



Recreation Research Update



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Recreation and Fire: A Study of Year-Round and Seasonal Homeowners

A management report on a study of fire attitudes of seasonal and year-round homeowners is now available. The report was completed by Drs. Christine Vogt and Charles Nelson (Michigan State University). In an effort to better understand public attitudes about fire, a study was conducted via a mailed survey of residents within and proximate to the San Bernardino (California), the Grand Mesa, Uncompahgre, Gunnison (Colorado), and the Apalachicola National Forests (Florida). Year-round and seasonal homeowners and special use permittees holding cabins on FS land participated.

The majority of respondents had observed effects of wildland fires on forests and had personally witnessed a wildfire. More than half of all homeowners, with the exception of special use cabin permittees in Colorado, were very concerned about wildfires in their state. A similar level of concern was found for wildfires resulting in losses of home or lives.

Respondents from California were more likely to have implemented firewise characteristics on their homesites than were respondents from Colorado or Florida. Most respondents from California also had local or federal requirements for vegetation removal. Such requirements were rare among the other states' respondents.

Prescribed burns, mechanical fuel reduction, and defensible space were rated for general attitude and support or opposition as fuel management strategies. Florida respondents were most supportive of prescribed fire. Respondents from California were almost evenly divided in support, neutrality, and opposition of prescribed burns.

Hundreds of respondents provided open-ended comments. The majority of comments from California were negatively focused on prescribed fire escapes. Skepticism over the benefits of firewise practices were also common. In Colorado, the majority of comments were also focused on escape of prescribed fire. In contrast, the most common comment from Florida was support for prescribed fire.

While the survey focused on three of many potential management alternatives to reduce the incidence and severity of wildfire, each was included in the President's Healthy Forest Initiative and in the Healthy Forests Restoration Act of 2003.

Realtors, local officials, educators, developers, builders, landscape contractors, demonstration sites, and the insurance industry all have important and often complementary roles in public education about wildfire and firewise behavior. *Contact Pat Winter at 909-680-1557 or pwinter@fs.fed.us for a copy of the report.*

Chattahoochee NF Recreation Fee Study

A study of the Chattahoochee NF Recreation Fee Demonstration Program is now available. Jim Absher, along with co-authors from Clemson University (Gerard Kyle, William Hammitt, Kenneth Backman, Jennifer Cavin and James Gould), investigated visitor attitudes and preferences related to fees in general, and the Chattahoochee National Forest fee program in particular. Respondents completed a mailback survey after being contacted at targeted settings: visitor centers, day use areas, campsites and ORV use areas. This yielded 562 completed surveys (43% response rate).

Respondents were mostly white, male, averaged 44.6 years of age, and 59.1% were college graduates. Measures of forest experience revealed high levels of repeat visitors (66.9%) and length of visit varied significantly across the settings. Overall most indicated that their primary activity was day hiking (37.9%) or viewing scenery (28.5%).

Attitudes toward fees were generally supportive of the Forest Service's management of public lands. This support was also reflected in their attitudes toward the Forest Service fee program. Respondents considered the fee program a good thing, thought that it was fair, and perceived that by paying fees they were helping to preserve the forest. They also indicated understanding the reasons behind the fee program. Finally, visitors indicated that the Chattahoochee Fee Program had not influenced their attitude toward the Forest or inhibited their access to the Forest.

Preferences for revenue types showed that recreation use and entrance fees received the strongest support. Alternately, respondents expressed indifference toward the suggestion of relying on tax revenue alone, the sale of commercial tourism permits, and corporate sponsorships. Items that received the strongest opposition were the sale or leasing of the Forest for private use and the sale of commercial mining licenses and mineral resources.

Activity-based fees were generally supported, with fees for camping at developed settings judged the most acceptable. Most respondents had also indicated having previously paid a fee for this activity.

Preferences for spending fee revenue revealed strongest support for spending fee revenue on facility and setting maintenance (e.g., bathrooms, exhibits, trails) and environmental restoration. Weakest support was observed for expanding the hours of operation of the visitor centers and the installation of interpretive exhibits throughout the Forest.

