

Nature-based Outdoor Recreation Trends and Wilderness

BY H. KEN CORDELL, CARTER J. BETZ, and GARY T. GREEN

Wilderness and other public land management agencies, both federal and state, have been feeling a pinch. It seems this pinch may partly be in response to a growing perception, or perhaps misperception, that nature-based, especially wildland recreation, is on the decline. This perception has been getting a lot of media attention of late. Some of us who have done research about nature-based recreation trends for years wonder what the reaction to such a perception might be. We wonder especially how congressional, legislative, administrative, and other recreation and wildland protection policy and budget makers might be reacting. Might there be negative effects on funding for matching grant programs or on related federal and state wildland protection programs, such as budgets and staffing levels for wilderness management?

Especially noteworthy has been recent media attention to a paper written by Pergams and Zaradic (2008). Looking at national and state park visitation, at hunting and fishing license sales, and at camping, the authors concluded that nature-based recreation is seeing steep pervasive slides in participation, and that this slide has been underway since the 1980s. It occurred to us that this highly important dimension of demand for nature warranted closer examination to see if nature-based recreation really is in steep decline in the United States. A fairly recent national trends report, *Outdoor Recreation for 21st Century America* (Cordell et al. 2004), made a big point that the nature-based recreation activities tracked by the U.S. *National Survey on Recreation and the Environment* (NSRE) were still growing as recently as the first part of this decade. For example, almost 70 million people 16 or older reported then that they had visited a wilderness or other wildland area or went hiking in the last year. Furthermore, approximately 70 to 130 million people reported that they viewed or photographed birds or natural scenery, respectively, in the last year. Hence, we

wonder if these levels have changed as we move further through this decade and into the 21st century.

The following paragraphs summarize an analysis of several sources of data describing Americans' participation in nature-based outdoor recreation. The focus, in particular, is on wildland activities. The data sources used are widely viewed as the nation's most authoritative.



H. Ken Cordell in the Okefenokee Wilderness of Georgia. Photo by Babs McDonald.

Visitation to Public Natural Lands

For many reasons, the trend in visitation to public natural lands has been unclear. The wilderness visitation trend has been especially unclear. Inconsistent count methods across time and not accounting for a large increase in visitors entering from adjoining private or other public lands are among some of the reasons. But, we look at visitation as reported for three of the major jurisdictions of public natural lands in the United States in search of visitation trend patterns. We found similar patterns; they were not pervasive declines. For state parks, national parks, and national wildlife refuges, visitation has been relatively stable since the mid-1990s, following long-term growth from the 1960s through the 1980s.

State Parks—Total visitation to state parks grew rapidly through the 1950s, 1960s, and 1970s, as Americans sought the forests, lakes, trails, and nature experiences offered by those parks. Number of visits peaked sometime around

2000, then decreased modestly through to 2006 (see table 1). But, that decrease has begun to turn around as reported visitation in 2007 rose back above the former level reported in 2001 (an increase of 0.7% (National Association of State Park Directors 2007).

Table 1. Trend in total visitation to state parks in the United States, 1975 to 2007	
Year	Millions of Visits
1975	471
1985	660
1995	746
2000	767
2001	735
2003	735
2005	715
2006	711
2007	740

Source: National Association of State Park Directors, Annual Information Exchange.

National Parks—For national parks, including the wilderness the National Park Service manages, the highest recorded visitation was in 1987, with more than 287 million people (see figure 1). After this high, visitation dropped somewhat through the 1990s, but rebounded in 1998 and 1999 to that previous 1987 high (National Park Service 2007). There were minor decreases in national park visitation during the early 2000s, but for the most part visitation has been stable since 2001. In 2007, visitation rose by almost 3 million above the 2006 level.

National Wildlife Refuges—Visitation at national wildlife refuges, and the wilderness in those refuges, has also shown growth for most years

since the late 1990s. This increase obviously reflects people's interest in wildlife species and the natural wildland habitats protected for them. Visitation grew from about 33 million in 1998 to more than 40 million in 2007, nearly 21% total growth (Fish and Wildlife Service 2008). Instead of fishing and hunting as in previous decades, general use and native wildlife watching have especially been growing on refuges. The resulting overall trend pattern was strong growth up to the early 2000s; nearly stable visitation levels have been seen through to 2007. However, visitation for 2007 was the highest reported level in the history of the National Wildlife Refuge System.

Public Wildlands in General—Growing interest in native wildlife and bird-watching on public lands (including photography and other forms of interaction with wildlife) can be seen in results from the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* (FHWAR). FHWAR reported substantial increases in numbers of wildlife-watching visitors to public parks and areas near their homes. In 1996 the number of visitors 16 years and older was 11.0 million; by 2006 this number had increased to 13.3 million, a 21% increase. Of the 23 million people in 2006 who traveled away from home to watch birds and wildlife, more than 80% visited a public area to do so.

