



# Recreation Research Update



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## Rapid Response Research on Fire Communication With Wildland Interface Communities

The proximity of large wildfires to populated areas in recent years has demanded unprecedented levels of communication among agencies and between agencies and the general public. A study on wildfire communication in wildland interface communities was completed by Drs Jonathan Taylor and Shana Gillette (USGS), Dr. Ron Hodgson (BLM/USFS), Judith Taylor (USFS) in collaboration with Dr. Deborah Chavez. The objective of this study of two wildfire events in the San Bernardino mountains was to understand the communication needs of the public and to explore agency response to those needs.

The research team conducted the study in three stages before and after fires at the San Bernardino mountains. Rapid response research methods included informal discussions and focus groups, content analysis, and participant observation.

Following are some study results and management implications: (1) There is a need to provide real time information—residents of communities near wildfires feel an urgent need for timely and accurate fire information that will help them cope with the threat to their families, lives, safety, property, and interests. (2) Official communications should contain pertinent local information—residents found that official communications about the fires contained very little that was useful to them and that information releases were infrequent and public meetings were sometimes lacking in information of interest to residents. (3) News media information should be more accurate—residents expressed dissatisfaction with coverage by the regional broadcast media, which was believed to be inaccurate, emphasizing the sensational over the practical, and shifting to new topics before the local need for information was past. (4) Informal networks can be used to provide information—Wildland urban interface communities are served by relatively complex information networks that go well beyond the traditional media. Residents rely on these networks heavily during fires. (5) Prepare for reoccupation—reoccupation following evacuations needs to be planned for as carefully and completely as the evacuation is. A communication plan needs to be part of the reoccupation plan. (6) Mountain Area Safety Council

(MAST) and Fire Safe Councils (FSCs) are important—communications among agencies and between agencies and residents in the mountain communities was substantially more effective during the fires as a result of preparations made by MAST and the FSCs prior to the events. (7) Plan for information flow during transition—when wildland fires change in status and scope – authority, function and personnel change as well, with the “new team in town” starting from scratch to try to build community information systems. *For more information about this study contact Jonathan Taylor at 970-226-9438.*

## Asian Americans and Outdoor Recreation

Research was recently published (see Winter, Jeong, Godbey listing on page 2) that focused on outdoor recreation among Asian Americans in the San Francisco Bay Area. The work was based on Jeong’s doctoral dissertation, for which he gathered data from four Asian groups (Chinese, Japanese, Korean, and Filipino). Demographic projections for the United States suggest that Asian Americans will increase proportionately nationwide, to the point that they will be the majority group of color. Understanding differences and similarities among Asian Americans furthers our understanding of how to best provide recreational opportunities to a diverse constituency.

We found significant differences among the groups concerning degree of linguistic acculturation (preferred language spoken at home, when watching television, when listening to the radio, and when reading newspapers and magazines). As a whole, the majority of respondents preferred their own ethnic language, or mostly their ethnic language and some English, when speaking at home. About one-third expressed a preference for their own ethnic language across the three types of media. These findings suggest that communications related to recreation and other natural resource management issues should appear in ethnic media, particularly in areas where concentrated populations of Asian Americans reside.

The importance of ethnic use patterns in preference for natural areas was examined. Use of natural areas by others from one’s own ethnic group was most important among the Filipino and Chinese respondents. Constraints to visiting the Golden Gate National Recreation Area, including such factors as perceived

discrimination, and a lack of information were infrequently reported.

Overall the results suggest that Asian Americans should not be viewed as homogeneous. While sociodemographic variations were more influential in predicting some recreation-related issues we looked at, cultural identity was more important in others. Further research is needed to explore the differences and similarities among Asian American cultural groups, as well as to gain an understanding of the impact of these similarities and differences on recreation service delivery. *For more information about this study contact Pat Winter at 951-680-1557 or [pwinter@fs.fed.us](mailto:pwinter@fs.fed.us).*

## Communication of Fire Meanings and Messages

Kevin Larkin (White Mountain NF), Amanda Grau, & Dr. Joe Roggenbuck (Virginia Tech University), in cooperation with Dr. Jim Absher, investigated how people's fire management and prevention cognitions are acquired and/or negotiated. This study looked at the processes through which WUI residents receive, interpret, and reconstruct wildfire messages, especially with respect to educational programs such as Firewise or Smokey Bear. Using a symbolic interactionist perspective and a qualitative, in-depth interview methodology, 17 WUI homeowners and 15 agency representatives in northern Georgia and central Virginia were interviewed.

