

Centre for Northern Forest Ecosystem Research

Program Report Series

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THE HUMAN DIMENSIONS OF RESOURCE MANAGEMENT PROGRAM

This document is part of a series created for the public to provide a general overview of current research programs at the Centre for Northern Forest Ecosystem Research. Visit <http://cnfer.mnr.gov.on.ca/> for more detailed information and a listing of publications.

THE HUMAN DIMENSIONS OF RESOURCE MANAGEMENT (HDRM) RESEARCH PROGRAM EXAMINES THE PEOPLE SIDE OF RESOURCE MANAGEMENT. The HDRM program conducts applied research to support organizational goals and/or legal priorities of the OMNR and research priorities identified by OMNR staff and other stakeholders. Four general themes capture most research conducted by the research program.

Human Dimensions of Resource Management Research

1) Understanding how Resource Management Affects the Behaviours of People

The HDRMP conducts research to understand the behaviours of people and to predict how resource management decisions may affect these behaviours. Past research has studied the preferred settings for resource-based tourism and outdoor recreation and the willingness of different people to engage in forms of environmental activism.

Current research focuses on the behaviour of recreational anglers. The project was initiated to understand and predict how the creation, removal and maintenance of forest access roads may influence where anglers fish and how they value recreational fishing. Understanding these behaviours provides important information about angling demands for different resource settings and potential areas of conflict among anglers and resource-based tourists.

2) Assessing the Effectiveness of Policies, Guides and Resource Management Approaches

The HDRMP evaluates the effectiveness of policies, guides and other approaches that may affect social and/or economic systems. Past research has focused on understanding the efficacy of the forest management planning process at mitigating impacts of forestry operations on resource-based tourism.

Current research focuses on two aspects of the effectiveness of road access management. One project examines the effectiveness of various tools and controls (e.g., gates, signs, etc.) for limiting or preventing unwanted motorized access to water bodies. Effectiveness will be evaluated by monitoring vehicle use that occurs beyond points where these tools and controls are in place. A second project will investigate the likelihood that forest operations will lead to the creation of unauthorized motorized vehicle access to water bodies. We will use information on the attractiveness of waters (e.g., fish abundance) and costs of access (e.g., proximity of forest access roads) to predict the likelihood of unauthorized access point development. These predictions can help guide management efforts to prevent unauthorized access point development.



For more details, visit <http://cnfer.mnr.gov.on.ca>

3. Assessing Public Views about Resource Management

The HDRMP provides information to resource managers and stakeholders about the views that various publics have about resource management. Past research has focused on views about forest management in Ontario, visual aesthetics, and public support for different resource management policies.

Current efforts focus on approaches to road access management and their acceptability to stakeholders and residents of Ontario. Qualitative interviews with key stakeholder representatives from two northern Ontario locales provide information and perceptions about road access issues and management



4. Evaluating Public Participation

Evaluating the effectiveness of public participation in resource management is an important priority for the OMNR. Evaluations of the fairness and effectiveness of public participation are key indicators for reporting on forest sustainability. Past research has included having forest advisory committee members and other Ontarians evaluate the fairness and effectiveness of decision-making processes in forest management planning.

Current research is comparing evaluations and perceptions of forest advisory group members across Canada. Through self-evaluations and written comments, this research will help to identify those characteristics that are associated with effective deliberations, learning, and effectiveness of public participation. A second research project focuses on communicating complex information to participants in decision-making processes. Researchers will assess whether different media for communicating information increases knowledge transfer and the effectiveness of deliberations and decision-making.



Landscape Fisheries Model

Rob Kushneriuk from CNFER is developing a Landscape Fisheries Model (LFM) for the HDRM program. LFM is a model that uses a simulated world consisting of lakes, roads, access points, and angling agents (i.e., virtual anglers). The anglers make decisions about the timing, duration, and location of recreational fishing trips given the conditions of the simulated world. This virtual world allows the users of LFM to assess many management scenarios including changes to road access. While LFM is currently calibrated for the Thunder Bay area, information can be imported from any geography and examined in a variety of ways.

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 Ontario Ministry of Natural Resources

The Centre for Northern Forest Ecosystem Research (CNFER) is located on the Lakehead University campus. Research at CNFER is focused on OMNR's commitment to provide information about the environmental effects of timber management on Ontario's crown lands, and the effectiveness of existing timber management guidelines in preventing undesirable effects to Ontario's forest ecosystems. For more information, please visit <http://cnfer.mnr.gov.on.ca>.