ecotones of various ages showed plant species spreading into burned areas at an average rate of 0.5-0.8 m per year. With an 80-year rotation, the maximum distance between upland unburned fragments that will replenish biodiversity throughout the forest 80 to 130 m. Management implications for burned protected areas subject to salvage logging will be discussed.

Relationships Between Forest Fires, Habitat Change and Ecological Integrity in Terra Nova National Park, NF

Robin Bloom[1], Azim U. Mallik[1], Keith P. Lewis[2] and Randy Power[3]
[1]Department of Biology, Lakehead University
[2] Departments of Biology and Psychology, Memorial University
[3]Terra Nova National Park

Parks Canada has adopted a definition of ecological integrity that incorporates the status of native species diversity, ecosystem function (such as nutrient cycling) and stresses on species and their habitats. Managing for "ecological integrity" in protected areas implies that optimal combinations of these factors exist and can be maintained within political boundaries.

In this project we documented how forests respond to different levels of stress in the form of wildfire. The establishment success of black spruce in severely burned areas had strong positive effects on regeneration of other plants, nutrient cycling and wildlife habitat value. In contrast, many areas did not burn deeply and became dominated by expansive heathlands with low plant diversity and negative feedbacks on habitat quality. The relationship between optimal states for the ecosystem and types of disturbances are discussed in relation to park management options.

The Role of Biosphere Reserves in Working towards Ecological Integrity: Case Example of Frontenac Axis Biosphere Reserve

Munju Ravindra
St. Lawrence Islands National Park

There are currently ten places in Canada recognized by UNESCO (United Nations Education, Scientific, and Cultural Organization) as 'biosphere reserves', and a number of other areas in the process of developing biosphere reserve proposals. Four of the designated reserves and several of the proposals include national parks as biosphere reserve 'core areas'. One such proposal is the 1000 Islands - Frontenac

Axis biosphere reserve, encompassing St. Lawrence Islands National Park. Using this example, the paper explores the role of a biosphere reserve in working towards ecological integrity in the greater landscape. The paper examines why national parks and other protected areas should be interested in biosphere reserves, and identifies several ways in which the development of a biosphere reserve can support the protection of ecological integrity in the greater ecosystem.

Ontario's Living Legacy (OLL) Regulations Project – Poster Presentation

John R. Fisher
OLL Regulations Co-ordinator
Ontario Parks, OMNR

The Ontario's Living Legacy Land Use Strategy (1999) recommends the establishment of 378 parks and conservation reserves by regulation covering approximately 2.4 million hectares of Crown Land within the planning area. These regulations are to occur over the next four years. The Ontario Ministry of Natural Resources, more specifically Ontario Parks, is leading this process through the OLL Regulations implementation project. Since this project was initiated in mid-1999, MNR has regulated 91 parks and protected areas encompassing approximately 173,000 ha. of land.

The OLL Regulations implementation project is guided by an interdisciplinary MNR team with representatives from Ontario Parks; Northwest, Northeast, and Southcentral Regions; Native Affairs Unit; Ontario Surveyor General; Forest Industry Section; and the provincial Geomatics and Data Acquisition Services Centre.

The OLL regulations process involves a streamlined MNR administrative procedure to consult on the OLL site boundaries, prepare regulation documentation, amend forestry licences, and process draft Provincial Park, Public Lands, and Fish and Wildlife Conservation Act regulations through senior levels of government approval. It is a dynamic and complex process that, on one hand, must be sufficiently flexible to accommodate unique issues as they arise and, on the other hand, remain sufficiently consistent to ensure quality control and predictability across the planning area.

This poster presentation will provide a simplified overview of the digital maps and information transfer between various MNR offices as required by the OLL Regulations process. In particular, a regulated OLL site (i.e. C69 – Plastic Lake and Dawson Pond Conservation Reserve) will be reviewed at different stages of the regulation