

SUMMARY OF RESEARCH ACTIVITIES (1996 – 2003) WITHIN THE SOUTHWEST ZONE, ONTARIO PARKS

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Abstract

The Planning and Research Section, Ontario Parks, co-ordinates and implements corporate research priorities, and liaises with the scientific and education sectors. A database was created in 1996, coincident with the implementation of the new business model for Ontario Parks, to track research projects that were submitted for approval. The Southwest Zone, Ontario Parks, is an administrative area containing 40 + 1 provincial parks (one proposed). Since 1996 there have been over 120 research projects submitted and approved within the Zone's parks. Some of the projects are long-term, multi-park or regional research projects. Research topics are diverse and include such examples as the creation of a Niagara Escarpment ancient tree atlas, establishment of bio-diversity monitoring plots, park user surveys, oak savannah restoration monitoring, and genetic studies of species at risk. This poster presentation summarizes the location, content and diversity of research projects conducted in the Southwest Zone since 1996. It is also intended to demonstrate the range and scope of approved research and monitoring projects and to inform potential researchers about the policy and procedure for applying to conduct appropriate research in provincial parks.

Introduction

The goal of Ontario's provincial park system is to protect provincially significant natural, cultural, and recreational environments and to provide a variety of outdoor recreation opportunities in a system of provincial parks. Science is crucial to achieving this goal. It is fundamental to the selection and care of our provincial parks. It adds philosophical, intellectual, and educational depth to park programs. Science also provides opportunities to conduct research, collect information, gain knowledge and apply new theories and technologies vital to the delivery of heritage conservation and management (OMNR, 1997).

Ontario Parks Research Policy

Research activities are encouraged through a variety of means to help provide a better understanding of park environments and to contribute to appropriate management practices and actions. Ontario Parks, Ministry of Natural Resources, develops partnerships and agreements with qualified researchers at colleges, universities and other research institutions and organisations. They encourage volunteerism and make use of community-based initiatives to further park objectives (OMNR, 1997). The provincial park man-

agement plan defines the overall research interests for the park and, establishes the need for a research plan to address key research issues for parks with substantial research interests and activities (OMNR, 1996).

Research Disciplines

Life Science

Provincial parks protect a representative sample of life science features in Ontario's 13 ecoregions and 65 ecodistricts. Ecoregions are broad climatic zones distinguished by their north-south temperature and east-west precipitation gradient. Ecodistricts are the distinctive physiographic areas found within the ecoregions. Each ecodistrict contains landform patterns and biological productivity traits that distinguish it from other ecodistricts. Close to one half of these landform patterns and the vegetation and species they support are found within Ontario's provincial parks.

Highlight study: Niagara Escarpment Ancient Tree Atlas Project (1998, 1999)

Park(s): Various parks along the Niagara Escarpment

Social Science

Ontario's Provincial Parks are challenged with providing quality outdoor recreation, cultural resource protection and heritage appreciation opportunities while maintaining a balance between visitor use, customer satisfaction, and environmental protection. Ontario Parks values projects such as demographic and market analysis, profiles of traditional and potential park users and activities, product research and development, and customer satisfaction research.

Highlight Study: Provincial Parks Markets and Visitor Analysis (1998)

Park(s): MacGregor Point, Rondeau, The Pinery.

Cultural Heritage

The selection of areas for protection is guided by 13 historical themes and 115 specific theme segments encompassing all aspects of Ontario's history. Themes span more than 10 000 years of human history, from Ontario's earliest post-glacial immigrants, through European contact and settlement, to day-to-day aspects of contemporary life. Almost one third of all historical themes and theme segments are currently found within provincial parks.

Highlight Study: Archaeological Study of Former Beach O' Pines Camp 1932-1947 (2000)

Park(s): The Pinery

Earth Science

Representative features have been organized into 44 geological themes, while more than 1200 typical rock types, fossil assemblages, landforms and related geologic processes have been identified for protection. Close to one half of these features have been captured in our park system.

