

Management in a Planning Vacuum: Co-operation in the Quetico-BWCAW-Voyageurs International Boundary Region

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Abstract

This is a report of a workshop on shared management issues faced by Quetico Provincial Park in Ontario, and the Boundary Waters Canoe Area Wilderness (BWCAW) and Voyageurs National Park in Minnesota. In the absence of an integrated planning framework across the U.S.-Canada border, protected areas management issues tend to be tackled informally. Issues addressed in this report include fire management, tourism, and species-at-risk. The different political environments of the three areas have compounded problems of co-ordination in this biophysical region. The parks have common interests in fire management and species-at-risk management. For example, the 1999 blow-down requires co-operation by U.S. and Canadian authorities, as does any attempt at woodland caribou re-introduction. However, visitor management priorities inevitably differ: BWCAW is operating near capacity, whereas Quetico and surrounding communities need to stimulate more tourism. Suggestions are offered for improved management through enhanced co-ordination between these areas.

Introduction

Parks and protected areas do not exist in isolation of their regional context; they are perpetually being influenced by activities and management initiatives occurring around their borders (Dearden, 1988; Nelson, 1993). Activities that conflict with protected area mandates, such as forest harvesting adjacent to reserves, influence ecological, tourism and other values important to protected area sustainability and management (Woodley *et al.*, 1998). Reserves that neighbour one another also have a dramatic influence on the characteristics of adjacent land units. As a result, it is often in the best interest of protected area managers to work together on shared issues. This is not a simple task, as cross-jurisdictional management can be very

challenging; this is primarily due to the differing values, management systems and a diversity of political objectives. However, issues that face one reserve will invariably influence others. An excellent example of cross-jurisdictional management issues occurs in the centre of North America, straddling the Canada – United States border; here lies one of the largest intact protected regions on the continent. It is comprised of Quetico Provincial Park in Ontario, and Boundary Waters Canoe Area Wilderness and Voyageurs National Park in Minnesota. The region functions as an ecological unit where diverse ecosystems meet; the area is in a transition zone where the Great Lakes-St. Lawrence and Boreal forests meet the eastern edge of the prairies. This region is very diverse and is home to a multitude of species, Unfortunately there is very little integrated management of the vast regions, and most attempts at cooperative management and solutions are informal and ad hoc.

For this research paper we have informally named this region (comprised of the three protected areas) as the Northwoods Wilderness Frontier (Figure 1).

The purpose of this paper is twofold. First, we examine the individual reserves and identify priority management issues. Second, we identify shared management concerns and strategies to deal with them.

Managing Beyond Boundaries

The management of protected areas is a challenging endeavor; strategies are often complex, and in certain cases contradictory (Killan, 1993; Priddle, 1982). Even so, managers must approach these tasks with vigor and from a resource protection perspective. Conflicts within a single jurisdiction are sufficiently complex; the complexity of protected area management is compounded if management decisions are to be embraced by managers from multiple jurisdictions. Management efforts across international borders further complicate things.

The Parks

Quetico Provincial Park

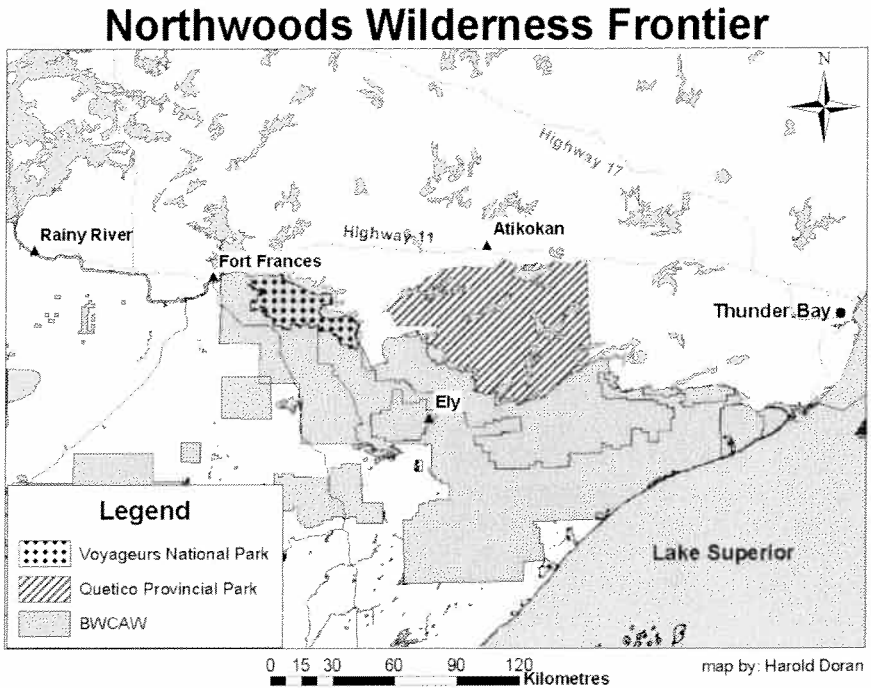
Provincial parks in Ontario are classified into six categories: natural environment, waterway, nature reserve, historical, recreation, and wilderness. One hundred thousand hectares is the minimum area a wilderness park is to occupy (Ontario Parks, 2001). At 475,000 ha, Quetico Provincial Park, which lies along the Ontario-Minnesota border approximately 160 km west of Thunder Bay, is the third largest wilderness park in Ontario. It is characterized by hundreds of lakes, beautiful Canadian Shield topography, and vast unspoiled wilderness. This landscape was formed by ancient geological processes and later glacial activity and has since evolved into an area with a unique composition of Great Lakes St. Lawrence, boreal, and even

