.2	0.1	—	—	—
9	19	54.9	13.6	25.8	0.6	—	—	1,149.2	224.5	152.8	5.1	1.6	2.5
9	20	63.9	31.6	15.4	161.4	4.0	2.4	1,023.5	1,205.8	329.6	9.0	22.3	15.3
9	21	45.8	41.8	31.2	7.9	1.8	4.6	113.8	191.8	185.4	11.5	6.5	4.0
9	22	43.0	30.1	72.9	—	—	—	83.2	217	278.7	54.6	23.7	9.7
10	2	28.0	6.6	11.0	0.9	—	—	77.3	102.8	39.2	3.3	11.4	10.9
10	3	115.8	261.8	571.1	7.9	—	—	636.9	72.8	55.4	235.3	18.5	—
10	4	56.3	35.5	83.9	0.1	—	—	247.9	77.3	25.8	—	—	—
10	5	20.0	42.5	18.2	10.0	—	—	92.1	39.5	—	30.7	0.1	—

— = Stratum was not used; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites; R = Region; F = Forest; L = Low use-level; M = Medium use-level; H = High use-level.

Table A.11—The range of values used for R_h and G_h for each of the 25 proxies

Proxy	Values for the variables (Ratio, Grpsize)
DUR4	(., .) (1, .) (1, 0-70) (2, .) (2, 1-99) (3, .) (3, 1-75) (4, 1-30) (5, 1-12) (6, 1-10) (7, 1-13) (8, 2-8) (9, 2-3) (10, 1-7) (11, 1-6) (12, 2) (13, 2-10) (14, 2-4) (15, 1-4) (16, 2) (20, 1-2)
DUR5	(., .) (1, .) (1, 11-150) (2, .) (2, 11-100) (3,11-50) (4, 11-52) (5, 11-37) (6, 12-15) (7, 24) (8, 45) (9, 15)
FE1	(1, 1)
FE3	(1, .) (1, 1-13)
FE4	(., .) (1, 0-54) (2, 1-18) (3, 1-20) (4, 1-9) (5, 1-4) (6, 16) (8, 2) (9, 2)
FR1	(., .) (0.01010-0.11111, 1) (0.11111, 9) (0.12500-1.00000, 1-6)
FR2	(., .) (1.00000, 1-5) (2, 2-10) (3, 3) (4, 4-5) ((5, 4) (6, 5-6) (7, 7) (8, 8) (10, 8-10)
FR3	(1, .) (1, 1-9)
FR5	(. ,) (1, .) (1, 10-99) (2, 12-22) (10, 12)
MA1	(1, 1)
MA2	(., .) (1, 1-14) (2, 1-8) 3, 1-3) (5, 5)
PTC1	(1,1)
PTC3	(1, .) (1, 1-40)
RE1	(1, 1)
RE2	(1, 2-30) (2, 1-20) (3, 2-4) (4, 2-14) (5, 3) (7, 10)
RE4	(., .) (1, 1-16)
RF1	(1, 1)
RF2	(1, 1-4) (2, 2-5) (3, 4) (5, 4) (6, 1) (7, 1-4)
RF4	(., .) (1, 1-6) (2, 1-5) (3, 2-4) (4, 1-8) (7, 4) (13,13)
SUP1	(1, .) (1, 2-3)
SUP2	(., .) (1, 2-33) (3, 20) (6, 3)
SUP4	(., .) (., 0) (1, 1-34) (2, 3-5) (3, 5-13) (4, 9) (5, 11) (6, 9) (11, 4)
SV1	(0, 1) (1, 1)
TB1	(1, 1)
TB3	(1, .) (1, 1-24)

(.) = Value is missing.

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
1	2	DUDS	SV1	46.6	1.04		1.06	45.7
1	2	OUDS	DUR4	8.7	2.47		1.61	13.4
1	2	OUDS	FE4	0.4	2.90		2.67	0.5
1	2	OUDS	SUP4	12.7	3.50		2.51	17.6
1	3	DUDS	FR1	41.2	1.17		1.01	47.8
1	3	OUDS	DUR4	6.2	2.05		1.17	10.9
1	3	OUDS	DUR5	0.1	16.21		2.04	0.7
1	3	OUDS	RE4	1.4	4.10		1.27	4.6
1	4	DUDS	FE3	0.6	4.35		2.28	1.1
1	4	DUDS	FR1	20.0	1.00		1.37	14.6
1	4	DUDS	SV1	22.4	1.10		1.01	24.3
1	4	OUDS	DUR4	8.9	1.18		2.14	4.9
1	4	OUDS	DUR5	1.2	5.08		3.11	1.9
1	4	OUDS	FE4	3.4	1.12		1.66	2.3
1	4	OUDS	SUP4	2.0	2.60		3.17	1.6
1	5	OUDS	FE4	7.3	1.68		1.51	8.1
1	5	OUDS	SUP4	2.1	2.40		1.96	2.6
1	8	DUDS	DUR4	0.0	1.95		1.27	0.0
1	8	DUDS	SV1	100.6	1.03		1.00	104.1
1	8	OUDS	DUR4	12.2	2.74		2.81	11.9
1	10	DUDS	FR1	294.1	1.11		1.01	321.2
1	10	DUDS	FR3	6.1	3.07		1.08	17.3
1	10	OUDS	FE4	40.8	5.72		2.10	111.3
1	10	OUDS	SUP4	0.8	2.87		1.00	2.3
1	11	DUDS	PTC1	33.1	1.00	0.704	1.08	21.5
1	11	DUDS	SV1	146.7	1.05		1.03	149.6
1	11	GFA	PTC1	6.7	1.00	0.471	1.72	1.8
1	11	OUDS	DUR4	25.4	1.38		1.25	27.8
1	11	OUDS	RE1	15.4	1.00		2.60	5.9
1	11	OUDS	SUP4	2.1	2.61		1.85	2.9
1	12	OUDS	FE4	2.4	3.12		1.17	6.4
1	12	OUDS	RE2	0.6	1.46		1.66	0.5
1	14	DUDS	DUR5	0.0	36.20		1.00	1.1
1	14	DUDS	FR1	5.6	1.44		1.00	8.1
1	14	OUDS	FE4	10.9	3.31		1.70	21.3
1	14	OUDS	SUP4	0.3	3.38		1.70	0.7

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
1	15	DUDS	SV1	59.5	1.04		1.22	50.6
1	15	OUDS	FE4	3.5	2.42		1.26	6.8
1	15	OUDS	RE1	0.6	1.00		1.84	0.3
1	16	DUDS	FR1	83.8	2.03		1.01	169.6
1	16	OUDS	FE4	12.1	2.45		2.55	11.7
1	16	OUDS	FR5	0.1	20.46		1.00	1.1
1	16	OUDS	RE2	0.0	1.84		1.00	0.0
1	16	OUDS	RE4	0.1	3.35		1.06	0.2
1	16	OUDS	SUP2	0.2	5.15		1.26	0.7
1	16	OUDS	SUP4	3.0	3.59		1.45	7.3
1	18	OUDS	DUR4	0.7	0.98		1.98	0.3
2	2	DUDS	SV1	3.0	1.24		1.10	3.3
2	2	OUDS	DUR4	46.3	1.14		1.62	32.7
2	2	OUDS	FE4	1.4	1.70		2.40	1.0
2	2	WILD	MA2	3.6	2.81		1.78	5.7
2	3	DUDS	PTC1	71.3	1.00	0.734	1.80	29.1
2	3	OUDS	DUR4	24.3	1.37		1.30	25.6
2	3	OUDS	DUR5	0.1	13.09		1.99	0.8
2	3	OUDS	RE2	0.2	2.57		2.12	0.3
2	3	OUDS	SUP4	0.0	5.57		1.75	0.0
2	4	DUDS	SV1	748.7	1.02		1.05	726.1
2	4	OUDS	DUR4	29.3	1.43		3.66	11.4
2	4	OUDS	DUR5	0.3	12.46		3.60	0.9
2	4	OUDS	RE1	0.6	1.00		4.11	0.1
2	4	OUDS	RE4	5.9	2.08		3.82	3.2
2	6	DUDS	DUR5	0.0	29.30		1.27	0.4
2	6	DUDS	FR1	0.3	2.82		1.00	0.9
2	6	DUDS	SV1	42.7	1.00		1.03	41.3
2	6	OUDS	DUR4	10.4	1.74		1.52	12.0
2	6	OUDS	RE4	2.7	3.54		1.12	8.4
2	7	DUDS	FR1	6.0	1.08		1.40	4.6
2	7	DUDS	PTC1	20.1	1.00	0.462	1.24	7.5
2	7	OUDS	DUR4	0.1	1.66		1.05	0.1
2	7	OUDS	DUR5	0.0	11.69		1.26	0.0
2	7	OUDS	FE3	0.0	3.37		1.20	0.0
2	9	DUDS	RF1	11.3	7.83		1.00	88.3

