

## SENSE OF PLACE: MOUNT DESERT ISLAND RESIDENTS AND ACADIA NATIONAL PARK<sup>1</sup>

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**Abstract:** The framework of sense of place, developed by humanistic geographers, has been employed by researchers in their efforts to explain the range of attachments, values, and meanings assigned to natural areas. This study used an exploratory approach to address the range of values and meanings assigned by local residents to places in Acadia National Park. Qualitative interviews were used as a scoping instrument to identify characteristic places and place values in Acadia National Park. Interview findings informed a mail-back questionnaire administered to a representative sample of local residents. Research findings address the range of values assigned to places in Acadia National Park. Implications of sense of place research for management of national parks are also discussed.

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### Introduction

The sense of place concepts elucidated by humanistic geographers such as Tuan (1974, 1977), Relph (1976), and Steele (1981) speculate about and describe ways humans attach value and meaning to place. Sense of place can be viewed as the variety of attachments, meanings, and values that humans assign to and derive from physical spaces. Personal constructions of place that contribute to self identity, as well as more social constructions of place, which contribute to regional or local shared senses of place are considered within the framework of sense of place.

Recent natural areas research has used a range of methods and perspectives to consider sense of place. Research on place attachment, a subset of sense of place, has examined the extent to which visitors emotionally bond to recreation sites (Williams *et al.* 1992, Mitchell *et al.* 1993, Moore and Graefe 1994). Other sense of place research has attempted to identify important places and the values associated with places (Schroeder 1991, 1996, Brandenburg and Carroll 1995). All of the above researchers suggest that natural areas managers need to be more receptive to the range of values and attachments to place when planning for natural areas.

Sense of place is an important concept for national park research. National park designation provides protection for natural and historical resources valued by many Americans. At the national level, national parks are considered icons of an American identity (Schreyer and Roggenbuck 1981). At

the local level, the natural and historic resources protected by parks may be integral parts of local communities (Zube 1989). Adjacent residents may value these areas not just as symbols of an American identity, or as recreation places, but as places important to the local character or regional identity. The local connections to national parks can be positive sources of stewardship; however, they may also spur conflict over management decisions about the resource. Thus, national park managers may do well to understand how the places they manage have local significance.

This research considers how places protected by Acadia National Park, Maine (United States) contribute to local character, and the values that local residents feel are important to these places. Acadia National Park is an unusual unit of the park system, because it is comprised of a patchwork of federally owned lands interspersed with locally owned land. The majority of this patchwork is on an island (Mount Desert Island), thus making planning decisions all the more important in this finite area of land. Mount Desert Island (MDI) residents have a long history of stewardship of the natural and historic resources of the park (National Park Service 1992). Understanding how places in the park are valued by local residents and contribute to the local character may help park managers and the community make more informed planning decisions.

### Objectives and Methods

The goal of this research considered how sense of place concepts might be used to understand more about places important to the local character of MDI, and the values associated with the places. Given that MDI has a resident population of 10,000, a representative sample of the population was used to provide the most accurate information. Therefore, an additional goal of this research was to develop a method to address these issues in the format of a mailed questionnaire. The specific objectives of the research were as follows:

1. Identify the values assigned to Acadia National Park by local residents.
2. Identify types of places in the park that are important to the local character and the values assigned to such places by local residents.

A two phase approach which used both qualitative and quantitative methods was used to explore the issues described above. Phase I was an information gathering stage and used primarily qualitative methods. The objectives of this phase were to identify places important to the character or identity of MDI, and inform Phase II. The Phase II questionnaire was designed to address this issue in a more quantitative format to a representative sample of MDI residents. Since this research was exploratory, Phase I was a scoping phase to inform Phase II. This paper will concentrate primarily on the objectives, methods, and results of Phase II. Phase I will be discussed only in reference to its implications for Phase II.

Nine local residents were interviewed for Phase I. Interview respondents were chosen using a non-random chain referral technique. The interviews were comprised of

two parts. The first part was a series of open-ended questions which asked respondents to identify places they felt were important to the character of MDI, and the values and meanings associated with the places. Interview candidates were allowed to mention places both inside the park and outside the park boundary. The methods used for this part followed qualitative methods used by previous sense of place research (Schroeder 1991, 1996, Mudrak 1982, and Brandenburg and Carroll 1995), and followed basic qualitative methods reviewed by Marshall and Rossman (1989). The second part of the Phase I interviews tested potential close-ended questions for the development of the mailed survey.

Phase I results showed that residents were able to identify places important to the character of MDI and the values associated with the places. Over half of the places mentioned by the interview candidates were places protected by Acadia National Park, thus lending support to the assumption of this research that places in the park are important to the local character. Interview respondents also suggested that the park as a whole was important to the local character. Interview respondents were also able to use the close-ended questions, which were kept with some modification for Phase II. The close-ended questions are described in more detail with regard to their use for Phase II.

