

Adirondack Stakeholder Wilderness Perceptions for Use in Wilderness Preservation

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INTRODUCTION

Although wilderness is legally defined by 1987 New York State legislation, the concept of wilderness further defined by individual perceptions. The Adirondack State Park in northern New York is a six-million acre mix of public and private lands where local economies often rely on wilderness-based tourism and attractions. Park managers work to balance the preservation of the Adirondack wilderness character with recreation and commercial activities. Wilderness perceptions are formed by familiarity, access, and experiences with natural landscapes and are therefore highly variable among individuals. However, individuals similar in demographic background or geographic location are likely to have similar perceptions of wilderness, which allows for the study of the wilderness concept by discrete sample populations.

My internship objectives were to collect wilderness perception surveys in the Adirondack Park and test for statistical differences among sample locations and then stakeholder groups. I tested the following hypotheses:

1. Wilderness perceptions differ by sample location

Sample locations: Old Forge, Lake George, Lake Placid, Newcomb

2. Wilderness perceptions differ by stakeholder group, with residents expected to have the strictest interpretation and most defined perception of wilderness along a spectrum

Stakeholder groups: residents, seasonal residents, visitors

This internship was in collaboration with Protect the Adirondacks! (PROTECT), an organization committed to the conservation and stewardship of public lands among private communities in the Adirondacks. I worked with Dan Plumley, PROTECT's Director of Conservation Programs during preliminary stages of this internship. I participated in a Wilderness Stewardship Training weekend presented by PROTECT and organized by Dan Plumley prior to the internship. Unfortunately in early June Dan Plumley resigned from PROTECT to return to a career in private environmental consulting. I notified the SUNY-ESF

campus coordinator (Dr. Shannon) and continued my internship as planned. A summary report of the research was prepared and delivered to Dan Plumley.

The data collected through this project will feed directly to my thesis and graduate research concerning wilderness perceptions in the Adirondacks. My research goals are intended to benefit park managers and organizations like PROTECT to better promote the conservation of the recreational, cultural, and natural resources of the Adirondack Park.

RESEARCH CONDUCTED

This internship repeated a survey protocol approved and developed during the summer of 2009. I distributed survey efforts among trailheads, boat launches, community events, and town centers within sample locations (Old Forge, Lake Placid, Lake George, Newcomb) to represent stakeholder groups (residents, seasonal residents, visitors) of the Adirondack Park (Figure 1).

The surveys recorded data on respondent's wilderness perceptions and demographic variables. Respondents were asked to indicate the desirability of 16 wilderness items along a five point scale

(Appendix I). Items were based on previous wilderness perception studies (Kliskey and Kearsley 1993). I calculated a total score by aggregating the 16 individual scores. I used the total scores to compare among sample locations and then stakeholder groups. Total scores were also used to define four classes (nonpurist, neutralist, moderate purist, strong purist) along on the U.S. Wilderness Purism Scale which represents an increasingly strict interpretation of the wilderness concept from left to right along the scale (Stankey 1973). This research focuses on the two extreme classes: nonpurists with the lowest total scores and strong purists with the highest total scores. An additional analysis was conducted on the distribution of the four purism classes among stakeholder groups and then sample populations.

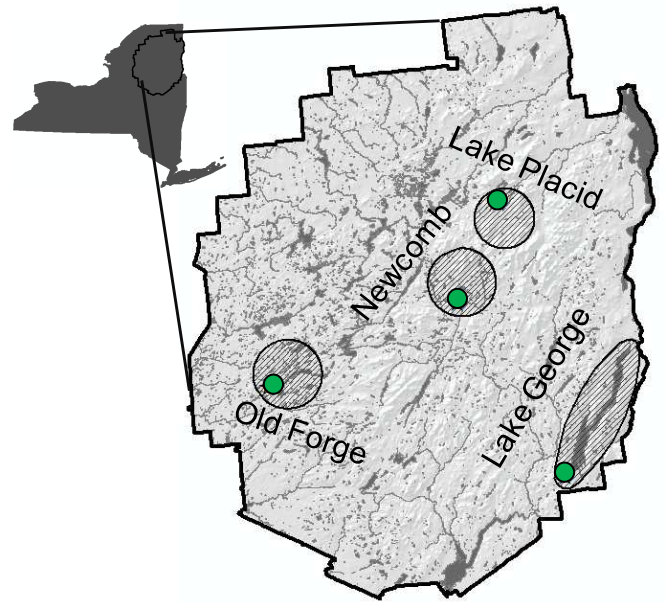


Figure 1: Sample locations within the Adirondack Park of New York. Green circles indicate town centers while shaded areas represent the overall range of sampling efforts for each location.