Different processes exist by which homeowners incorporate the threat of wildfire into their lives. Nearly all accepted the threat of wildfire in their area. They know that fires might burn their homes and significant areas nearby, but many have not chosen to act on that threat. The majority of interviewees had externalized the threat of wildfire, and many felt little responsibility for any aspect of vulnerability minimization and/or fire suppression. The data show, however, that some people reach a point where they internalize, rather than externalize, the fire threat.

In understanding how people come to internalize or externalize the threat, it was found that individual homeowner's perceptions of risk were often different from the risks conveyed by agency education programs, especially in three areas. Human Safety: In wildfire education programs, a homeowners' risk of being trapped without an evacuation route is commonly portrayed, but interviewees seldom brought up a closely related issue, the risk to firefighters' safety. Personal Property: Agency representatives typically make it clear that WUI homes are at risk to be burned. Interviewees accept this risk, but often speak of the contents of their homes. Natural Amenities: Amenity values such as trees, views, or wildlife were addressed by fire

professionals. Based on the interviews, the idea of rebuilding a home in a burned-out landscape may be a significant issue.

In summary, having homeowners reach a point of internalizing the wildfire threat is an important step toward increasing Firewise behaviors. To do so, wildfire risk should be stated in terms that are relevant to those homeowners' lives. Although only two southeastern communities were studied and these results may not apply nationwide, these results enhance the existing literature on managing wildfire in the WUI and point to the need for similar studies in order to improve program managers' effectiveness in achieving fire prevention and preparedness goals. *For more information about this study contact Jim Absher at 951-680-1559 or [jabsher@fs.fed.us](mailto:jabsher@fs.fed.us).*

## Unit Publications

- Chavez, D.J.; Knap, N.E.; McCollum, D.G. 2004. **Assessing national forest visitors' comprehension of international symbols for communicating outdoor recreation messages.** *Journal of Park and Recreation Administration* 22, 3, 1-21.
- Chavez, D.J.; Schneider, I.; Powell, T. 2004. **The social-psychology of a technology driven outdoor trend: Geocaching in the USA.** [Proceedings paper]. Hawaii International Conference on Social Sciences; 2004 June 16-19; Honolulu, HI. [on CD ROM only] p. 583-594.
- Chavez, D.; Tynon, J.; Knap, N. 2004. **Reducing crime and violence on public lands: Case studies in the USDA Forest Service.** *Journal of Park and Recreation Administration*, 22, 3, 22-38.
- Kneeshaw, K.; Vaske, J.J.; Bright, A.D.; Absher, J.D. 2004. **Acceptability norms toward fire management in three national forests.** *Environment and Behavior* 36, 4, 592-612.
- Kneeshaw, K.; Vaske, J.J.; Bright, A.D.; Absher, J.D. 2004. **Situational influences of acceptable wildfire management actions.** *Society and Natural Resources* 17, 6, 477-489.
- Li, C.; Zinn, H.C.; Chick, G.E.; Graefe, A.R.; Absher, J.D. 2004. **Hofstede's cultural measure in a national forest recreation context.** Proceedings of The Second International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas; 2004 June 16-20; Rovaniemi, Finland. [available at <http://www.metla.fi/julkaisut/>] p.151-156.
- Struglia, R.; Winter, P.L.; Meyer, A. 2003. **Southern California socioeconomic assessment: Sociodemographic conditions, projections, and quality of life indices.** General Technical Report PSW-GTR-187. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 418 p.
- Winter, P.L.; Jeong, W.C.; Godbey, G.C. 2004. **Outdoor recreation among Asian Americans: A case study of San Francisco Bay Area residents.** *Journal of Park and Recreation Administration*, 22, 3, 114-136.