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
2	9	DUDS	SV1	127.7	1.04		1.02	130.1
2	9	GFA	SUP1	1.2	8.74		1.00	10.6
2	9	OUDS	DUR4	20.4	3.22		3.15	20.8
2	9	OUDS	RF4	0.2	2.87		2.93	0.2
2	10	DUDS	SV1	1738.3	1.02		1.44	1233.3
2	10	DUDS	TB3	85.4	2.15		1.11	164.8
2	11	DUDS	SV1	1045.4	1.00		1.54	677.0
2	11	OUDS	DUR4	0.0	48.64		1.00	0.0
2	12	DUDS	FE3	12.7	2.10		1.07	24.9
2	12	DUDS	FR3	57.5	1.93		1.15	96.3
2	12	DUDS	SV1	213.5	1.10		1.05	224.3
2	12	GFA	PTC3	6.9	2.67	0.963	1.03	17.3
2	12	GFA	TB1	503.1	1.00		1.06	476.6
2	12	OUDS	DUR4	81.6	1.76		1.35	105.8
2	12	OUDS	FE4	1.0	2.59		2.01	1.3
2	12	OUDS	FR5	0.3	29.88		1.15	7.4
2	12	OUDS	RE1	15.6	1.00		2.59	6.0
2	12	OUDS	RE4	0.1	2.50		2.31	0.1
2	13	DUDS	FR1	0.0	0.50		1.00	0.0
2	13	DUDS	SV1	323.9	1.04		1.06	317.8
2	13	OUDS	DUR4	55.0	1.83		2.46	40.8
2	14	DUDS	FR1	0.8	1.15		2.22	0.4
2	14	DUDS	SV1	4.5	1.00		1.33	3.4
2	14	GFA	PTC1	0.4	1.00	1.000	1.00	0.4
2	14	OUDS	FE3	2.7	2.32		1.64	3.9
2	14	OUDS	FE4	7.3	2.38		1.46	12.0
2	14	OUDS	RE1	2.8	1.00		2.97	0.9
2	14	OUDS	RE2	0.5	1.28		2.61	0.2
2	14	OUDS	RE4	14.7	2.04		2.69	11.2
2	15	DUDS	DUR4	9.1	3.59		2.16	15.1
2	15	DUDS	DUR5	0.6	18.51		1.00	10.2
2	15	DUDS	SV1	7048.0	1.01		1.07	6681.4
2	15	GFA	FR1	168.0	1.21		1.00	203.1
2	15	GFA	PTC1	501.2	1.00	0.913	1.16	395.2
2	15	OUDS	DUR4	112.5	1.19		2.07	64.8
2	15	OUDS	DUR5	1.0	10.53		2.69	4.0

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
2	15	OUDS	FE4	4.6	2.65		2.61	4.6
2	15	OUDS	RE1	24.4	1.00		3.19	7.6
3	1	DUDS	RE1	4.3	1.00		1.15	3.7
3	1	GFA	FR1	2.7	1.00		1.05	2.6
3	1	OUDS	DUR4	289.0	1.00		1.16	248.5
3	1	OUDS	DUR5	3.1	0.50		1.00	1.6
3	1	OUDS	PTC1	4.3	1.00	1.000	1.19	3.6
3	1	OUDS	RE4	0.8	3.05		1.98	1.2
3	2	DUDS	SV1	415.1	1.00		1.07	388.8
3	2	OUDS	DUR4	13.1	1.89		2.11	11.7
3	2	OUDS	DUR5	0.1	12.3		1.00	0.7
3	3	DUDS	FR1	272.3	1.00		1.06	257
3	3	DUDS	RF2	0.0	1.00		1.00	0.0
3	3	DUDS	RF4	0.0	1.00		1.00	0.0
3	3	OUDS	FE4	0.9	3.18		1.13	2.5
3	3	OUDS	RF4	0.0	1.44		1.21	0.0
3	4	DUDS	FR1	25.1	1.47		1.42	25.9
3	4	DUDS	FR3	100.9	2.75		1.51	183.4
3	4	DUDS	SV1	140.3	1.06		1.18	125.8
3	4	OUDS	DUR4	45.1	2.27		1.19	86.4
3	4	OUDS	FE4	0.0	3.83		1.74	0.0
3	4	OUDS	FR2	0.0	0.54		2.83	0.0
3	4	OUDS	RF4	0.2	1.75		1.66	0.2
3	4	OUDS	SUP4	0.0	4.28		1.59	0.0
3	5	DUDS	SV1	72.5	1.00		1.49	48.7
3	5	OUDS	DUR4	17.6	1.42		1.81	13.8
3	5	OUDS	FR5	0.1	37.97		2.35	1.6
3	5	OUDS	RE4	2.6	10.58		2.77	9.9
3	6	DUDS	FR5	7.0	47.87		1.40	239.3
3	6	DUDS	PTC1	42.3	1.00	1.000	2.10	20.1
3	6	OUDS	FE3	4.5	2.52		1.99	5.7
3	6	OUDS	FE4	19.2	2.39		1.15	39.8
3	7	DUDS	FR1	30.0	1.00		1.02	29.5
3	7	OUDS	DUR4	19.7	1.37		1.13	23.9
3	7	OUDS	FE4	4.9	2.10		1.06	9.6
3	7	OUDS	RF4	28.6	1.39		1.06	37.7

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
3	8	DUDS	SV1	155.1	1.21		1.18	158.6
3	8	OUDS	DUR4	13.2	1.16		1.12	13.6
3	8	OUDS	DUR5	0.2	10.42		1.48	1.5
3	8	OUDS	FE3	1.6	2.93		1.41	3.2
3	8	OUDS	FR5	0.1	29.54		1.28	1.8
3	9	OUDS	DUR4	11.7	4.00		1.31	35.8
3	9	OUDS	DUR5	0.1	7.59		1.89	0.4
3	9	OUDS	FE4	1.6	2.83		1.43	3.2
3	10	DUDS	DUR4	3.3	2.56		1.33	6.3
3	10	DUDS	DUR5	0.0	33.38		1.22	0.5
3	10	DUDS	SV1	189.6	1.09		1.03	202.2
3	10	OUDS	DUR4	18.1	2.59		1.29	36.3
3	10	OUDS	DUR5	1.8	12.35		1.78	12.2
3	10	WILD	PTC1	36.4	1.00	0.995	1.11	32.7
3	12	DUDS	DUR5	0.0	17.52		1.00	0.1
3	12	DUDS	PTC1	82.7	1.00	0.700	1.55	37.4
3	12	GFA	PTC3	2580.5	2.13	0.594	1.04	3150.1
3	12	OUDS	DUR4	28.1	2.04		1.38	41.7
3	12	OUDS	DUR5	0.3	11.34		2.16	1.5
3	12	OUDS	FE3	2.4	2.14		1.20	4.2
3	12	OUDS	RE4	8.1	2.65		2.38	8.9
4	1	DUDS	FR3	42.4	3.03		1.13	113.6
4	1	DUDS	TB1	2.6	1.00		1.76	1.5
4	1	OUDS	DUR4	89.2	1.38		1.20	102.2
4	1	OUDS	DUR5	0.7	11.36		1.00	8.4
4	1	OUDS	RE4	6.5	3.10		1.49	13.5
4	2	DUDS	PTC3	30.3	2.77	0.426	1.14	31.4
4	2	DUDS	SV1	301.6	1.21		1.02	357.2
4	2	GFA	PTC3	79.7	2.86	0.690	1.12	140.1
4	2	OUDS	DUR4	40.4	1.94		1.31	59.7
4	2	OUDS	FE1	0.0	0.29		3.51	0.0
4	2	OUDS	FE4	30.3	3.40		1.29	79.8
4	2	OUDS	PTC3	1.5	0.58	0.859	1.07	0.7
4	2	OUDS	SUP4	1.3	4.57		1.52	4.0
4	3	DUDS	FR1	106.4	1.05		1.69	65.9
4	3	DUDS	SV1	447.3	1.05		1.09	430.1