RESULTS AND CONCLUSION

Surveys collected during this internship were combined with surveys from the previous summer, to a total of 687 surveys used for analysis. ANOVA tests of mean total scores indicated a significant difference among stakeholder groups, with residents scoring the lowest. ANOVA did not indicate a significant difference among the four sample locations, however a deeper analysis of stakeholder groups across sample locations indicated differences among residents, with Newcomb residents scoring the lowest and significantly different than residents from other sample locations. Lake Placid and Newcomb seasonal residents and visitors scored higher than similar stakeholders from Old Forge and Lake George. An additional analysis compared the three stakeholder groups within each sample location. Old Forge, Lake Placid, and Newcomb residents were significantly different than the other stakeholders of the same sample populations, all with the lowest total scores.

A similar analysis compared sample populations by the distribution of purism classes, which were previously defined by the range of total scores. Among stakeholder groups, a majority of residents consisted of nonpurists while the highest concentration of strong purists was within the seasonal resident group. Among sample locations, Old Forge had the lowest concentration of strong purists while Lake Placid had the highest. The single population with the highest concentration of nonpurists was Newcomb residents, who also had the lowest mean total score. The highest concentration of strong purists was within Lake Placid seasonal residents, followed closely by Newcomb visitors and seasonal residents. Newcomb was a very interesting sample location, with high concentrations of both nonpurists and strong purists in different stakeholder groups.

The demographic variables age, education, and politics proved significant in relation to the sample populations and purism classes. In general, nonpurists tended to be older with significantly less education and more conservative politics than strong purists. Lake Placid had the lowest mean age and, along with Lake George, more liberal politics. Residents, particularly of Newcomb, had the highest mean age along with lower education levels. Based on ANOVA, distribution, and demographic analysis, nonpurists are the most similar to residents. Strong

purists are most associated with Lake Placid. It is not as clear which sample location is most associated with nonpurists or which stakeholder group is most associated with strong purists.

This research was recorded in greater detail and provided in a report to Dan Plumley prior to the submission of this report.

FUTURE WORK

The goal of this research is to enhance the understanding of how different groups use and perceive of wilderness in the Adirondack Park, which has a greater impact on natural resource use, land management, and preservation. The project has made a substantial contribution to my thesis objectives, which include a complex integration of survey results and spatial datasets to construct projected maps of wilderness perceptions (Appendix II). These maps depict wilderness zones on the landscape as defined by the purism classes through the survey data. One map is constructed for each sample populations for comparison among stakeholders and then sample locations, as well as to currently designated zones of wilderness in the Adirondack Park. A comparison of perceived and designated wilderness extents would assist managers to better understand and serve the diverse preferences for natural landscapes among stakeholder groups within the Adirondack Park.

ACKNOWLEDGEMENT

I thank the multiple organizations who permitted surveying at their events or locations including: the Mountainman Outdoor Supply Company and Arts Center of Old Forge, the Adirondack Loj and Farmers Market of Lake Placid, the Lions Club and Visitor Interpretive Center of Newcomb, and the state of New York. I would like to thank Dan Plumley and PROTECT for their contributions to this project. I would also like to thank my major professor Dr. Colin Beier for his continual guidance and support in my research. Most importantly, I want to acknowledge funding provided by the Edna B. Sussman Foundation. I am grateful for this opportunity provided by the Sussman Foundation to further develop my research by collecting and analyzing an essential dataset for my master's thesis.