prairie plant species. The area has a rich history of use by First Nations people and Euro-Canadians.

Several issues that park managers face today include the re-introduction of fire as a natural component of the regional ecology at appropriate temporal and spatial scales.

Balancing between the needs of recreational users and meeting conservation targets is an ongoing management dilemma. In addition, managers must incorporate First Nations rights and values into park management policies and boundary zone issues.

Figure 1. Map of the Northwoods Wilderness Frontier.



Boundary Waters Canoe Area Wilderness

The Boundary Waters Canoe Area Wilderness (BWCWA) forms a ribbon of protected areas along much of the Ontario-Minnesota Border. The reserve represents a significant portion of the Great Lakes-St. Lawrence and boreal forest regions in the U.S. It is also the largest Northwoods lakelands region in the U.S. Due to its unique characteristics within the U.S., with rugged Precambrian shield and vast

waterway system, and its proximity to large mid-western urban centres, it is the most heavily used backcountry area in North America. The BWCAW is the second largest protected area in the lower 48 states (434,000 ha). Even with its considerable size, high summer visitation by canoe trippers is posing a threat to the ecological integrity of heavily used routes, and to people seeking solitude and wilderness values (Stankey *et al.*, 1990).

Fire management has long been identified as a management priority ever since the early 1950s when fire suppression was the accepted management regime. In recent years, the role of fire has been identified as a priority in maintaining ecological processes and vegetation mosaics. Prescribed fire is also being used to reduce fuel loads in the large 1999 blowdown area (USDA, 2000).

The management of species-at-risk is also a major issue in this region, with many threatened species living in the Northwoods Wilderness Frontier such as the Bald Eagle (*Haliaeetus leucocephalus*), and Canada lynx (*Lynx canadensis*). Woodland caribou (*Rangifer tarandus caribou*) once roamed the wilds of this boundary region, but were extirpated in the 1940s (Heinselman, 1996; Racey *et al.*, 1998). Studies have also been undertaken to look at the potential of woodland caribou reintroductions (Jordan *et al.*, 1996). Any species reintroduction would need the cooperation of all land managers in the Northwoods Wilderness Frontier region for success to be realized, especially for wide-ranging animals such as caribou.

Voyageurs National Park

Voyageurs National Park, located adjacent to International Falls/Fort Frances on the Ontario-Minnesota border is considerably smaller than the two other reserves, at only 89,034 ha it does not have the wilderness character of Quetico or BWCAW. Voyageurs does have other special values, such as a booming recreational industry (both summer and winter), and unique vegetation mosaics, comprised of Great Lakes-St. Lawrence and boreal forests, with significant influence from the nearby prairies. These two unique features are also what potentially pose the greatest threats to this national park. Heavy use from recreational house and motorboats in the summer, and snowmobiles in the winter are having significant impacts on the natural values associated with this national park. Due to its close proximity to dry prairies, Voyageurs National Park is particularly prone to vegetation community alterations as a result of climate change (Suffling and Scott, 2002). Some mitigative approaches such as fire control can be used in the short term to address vegetation change, but other longer-term and more appropriate management decisions will have to be made regarding sustainable vegetation management.

Shared Issues

Visitor Management

All of the reserves have visitor management issues; on the American side of the

border issues arise from overuse and associated recreational impacts on native flora and fauna, with both BWCAW and Voyageurs N.P. operating near capacity during the summer months. Quetico, although heavily used in certain areas, receives many of its visitors from the U.S. as Americans cross the border from the BWCAW. This has resulted in a little economic stimulus for communities such as Atikokan in Ontario. Plans should be devised to distribute the visitors more evenly, with an increasing number entering the region from the Canadian side of the border.

Species at Risk

Addressing issues relating to species-at-risk cannot be undertaken by individual protected areas. Any form of effective management or re-introduction (in the case of woodland caribou) must be done in a coordinated fashion. Modular approaches to these issues will result in the source – sink phenomenon, in which one area may act as a source for threatened species, whereas adjacent jurisdictions with less protection will be where species are lost. In this case, the total area protected in these reserves is greater than the sum of their parts.