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
4	3	OUDS	DUR4	8.1	2.42		1.73	11.3
4	3	OUDS	DUR5	0.0	7.25		1.05	0.1
4	3	OUDS	RE4	24.6	2.59		2.72	23.5
4	7	DUDS	DUR5	0.5	25.36		1.08	12.8
4	7	DUDS	FR1	12.3	1.00		1.28	9.6
4	7	DUDS	FR3	2.0	3.40		1.40	4.9
4	7	DUDS	SV1	180.0	1.00		1.07	168.4
4	7	OUDS	DUR4	37.4	1.42		2.35	22.6
4	7	OUDS	DUR5	0.2	8.26		1.36	1.4
4	7	OUDS	RE4	0.5	8.62		2.49	1.8
4	8	OUDS	DUR4	15.3	0.94		2.56	5.6
4	8	OUDS	DUR5	1.2	9.35		2.50	4.5
4	8	OUDS	FE4	0.1	2.52		1.00	0.3
4	8	OUDS	FR1	2.1	1.05		1.61	1.4
4	8	OUDS	RE4	0.9	1.73		2.72	0.6
4	10	OUDS	DUR4	18.2	3.90		1.15	61.9
4	10	OUDS	DUR5	8.3	11.12		1.05	87.8
4	12	DUDS	DUR4	0.3	3.98		1.00	1.3
4	12	DUDS	FR1	5.6	1.24		1.02	6.8
4	12	DUDS	SV1	112.9	1.03		1.04	111.5
4	12	GFA	PTC3	69.6	2.22	0.660	1.06	96.4
4	12	OUDS	DUR4	0.1	2.03		1.00	0.2
4	12	OUDS	DUR5	0.2	12.64		1.00	2.9
4	12	OUDS	FE4	2.0	3.93		1.36	5.9
4	12	OUDS	RE4	0.4	4.47		1.21	1.4
4	12	WILD	MA2	0.6	4.43		1.59	1.6
4	13	OUDS	DUR5	0.0	4.63		1.04	0.1
4	13	OUDS	FE4	2.4	0.99		3.44	0.7
4	13	OUDS	RE4	0.3	1.00		3.74	0.1
4	13	OUDS	SUP4	0.1	1.82		3.28	0.0
4	13	WILD	MA2	2.3	6.63		7.79	1.9
4	14	DUDS	FR1	3.4	1.05		1.00	3.5
4	14	DUDS	SUP2	0.0	2.75		2.55	0.0
4	14	DUDS	SV1	353.9	1.04		1.05	352.8
4	14	OUDS	DUR4	20.2	1.15		1.44	16.2
4	14	OUDS	RF4	0.0	1.05		1.61	0.0

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
4	15	DUDS	FR1	26.0	1.16		1.03	29.5
4	15	DUDS	SV1	101.1	1.11		1.00	112.3
4	15	OUDS	DUR4	58.0	1.38		1.80	44.4
4	15	OUDS	RF2	0.1	0.77		1.00	0.0
4	15	OUDS	SUP1	1.6	2.46		1.65	2.4
4	17	DUDS	DUR4	5.3	4.52		1.90	12.6
4	17	DUDS	SV1	290.3	1.06		1.01	306.7
4	17	OUDS	DUR4	39.0	1.30		2.50	20.3
4	17	OUDS	RF4	11.8	1.20		2.27	6.2
4	18	OUDS	DUR4	48.1	2.57		1.21	102.1
4	18	OUDS	DUR5	5.9	13.35		1.13	69.0
4	18	OUDS	RE4	5.7	4.36		1.93	12.8
4	19	DUDS	DUR4	9.5	3.01		2.13	13.4
4	19	DUDS	DUR5	0.5	14.33		1.40	5.1
4	19	DUDS	FE3	4.7	2.29		1.88	5.8
4	19	DUDS	FR1	49.0	1.06		1.15	45.3
4	19	DUDS	FR3	26.1	3.91		1.36	74.8
4	19	DUDS	SV1	1350.6	1.08		1.09	1345.9
4	19	GFA	FE3	8.3	2.26		1.08	17.5
4	19	GFA	FR3	14.5	3.40		1.28	38.5
4	19	OUDS	DUR4	89.1	1.88		1.44	116.1
4	19	OUDS	DUR5	0.9	13.87		2.00	6.3
4	19	OUDS	FE4	0.7	6.34		1.92	2.1
4	19	OUDS	RE4	2.0	5.89		2.22	5.2
4	19	OUDS	SUP4	0.0	3.05		1.00	0.0
5	1	DUDS	FE4	0.2	2.93		1.00	0.7
5	1	DUDS	FR1	425.6	1.15		1.05	465
5	1	DUDS	FR3	72.1	3.50		1.03	243.9
5	1	DUDS	PTC3	40.2	3.10	0.700	1.06	82.5
5	1	DUDS	TB1	19.9	1.00		1.05	19.1
5	1	OUDS	DUR4	14.0	2.10		1.00	29.5
5	1	OUDS	FE4	12.1	3.46		1.05	39.7
5	1	OUDS	RF2	6.4	3.28		1.00	20.9
5	1	OUDS	TB3	0.8	2.64		1.49	1.4
5	2	OUDS	DUR4	12.6	1.57		1.09	18.3
5	2	OUDS	FE4	0.7	3.08		1.00	2.0

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
5	2	OUDS	RE4	4.8	3.16		1.00	15.2
5	2	WILD	PTC1	4.3	1.00	0.696	1.00	3.0
5	3	DUDS	SV1	712.9	1.00		1.00	712.9
5	3	OUDS	DUR4	55.3	1.39		2.13	36.1
5	3	OUDS	DUR5	0.7	8.52		2.40	2.6
5	3	OUDS	RE2	6.5	2.09		2.44	5.6
5	3	OUDS	SUP4	0.2	5.01		2.15	0.6
5	4	DUDS	FR1	56.2	1.29		2.19	33.0
5	4	DUDS	SV1	1176.0	1.55		1.07	1700.3
5	4	OUDS	DUR4	181.2	1.06		2.52	76.1
5	4	OUDS	DUR5	0.7	7.61		3.69	1.5
5	4	OUDS	RE4	77.6	3.20		3.13	79.4
5	5	OUDS	FE4	2.0	3.55		1.07	6.5
5	5	OUDS	FR5	0.0	24.48		1.10	0.9
5	6	OUDS	DUR4	49.3	1.64		1.38	58.2
5	6	OUDS	RF4	0.1	0.97		1.86	0.0
5	7	DUDS	DUR4	38.2	0.97		1.24	30.0
5	7	OUDS	DUR4	39.0	1.32		1.34	38.4
5	7	OUDS	DUR5	0.0	16.07		1.65	0.3
5	8	OUDS	DUR4	6.1	1.14		2.01	3.5
5	8	OUDS	DUR5	0.2	10.61		2.14	0.8
5	8	OUDS	FE4	3.4	1.80		1.51	4.0
5	8	OUDS	SUP4	0.0	3.48		1.89	0.0
5	9	DUDS	FR1	0.5	0.79		1.00	0.4
5	9	OUDS	FE4	3.1	0.50		1.00	1.5
5	10	OUDS	DUR4	9.5	1.83		1.58	11.0
5	10	OUDS	RE4	1.8	2.49		2.42	1.8
5	10	OUDS	SUP4	0.0	3.72		1.96	0.1
5	11	OUDS	DUR4	48.1	1.56		1.50	50.0
5	11	OUDS	RF4	7.4	1.31		1.87	5.2
5	12	DUDS	FE3	14.7	4.15		1.07	56.9
5	12	DUDS	FR1	38.6	1.00		1.56	24.8
5	12	DUDS	PTC1	159.6	1.00	0.816	1.72	75.8
5	12	DUDS	SV1	662.1	1.00		1.06	624.0
5	12	OUDS	DUR4	39.5	3.38		1.55	86.0
5	12	OUDS	DUR5	0.6	12.88		1.5	5.2