*Highlight Study: Holocene History of Great Lakes Coastal Dunes (2002)**Park(s): The Pinery***Resource Monitoring**

As part of its global commitment, Ontario Parks continues to monitor and evaluate long term provincial park ecosystem health within the context of the greater park and global ecosystem. The collection of data and information over extended periods of time provides information on past and present ecological, social, cultural and economic trends with which managers can accurately assess the past and make predictions about the future.

*Highlights: Monitoring the Extent of Deer-related Vegetation Impacts (1978-present)**Park(s): Rondeau***Research Activity**

Figure 1. Disciplines of research conducted in the Southwest Zone, 1996-2002.

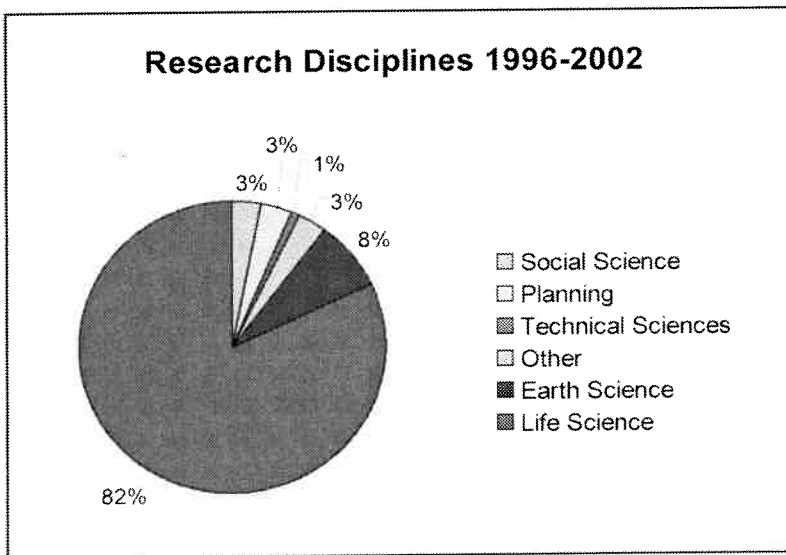


Figure 2. Number of research projects in the to 10 most active research parks.

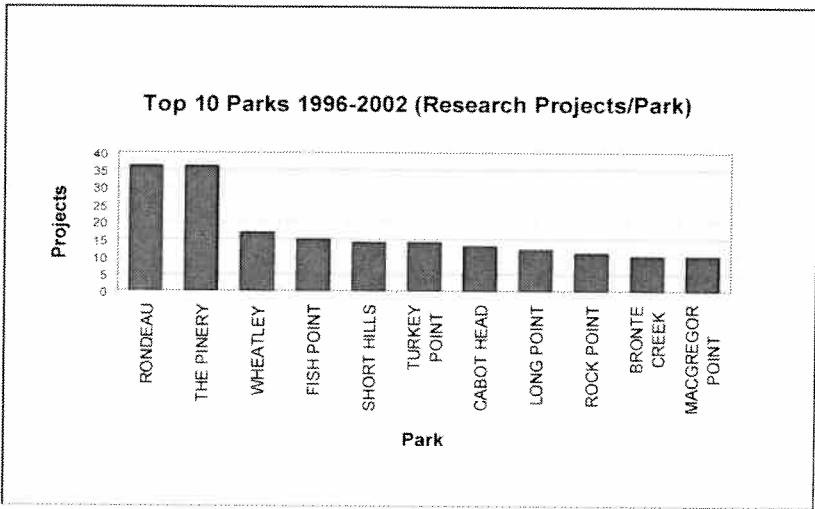
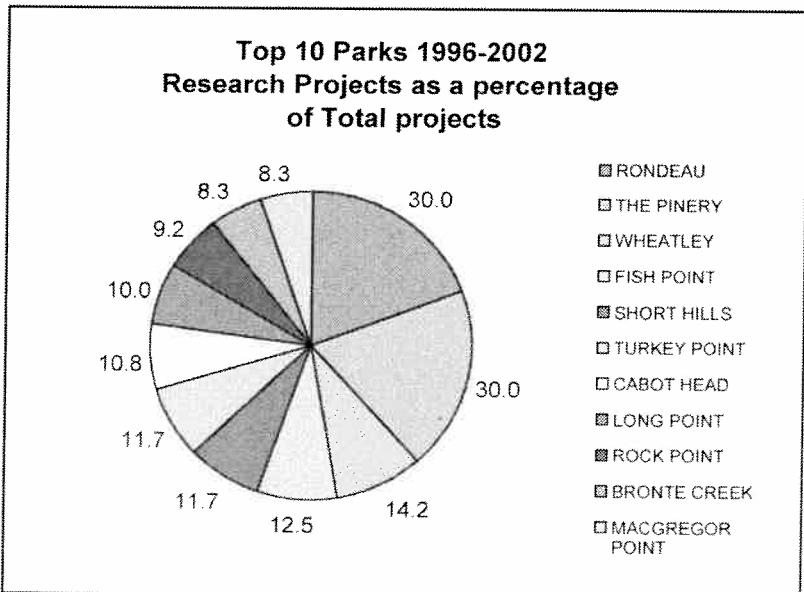


