

Do Parks Make Good Neighbors?

By Robert E. Manning

Many of America's national parks have become islands of nature in a sea of civilization. Development of land around and adjacent to parks has raised a variety of management issues, including air and water pollution which flow into the parks, limited range for wild animals, increasing demand for recreation opportunities, and incompatible development along park boundaries. These and related park management issues – collectively termed “external threats” – reached crisis proportions in the decade of the 1980s.

However, another side of this issue is beginning to emerge as well. Just as parks and park management can be affected by surrounding lands, so too can surrounding lands and their owners be affected by parks. Parks, wilderness and related public lands often draw thousands or even millions of visitors annually, and public ownership of land can have important implications for property taxes and other community affairs. This study was designed to explore how the presence of a national park was perceived to affect private landowners and their communities.

The study focused on Acadia NP, which is located on Mt. Desert Island, Maine. The park occupies approximately one-half of the island, the other half comprised of private lands organized into a number of small communities. The park boundary is highly irregular, resulting in a complex landownership pattern highlighted by substantial intermixture of public and private land. The park is heavily visited.

The principal objective of the study was to determine the effects of the park on surrounding areas as perceived by residents of Mt. Desert Island. A standard questionnaire was administered by mail to a 10 percent

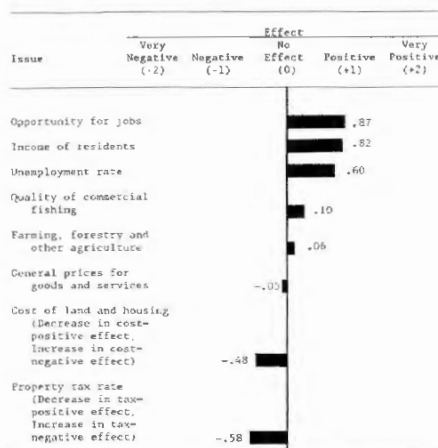


Figure 1. Resident perceptions of the effects of Acadia NP – economic issues.

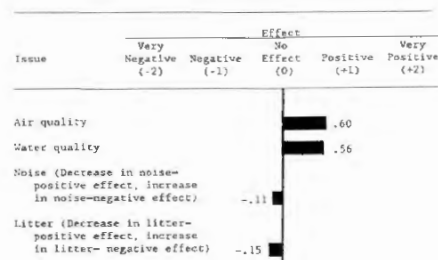


Figure 2. Resident perceptions of the effects of Acadia NP – environmental issues.

Wildland/Urban Interface (Continued from page 18)

is derived from an interest in protecting the uniqueness of the maritime forest, it is self defeating from a fire prevention standpoint. The resources it strives to protect will be destroyed in the event of a wildfire. At Cape Hatteras a 170 unit subdivision, which is located immediately adjacent to the park boundary, is being developed under a county ordinance which prohibits removal of any vegetation beyond 30 percent of the lot area (roughly the amount necessary to build the structure, no more). The justification for this code is protection of the freshwater aquifer from excessive runoff. This same subdivision is being built under building codes which require “low visual impact”, highly flammable, natural building materials. Hazard fuels were not considered when the ordinances were developed, so the design of the subdivisions considers only the impact of the new housing on the natural ecosystems and does not consider potential impact of adjoining wildlands on the housing. Future plans should consider both elements, thereby avoiding conflicts between human communities and park resource management programs.

Evaluation of the wildland/urban interface at Buxton Woods suggests that further research and managerial experimentation on maintaining fuel breaks is desirable. Use of fire resistant vegetation or vegetation conversion to low fuel plant communities, for example, are options which have rarely been employed in national parks. This approach can encourage natural succession of native fire resistant vegetation, such as live oak, or their use in landscaping applications. This may be a very valuable option around residences and park historic structures where removal of vegetation using

either mechanical means or prescribed burning may be undesirable. This treatment may also be viewed, by county planning boards and other officials, as a suitable compromise in situations where runoff and watershed protection are primary considerations. Vegetation conversion or establishment of fuel breaks of adequate width to protect structures and developments exterior to the parks may, however, effect wildlife movements or habitat use. More information is needed on optimal strategies for boundary management.

Parks interested in obtaining information or training materials on the wildland/urban interface should contact: NPFA (National Fire Protection Association), Batterymarch Park, Quincy, MA 02269.

Available publications are: *Protecting Your Home From Wildfire*, a handout booklet for distribution to homeowners; *Wildland Fire Management Briefings*; *Wildfire Strikes Home*, Newsletter; *Wildfire Strikes Home*, Annual Report; and *People and Fire at the wildland/urban interface* (a sourcebook).

Contact: Bill Baden (wildland/urban interface specialist) 617-770-3000, ext. 7484.

Available videos are: *Wildland Fire Strikes Home*, discusses the 1985 fire season, the worst in history for the wildland/urban interface; *Wildland Fires Satellite Broadcast*, looks at the 1987 wildfire season, details ways to protect your home and methods for building interagency cooperation.

Contact: Manuscripts, 28 South Main St., Suite 256, Randolph, MA 02368 – also available through BIFC by spring, 1990.