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
5	12	OUDS	FE4	2.3	2.40		1.00	5.6
5	12	OUDS	RE2	0.7	3.38		1.63	1.5
5	13	DUDS	FR1	21.4	1.07		2.23	10.2
5	13	OUDS	DUR4	49.5	2.61		1.52	85.2
5	13	OUDS	DUR5	0.6	10.61		2.30	2.6
5	13	OUDS	RE4	11.1	3.52		1.65	23.6
5	13	OUDS	SUP4	0.3	3.53		2.06	0.5
5	14	DUDS	SV1	4.6	1.00		1.15	4.0
5	14	OUDS	DUR4	56.9	1.34		1.65	46.3
5	14	OUDS	DUR5	0.2	8.11		2.37	0.7
5	14	OUDS	FE4	2.3	1.72		2.29	1.7
5	14	OUDS	RE4	10.4	2.46		2.59	9.9
5	15	DUDS	DUR4	5.8	2.20		1.30	9.9
5	15	DUDS	FE3	11.0	3.73		1.17	35.0
5	15	DUDS	SV1	145.3	1.11		1.02	157.4
5	15	OUDS	DUR4	252.0	1.81		1.50	303.5
5	15	OUDS	DUR5	21.0	10.27		1.85	116.8
5	15	OUDS	RE4	18.0	1.75		2.06	15.2
5	16	DUDS	FR1	139.7	1.12		1.04	149.9
5	16	DUDS	SV1	156.4	1.00		1.06	147.1
5	16	OUDS	DUR4	79.8	1.38		1.55	70.6
5	16	OUDS	DUR5	0.3	0.50		1.00	0.1
5	16	OUDS	FE4	3.1	2.13		1.00	6.7
5	16	OUDS	RE4	8.8	3.25		1.20	23.8
5	17	DUDS	FR1	1370.8	1.40		1.12	1714.9
5	17	DUDS	PTC1	7.2	1.00	1.000	2.13	3.4
5	17	GFA	RE2	3.4	7.78		1.00	26.3
5	17	OUDS	DUR4	54.6	2.93		1.84	87.3
5	17	OUDS	DUR5	0.4	14.00		3.57	1.4
5	17	OUDS	FR2	0.1	0.79		3.97	0.0
5	19	DUDS	FR1	40.6	1.05		1.08	39.4
5	19	DUDS	SV1	618.2	1.06		1.05	624.6
5	19	OUDS	DUR4	53.1	1.48		1.40	56.1
5	19	OUDS	RE4	10.5	3.21		3.00	11.3
6	1	DUDS	PTC1	114.4	1.00	0.828	1.75	54.0
6	1	DUDS	SV1	714.3	1.09		1.04	743.7

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
6	1	GFA	PTC3	77.6	1.97	1.000	1.78	85.4
6	1	OUDS	DUR4	28.2	1.96		1.00	55.2
6	1	OUDS	DUR5	0.8	11.91		1.00	9.6
6	1	OUDS	FE3	15.9	3.25		2.30	22.5
6	1	OUDS	FE4	85.8	2.77		1.21	196.1
6	1	OUDS	RE4	6.1	2.47		2.59	5.9
6	3	DUDS	PTC3	189.0	3.40	0.976	1.99	315.4
6	3	GFA	PTC3	320.1	2.60	0.715	1.24	480.7
6	3	OUDS	DUR4	21.1	1.92		1.52	26.7
6	3	OUDS	DUR5	0.1	12.66		1.00	1.6
6	3	OUDS	FE4	1.6	3.53		2.39	2.4
6	3	OUDS	RE1	0.5	1.00		2.97	0.2
6	3	WILD	MA2	9.3	1.07		1.11	9.0
6	4	GFA	PTC3	115.7	2.83	0.395	1.71	75.5
6	4	OUDS	FE4	3.6	2.54		1.88	4.8
6	4	OUDS	SUP4	0.1	3.11		1.72	0.2
6	5	DUDS	FR1	1548.9	1.00		1.05	1472.6
6	5	OUDS	DUR4	33.7	2.40		1.17	68.9
6	5	OUDS	RF4	24.4	1.59		1.20	32.3
6	5	OUDS	SUP4	8.8	3.78		1.12	29.6
6	5	WILD	MA2	84.6	2.32		1.00	196.6
6	6	DUDS	DUR4	1.4	3.95		1.26	4.4
6	6	DUDS	FE3	4.4	2.66		1.32	8.8
6	6	DUDS	SV1	686.8	1.11		1.16	655.1
6	6	OUDS	DUR4	50.2	2.67		1.16	115.8
6	6	OUDS	RE4	17.1	3.09		1.30	40.5
6	7	GFA	PTC3	174.0	2.40	0.694	1.08	268.8
6	7	OUDS	FE4	28.7	0.91		2.59	10.1
6	7	OUDS	SUP2	0.4	3.86		1.30	1.1
6	8	DUDS	SV1	17.9	1.00		1.00	17.9
6	9	DUDS	FR3	9.2	2.83		1.22	21.4
6	9	DUDS	PTC1	58.8	1.00	1.000	1.25	47.2
6	9	OUDS	DUR4	3.1	3.06		1.32	7.1
6	9	OUDS	FE4	11.0	2.83		1.15	26.9
6	9	OUDS	RF1	0.5	1.00		2.36	0.2
6	9	OUDS	RF4	17.8	1.95		1.14	30.4

