

PROTECTED AREAS IN THE CONTEXT OF BIODIVERSITY AND ECOSYSTEM MANAGEMENT CAN ALBERTA'S "SPECIAL PLACES 2000" INITIATIVE MAKE THE GRADE?

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Protected areas - biodiversity - ecosystem management. Recent expanding interest in many conservation initiatives, including protected areas, is coalescing around the relationship between biodiversity, ecological processes and human values and activities. The fundamental efforts of those interested in protected areas will still be site and boundary identification and long term protection through legislation and management, but these efforts increasingly need to be described in terms of biodiversity conservation and ecosystem management strategies.

We provide a brief summary of the

opportunities for protected areas as provided by recent international and national biodiversity initiatives, and new approaches to ecosystem management. Alberta's recently released protected areas strategy, titled Special Places 2000 is highlighted in relation to these opportunities.

Biodiversity Conservation

Rather than just another fashionable buzzword, biodiversity is becoming the major unifying framework for the range of factors that those interested in conservation need to consider. Biodiversity conservation is a "tidal wave" as an organizational and strategic concept.

One of the most important international political events that recognizes the importance of this concept is the Convention on Biological Diversity that was signed at the United Nations Conference on the Environment and Development in Rio de Janeiro during June 1992.

This Convention includes articles that deal with conserving biodiversity, preserving basic planetary ecological integrity, global funding of conservation, sustainable development, education and scientific research on biodiversity. Protected areas are one of the foundations of the Convention, as evidenced by the following article:

- Article 8 - Each contracting party shall, as far as possible and as appropriate:
 - a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;
 - b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity;
 - c) Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use.

(Protected area is defined in the Convention on Biological Diversity as "a geographically defined area which is designated or regulated and

managed to achieve specific conservation objectives.")

Canada was a major force in negotiating the Convention and at a point when many nations were wavering about their commitment, was the first nation to sign the completed Convention. The Convention subsequently came into force on December 29, 1993.

Canada is preparing a national biodiversity strategy to be finalized in the fall of 1994. The draft being prepared for public release has fourteen recommendations (although these may change once the final draft is released) related to protected areas in Canada, as follows:

- Develop and implement a national vision, framework and strategy for completing a system of protected areas for the purpose of conserving biodiversity.
- Establish a diverse range of protected areas based on species' critical habitat needs, and ecosystem and genetic diversity.
- Establish at least one protected area, of sufficient size to maintain ecological integrity, representing each of Canada's ecological units by the year 2000.
- Involve non-government organizations and private landowners in establishing protected areas.
- Identify priority sites for the establishment of protected areas, and provide interim protection measures while protected status is being sought.
- Enhance the role of local communities in determining and mitigating negative social, economic and cultural impacts regarding the

establishment and use of protected areas.

- Integrate protected areas into the management of surrounding landscapes.
- Prepare and implement management plans, guidelines and monitoring programs for all protected areas on a priority basis.
- Re-connect fragments, provide corridors and protect habitats for individual species or populations, where conservation of entire ecosystems is no longer possible.
- Evaluate the role of the full range of protected areas in the conservation of biological diversity, and adjust legislation, enforcement, and management practices where necessary.
- Promote the use of an internationally recognized protected areas classification system.
- Develop and use a credible scientific information basis for the establishment and management of protected areas.
- Manage crown range lands and military sites where practical, as biodiversity protection areas.
- Ensure that protected areas are established recognizing the habitat needs of highly mobile species or populations.

These recommendations, if retained in the final strategy, not only entrench but expand the important role of protected areas in the conservation of Canada's biodiversity. The first international meeting of the signatories to the Rio Convention on Biological Diversity is planned for the fall of 1994. If Canada wishes to retain its international leadership position on the issue of biodiversity conservation, it will work

toward completion for this meeting, its national biodiversity strategy as an example for other nations to follow.

The subsequent challenge for Canada and its various jurisdictions is to put the strategy's recommendations into practice. For the issue of protected areas, it will be necessary to quickly define the role of protected areas versus the role of more intensively managed landscapes in biodiversity conservation. It will be also necessary to define the role of protected areas in meeting Canadians' economic and social goals in addition to their role of biodiversity conservation.

Ecosystem Management

There has been a major shift in protected area management in the last couple of decades. There had been a prevailing attitude to have protected areas serve as "vignettes" - examples of some nebulous pre-European primitive Canada that are surrounded by intensively managed landscapes. Because ecosystems naturally change, we know now that this vision of protected areas is not a desirable nor feasible one of protected areas management, although many cling to it. To use any narrow window of time as the basis for establishing management goals in protected areas is inappropriate, especially for systems characterized by non-equilibrium conditions.

We must redefine our vision of protected areas management if we are to successfully face the significant biological, economic and social challenges in the establishment and stewardship of protected areas.

We need a better way to manage for change in protected areas - both for change in the environment, and for change in public perceptions and attitudes. This has been reflected in an evolution of approaches to

protected areas management. Early versions drew lines around various areas with the intent that undeveloped, essentially unmanaged areas within the boundaries would be adequately protected. Later, the need for active management was recognized. Currently, we also realize that protected areas management requires ongoing refinement goals and cooperation with neighbouring agencies, landowners and tenure holders.

Our challenge now is to define a working model that recognizes these new, but rapidly changing, realities. Ecosystem management appears to be the appropriate basis for this new model. But beyond this, ecosystem management seems to have the potential of providing both the agency mandate and the operational mechanisms to establish new protected areas and to expand protected area interests beyond the strict boundaries of legislatively established sites.