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systematic random sample of residential property owners on the Island. Sampling was conducted using the property tax records of all communities on the Island. Respondents were asked to rate the degree to which the park positively or negatively affected 33 items related to personal and community life. A response rate of 83 percent was attained, yielding 542 completed questionnaires.

Study findings are summarized in Figures 1-5 which report mean responses. From the findings several conclusions may be drawn. First, respondents feel that the park does affect them in a multitude of ways. For only two of the 33 items included in the questionnaire did a majority of respondents feel the park had “no effect.”

Second, it is clear that the park is perceived by residents as having both positive and negative effects. Using the mean responses shown in Figures 1-5, it can be concluded that respondents felt the park had a slightly-to-moderately negative effect for 12 of the 33 items explored. The most clearly negative items were property tax rate, cost of land and housing, and traffic congestion. Most residents apparently believe that property tax rates are abnormally high due to the presence of the park. This situation may be due to the fact that land in public ownership generates little or no property tax revenue for local governments, placing what is perceived to be an undue burden on private property owners.

Another contributing factor may be an abnormally high rate of appreciation of private land values as there is a reduced supply of private land and their market price may be bid up quite steeply. (Demand for commercial tourist development and vacation homes is spawned by the presence of the park.) Most residents also believe that the park has a negative effect on the cost of land and housing; that is, the presence of the

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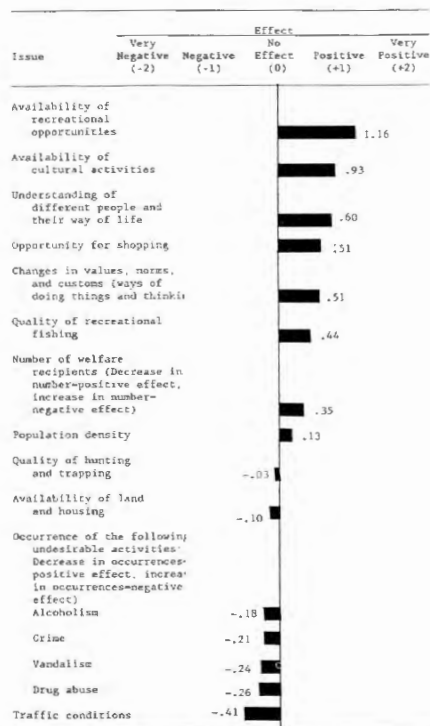


Figure 3. Resident perceptions of the effects of Acadia NP – social and cultural issues.

park has caused land and housing costs to rise abnormally high. Finally, respondents clearly believe that the high level of visitation to the park causes traffic congestion with which local residents must contend.

The majority of items explored were perceived to be slightly-to-strongly positively affected by the park. The most clearly positive were availability of recreational and cultural opportunities, opportunities for jobs, income of residents, and fire protection. Respondents apparently recognize that the large number of visitors attracted to the park makes possible the provision of opportunities for recreation, shopping and culture which could not otherwise be supported on the Island. They also appreciate the economic benefits brought about by a large infusion of park visitors and under-

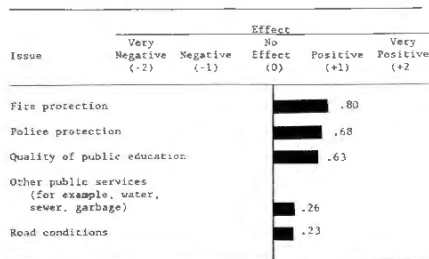


Figure 4. Resident perceptions of the effects of Acadia NP – public service issues.

stand that these expenditures create jobs and income in local communities. There is also an apparent belief that the presence of a major unit of the National Park System can enhance traditionally local government services such as fire and police protection.

Finally, a summary item, "general quality of life," was included in the questionnaire. The vast majority of respondents felt the park had an overall positive effect on their lives and on their communities.

Findings from this study indicate that, for the most part, parks can indeed be good neighbors. However, two notes of caution are in order. First, it should be emphasized that these findings relate to *perceived* effects of the park. These perceptions may or may not be related to real effects, at least for some items. Nevertheless, perceptions of local residents are important unless they can be proven wrong empirically. Second, although most items explored in the questionnaire were perceived as positively affected by the park, the

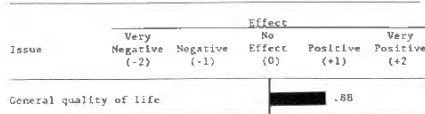


Figure 5. Resident perceptions of the effects of Acadia NP – overall quality of life.

attention of the park managers should be drawn to the issues perceived as negatively affected. Negative perceptions should be corrected where they are believed to be in error; action should be taken to ameliorate negative effects where possible.

Over the past decade it has become clear that parks are inextricably tied to lands outside their boundaries. This issue has been framed primarily in terms of the effects of these surrounding lands on park management. This study illustrates that there is another side of this issue as well. Parks are clearly perceived to affect surrounding lands. As the interconnectedness of public and private lands is more widely recognized, it will be necessary for park managers to reach out beyond the borders of their areas to deal successfully with "external threats". They are likely to be more effective in this process if they are aware and sensitive to effects they in turn have on surrounding communities.

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