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
6	10	DUDS	FR1	95.2	1.92		1.07	171.0
6	10	OUDS	RE4	8.8	4.89		3.73	11.5
6	10	OUDS	SUP4	0.0	2.93		1.00	0.1
6	11	GFA	FR1	42.9	1.00		1.68	25.6
6	11	OUDS	DUR4	0.3	1.57		2.16	0.2
6	11	OUDS	FE3	0.7	4.18		2.03	1.4
6	11	OUDS	SUP4	0.4	4.64		1.86	1.1
6	12	DUDS	PTC1	34.7	1.00	0.931	1.85	17.4
6	12	DUDS	PTC3	117.2	2.28	0.508	1.85	73.5
6	12	DUDS	RE2	0.0	3.93		3.97	0.0
6	12	GFA	PTC3	552.4	2.75	0.695	1.16	908.0
6	12	OUDS	DUR4	57.8	1.96		1.5	75.3
6	12	OUDS	DUR5	0.1	12.79		1.00	1.8
6	12	OUDS	FE3	12.1	3.21		1.15	34.0
6	12	OUDS	RE2	0.0	1.80		2.45	0.0
6	12	OUDS	RE4	1.1	3.36		2.53	1.4
6	14	DUDS	FE3	1.8	3.18		1.08	5.3
6	14	DUDS	SV1	27.0	1.01		1.01	27.1
6	14	OUDS	DUR4	4.5	1.54		1.20	5.8
6	14	OUDS	FE4	2.8	3.45		1.06	9.2
6	14	OUDS	SUP4	0.5	3.36		1.00	1.8
6	15	DUDS	RE1	6.6	1.00		2.07	3.2
6	15	OUDS	DUR4	42.8	2.13		1.80	50.6
6	15	OUDS	DUR5	1.3	12.71		1.00	16.1
6	15	OUDS	FE4	16.4	2.57		1.37	30.9
6	15	OUDS	SUP4	0.2	3.74		2.01	0.5
6	16	DUDS	FR1	14.5	1.00		1.57	9.2
6	16	DUDS	FR3	1.3	2.78		1.70	2.2
6	16	DUDS	PTC1	13.5	1.00	0.951	1.33	9.6
6	16	DUDS	SV1	8.6	1.09		1.00	9.4
6	16	GFA	FR3	4.6	2.33		1.05	10.3
6	16	OUDS	DUR4	6.0	1.18		1.58	4.4
6	16	OUDS	FE4	2.5	2.24		1.44	4.0
6	16	OUDS	RE4	0.4	2.03		1.74	0.5
6	16	OUDS	SUP4	0.1	3.27		1.28	0.3
6	17	DUDS	FR3	7.9	2.59		1.20	17.0

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
6	17	DUDS	SV1	230.6	1.33		1.02	300.6
6	17	OUDS	DUR4	178.5	2.02		1.08	333.6
6	17	OUDS	FE4	8.3	2.46		1.08	18.9
6	17	OUDS	FR3	1.1	0.52		1.00	0.6
6	17	OUDS	RE1	3.0	0.50		1.00	1.5
6	17	OUDS	RE4	3.8	3.82		1.53	9.5
6	17	WILD	MA2	52.6	3.61		1.00	189.8
6	18	DUDS	PTC3	36.7	3.27	0.292	1.39	25.1
6	18	DUDS	SV1	131.3	1.33		1.07	163.1
6	18	GFA	PTC3	38.5	2.59	0.484	1.11	43.6
6	18	OUDS	DUR4	66.3	2.43		1.62	99.2
6	18	OUDS	DUR5	0.2	12.47		2.77	0.7
6	18	OUDS	FE3	3.0	2.79		1.60	5.1
6	18	OUDS	RE4	0.6	4.38		1.84	1.4
6	18	OUDS	SUP4	0.2	5.12		2.53	0.3
6	18	WILD	MA2	7.2	2.55		2.23	8.3
6	20	DUDS	FE3	42.3	3.33		1.18	119.8
6	20	GFA	FE3	11.7	3.05		1.14	31.5
6	20	OUDS	FE3	37.0	3.46		1.25	102.7
6	21	DUDS	FE3	0.3	3.39		1.07	0.9
6	21	DUDS	FR1	49.9	3.52		1.00	175.9
6	21	DUDS	FR3	0.1	2.16		1.00	0.1
6	21	OUDS	FE3	13.0	1.00		2.52	5.1
6	21	OUDS	FR3	0.5	1.55		3.26	0.2
6	21	OUDS	FR5	0.1	24.39		1.53	1.5
6	21	OUDS	SUP4	0.0	1.00		2.35	0.0
6	22	GFA	PTC3	98.1	3.78	0.974	1.71	211.4
6	22	OUDS	RF1	7.9	1.00		1.90	4.1
8	1	DUDS	DUR4	10.3	7.62		1.00	78.3
8	1	OUDS	DUR4	13.6	1.17		1.12	14.3
8	2	DUDS	FR3	39.6	3.12		1.00	123.7
8	2	DUDS	FR5	0.1	36.61		1.00	1.8
8	2	OUDS	DUR4	48.4	1.43		1.35	51.2
8	2	OUDS	DUR5	0.2	5.83		1.58	0.7
8	2	OUDS	FE4	1.3	1.77		1.50	1.5
8	3	DUDS	FE3	110.2	2.26		1.24	201.4

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
8	3	GFA	FE3	11.2	1.88		1.00	21.1
8	3	OUDS	FE3	2.1	4.17		1.63	5.5
8	3	OUDS	FE4	32.3	3.32		1.23	87.0
8	5	DUDS	FR3	3.3	2.64		1.10	8.0
8	5	DUDS	TB1	347.9	1.00		1.09	320.3
8	5	GFA	TB3	6.3	3.39		1.00	21.3
8	5	OUDS	RF2	2.9	1.15		1.00	3.3
8	5	OUDS	SUP4	0.1	5.09		2.62	0.1
8	5	OUDS	TB1	136.3	1.00		1.23	111.2
8	7	DUDS	FE3	27.5	2.48		1.11	61.2
8	7	GFA	FR3	3.4	3.19		1.00	10.8
8	7	GFA	RE1	12.8	1.00		1.00	12.8
8	7	OUDS	FE4	6.7	1.57		1.00	10.5
8	8	DUDS	FE4	4.3	2.74		1.11	10.7
8	8	DUDS	FR3	1.4	2.42		1.55	2.2
8	8	DUDS	TB3	10.6	2.89		1.00	30.6
8	8	OUDS	FE4	7.1	1.95		1.06	12.9
8	8	OUDS	FR3	0.1	0.50		1.00	0.0
8	8	OUDS	TB3	10.3	2.62		1.04	25.8
8	9	OUDS	SUP4	0.0	25.55		1.00	1.0
8	10	DUDS	FR1	82.9	1.00		1.10	75.5
8	10	DUDS	FR3	6.8	3.86		1.02	25.6
8	10	GFA	FR1	3.9	1.00		1.13	3.4
8	10	OUDS	DUR4	0.7	1.71		1.62	0.7
8	10	OUDS	FE4	4.4	3.84		1.16	14.4
8	11	DUDS	DUR4	13.5	3.61		2.68	18.2
8	11	DUDS	FR1	44.7	1.00		1.60	28.0
8	11	DUDS	FR3	24.5	2.94		1.16	62.2
8	11	DUDS	TB3	102.7	2.18		1.28	175
8	11	OUDS	DUR4	70.1	1.31		1.23	74.7
8	11	OUDS	DUR5	0.4	12.08		1.00	5.0
8	11	OUDS	FE3	4	1.64		2.23	2.9
8	11	OUDS	FE4	31.6	1.72		1.34	40.5
8	11	OUDS	FR1	7.8	1.41		1.41	7.8
8	11	OUDS	FR2	6.7	0.68		2.52	1.8
8	11	OUDS	FR5	0.4	31.5		1.39	8.8