Fishing, Hunting, and Other Wildlife Recreation

Perceptions of downward trends in wildland recreation have sometimes been based on reported trends in fishing and hunting. According to the FHWAR, many types of fishing and hunting participation in 2006

were, in fact, down from previous years (Fish and Wildlife Service 2006). Between 1996 and 2006 there was a drop of 5.2 million anglers and 1.5 million hunters. Pergams and Zaradic (2008) reported a drop in per capita fishing and hunting license sales. However, it is worth noting that license sales are greatly influenced by the spread of private residences into rural areas with large areas of natural land where owners don't need hunting or fishing licenses for their own land.

Participation estimates for 1999 to 2001 to 2005 to 2008 from the NSRE may be reflecting this growing trend of at-home fishing and hunting that does not require a license. The NSRE includes nature activities at and near home, as well as activities undertaken away from home. Although the NSRE shows cold-water and saltwater fishing down, it shows warm-water and anadromous fishing up. Whereas NSRE shows small-game and migratory bird hunting down, big game hunting is up. At the same time, it appears that how people participate in wildlife recreation is shifting. From 1996 to 2006 the FHWAR survey reported that the number of people who watched or photographed wildlife increased by 8.2 million. This is so much larger than the drop in fishing and hunting reported by the Fish and



Figure 1—Young canoeist enjoying nature in the Okefenokee Wilderness of Georgia. Photo by Babs McDonald.

Wildlife Service that it represents a net gain in participants in wildlife-associated recreation of 1.5 million.

A Broad-based Picture of Trends in Nature-based Wildland Recreation

Simply looking at reported public land visitation and at traditional hunting and fishing activities tells only part of the trend story. These evidences alone are not enough to conclude very much about Americans' interests in nature and in nature-based recreation. A more complete picture can be seen by examining broad-based data sources such as the Forest Service's *National Survey on Recreation and the Environment*. The NSRE is one of the United States's official surveys of outdoor recreation. It focuses on participation levels and trends (as does the FHWR). The NSRE has been ongoing since 1960. In addition to recreation, one of the foci of the NSRE has been wilderness values and people's interests in the National Wilderness Preservation System.

Similar to earlier NSRE reports (e.g., Cordell et al 2004), this national survey of U.S. households is showing continued growth in interest in nature-based outdoor recreation since the mid-1990s. Both the total number of Americans and the total number of days annually in which we participate in nature-based recreation have grown since 1994. In particular, viewing, photographing, and studying nature in all its forms, for example, wildlife and birds, have grown strongly (see table 2). Other similar nature-interest activities include viewing flowers, trees, natural scenery, fish, and visiting

1994–1995 Nature-based Outdoor Recreation Activity	1999–2001		2005–008		Millions of Participants Annually	Billions of Participants Annually
	Millions of Participants Annually	Billions of Participants Annually	Millions of Participants Annually	Billions of Participants Annually		
Viewing wildlife	62.8	2.3	94.6	3.6	114.8	5.3
Viewing birds	54.3	4.8	68.0	5.8	81.1	8.0
Visit a wilderness or primitive area	n/a	n/a	68.5	0.98	70.6	1.1
Primitive camping	28.1	0.26	34.0	0.28	33.3	0.34
Backpacking	15.2	0.13	22.3	0.22	22.1	0.28

Source: National Survey on Recreation and the Environment, USDA Forest Service, Athens, GA.

nature exhibits. The number of days visiting wilderness and other primitive areas has increased 12% since 2000. Primitive camping and backpacking days have increased 12% and 24% respectively since 2000. For the NSRE, a day is any amount of time in a given day that the respondent reported activity participation.

Not shown in table 2, but still popular and growing, are visiting beaches, gathering mushrooms and berries, driving off-road vehicles, kayaking, and snowboarding. Total number of Americans participating in any of the 42 nature activities the NSRE tracks is up more than 3% since 2000, and number of activity days is up almost 32% since 2000. Of course, the nature-based outdoor activities Americans are choosing now are different from those chosen in the past. It is true that *some* forms of hunting and fishing are declining, and that camping

and swimming are growing more slowly now. In addition, some other activities have declined in popularity, for example, mountain biking, rafting, and horseback riding on trails. Overall, however, nature-based recreation has grown.

