

Natural Areas and Urban Populations: Communication and Environmental Education Challenges and Actions in Outdoor Recreation

Deborah J. Chavez

ABSTRACT

Challenges, opportunities, and actions exist in areas where large urban populations interface with natural areas, such as outdoor recreation sites in southern California. Challenges in the interface include intense recreation use, public safety issues, and complex information strategies. Research results on communications and environmental education offer opportunities to address information challenges. Actions taken include the use of Eco-Teams (delivers environmental messages), a forest information van (delivers information of interest to visitors), and Hawkins Natural Park in South Central Los Angeles (delivers environmental education). Each exemplifies well-planned ways to address interface issues.

Keywords: communication, environmental education, interface, Latinos, urbanization

Two goals of urban park managers include managing facilities and programs and providing physical and social settings that help park visitors have good experiences (Hoots and Buist 1982). These goals are important beyond urban parks and into the urban interface, where urban populations meet natural resource areas. Urban national forests are forests located within 50 mi of a population center of greater than 1 million people and demonstrate unique management challenges and opportunities (Dwyer and Chavez 2005). In 1995 14 national forests in eight US states were identified as urban national forests. Since then another 10 have been identified. As populations shift toward urban and urban interface areas across the

country there is an increased need for managers to reach out, gain the trust, and understand urban people. It will be increasingly important to be proactive in working with urban residents.

The Angeles and San Bernardino National Forests in southern California serve as urban interface examples. These forests match the interface challenges identified by Hartley (1986). Some of these also are based on the work of Stickers (1983), which focuses on the Angeles National Forest. Factors making recreation patterns in these forests unique include: (1) year-round accessibility with day use, including winter day use, wilderness day use, concentrated dispersed use (high use of areas managed for dispersed use), and “nocturnal day use”

(e.g., use of picnic areas during the night when the picnic area is officially closed); (2) cultural influences, including rapidly changing demographics, strong Latino influence, diverse social and recreational values, and inexperienced visitors with an urban orientation; (3) emergence of new recreational activities, which often develop before management policies are established for them; and (4) competition for open space caused by high land values, lack of room for expansion, and urbanization nearby (sprawl) and within the forests. Other interface issues include urban social problems migrating to public lands (including crime, vandalism, arson, and traffic congestion), public and employee safety issues, and the need for complex information strategies (caused by language, race/ethnicity, and class diversity).

Demographic shifts in the United States indicate a rapidly growing Latino population. In 1900 there were approximately 500,000 Latinos in the United States. Today, there are more than 35 million Latinos (Saenz 2004). In 2000 about 13% of the US population was Latino and in 2100 it is projected that the Latinos will make up one-third of the total US population (Saenz 2004). There are approximately 12 million Latinos in California (about one-

third of California's population; as cited in Bear Facts [Smith 2004]), and this is expected to grow to 21 million Latinos by the year 2025 (about 40% of California's population).

The importance of these demographics lies in what it means for managing interface lands. Research indicates Latino groups may have different preferences, different expectations about public lands, different barriers to participation, and different site development preferences than other groups (Tierney et al. 1998, Chavez 2001, 2002). It is equally important to examine the information strategies that can be used with Latino populations. These information strategies include communication plans and environmental education programs. Communication preferences and styles are not the only differences between whites/Anglos and Latinos. In general, Latinos tend to use lands in larger and extended family groups (nuclear family plus aunts, uncles, cousins, etc.). Also, some Latinos describe barriers (such as feeling welcome) that require specific knowledge to alleviate, and in some states, proximity to homelands (such as Mexico or Cuba) contributes to the maintenance of Latino cultures.

Challenges, opportunities, and actions exist in areas where large urban populations interface with natural areas. Urban park programs, urban forestry programs, and urban national forests have great potential to educate the public and create supportive constituencies (Gangloff 2003). Applied research studies can offer suggestions for actions that interface managers can take. This article briefly describes some of those research results and presents three examples of actions taken by resource managers in southern California to address barriers, complex information, and environmental education challenges for Latino groups in the interface.

Applied Research Results

Although diverse populations, varying familiarity with natural resources and their management, different cultures, multiple languages, and varied economic standing and interests complicate communication and education efforts (Hodgson et al. 1990), these efforts have the potential to reach a large number of people and influence their perceptions of resource management across the urban to wilderness spectrum (Dwyer and Chavez 2005).