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
8	16	DUDS	FR2	15.9	0.99		2.64	6.0
8	60	DUDS	FR1	105.2	1.14		2.29	52.1
8	60	DUDS	PTC1	208.5	1.00	0.864	1.66	108.3
8	60	DUDS	PTC3	46.6	2.70	0.686	1.60	53.8
8	60	GFA	PTC3	665.6	1.28	0.700	1.18	504.0
8	60	OUDS	PTC3	33.6	1.65	1.000	1.00	55.4
8	60	OUDS	RE1	424.6	1.00		1.73	244.8
9	3	OUDS	DUR4	6.2	1.47		1.40	6.5
9	3	OUDS	FE4	23.3	2.10		1.20	40.7
9	3	OUDS	FR5	0.0	30.2		1.51	0.6
9	3	OUDS	RE1	30.0	1.00		1.42	21.0
9	4	OUDS	DUR4	24.4	1.62		1.15	34.2
9	5	DUDS	FE3	8.9	3.00		1.19	22.5
9	5	GFA	FE3	4.1	2.59		1.47	7.3
9	5	OUDS	DUR4	10.3	2.69		1.92	14.4
9	5	OUDS	DUR5	0.1	11.61		2.32	0.3
9	7	DUDS	FR1	61.1	1.34		1.00	81.8
9	7	DUDS	FR2	0.7	2.94		2.08	1.0
9	7	DUDS	FR3	0.6	2.78		1.19	1.3
9	7	DUDS	PTC1	24.8	1.00	0.321	3.80	2.1
9	7	OUDS	FE4	7.3	1.87		1.09	12.5
9	7	OUDS	FR5	0.0	21.74		1.00	0.4
9	7	WILD	MA2	2.3	2.05		1.02	4.6
9	9	OUDS	DUR4	27.3	1.02		2.20	12.7
9	9	OUDS	FE4	0.3	1.70		3.64	0.1
9	9	WILD	MA1	282.0	1.00		2.04	138.4
9	10	DUDS	SV1	1.2	1.14		1.00	1.4
9	10	OUDS	FE4	29.4	2.52		1.36	54.4
9	10	OUDS	SUP4	0.1	2.58		1.00	0.3
9	12	DUDS	FR3	33.3	3.30		1.00	109.8
9	12	OUDS	FE3	0.4	1.00		1.00	0.4
9	12	OUDS	FR3	51.8	2.05		1.06	99.5
9	13	DUDS	PTC1	52.5	1.00	0.824	1.16	37.3
9	13	OUDS	DUR4	58.8	1.42		1.41	59.4
9	13	OUDS	DUR5	0.2	8.00		1.55	0.9
9	15	GFA	FR1	3.4	6.70		1.00	22.7

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
9	15	GFA	TB1	1.2	1.00		1.00	1.2
9	19	DUDS	FE3	2.4	3.72		1.23	7.1
9	19	DUDS	FR3	1.7	2.90		1.07	4.5
9	19	OUDS	DUR4	30.2	1.25		1.17	32.2
9	20	DUDS	SV1	865.6	1.04		1.00	900.9
9	20	OUDS	FE4	2.3	2.47		2.37	2.4
9	21	DUDS	DUR4	2.1	9.80		1.19	17.3
9	21	DUDS	DUR5	0.1	35.93		1.20	3.5
9	21	DUDS	SV1	86.9	1.00		1.00	86.9
9	21	GFA	FR1	27.5	1.00		1.12	24.5
9	21	OUDS	DUR4	18.5	1.59		1.19	24.7
9	21	OUDS	DUR5	0.8	7.39		2.65	2.2
9	21	OUDS	RE2	0.0	1.13		2.79	0.0
9	22	DUDS	FR1	12.5	1.09		3.02	4.5
9	22	DUDS	FR3	10.2	3.44		1.32	26.6
9	22	DUDS	PTC1	136.1	1.00	0.907	3.15	39.2
9	22	DUDS	RF1	1.6	5.84		1.20	7.6
9	22	DUDS	SV1	694.4	1.00		1.17	592.3
9	22	OUDS	DUR4	206.6	4.08		1.50	563.3
9	22	OUDS	FE1	7.4	1.00		5.45	1.4
9	22	OUDS	FE4	2.0	3.52		1.15	6.1
9	22	OUDS	RF1	78.3	1.00		1.39	56.1
9	22	OUDS	SUP4	26.0	2.18		1.67	33.9
10	2	GFA	RE1	0.8	1.39		1.00	1.1
10	2	OUDS	FE4	0.2	1.75		2.79	0.1
10	2	OUDS	SUP4	0.6	2.94		1.35	1.4
10	2	WILD	RE4	0.1	0.50		1.00	0.0
10	2	WILD	SUP4	0.2	3.60		1.24	0.6
10	3	OUDS	FE4	0.0	1.96		1.90	0.0
10	3	OUDS	RF4	2.9	1.13		1.82	1.8
10	4	DUDS	DUR4	0.8	3.99		3.35	0.9
10	4	DUDS	FR2	44.9	1.79		2.60	30.8
10	4	DUDS	TB3	9.4	3.13		1.22	23.9
10	4	GFA	TB3	2.4	3.28		1.07	7.4
10	4	OUDS	DUR4	15.6	2.17		1.26	27.0
10	4	OUDS	FE4	0.0	2.41		1.00	0.1

continued

Table A.12—The Round 1 proxy national forest visit estimates (1,000s) for each stratum and forest (continued)

Region	Forest	Site-type	Proxy	Proxy count	ABAR	PBAR	SF	Proxy NFV
				thousands				*thousands*
10	4	OUDS	RE4	2.2	4.27		2.65	3.6
10	4	OUDS	SUP2	0.1	6.22		1.06	0.9
10	4	OUDS	TB3	5.4	3.06		1.34	12.3
10	5	DUDS	FR1	0.3	1.08		1.98	0.2
10	5	DUDS	PTC1	41.0	1.00	0.389	2.60	6.1
10	5	OUDS	FE4	1.1	3.19		2.27	1.6
10	5	OUDS	SUP4	0.5	3.70		2.11	0.9
10	5	WILD	SUP4	0.2	3.80		1.00	0.8

ABAR = Conversion coefficient to convert annual proxy counts obtained from the forests to site visit estimates; PBAR = The average proportion of exiting vehicles (groups) in the stratum that are last-exiting recreationists (LERs); SF = The average number of sites visited (nonproxy and proxy) per national forest trip by a visitor in the proxy stratum; NFV = National forest visits; DUDS = Day-use developed sites; OUDS = Overnight-use developed sites; GFA = General forest area sites; WILD = Wilderness sites.

Table A.13—The number of special events (n) and special events visits for each Round 1 forest

R	F	n	Visits	R	F	n	Visits	R	F	n	Visits
1	2	22	26,160	4	1	23	74,362	6	8	9	7,938
1	3	9	4,934	4	3	30	4,352	6	10	11	2,999
1	8	5	1,093	4	8	3	1,185	6	11	3	520
1	10	1	1,000	4	10	9	4,415	6	12	19	14,206
1	11	26	16,223	4	12	1	58	6	15	11	1,330
1	12	4	2,423	4	13	13	3,295	6	17	33	31,702
1	14	35	4,734	4	14	13	3,839	6	18	21	17,796
1	16	26	6,411	4	17	51	164,779	6	20	34	89,569
1	17	13	652	4	19	59	39,468	6	21	6	1,128
1	18	4	475	5	1	34	49,631	8	1	2	500
2	2	12	1,060	5	2	17	7,384	8	2	30	3,119
2	3	28	7,520	5	3	47	43,832	8	4	42	16,803
2	4	26	5,301	5	4	15	2,190	8	5	19	32,784
2	6	18	3,591	5	6	33	11,659	8	7	15	11,063
2	7	14	7,456	5	7	38	55,215	8	10	153	12,020
2	10	10	10,156	5	8	14	26,522	8	11	17	4,392
2	11	4	40,388	5	10	2	3,600	8	13	39	3,201
2	12	75	34,216	5	11	20	19,715	8	16	4	2,225
2	14	8	1,296	5	12	88	104,536	9	4	31	11,323
2	15	37	10,009	5	13	58	49,368	9	8	9	6,825
3	1	85	71,529	5	14	20	8,190	9	10	8	1,163
3	2	12	7,885	5	15	28	56,557	9	13	22	19,156
3	3	8	362	5	16	25	56,903	9	14	22	3,140
3	4	39	11,194	5	17	86	24,356	9	15	34	10,074
3	5	102	136,823	5	19	25	205,130	9	19	22	12,226
3	6	14	2,079	6	1	19	3,857	9	20	20	2,003
3	7	11	2,660	6	3	12	19,993	9	21	23	33,410
3	8	2	300	6	4	5	731	10	2	3	217
3	10	15	827	6	6	62	35,380	10	3	10	6,250
3	12	9	17,988	6	7	11	2,130	10	4	20	4,268

R = Region; F = Forest.