Phase I results were used to inform Phase II. Since previous sense of place research had not asked about the values of places in a quantitative format, a typology of values derived from the diverse theoretical literature on environmental values was incorporated as a heuristic device. Table 1 shows this typology. Versions of this typology have been used to address the values of the Vermont State Park System (Manning *et al.* 1996) and the Breadloaf Wilderness (Green Mountain National Forest) (Manning and Valliere 1996). Thus, it follows that this typology can also be used to look at the values of a national park. Results from the Phase I research showed that residents were able to rate the values of both the park as a whole, and the values of types of places representative of local character. The typology of values was used to address objective one -- the values of Acadia National Park.

To accomplish the second objective, a series of six photographs which represented types of places in the park was included with the mailed survey.<sup>ii</sup> The places chosen for the photographs were informed by places mentioned most often as important to the character of MDI during Phase I. Informal suggestions from park personnel as to which places in the park were important to local residents were also used. The photographs illustrated the following types of places in the park: 1) the ocean and rocky cliffs, 2) the carriage roads, 3) an estuary, 4) the mountain interior, 5) a fresh water lake, and 6) a hiking trail. The use of photographs to represent places was tested during Phase I, and proved a successful method.

Two questions were asked in regard to the photographs described above. First, respondents were asked to rate the extent to which each type of place represented 1) the character of Acadia National Park, and 2) the character of MDI (Table 2). Next the respondents were asked to rank each of the values of each place, using the same values typology described for objective one.<sup>iii</sup>

The objectives of Phase II were accomplished by means of a mailed questionnaire to a representative sample of MDI residents during the summer of 1996, following the methods recommended by Dillman (1978). Nine hundred and thirty-nine questionnaires were mailed to a stratified sample of the populations of each town on MDI. Of the 761 deliverable questionnaires, 377 were returned, yielding a response of 49.5%.

## Results

Results to the first objective are shown in Table 1. Acadia National Park is important for all of the values; however certain values were rated more highly by residents. Recreation and aesthetic values were given the most importance, followed by a second group of values, which included ecological and therapeutic values. Educational/scientific values, moral/ethical, spiritual, and historical/cultural values comprised a third tier of values. Finally, intellectual and economic values were reported least often as important.

Table 1. Acadia National Park Values.

| Value                  | Statement                                                                                                  | Average Points of Importance* |
|------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------|
| Recreation             | The opportunity to participate in outdoor recreation activities                                            | 15.6 a                        |
| Aesthetic              | The opportunity to enjoy the natural beauty of this area                                                   | 15.3 a                        |
| Ecological             | The opportunity to protect nature in order to ensure human well-being and survival                         | 12.2 b                        |
| Therapeutic            | The opportunity to maintain or regain physical health and/or mental well-being through contact with nature | 10.3 c                        |
| Educational/Scientific | The opportunity to study and learn more about nature                                                       | 8.9 d                         |
| Moral/Ethical          | The opportunity to exercise a moral/ethical obligation to respect nature and protect other living things   | 8.2 d, e                      |
| Spiritual              | The opportunity to obtain spiritual meaning through contact with nature                                    | 7.9 d, e                      |
| Historical/Cultural    | The opportunity to preserve traditions and past ways of life                                               | 7.6 e                         |
| Intellectual           | The opportunity to think creatively and be inspired by nature                                              | 6.8 e, f                      |
| Economic               | The opportunity to earn a living through tourism and other means                                           | 6.7 e, f                      |

\* based on 0-100 possible points of importance.

a-f denotes statistically significant differences based on t-tests.

Results to the second objective are shown in Tables 2 and 3. All of the photographs ranked highly as types of places which show the character of Acadia National Park and MDI. The carriage road and the lake were most representative of Acadia National Park, and the lake and the ocean and cliff were most representative of the island.

Table 2. Average responses for how well each photograph shows a type of place that represents the character of Acadia National Park and Mount Desert Island.

| Type of Place               | Average Rating*      |                     |
|-----------------------------|----------------------|---------------------|
|                             | Acadia National Park | Mount Desert Island |
| Photo 1 - "Ocean and Cliff" | 5.20                 | 5.04                |
| Photo 2 - "Carriage Road"   | 5.45                 | 4.03                |
| Photo 3 - "Estuary"         | 4.59                 | 4.88                |
| Photo 4 - "Mountain"        | 5.23                 | 4.90                |
| Photo 5 - "Lake"            | 5.26                 | 5.21                |
| Photo 6 - "Trail"           | 4.99                 | 3.76                |

\* 1 = "not at all," 6 = "extremely."