One of the earliest studies of Latino visitors, focusing on communication, occurred

Table 1. Challenges and recommendations for interface managers.

Challenges	Recommendations
General	
Use pattern shifts (e.g., year-round)	Additional coverage year-round; requires resources
Cultural influences	Hire people of color into the workforce
Competition for open space	Cooperate with other agencies/redirect use; make information seamless regardless of agency
Urban social problems/safety issues	Identify and act on issues quickly
Serving Latinos	
Lack information about sites	Use styles of Latinos to communicate; FIV; community portals
Barrier in feeling welcome	Have materials professionally translated; hire Latinos into the workforce
Outreach may be complex	Proactively seek input from Latinos; contact through churches, Chambers of Commerce, Supermercados, etc.

at the Angeles National Forest in southern California (Hodgson et al. 1990). Based on study results, these researchers suggested several communication guidelines. They suggested that communications between the agency and Latinos should be treated as intercultural communication because visitors have different values, experiences, and world-views than managers, and failure to consider those differences can create misunderstandings. They also determined that mass media sources for communication were ineffective because they cannot quickly adapt to differences among people. They defined effective communication as minimizing misunderstandings, which occurs best if it is a two-way exchange of information. They found a large percentage of Latino visitors spoke only Spanish (45%), indicating the need for use of Spanish in written and oral communications.

Research on barriers to participation in recreation and barriers that shorten recreation trips indicate that Latino groups do not know where to go or what to do when they get there; they do not feel welcome at natural resource areas (Tierney et al. 1998). They also believe that few people who look like them recreate at natural areas and few people who look like them work there. Some of the interface challenges to consider are shown in Table 1.

Based on several studies on the Angeles and San Bernardino National Forests, Chavez (2000) suggested the need to use an "I Triad" to better serve Latino visitors at interface sites. The triad says to invite, include, and involve Latinos in natural resource use and decisionmaking. To invite Latinos will require use of appropriate processes when communicating. For example, one-way communication (such as brochures or signs along the road) is fine for use once Latinos have reached your park or forest, but

one-way communications are not effective in reaching out to Latinos. Most Latinos have heard about sites from informal sources such as family and friends, suggesting interpersonal communications are better for outreach. At forest sites Chavez (2001) found that urban visitors, including Latinos, want to learn much more about natural environments. They would like ranger-led talks on animals and their habitats, local mountain history, effects of air pollution, and citizen involvement on forest protection and safety. They also would like to receive information about streamside areas, hiking in the area, picnic/barbecue sites, things to see and do, and the best times to visit. The desire for information exists; the task is to fit the needs of Latino visitors. To include and involve demands even more of resource managers, including hiring Latinos into the workforce (at more than entry levels) and involving Latinos in decisionmaking processes. Finally, Chavez (2000) added to the "I Triad" the need to be innovative, suggesting managers be innovative in their applications of research recommendations. Some interface recommendations to consider are listed in Table 1.

Actions in the Interface

Several innovative programs were implemented by forest managers in southern California based on recommendations from research studies. This article highlights two of those programs: the Forest Information Van (FIV) and Eco-Teams. Another application comes from an urban site, the Augustus F. Hawkins Natural Park in Los Angeles, California.

The FIV ran from 1994 through 2001 at the Angeles National Forest in southern California. The FIV was a small, movable visitor center that took forest information to where Latino recreation visitors were (Ab-

sher et al. 1997). For example, if the visitors were in the East Fork of the San Gabriel Canyon, then that is where the FIV went. A pullout canopy that had pillars/panels with brightly colored pictures of animals is attached to the van. These pictures were used to attract the attention of Latino visitors. Visitors could acquire information about forest rules and regulations and what to see and do in the area. Information at the FIV was available in English and Spanish, and the FIV staff was bilingual.

Eco-Teams were implemented from 1991 through 2001 at both the Angeles and the San Bernardino National Forests in southern California. The forests worked with the California Environmental Project (a nonprofit organization) to hire youth from Los Angeles and train them to make contact with recreationists in highly used areas. The Eco-Team members approached primarily Latino recreation visitors to relay important regulatory and conservation messages (Absher et al. 1997). Often, these messages related to litter, water safety, and fire. Team members also modeled behavior such as picking up litter from the site.