Table A.14—The site visit and national forest visit estimates for each Round 1 forest

R	F	SV	CV	90% Lower	90% Upper	NFV	CV	90% Lower	90% Upper
1	2	1,540,268	16.3	1,128,516	1,952,020	1,330,965	18.0	937,564	1,724,366
1	3	793,078	11.9	637,926	948,230	711,940	12.5	565,389	858,491
1	4	882,262	11.9	709,935	1,054,589	776,695	13.1	609,492	943,898
1	5	1,214,498	35.0	515,279	1,913,717	1,071,638	38.6	391,701	1,751,575
1	8	909,276	19.6	615,881	1,202,671	825,616	19.9	554,697	1,096,535
1	10	1,287,766	12.3	1,026,567	1,548,965	1,091,655	10.0	911,348	1,271,962
1	11	1,779,333	10.9	1,460,044	2,098,622	1,663,886	11.0	1,364,093	1,963,679
1	12	441,265	19.4	300,323	582,207	433,765	19.7	292,908	574,622
1	14	1,443,739	13.8	1,115,926	1,771,552	1,334,720	14.3	1,021,690	1,647,750
1	15	520,264	10.7	428,444	612,084	481,335	11.5	390,660	572,010
1	16	1,506,711	16.0	1,111,252	1,902,170	1,424,147	16.1	1,046,393	1,801,901
1	17	630,268	18.5	438,649	821,887	515,260	19.1	353,097	677,423
1	18	667,621	14.9	503,646	831,596	641,471	15.4	478,756	804,186
2	2	991,905	22.8	619,912	1,363,898	800,590	24.1	483,508	1,117,672
2	3	1,721,544	16.8	1,244,623	2,198,465	1,425,982	18.9	981,921	1,870,043
2	4	3,748,105	23.2	2,318,864	5,177,346	3,231,554	22.7	2,022,717	4,440,391
2	6	1,119,297	13.7	866,792	1,371,802	969,276	13.3	757,298	1,181,254
2	7	144,941	18.1	101,686	188,196	135,087	18.7	93,607	176,567
2	9	1,675,624	24.9	988,617	2,362,631	1,272,904	28.0	685,972	1,859,836
2	10	7,914,938	14.8	5,991,318	9,838,558	6,639,554	16.2	4,872,589	8,406,519
2	11	1,940,411	5.1	1,776,629	2,104,193	1,448,482	8.5	1,246,813	1,650,151
2	12	4,382,441	11.7	3,537,134	5,227,748	3,961,126	12.2	3,165,699	4,756,553
2	13	2,853,183	18.7	1,974,494	3,731,872	2,425,852	19.2	1,660,393	3,191,311
2	14	644,007	14.6	489,405	798,609	543,167	16.3	397,364	688,970
2	15	10,285,047	2.9	9,791,404	10,778,690	9,370,212	3.4	8,853,763	9,886,661
3	1	2,516,710	12.5	1,999,211	3,034,209	2,109,286	12.3	1,684,089	2,534,483
3	2	1,079,051	12.8	851,442	1,306,660	997,127	13.3	779,656	1,214,598
3	3	2,797,821	15.5	2,083,593	3,512,049	2,613,942	15.9	1,930,422	3,297,462
3	4	2,946,048	16.0	2,168,552	3,723,544	2,482,233	17.0	1,789,144	3,175,322
3	5	2,882,454	11.6	2,334,521	3,430,387	2,288,591	13.2	1,791,120	2,786,062
3	6	2,049,322	19.9	1,379,483	2,719,161	1,498,197	22.8	936,885	2,059,509
3	7	657,494	21.8	422,011	892,977	531,834	21.6	342,749	720,919
3	8	929,203	20.4	617,815	1,240,591	836,137	21.4	541,233	1,131,041
3	9	823,226	17.3	588,411	1,058,041	756,219	17.7	535,808	976,630
3	10	1,393,969	10.9	1,145,154	1,642,784	1,268,194	11.2	1,035,312	1,501,076
3	12	6,251,558	20.6	4,136,118	8,366,998	5,850,377	28.2	3,140,825	8,559,929
4	1	1,583,217	9.8	1,328,333	1,838,101	1,432,099	10.0	1,196,074	1,668,124
4	2	1,449,466	12.3	1,157,322	1,741,610	1,274,714	13.2	997,738	1,551,690
4	3	2,815,455	15.2	2,111,197	3,519,713	2,563,277	16.5	1,865,907	3,260,647
4	7	791,440	14.4	604,479	978,401	693,850	14.8	524,534	863,166
4	8	529,248	13.7	410,200	648,296	478,499	14.2	366,647	590,351
4	10	919,414	17.9	648,026	1,190,802	867,279	18.1	608,704	1,125,854
4	12	685,436	11.1	560,420	810,452	653,177	12.5	519,350	787,004
4	13	421,625	11.7	340,411	502,839	356,924	12.7	282,095	431,753

continued

Table A.14—The site visit and national forest visit estimates for each Round 1 forest (continued)

R	F	SV	CV	90% Lower	90% Upper	NFV	CV	90% Lower	90% Upper
4	14	1,092,391	11.9	877,699	1,307,083	954,059	12.5	757,432	1,150,686
4	15	3,006,107	16.1	2,209,467	3,802,747	2,846,337	17.1	2,045,829	3,646,845
4	17	3,911,011	24.9	2,311,047	5,510,975	3,566,310	25.9	2,044,144	5,088,476
4	18	3,277,173	8.4	2,823,631	3,730,715	2,972,797	9.0	2,531,662	3,413,932
4	19	5,113,521	11.7	4,128,773	6,098,269	4,593,478	12.1	3,676,623	5,510,333
5	1	3,542,543	10.2	2,947,091	4,137,995	3,286,437	10.1	2,738,324	3,834,550
5	2	694,873	18.5	483,179	906,567	669,221	19.1	458,559	879,883
5	3	2,532,775	7.7	2,212,753	2,852,797	2,137,252	7.4	1,877,619	2,396,885
5	4	5,665,421	12.4	4,509,824	6,821,018	4,205,619	15.1	3,159,776	5,251,462
5	5	536,201	23.9	325,325	747,077	473,657	25.1	278,417	668,897
5	6	913,754	16.2	669,703	1,157,805	720,061	16.7	522,795	917,327
5	7	1,753,021	12.2	1,402,134	2,103,908	1,557,785	12.4	1,240,776	1,874,794
5	8	338,022	8.2	292,696	383,348	265,528	8.3	229,222	301,834
5	9	136,514	18.4	95,281	177,747	109,048	20.6	72,173	145,923
5	10	474,786	16.5	346,266	603,306	414,763	17.4	296,087	533,439
5	11	1,183,735	9.0	1,008,643	1,358,827	989,170	9.5	835,363	1,142,977
5	12	2,187,847	8.7	1,874,292	2,501,402	1,859,602	9.0	1,583,249	2,135,955
5	13	1,800,688	15.5	1,342,179	2,259,197	1,439,502	16.7	1,044,724	1,834,280
5	14	3,055,557	9.7	2,568,839	3,542,275	2,675,186	10.4	2,219,348	3,131,024
5	15	2,350,089	10.8	1,933,406	2,766,772	1,862,863	11.8	1,501,544	2,224,182
5	16	2,191,503	12.4	1,745,740	2,637,266	1,812,528	12.4	1,443,068	2,181,988
5	17	4,679,930	12.8	3,692,737	5,667,123	3,969,030	13.2	3,109,742	4,828,318
5	19	4,135,176	14.4	3,154,676	5,115,676	3,411,650	15.1	2,564,968	4,258,332
6	1	3,817,977	9.2	3,239,049	4,396,905	3,109,377	9.7	2,610,998	3,607,756
6	2	326,886	16.9	236,046	417,726	277,753	16.8	201,128	354,378
6	3	2,510,024	14.4	1,913,573	3,106,475	1,754,789	18.4	1,222,391	2,287,187
6	4	344,687	18.5	239,512	449,862	264,392	20.7	174,271	354,513
6	5	3,928,503	18.0	2,763,719	5,093,287	3,600,430	18.1	2,529,387	4,671,473
6	6	5,089,394	27.7	2,771,836	7,406,952	4,369,485	28.3	2,335,758	6,403,212
6	7	621,416	25.2	363,545	879,287	568,662	27.1	315,223	822,101
6	8	470,480	14.4	358,661	582,299	407,329	15.7	301,953	512,705
6	9	629,966	18.3	439,861	820,071	538,273	19.0	370,179	706,367
6	10	667,442	18.6	463,447	871,437	544,996	20.4	361,755	728,237
6	11	739,177	16.1	543,208	935,146	641,846	17.7	455,005	828,687
6	12	2,443,245	17.8	1,727,618	3,158,872	1,964,986	25.0	1,155,753	2,774,219
6	14	582,245	16.1	428,388	736,102	541,906	16.0	398,888	684,924
6	15	1,140,842	14.9	861,986	1,419,698	734,747	13.9	567,134	902,360
6	16	539,814	15.0	406,583	673,045	484,258	16.5	352,819	615,697
6	17	2,698,559	9.4	2,279,971	3,117,147	2,545,349	12.4	2,024,290	3,066,408
6	18	2,155,960	11.7	1,742,113	2,569,807	1,685,176	12.4	1,340,202	2,030,150
6	20	541,778	6.2	486,638	596,918	480,939	7.6	420,468	541,410
6	21	570,683	19.5	387,591	753,775	526,951	20.7	347,276	706,626
6	22	2,965,851	12.8	2,342,516	3,589,186	1,890,334	13.6	1,466,150	2,314,518
8	1	1,290,650	48.9	253,360	2,327,940	1,258,335	50.6	211,151	2,305,519