Parting Observations

Both the NSRE and the FHWR show that participation in some nature-based activities has declined somewhat. However, many other activities seem to be continuing in popularity and some have even demonstrated rather strong popularity growth. One such activity is visiting wilderness and other primitive areas. Admittedly, new generations may not want to visit wilderness, or what they perceive to be wilderness. No one can know for sure what the future will hold for wildland visitation, or for any other nature-based activity for that matter.

There has been much speculation that young people's attachment to computers, cell phones, television, and

Americans' interest in and appreciation of nature-based recreation and wildlands is up.

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other media that keep them inside may lead to a future society in which people abandon outdoor activities, especially nature-based outdoor activities (see figure 2). For example, Richard Louv’s 2005 book, *Last Child in the Woods*, speculated that children are becoming more disconnected from nature. Pergams and Zaradic speculated that there is a “fundamental and pervasive shift away from nature-based recreation.” But in joining in such speculation, we should all remember that outdoor activity levels and interest in nature tend to fluctuate across generations. Changing technology, fads, costs of transportation, health care, personal fitness levels, and many other factors may intervene to turn today’s disconnected youth into tomorrow’s connected outdoor avid participants. Who could ever have predicted 20 years ago the boom in people moving to natural amenity-rich areas where they can see wilderness out the kitchen window. Who could have foreseen that living in these areas allows uncounted numbers to visit wilderness by walking across the backyard and into federally protected lands that used to be remote. All in all, by taking a broad view of this 21st century society, it appears to us that Americans’ interest in and appreciation of nature-based recreation and wildlands is up. **IJW**

References

Cordell, H. Ken, et al. 2004. *Outdoor Recreation for 21st Century America*. State College, PA: Venture Publishing.

Louv, R. 2005. *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books of Chapel Hill.

National Association of State Park Directors. 2007. Annual Information Exchange. Terra Haute: Center for State Park Research, Indiana State University, http://www.naspd.org/research_sub.asp.

Pergams, Oliver R. W., and Patricia A. Zaradic. 2008. Evidence for a fundamental and pervasive shift away from nature-based recreation. Proceedings of the *National Academy of Sciences*, Stanford University, Palo Alto, CA.

USDA Forest Service. 2008. *National Survey on Recreation and the Environment*. Athens, GA: Southern Research Station, www.srs.fs.fed.us/trends.

USDI Fish and Wildlife Service. 2008. *Wildlife Refuge Visitation*. Washington, DC: USDI Fish and Wildlife Service, Division of Refuges, Office of Visitor Services, Visitation 1998–2007.

———. 2006. *National Survey of Fishing, Hunting and Wildlife-Associated*

Recreation. Washington, DC: USDI Fish and Wildlife Service.

USDI National Park Service. 2007. *Public Use Statistics*. Washington, DC: USDI National Park Service, Public Use Statistics Office, www.nature.nps.gov/stats.

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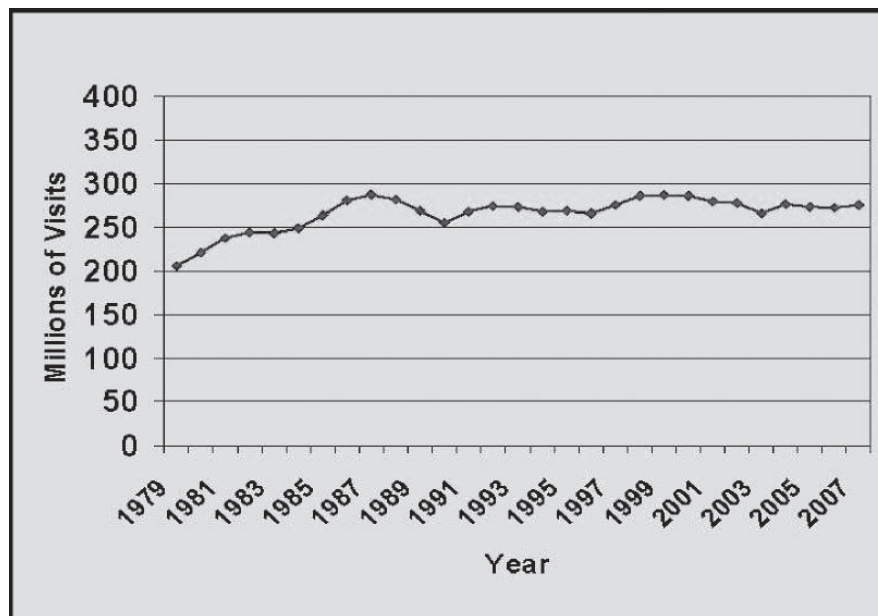


Figure 2—Trend in total visitation to national parks in the United States, 1979 to 2007
Source: www.nature.nps.gov/stats/park.cfm.