

# Development of a Spatial Recreation Planning Framework for Canadian Crown Lands

Michael Yuan, Norman McIntyre, Robert Payne and Jeff Moore

Centre for Parks, Recreation and Tourism Research, Lakehead University, Thunder Bay, Ontario, Canada  
e-mail: mike.yuan@lakeheadu.ca

Public forests, commonly referred to as crown lands in Canada, are increasingly administered through integrated management approaches that acknowledge non-commodity resource values in addition to traditional wood products. Central to this premise is the recognition that all values the public associates with forests should be given due consideration in management actions. Until fairly recently though, Canada's Crown forests served foremost as commercial forest lease areas administered by the provinces. This contrasts with federally managed U.S. forests where multiple use policies gave recreation legal standing decades ago. Recent developments towards integrated, sustainable forest management practices have demonstrated the need to better understand the relationships between competing commodity and non-commodity forest values in Canada. Arguably, recreation and tourism are the least understood values of the resource and typically receive only secondary consideration in management decisions.

This project addresses the need for a structured evaluation of the recreation values of Crown Lands in a case study in the Dog River-Matawin sustainable forest license area, Northwest Ontario. The primary research objective is to develop a spatial recreation planning framework by which to identify recreation values and assess the effects of intensive forestry activities on them. The study area extends over 800,000 hectares abutting the eastern boundary of Quetico Provincial Park, an internationally significant wilderness canoeing area. Support for the project is provided through a partnership of public, private, corporate and academic interests in the Thunder Bay, Ontario region.

The project expands upon traditional planning approaches that are primarily supply driven to directly address core user values rather than traditional user preferences. A spatial GIS model has been developed that incorporates interactive data layers of the study area including (1) high resolution ortho-photo mosaic, (2) forest resource inventory (3) recreation facilities locations, (4) recreation opportunity spectrum type classification, (5) recreation values at the contextualized site, area and forest levels; (6), activity participation, type and location; and, (7) spatial trip patterns. These data layers are then overlaid on the forest management plan that details the harvesting and silvicultural treatments that are planned for the next five years. Operation of the interactive model is based on maintaining (1) recreation portfolios, a set of recreation opportunities preferred by recreationists similar in concept to timber (silvicultural) portfolios, (2) recreation class consistency, and (3) sets of cont The political process has repeatedly demonstrated that the civic debate over how publicly owned lands should be cared for ultimately centers around the 'meaning' of place and the reconciliation of competing values associated with them. This paper presents an amalgamation of useful concepts from traditional recreation planning approaches and proposes a spatial values-based methodology that responds to the demands of contemporary sustainable forest management paradigms.