continued

Table A.14—The site visit and national forest visit estimates for each Round 1 forest (continued)

R	F	SV	CV	90% Lower	90% Upper	NFV	CV	90% Lower	90% Upper
8	2	3,161,427	22.5	1,989,594	4,333,260	2,980,516	23.1	1,845,871	4,115,161
8	3	2,375,587	19.9	1,597,027	3,154,147	2,135,630	21.3	1,388,819	2,882,441
8	4	2,766,892	14.0	2,128,157	3,405,627	2,497,810	14.4	1,904,867	3,090,753
8	5	2,601,648	19.5	1,765,679	3,437,617	2,099,015	21.0	1,374,499	2,823,531
8	6	788,629	28.8	415,067	1,162,191	617,826	30.7	305,415	930,237
8	7	3,287,829	19.9	2,211,285	4,364,373	3,191,886	19.8	2,149,745	4,234,027
8	8	3,734,117	13.6	2,899,480	4,568,754	3,413,795	13.8	2,637,836	4,189,754
8	9	1,600,007	18.2	1,120,480	2,079,534	1,389,960	20.1	929,652	1,850,268
8	10	2,127,966	19.7	1,438,662	2,817,270	2,077,521	19.8	1,400,391	2,754,651
8	11	8,729,381	16.4	6,381,450	11,077,312	6,708,041	15.2	5,031,784	8,384,298
8	12	1,489,166	17.2	1,066,720	1,911,612	1,335,025	17.4	953,275	1,716,775
8	13	568,275	16.2	416,856	719,694	532,519	17.2	382,267	682,771
8	16	962,507	30.0	487,334	1,437,680	472,096	29.8	240,624	703,568
8	60	1,735,260	15.1	1,303,649	2,166,871	1,233,377	25.3	719,648	1,747,106
9	3	2,427,538	12.1	1,944,342	2,910,734	2,157,836	12.2	1,724,167	2,591,505
9	4	1,669,777	26.8	932,751	2,406,803	1,451,228	28.3	775,381	2,127,075
9	5	739,641	18.8	511,011	968,271	656,736	21.3	426,657	886,815
9	7	836,237	12.6	663,431	1,009,043	738,423	13.2	577,593	899,253
9	8	770,514	10.3	639,865	901,163	564,808	10.4	468,221	661,395
9	9	5,112,941	17.1	3,678,434	6,547,448	2,879,016	18.2	2,016,789	3,741,243
9	10	827,205	13.3	645,595	1,008,815	716,186	13.9	552,713	879,659
9	12	738,810	22.1	469,672	1,007,948	706,735	24.5	421,699	991,771
9	13	2,643,564	23.9	1,604,197	3,682,931	2,497,236	24.6	1,488,332	3,506,140
9	14	590,996	15.1	443,898	738,094	570,495	15.5	424,976	716,014
9	15	36,274	23.1	22,502	50,046	36,229	23.1	22,459	49,999
9	19	1,754,346	23.5	1,075,852	2,432,840	1,686,491	24.6	1,004,893	2,368,089
9	20	3,951,020	12.2	3,157,093	4,744,947	3,789,674	12.3	3,023,062	4,556,286
9	21	1,004,152	6.7	894,041	1,114,263	838,639	7.2	739,860	937,418
9	22	2,956,041	13.9	2,281,101	3,630,981	2,143,895	13.5	1,669,482	2,618,308
10	2	384,810	22.2	244,279	525,341	294,818	22.1	187,517	402,119
10	3	2,289,876	23.1	1,418,206	3,161,546	1,983,599	23.2	1,226,183	2,741,015
10	4	841,889	33.1	384,141	1,299,637	638,127	29.6	326,920	949,334
10	5	297,429	18.3	207,976	386,882	262,645	18.7	181,755	343,535
All		239,009,917	1.90	231,554,913	246,464,921	204,358,864	2.05	197,468,684	211,249,044

R= Region; F= Forest; SV = Site visits; CV = Coefficient of variation; NFV = National forest visits.

Zarnoch, S.J.; White, E.M.; English, D.B.K. [and others]. 2011. The National Visitor Use Monitoring methodology and final results for round 1. Gen. Tech. Rep. SRS–144. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 74 p.

A nationwide, systematic monitoring process has been developed to provide improved estimates of recreation visitation on National Forest System lands. Methodology is presented to provide estimates of site visits and national forest visits based on an onsite sampling design of site-days and last-exiting recreationists. Stratification of the site days, based on site type and use level, is used to improve the estimates by reducing variability. Forests are sampled on a 4-year cycle, with a fourth of the forests sampled each year.

The site visit and national forest visit estimates for each of the 121 forests sampled in round 1 (2000 to 2003) are presented along with their coefficients of variation and 90-percent confidence intervals. In addition, these estimates are decomposed into their nonproxy, proxy, and Special Events components which provide a level of transparency important for understanding the estimation process and for building credibility among the users of these National Visitor Use Monitoring estimates.

The concepts, equations, and data presented are reinforced by illustrating a typical analysis of the visitation estimation process for the Beaverhead-Deerlodge National Forest. This includes site-day characteristics of the nonproxy and proxy strata, information about the National Visitor Use Monitoring sampling process, and detailed calculation of the national forest visit estimate for the nonproxy, proxy, and Special Event components of the visitation estimate.

The total national visitation estimate is the summation of all the individual forest visit estimates. The national site visit estimate for 2004 was 239,009,917 with a 90-percent confidence interval of 231,554,913 to 246,464,921 and a coefficient of variation of 1.90 percent. The national forest visit estimate, circa 2004, was 204,358,864 with a 90-percent confidence interval of 197,468,684 to 211,249,044 and a coefficient of variation of 2.05.

Keywords: Model-based estimates, National Visitor Use Monitoring, NVUM, outdoor recreation, recreation sampling.

The Forest Service, United States Department of Agriculture (USDA), is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

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Research Station**

General Technical
Report SRS–144

The National Visitor Use Monitoring Methodology and Final Results for Round 1

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