Both of these examples highlight two-way communication (interpersonal) and the use of Spanish and are ways to reach out to Latino visitors using their communication styles and preferences as identified in the research studies. Other studies also have found that taking information to people and focusing on one-on-one communication was important for members of racial and ethnic groups (Crompton and Witt 1997). In this study the focus was on city youth.

Hawkins Natural Park in southern California is another innovative example of applying research results in an urban area. Results from the communications studies as well as studies on barriers to use in southern California (Tierney et al. 1998, Chavez 2001), were instrumental in some of the decisions about the development and management of the Augustus F. Hawkins Natural Park in South Central Los Angeles. The area is home to African American, Asian, and Latino groups, with Latinos being the largest ethnic group. It is an 8.5-ac park that was previously owned by the Los Angeles Department of Water and Power. It was best described as a "pipe graveyard" (Sorvig 2002, 67) until it was purchased by the Santa Monica Mountains Conservancy. When the planning was in process, it was often asked if there was value in building a nature park in the inner city.

The park that now exists fulfills the dream of returning nature to the urban landscape of southern California. It was a community endeavor where the local community decided to turn the area into a natural park, focusing on nature education. More than 50 neighborhood residents were hired to help clear the area and rebuild it (Sorvig 2002). Some were retained to work in the visitor center or on the grounds after the park opened. On-site buildings house the Evan Frankel Discovery Center with natural history exhibits and educational activity spaces. The top floor of the visitor center is home to the park ranger, who also grew up in the local community. The park opened in Dec. 2000 and has samples of several ecosystems, including chaparral, oak woodland, and freshwater marsh (Trzyna 2001). The park draws 3,000–5,000 people each week. Youth programs include a homework club, a junior ranger program, a Saturday science series, and gardening and crafts clubs.

Although the focus of the park has been on conservation education of local youth, entire families also take advantage of the opportunities offered at the park including walking, biking, picnicking, conservation education classes, and family nights (when they watch movies). On Saturdays the park offers transportation to nearby natural areas including beaches, deserts, and mountains. When the bus trips began, a conservation educator went with the groups, but with repeated trips there was less need to have someone "guide" the trips. Using inner-city nature parks as "portals" can increase minority visitation (Sorvig 2002, 74), as it did at Hawkins Natural Park, as well as increasing understanding of natural resources.

This is another example of how to fit the needs of southern California Latinos (and other groups) by addressing communication (using the communication styles of the local groups), education, personal preferences and, concurrently, addressing known barriers to participation in outdoor recreation.

Conclusions

To manage facilities and programs and provide physical and social settings that help park visitors have good experiences (Hoots and Buist 1982), managers are required to understand visitor needs. This may be especially difficult in urban interface areas that have unique management challenges and opportunities (Hartley 1986, Dwyer and Chavez 2005), such as rapidly changing de-

mographics. However, as populations shift and demographics change, it becomes important for managers in these areas to reach out, gain the trust and understanding of urban populations, and be proactive in working with urban visitors.

Research results on reducing barriers to visitation and communication preferences and processes for Latinos in southern California stress the need for good communication plans. These might include the use of multiple languages, interpersonal communications, and use of the client's primary language. Communication plans might also emphasize the need to take information to urban populations (Hodgson et al. 1990) and deliver that in one-on-one situations (Crompton and Witt 1997).

There are many great examples of urban interface education programs that exist, such as FamCamp used by the California State Park system. Three examples of urban interface programs that focus on research application were provided. These applications for serving Latino visitors exemplify well-planned and effective ways to address interface issues and barriers identified by Latinos. They show it is possible to serve diverse groups in the interface and represent innovative ways to implement the research recommendations. These efforts also indicate a desire for information and interpretation by Latinos and other groups (Dunn 1998, Chavez 2001, Dunn et al. 2002, Winter et al. 2004). The value lies in serving all visitor groups and in providing conservation education in socially acceptable ways for those groups.

Future research is needed to test the communication plan for populations in the interface (such as for Latino, Asian, Native American, and African American groups) and examine other communication outlets (such as Internet usage and new technologies) and show how they are used by diverse groups. Future studies also might evaluate the use of inner-city natural parks as portals to increase use levels and to provide information and environmental education.