Fire Management

Fire is the dominant driver of change in this ecosystem (Heinselman, 1996; Ontario Parks, 1998). It has dramatic effects on all terrestrial species, their distribution and densities. Although fire suppression activities have been successful since the 1950s, their ecological impacts outweigh any benefits. This form of management is inappropriate for wilderness areas such as these, where ecological values should be the top priority. Small scale prescribed burns are a good start, but controlled disturbance events cannot replicate the stochastic nature of large natural fires, which are needed to maintain ecological systems such as Jack pine (*Pinus banksiana*) forests in this part of the world (Heinselman, 1973; Schaefer and Pruitt, 1991; Schindler, 1998). Management strategies must address this serious issue, as the ecological integrity of the area depends on a diverse fire regime. Management between reserves, especially Quetico and the BWCAW, could promote larger fires by combining management efforts and establishing a large core natural fire zone in the heart of the two reserves along the international border.

Conclusions and Recommendations

This report has outlined some of the issues facing the trans-boundary protected area in Northern Minnesota and Northwestern Ontario: the Boundary Waters Canoe Area Wilderness, Quetico Provincial Park, and Voyageurs National Park. While threatened and endangered species management, fire management, and visitor use and distribution are only a select few of these matters, their examination has led to several general conclusions which can further enhance the management of the region. These recommendations are outlined in the following paragraphs.

1. Recognize the region

The three protected areas form a unique, contiguous environment, and many issues facing individual parks are common throughout the region. Currently, the three parks are not recognizable as a regional core. A first step in recognizing the region is to agree on a name that represents all three areas (i.e., the Northwoods Wilderness Frontier). Given the breadth of trans-boundary issues facing park managers, the three protected areas also need to formalize an inter-jurisdictional committee in order to jointly address the regional issues. Such a committee would include protected area managers from all three parks and representatives from all governing agencies. This committee would oversee sub-committees that would address more specific issues such as fire, rare and endangered species, and tourism. Initiatives that could be developed at a sub-committee level could include:

- Establishing a strategy that would focus on managing the ecological role of fire throughout the region. A less restrictive political environment in Canada allows Quetico Provincial Park managers to coordinate this effort;
- Developing interpretative outreach programs and projects to raise awareness of species-at-risk in the region. Managers of the BWCAW and Voyageurs should take a leading role with these initiatives because of greater experience with threatened and endangered species management and greater funding, resulting in increased data availability; and,
- Marketing and promoting regional recreational opportunities using the new name.

2. Identify and act upon regional opportunities

There are various regional opportunities that should be pursued to help realize the goals of the area as identified by the inter-jurisdictional committee. Educational field seminars could be organized to raise awareness among the local population, lobby groups and decision-makers, with a few days spent in each protected area, to examine the differences between the biomes and their species. This program could help participants better understand ecological interrelationships and the need to protect endangered and threatened species. The participant fees could go towards paying the guide's salary and/or into a fund for species protection and recovery. The U.S. should share its considerable experience with comprehensive programs and data collection initiatives.

Opportunities, with respect to fire, include the promotion of ecological values and integrated research across inter-jurisdictional boundaries, which can then be used as a model of collaborative work.

The opportunity exists to promote and market the Northwoods Wilderness Frontier because of its unique, unspoiled character. This can be achieved through direct marketing (i.e., travel media) and indirect marketing (i.e., visual and literary art).

3. Identify shared interests and develop common goals

Managers of the three parks have indicated that maintaining the ecological integrity of the region, while providing recreational opportunities is an integral part of their responsibilities. With respect to fire, learning opportunities include understanding the dynamics of fire at multiple spatial and temporal scales.

The three protected areas need to form a regional partnership to conserve wildlife populations and their habitats. A charter or agreement on threatened and endangered species can be drawn to clearly indicate common interests and determine appropriate goals. The “Framework for Cooperation” for species protection and recovery between the U.S. and Canadian federal governments may act as a model from which a regional approach could be organized.

The three parks should also strive towards recognizing the complex as a prime tourist destination. This can be achieved by enhancing existing tourism attractions and services in the region and by marketing to domestic and international audiences that demand such wilderness.

4. Identify and work to resolve shared problems

While some problems are park specific, others are regional in scope. Identification and resolution of such problems needs to be addressed by the regional committee. A lack of information has hindered ecologically sound fire management policies. Co-operating on research initiatives and improved sharing of information related to fire could result in improved fire management practices.

A common problem regarding threatened and endangered species is habitat loss and fragmentation. The three protected areas should work together to safeguard existing wildlife corridors between the parks from major human disturbance and development.

Inter-park travel is another shared regional problem. Existing transportation infrastructure in the region does not effectively connect the parks. New and innovative ways of facilitating visitor movement within the region need to be developed by the joint committee.

5. Identify and resolve tensions

Due to the inter-jurisdictional nature of the region, specific management objectives will at times conflict with one another. In order to work together more effectively, it is important for committee members and park staff to understand the commonalities and differences among the three protected areas.

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