TRAVEL METHOD PREFERENCES OF BOUNDARY WATERS CANOE AREA CAMPERS

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Introduction

Measuring recreational area visitor preferences can aid managers in at least three ways. First, managers may be able to foresee potential resource degradation because of inappropriate visitor preferences. For example, visitor preferences for mechanized travel in some ecologically sensitive areas could result in serious soil erosion problems. Second, managers of recreation resources can evaluate the congruence of management objectives with visitor preferences. Finally, data on visitor preferences may help the manager to anticipate and thereby reduce possible conflicts among the visitors themselves.

Most studies on visitor preferences have concentrated on some aspect of the recreational environment -- either natural or cultural. Investigations reported in (1) and (2) researched preferences on both aspects of the natural environment (vegetation, topography) and recreational facilities. Klukas and Duncan (3) were interested in vegetational preferences only and Schafer and Burke (7) were primarily concerned about recreation area facilities. Lacking in these studies were data on preferences for type of camping shelter, travel method, and similar variables which may have meaningful implications for the design of facilities and establishment of carrying capacities for wildland recreation resources.

Data was obtained on travel method preferences of visitors camping in the Boundary Waters Canoe Area (BWCA) located on the Superior National Forest in northeastern Minnesota. It was gathered as part of an overall study of camper-canoen outfitter relationships. The information presented here illustrates certain implications for BWCA management and relationships which may be worthy of investigation for other wilderness areas.

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Method

A total of 499 interviews were taken with group spokesmen (16 years of age and older) returning from overnight camping trips into the BWCA. Interviews were conducted during the summers of 1968 and 1969 at twelve access points and one portage within the BWCA according to a sampling procedure explained in (6). All groups returning to the interviewing location within the designated time period were interviewed. Three refusals were recorded. Respondents were asked: "Under ideal conditions what method of travel in the Boundary Waters Canoe Area would you prefer?". Answers were tabulated and related to the variables reported below.

Results

Most paddling canoeists interviewed preferred to remain paddlers (Table 1). While a majority of the motor canoeists and motor boaters preferred their present travel method, a quarter to a third preferred paddling. Less than 13% of the paddlers preferred motorized travel.

Table 1

<table>
<thead>
<tr>
<th>Travel Preference*</th>
<th>Paddle (N=325)</th>
<th>Motor Canoe (N=112)</th>
<th>Motor Boat (N=59)</th>
<th>Other (N=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paddle Canoe</td>
<td>84.6</td>
<td>34.8</td>
<td>23.8</td>
<td>33.3</td>
</tr>
<tr>
<td>Motor Canoe</td>
<td>12.0</td>
<td>53.6</td>
<td>16.9</td>
<td>33.3</td>
</tr>
<tr>
<td>Motor boat</td>
<td>0.6</td>
<td>4.5</td>
<td>52.5</td>
<td>33.4</td>
</tr>
<tr>
<td>Other</td>
<td>2.8</td>
<td>7.1</td>
<td>6.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Differences statistically significant at \( \alpha = .05 \) level.
Most motorized travelers came from the local area (defined as Minnesota's Eighth Congressional District in this study) and less than 40% of these preferred paddling a canoe. While local residents are more likely to visit the area for fishing, other campers view the area as a site for solitude and naturalness. These perceptions are also revealed in their travel method preference. Of those visiting the area for its solitude and wilderness environment, 77.1% preferred paddle canoeing; only 16.5% preferred to travel by motor. Sixty percent of the fishermen preferred motors contrasted to 34.5% who preferred a paddle canoe.

It has often been argued that older visitors are not able to withstand the requirements of a rigorous paddle canoe trip, and therefore, motors should not be restricted in the BWCA. Data collected in this study indicate only slight support for this argument. Although older campers did express more frequently a preference for motorized travel, the differences between age groups were relatively small and not statistically significant at the $$\alpha = .05$$ level.

The effects of socio-cultural influences of occupation and education on the camper's preferences were also investigated. Preference for paddle canoeing was most frequently elicited by students, professionals, and managers. Least preference for paddle canoeing was shown by sales workers, craftsmen and operatives.

Summary and Management Implications

Paddle canoeists are apparently most satisfied with their present means of travel. A substantial proportion of those using motors, however, would prefer paddle canoe over motors, given "ideal" conditions (sufficient time and money). With increasing mobility, affluence, and length of vacation periods, groups using paddle canoe would be expected to increase at a faster rate than groups using motors. Over the five year period 1961-1966, a slight trend in this direction has been noted (5).

Age of the respondent and preference for a specific means of travel appeared to be only weakly related. While recognizing that only BWCA users were studied, regardless of age or previous experience, most respondents preferred paddle canoe. This was especially true of group spokesmen perceiving the area as a place for solitude and wildness. Apparently, fishermen took little note of these opportunities for a majority of them preferred some means of motorized travel. With more communication about wilderness opportunities of the BWCA use may tend more toward paddle canoe.

In terms of management implications, the data reveal that visitor conflicts -- between paddlers and motorized groups -- may increase as use accelerates. A previous work by Lucas (4) has also noted that paddlers object to meeting motor boats more than motor boaters object to meeting paddlers. As paddler-motor boater encounters increase, satisfaction of the paddler's (who accounted for 61% of the total BWCA visitor days use in 1968) anticipated wilderness experience will probably decrease.
Undoubtedly, motorized groups have more impact on water quality than paddlers. With increasing use, managers may have to encourage more use of paddle canoe and discourage motor boaters to reduce this impact. Also, use of paddle canoe seems to be more congruent with the purposes of wilderness as established by the Wilderness Act of 1964. Finally, utilization of travel method preference data (especially in wilderness where conflicts are more serious) can aid managers in preserving sensitive and unique resources from inappropriate activity by visitors.

Literature Cited