LITERATURE CITED

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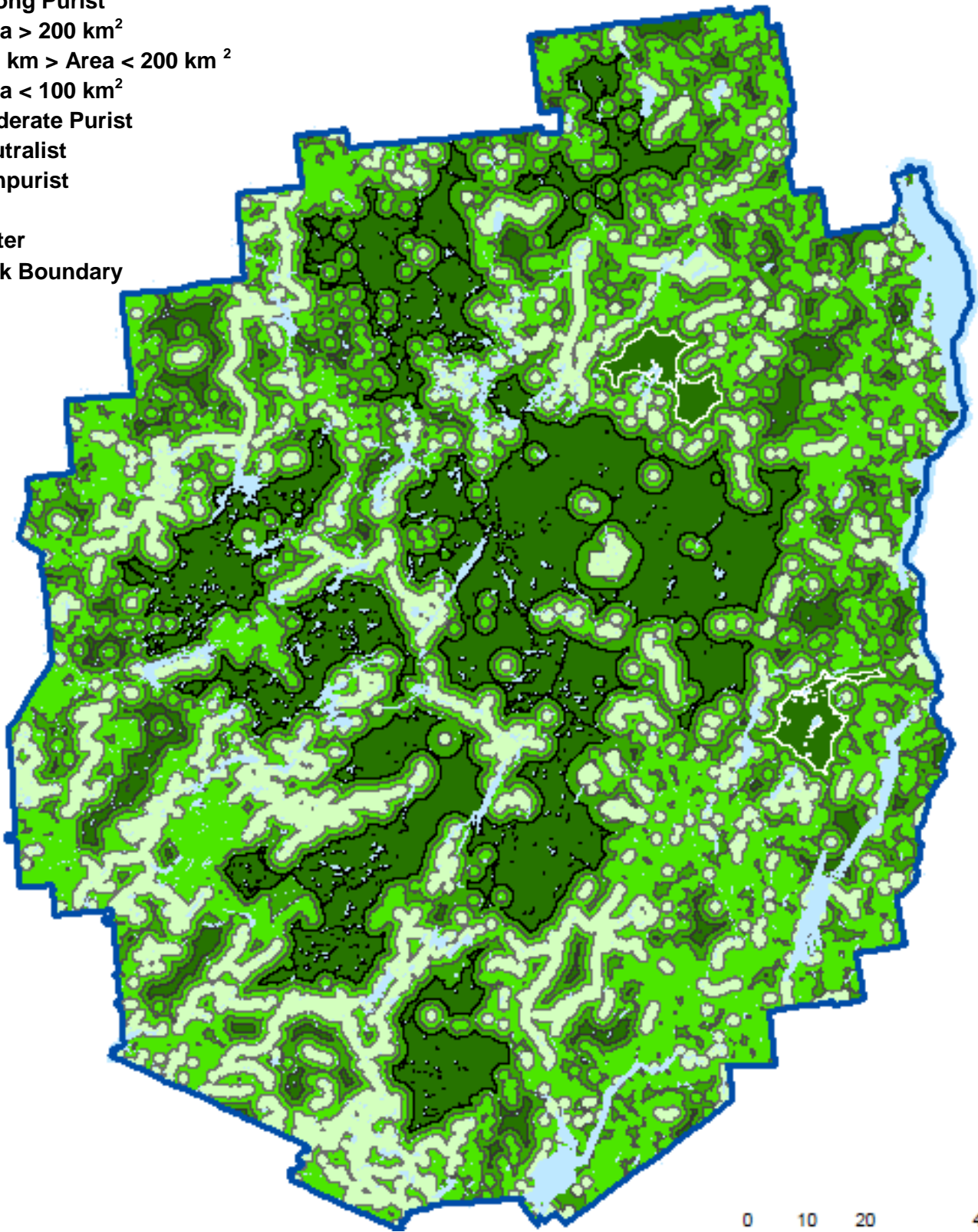
Stankey, G.H. 1973. Visitor perception of wilderness recreation carrying capacity. Research Paper INT-142. USDA Forest Service, Intermountain Research Station, Ogden, Utah.

Appendix I: 16 Wilderness Items. Numbers indicated the value given to each response.

Item	Likert Rating Scale				
	Strongly Desirable	Desirable	Neutral	Undesirable	Strongly Undesirable
A. Maintained campsites	1	2	3	4	5
B. Presence of species not originally native to the area	1	2	3	4	5
C. Road access to the wilderness boundary	1	2	3	4	5
D. Commercial recreation (e.g. guided tours)	1	2	3	4	5
E. Hunting	1	2	3	4	5
F. Logging	1	2	3	4	5
G. Motorized travel by visitors (use of powered vehicles, boats, etc)	1	2	3	4	5
H. Hydroelectric development (e.g. dams, power lines)	1	2	3	4	5
I. Commercial mines	1	2	3	4	5
J. Solitude (not seeing many other groups of people)	5	4	3	2	1
K. Remote from cities, towns, or areas of residence	5	4	3	2	1
L. Free from evidence of obvious human impact	5	4	3	2	1
M. Big enough to take at least two days to walk across	5	4	3	2	1
N. High density of biodiversity (numerous examples of plant and animal species)	5	4	3	2	1
O. Protected by preservation/conservation legislation	5	4	3	2	1
P. Evidence of human management (e.g. marked and maintained trails, resting benches, bridges over muddy areas, etc)	1	2	3	4	5

Appendix II: Future Research to Map Wilderness Perceptions Using Data from All Respondents

- Strong Purist
- Area > 200 km²
- 100 km > Area < 200 km²
- Area < 100 km²
- Moderate Purist
- Neutralist
- Nonpurist
- Water
- Park Boundary



0 10 20 40 km