Figure 3. Top 10 parks - research projects as a percentage of total projects.



Research Needs and Application Process

Research Needs in Ontario Parks' Southwest Zone are highlighted in Table 1. Applying to conduct research in a provincial park can be done two ways: 1) through an online application (www.ontarioparks.com/form.html) or, 2) by contacting one of the Ontario Parks'

administrative zone offices throughout the province for an application form. There is approximately a two-month wait for the application approval process. This allows Ontario Parks the opportunity to review and assess the application.

The applicant's study period is a maximum of 12 months however, an extension may be applied for as needed. Upon completion of the study, the researcher(s) are required to provide the Park Superintendent/Zone Manager with a copy of all reports, publications, theses, etc. produced as a result of the research. This information must be submitted within two years of research project completion (OMNR, 1996).

Table 1. Research needs in Ontario Parks' southwest zone.

RESEARCH NEEDS: SOUTHWEST ZONE, ONTARIO PARKS

- A study and assessment of adjacent land uses and impacts on park objectives.
- Monitoring cumulative effects and long term environmental change.
- Vulnerable, threatened and endangered plant species geographic information system (GIS) referencing and monitoring.
- An assessment of potential candidate historical class parks.
- A thorough knowledge of the geological, biological and cultural diversity and socio-economic aspects of serving customer needs.
- Baseline information on geological features, processes and landscapes; species, populations and biotic communities; and ecological functions, processes and systems.
- Baseline information on archaeological sites, built heritage, cultural landscapes, historical events, legends and lore found within and associated with provincial parks.
- GAP analysis and theme studies to determine which ecological and geological features and cultural resources are required to complete the provincial parks system.
- Innovative management applications to maintain ecosystem integrity and health, restore biological diversity, determine carrying capacity, manage visitor activities.
- Innovative communication applications to enhance natural and cultural heritage education and heritage appreciation initiatives in parks and the greater park ecosystem.
- Baseline information on provincial park visitors; including numbers, origin, motivation, expectations, participation in outdoor recreation activities and customer satisfaction in non-operating provincial parks.
- Demographic and market analysis, profiles of traditional and potential provincial park users and activities, product research and development and customer satisfaction research.
- Minimum buffer requirements for species at risk.
- Inventory, mapping, assessment and management prescriptions for controlling targeted exotic and invasive plant species.
- Evaluation and impacts of campground noise on wildlife.
- Assessment of effectiveness of shelterwood cut for pine regeneration at Beattie Pinery Provincial Nature Reserve.

Conclusion

Provincial Parks are an ideal venue for scientific research because they contain rare and representative features, landscapes, and species. These natural areas serve as references and baselines for measuring environmental change. The Ontario Parks Research Policy establishes a mutually beneficial relationship with the scientific community whereby researchers gain access to these sites and Ontario Parks can make informed decisions to enhance park sustainability.

References

- OMNR (Ontario Ministry of Natural Resources). 1996. *Research Policy for Ontario Provincial Parks*. Science, Research and Planning. Ontario Parks, Peterborough, ON.
- OMNR (Ontario Ministry of Natural Resources). 1997. *Ontario Parks Research and Information Strategy*. Science, Research and Planning. Ontario Parks, Peterborough, ON.