Estimates of visitors' willingness to pay and appropriate price analyses showed that in all instances, respondents' estimates of the maximum they would be willing to pay were greater than their appropriate price estimates. And in most instances, the appropriate price estimates were close to the fees being charged at the Forest during the time the study was conducted. *For more information about this study contact Jim Absher at 909-680-1559 or jabsher@fs.fed.us.*

Off-Highway Vehicle Management in California

Recently the Chief of the USDA Forest Service (USFS) identified four major issues facing National Forests: fire and fuel, invasive species, habitat fragmentation, and unmanaged recreation. The Chief cited off-highway vehicle (OHV) use as illustrative of unmanaged recreation. OHVs are motorized vehicles capable of traveling off-road year-round and include OSVs (over snow vehicles).

OHV issues are complex and require research attention. Of particular interest are the perceptions of managers of OHV activity. They are most likely to understand the complex nature of OHV issues and to take the actions required for mitigating them.

A survey of 38 managers of OHV areas on National Forests in California was conducted. Managers, identified through an internal USFS mailing list, received questionnaires via email in advance of telephone interviews.

Management issues were divided into those related to natural resources, social institutions, and interpersonal relations. In the natural resources classification the issues most frequently observed or reported were: soil erosion/trampling, soil erosion/compaction, litter/trash on roads and trails, litter/trash at trail access points, vegetation damage, and graffiti or other vandalism. In the social institutions classification the issues most frequently observed or reported were: four-wheelers going off established roads or trails, OHVs going too fast, lack of safetywear, and alcohol use. No item in the interpersonal relations classification appeared in the top ten issues nor were

any reported by more than one-quarter of the respondents.

Management actions were categorized into those which indirectly impact recreation visitors, those that directly impact recreation visitors, resource hardening, and bridge building or collaboration. For management issues named by 50% or more of respondents, bridge building actions were described as both "used most often" and "most effective." For example, 9 of 30 respondents identified bridge building actions as "used most often" and 11 of 30 respondents identified bridge building actions as "most effective" in mitigating soil erosion/trampling. Resource hardening and direct actions followed in frequency.

Managers did not frequently identify conflict between recreational users, however, some conflicts were evident (mostly between OHV riders and hikers/backpackers, and between OHV riders and mountain bikers). These issues could be some of the most difficult to mitigate.

Of the bridge building/collaboration actions, described as "used most often" and "most effective," personal contacts dominated. There are budgetary constraints to implementing a strategy of personal contacts namely funding, personnel, and training. *For more information about this study contact Debbie Chavez at 909-680-1558 or dchavez@fs.fed.us.*

Unit Publications

Absher, J.D.; Kyle, G.T.; Hammitt, W.; Backman, K.; Cavin, J.; Gould, J. 2004. **Chattahoochee National Forest 2002 Recreation Fee Program Study**. Unpublished report. Riverside, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. 59 p.

Chavez, D. 2003. **Fiddlehead fern harvesting in southern California**. *Bulletin of the American Fern Society*, 30, 4, 28-29.

Gomez, E.; Roberts, N.S.; Chavez, D.J. 2004. **Impact through action, influence and involvement—Ethnic minority recreation: Where to from here?** In: Harmon, D., Kilgore, B.M. and Vietzke, G.E. (eds). Proceedings of the George Wright Society/National Park Service Joint Conference; 2003 April 14-18; San Diego, CA. Hancock, MI: The George Wright Society, Inc.: p. 251-254.

Tierney, P.T.; Chavez, D.J. (technical coordinators). 2004. **Abstract Book: The 4th Social Aspects and Recreation Research Symposium**; 2004 February 4-6; San Francisco, CA. San Francisco, CA: San Francisco State University: 85 p.

Vogt, C.; Nelson, C. 2004. **Recreation and fire in the wildland-urban interface: A study of year-round and seasonal homeowners in residential areas nearby three National Forests - San Bernardino National Forest, California; Grand Mesa, Uncompahgre and Gunnison, Colorado; and Apalachicola National Forest, Florida**. Unpublished report. East Lansing, MI: Michigan State University.