

# Commentary on Planning and Management Challenges, Research Needs and Actions in Southern Ontario

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## *Synopsis:*

Southern Ontario belongs to one of the two most endangered ecosystems in Canada. The two ecosystems are the *Prairie Ecozone* which is located across the lower latitudes of prairie provinces and the *Mixedwoods Plains Ecozone* which parallels the St. Lawrence Lowlands across Ontario and Quebec. They are not only highly endangered but they are small, respectively occupying 4.8% and 2.0% of Canada's landscape. Within both of these macro ecosystems, conservation efforts tend to be characterized as efforts to protect 'the last of the least'. Acquiring and protecting representative elements of natural ecosystems is difficult. Early in Canada's history, various land conversion and resource development initiatives transformed much of these two ecosystems. The changes took place during eras when conservation interests and issues were relatively low.

Parks are part of a family of protected areas in southern Ontario. They along with National Wildlife Areas, Migratory Bird Sanctuaries, Ecological Reserves and other conservation areas have become nature's refugee camps, encircled by land uses activities such as urban sprawl, rural farms and commercial forests.

Strikingly, the Speaker's presentations on challenges, research needs and actions did not unduly concentrate on southern Ontario's major challenge of 'rarity' in respect to conserving representative ecosystem types and their associated species. Instead, the discussions tended to address the general barriers and obstacles confronting conservation initiatives. These problems exist across Canada and elsewhere. Given the relatively short time periods for discussions, this outcome may have been expected. The major points are as follows:

## *Improve the means to convey the vision underlying protected areas*

- In general, provide a credible, authoritative and understandable vision on the roles, functions and purposes of protected areas.
- Convey a vision to external and internal clients that explains aspects such as research, education, preservation, recreation, leisure, tourism, representative areas, wildlife habitats.
- Explain the vision of southern Ontario in the context of all the other conservation areas within Ontario and across Canada. For example, what particular roles are served by the protected areas of southern Ontario and how do they fit in with the more than 3500 government managed protected areas across Canada? What are the comparative risks of loss in this part of Canada?
- Explain the values of protected areas in the context of other prominent issues like biodiversity, sustainable resource use, health, environment and the economy.

*Improve the information base that supports the understanding of protected areas*

- Update, embellish and complete basic inventories. Current data is often too dated and incomplete in spatial, temporal and substantive detail including biological, physical and ecosystem characteristics.
- Improve and redesign monitoring networks. Older networks were often designed for different purposes and assumptions. Link research with monitoring and inventories to help rationalize why things change.
- Look at the information base in a way that better characterizes the broader landscape and seascape settings of protected areas. Many southern Ontario protected areas are in effect 'refuge camps' nested within a heavily human-modified setting. The impact and influences of the surrounding areas must be understood and considered.

*Improve the sharing of and access to information*

- Enhance the exchange of information between protected area groups (parks, wildlife, forestry), natural resource groups (water resources, climatology, wildlife management, land planning), and conservation and resource management groups).
- Enhance the means to share by adopting common ecosystem reporting frameworks, data standards, geo-referencing, map scale resolutions, and so on.
- Consider the information relationships on a local and wide area basis. The conservation of Monarch butterflies is, for example, both a local and continental issue. Sharing information is critical to citizens and organizations in southern Ontario as well as Mexico.

*Improve the analysis and interpretation of data*

- Augment and expand the science underlying protected areas. The fundamental science available for protected areas is not well developed and many questions remain about concepts such as: ecosystem management; ecosystem integrity; ecosystem sustainability; long term processes, functions and interactions; dependencies between and across ecosystems types; and 'cause-and-effect' relationships.
- Consider the roles and importance of elements beyond the tradition natural sciences and integrate other critical social and economic factors.
- Use an ecosystem approach forevaluations and foster a better understanding of ecosystem restoration techniques.

*Improve the efforts to merge science, policy and ground level actions*

- Develop means to further bridge the efforts that are required across a spectrum of working levels from specific management of individual sites through to creation of policies for an overall network of many sites. Further capitalize on the knowledge gained from university based scientific endeavours through to local knowledge acquired from site level field management and experiences.
- Endeavour to provide 'translation' of critical actions undertaken on science, policy and ground level management. The process of translating critical messages needs to address the range of people involved from local volunteers to senior bureaucrats.

*Improve the networking among protected area organizations*

- Continue with forums such as PRFO.
- Continue to build a basis for interagency involvement of parks groups and further involve other protected area organizations such as the Canadian Council on Ecological Areas and the Canadian Wildlife Service.
- Consider developing a clearing house of activities, facilitating expert working groups, and reviewing action plans.

*Improve the mechanisms available for establishing protected areas*

- Promote and improve actions concerning: stewardship; ecological land donations; taxation incentives and options; land trust initiatives; government programs; and, networks.

While these seven points would likely be applicable to almost any place in Canada, they are nonetheless significant in pointing out the challenges and barriers confronting conservation in southern Ontario. The key undercurrent in southern Ontario and the Prairies is the severity, uniqueness and urgency of these matters. The lack of well designed and concerted efforts to foster conservation actions, research, baseline studies, and plans is a formula that will lead high risk areas to disastrous ends.

## Selected References

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