Table 3 shows the values assigned to each place ranked relative to the values assigned to Acadia National Park as a whole. Different types of places in the park are clearly allocated different values by MDI residents, and are different from the values of the park in general. Although all of the places represented by the photographs, like Acadia National Park in general, ranked high for recreation and aesthetic values, and low for economic and intellectual values, there were some differences. The photographs

illustrating the ocean and cliff and the estuary ranked highest for aesthetic and ecological values. Carriage roads and the trails were given high ranks for historical/cultural value, in contrast to the lower rankings of this value for the park.

### Conclusions & Management Implications

Several conclusions may be drawn from the results of this study. The values of Acadia National Park can be classified and measured using the values typology. The results of this effort demonstrate that the park is valued by MDI residents for a number of values. Even though recreation value scored high, other values rated high as well. This result suggests that Acadia National Park is important to MDI residents for more than recreation.

Conclusions about the values of the types of places represented by the photographs are limited due to the exploratory nature of the methods; however, results suggest some implications for park management. Measuring the values of types of places showed that these places are allocated a range of different values by MDI residents. Often these values are allocated differently than the values allocated to Acadia National Park as a whole. Although Acadia National Park did not score high for historical/cultural value, the "carriage road" and "trail" photographs were highly valued for their historical/cultural significance. Park management may need to consider this value when planning for these resources, given the historical/cultural importance to MDI residents.

Table 3. Values of types of places in Acadia National Park represented by photographs.

| Value                  | Average Points of Importance* |                 |           |            |        |         |
|------------------------|-------------------------------|-----------------|-----------|------------|--------|---------|
|                        | "Ocean and Cliff"             | "Carriage Road" | "Estuary" | "Mountain" | "Lake" | "Trail" |
| Recreation             | 10.7                          | 23.2            | 11.7      | 19.0       | 16.0   | 24.1    |
| Aesthetic              | 19.5                          | 13.5            | 16.4      | 15.6       | 18.0   | 11.2    |
| Ecological             | 14.6                          | 8.4             | 19.7      | 12.3       | 13.8   | 10.0    |
| Therapeutic            | 11.2                          | 10.9            | 9.1       | 10.6       | 10.3   | 11.2    |
| Educational/Scientific | 10.2                          | 7.0             | 10.9      | 9.0        | 8.2    | 8.2     |
| Moral/Ethical          | 6.7                           | 5.5             | 7.4       | 6.3        | 6.2    | 5.8     |
| Spiritual              | 9.4                           | 7.7             | 8.6       | 9.0        | 9.6    | 7.3     |
| Historical/Cultural    | 5.9                           | 11.4            | 6.0       | 6.6        | 6.0    | 10.2    |
| Intellectual           | 6.6                           | 6.5             | 6.3       | 6.7        | 6.7    | 6.4     |
| Economic               | 5.0                           | 5.7             | 4.0       | 4.8        | 5.3    | 5.4     |

\* based on 0-100 possible points of importance.

Results also suggest that types of places in the park are important to residents because they represent the character of Acadia National Park and MDI. This result lends empirical support to the idea that parks are important for local residents not just as places to visit, but that the places protected by parks are integral to the sense of place of the region. Management implications suggest that parks need to continue efforts at developing relationships with local communities. Parks may play a role in protecting both the resources of the park and the integrity of the sense of place of the region.

A limitation of this study is that it represents the views of only one constituency of Acadia National Park -- the residents of MDI. Future research into the sense of place and values of Acadia National Park will need to balance these views with those of visitors and others. However, given that national parks and local residents can be connected by the geographical nature of place and historical stewardship relationships, understanding this relationship more empirically is an important step for national parks.

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## End notes

<sup>i</sup> Funding for this research was provided by the National Park Service, United States Department of the Interior.

<sup>ii</sup> Previous research used mapping exercises to identify places important to local character and identity in the context of in-person interviews (Mudrak 1983, Peterson and Saarinen 1986). Due to the format of the mailed survey, which precluded a mapping exercise, photographs were pre-tested as a method for describing important places. Narratives to describe types of places were decided against, because it is difficult to describe a place in a narrative format without alluding to the potential function or of the place, thereby biasing the assignment of potential values. For example, asking about the values of a "hiking trail," may bias the response to recreation values. Future research may need to consider this distinction to refine and validate methods for considering sense of place in the context of quantitative research. The use of photographs to describe places in this research is exploratory.

<sup>iii</sup> Candidates were asked to rank the photographs according to the extent to which the place was important to the character of the island and provided for the value, not according to his or her preference for the place, which is the primary objective of most landscape assessment studies. Several landscape assessment researchers have acknowledged that landscapes can be judged not just for their appeal, but also for how well they provide for activities (Purcell *et al.* 1994), meanings and emotions (Schroeder 1991), and community symbols (Mudrak 1983). However, these researchers are concerned with how the other attributes of landscape are associated with landscape preference, whereas this research is not concerned with the relationship between values and preference.