Literature Cited

- ABSHER, J.D., P.L. WINTER, AND K. JAMES. 1997. Delivering environmental education and interpretive messages in urban proximate field settings: "Lessons" from southern California. *Trends* 34(4):30–37.
- CHAVEZ, D.J. 2000. Invite, include, and involve! Racial groups, ethnic groups, and leisure. P. 179–194 in *Diversity and the recreation profes-*

- sion, Allison, M.T., and I.E. Schneider (eds.). Venture Publishing, Inc., State College, PA.
- CHAVEZ, D.J. 2001. Managing outdoor recreation in California: Visitor contact studies 1989–1998. USDA Forest Service Gen. Tech. Rep. PSW-GTR-180, Pacific Southwest Research Station, Albany, CA. 100 p.
- CHAVEZ, D.J. 2002. Adaptive management in outdoor recreation: Serving Hispanics in southern California. *West. J. Appl. For.* 17(3): 129–133.
- CROMPTON, J.L., AND P.A. WITT. 1997. The roving leader program in San Antonio. *J. Park Recreat. Administr.* 15(2):84–92.
- DUNN, R.A. 1998. African-American recreation at two Corps of Engineers projects: A preliminary report. Natural Resources Tech. Note REC-10, US Army Engineer Waterway Experiment Station, Vicksburg, MS. 24 p.
- DUNN, R.A., R.L. KASUL, AND D. BROWN. 2002. Hispanic recreation at Corps of Engineer lakes in the greater Tulsa area: Results of two Hispanic focus groups. Natural Resources Tech. Note REC-13, US Army Engineer Waterway Experiment Station, Vicksburg, MS. 33 p.
- DWYER, J.F., AND D.J. CHAVEZ. 2005. The challenges of managing public lands in the wildland-urban interface. P. 269–283 in *Forests at the wildland-urban interface*, Vince, S.W., M.L. Duryea, E.A. Macie, and L.A. Hermansen (eds.). CRC Press, Boca Raton, FL.
- GANGLOFF, D. 2003. Welcome and challenge for the future. P. 1–5 in *Proc. of the 2003 Urban National Forest Coalition*, San Antonio, TX, Sept. 15–17, Larsen, G. (ed.).
- HARTLEY, M.S. 1986. *An analysis of recreation management on southern California national forests*. Unpublished Rep. supplied by author. 76 p.
- HODGSON, R.W., R.E. PEISTER, AND D.E. SIMCOX. 1990. *Communicating with users of the Angeles National Forest*. Rep. 2, unpublished draft supplied by authors. 38 p.
- HOOTS, T.A., AND L.J. BUIST. 1982. Recreation opportunity spectrum: A new management concept. *Trends* 17:28–31.
- SAENZ, R. 2004. *Latinos and the changing face of America*. Russell Sage Foundation, New York. 28 p.
- SMITH, P. (ED.) 2004. P. 1–3 in Hispanic outdoor recreation preferences. *Bear Facts* 8 p.
- SORVIG, K. 2002. The wilds of south central. *Landsc. Architect.* 92(4):66–75.
- STIKKERS, D.E. 1983. *An examination of depreciative behavior and management options in San Gabriel Canyon*. Unpublished draft supplied by author. 23 p.
- TIERNEY, P.T., R.F. DAHL, AND D.J. CHAVEZ. 1998. Cultural diversity of Los Angeles County residents using undeveloped natural areas. USDA For. Serv. Res. Pap. PSW-RP-236, Pacific Southwest Research Station, Albany, CA. 76 p.
- TRZYNA, T. 2001. California's urban protected areas: Progress despite daunting pressures. *Parks* 11(3):4–15.
- WINTER, P.L., W.C. JEONG, AND G.C. GODBEY. 2004. Outdoor recreation among Asian Americans: A case study of San Francisco Bay area residents. *J. Park Recreat. Administr.* 22(3):114–136.

Deborah J. Chavez (dchavez@fs.fed.us) is project leader/research social scientist, USDA Forest Service, Pacific Southwest Research Station, 4955 Canyon Crest Drive, Riverside, CA 92507.