Although there are many definitions of ecosystem management, most encompass the optimal integration of ecological potentials and constraints with changing social values and needs and with emerging technologies. This meshing of human interaction with natural ecosystems in a unifying framework provides new opportunities for those interested in protected areas.

We should approach the new opportunity of ecosystem management and protected areas on three major fronts:

- First, for sites that are already formalized as protected areas, the following three-step approach will help incorporate ecosystem management:

- Clearly define goals and

- measurable targets for ecosystem components, conditions and sustainability within protected areas;

- Define boundaries for protected areas' primary ecosystem components, some which will extend beyond the boundary of formally protected areas;

- Develop adaptive management strategies and encourage the development and use of tools to achieve goals that transcend the boundaries of protected areas and encompass broader landscape and ecological units.

- Second, opportunities to establish new protected areas based on an ecosystem approach to site and boundary selection should be investigated. This approach should incorporate the selection of large sites based on enduring features of landscapes and the integrated management of protected areas within the context of surrounding landscapes.

- Third, the concept of "wildness" should be incorporated into ecosystem management for protected areas. Since we don't understand ecosystems and have neither the information base nor the predictive models on which to base ecosystem management decisions, the concept of managing for the unknown in natural systems, or "wildness", is a legitimate thrust of ecosystem management for protected areas. In fact, the maintenance and

management of wildness could be the major role of protected areas or at least the primary embodiment of this concept.

Key elements of achieving ecosystem management for protected areas will include: conceptual and technical awareness among agency staff and the public; an integrated, multidisciplinary planning approach; coordination and cooperation between agencies, the public and industry; adaptive management, and; the development and use of appropriate tools such as co-management, information acquisition and information management.

Special Places 2000

Special Places 2000 is the Alberta Government's initiative intended to address shortcomings in the network of protected areas in Alberta before the turn of the century. In 1992 the Government of Alberta committed to preparing a "made in Alberta" strategy for completing Alberta's component of Canada's Endangered Spaces campaign. The resulting draft policy - Special Places 2000 - was tabled as a statement of Alberta's commitment in the fall of 1992 at the historic Tri-Council Meeting of federal and provincial ministers responsible for environment, parks and wildlife. The draft policy was subsequently distributed throughout Alberta to solicit public response and recommend a course of action. This summary of public response and recommended course of action was released on February 9, 1994.

Based on public response to this initiative, Albertans enthusiastically embrace the vision of completing a network of protected areas by the year 2000 - a network that includes the full range of natural landscapes, environmental diversity and special natural

features of Alberta. A common theme expressed during public consultations was a sense of urgency - the need to get on with the task of identifying and designating protected areas. There is genuine concern that options to protect representative examples of Alberta's remaining natural landscapes are rapidly being foreclosed. Interestingly, this call for action came not only from environmental groups but also from industrial resource users and private landowners.

There was a strong desire expressed to see protected areas woven into the fabric of wise stewardship across the province. There was also a desire that the priority goal for management of protected areas be protection along with three additional parallel goals of heritage appreciation, outdoor recreation and tourism, where compatible with the protection mandate.

Protected areas are defined in Special Places 2000 as sites designated and managed to ensure their long-term ecological integrity. Explicit targets and timelines are set for establishment of new sites as well as a process for public and stakeholder involvement. The initiative recommends: developing interim protection measures while protected status is being sought; providing opportunities for expanding protected area interest beyond site boundaries; developing legislative improvements; protecting linking corridors, and developing additional data and information management systems.

The scientific base for site selection is a hierarchy of the province's natural regions and natural history themes. The hierarchy reflects the province's biodiversity, as expressed at the broadest level by enduring features of various landscapes. If Special

Places 2000 is endorsed as Government policy, it will be the first time there has been a comprehensive policy on protected areas in Alberta since natural resources became a provincial, rather than federal, responsibility in 1930. Special Places 2000 is Alberta's most important public policy opportunity for protected areas in more than 60 years. Its endorsement will open many doors for the rapid advancement towards a comprehensive

network of protected areas in the province.

If the Special Places 2000 initiative is successful, it will capture the province's major landscapes within a network of protected areas by the year 2000. Subsequent protected areas issues will need to focus on completing more minor gaps in biodiversity conservation and on ensuring long term conservation through ecosystem management.

WORKING WITH PRIVATE LANDOWNERS

Diane Griffin

Island Nature Trust, Prince Edward Island

When one thinks of natural areas that should be protected, it is often the wide open expanses of Crown land in western and northern Canada that come to mind. However, there are many natural sites in eastern Canada in need of protection and which are in the hands of private owners. This presents a whole new challenge in terms of protection.

It is not enough to simply enact ecological reserves legislation to protect crown property without also allowing private lands to be included. A tool kit of incentives must be developed to encourage owners to participate. This can range from techniques of appropriate landowner recognition through to financial incentives.

A citizens organization such as a nature trust

has an advantage over government employees in approaching landowners because of the suspicion with which people view governments. The Island Nature Trust (of Prince Edward Island) has developed a private stewardship program with funding assistance from Wildlife Habitat Canada and Environment Canada. Our objectives were to develop a tool kit of options to assist in private land protection and to approach landowners and ask them to participate. However, for such a program to be truly effective, it is necessary for governments to be co-operative in terms of supportive legislation and tax policy.

Prince Edward Island consists of 90% private land ownership. Thus, many of our remnant natural areas are in private hands and ways had to be found to help these

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PROTECTED AREAS

A cross-section of perspectives for
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Forestry on the Hill - Protected Areas

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