

Description of Conservation Considerations

Gregor G. Beck

The following section provides a description of the issues contained within the checklist. For more information on these features, contact the PPL staff.

A. Biodiversity Issues

Protection of rare species

The protection of species that are rare or which have been designated provincially or nationally ‘at risk’ are a significant consideration for protected areas design and location. Local knowledge of species at risk and critical habitat areas can be used to better protect wildlife and habitats. Some species have very specific habitat requirements, such as localized over-wintering or breeding / nesting areas, and the inclusion of these areas could improve the value of parks and conservation reserves. In addition, some species, such as pileated woodpeckers or American marten (a member of the weasel family), are considered important indicator species of environmental health. Ensuring that these species and their habitats are protected will likely also benefit many other species.

The status of species at risk is evaluated nationally by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The current list can be found at www.speciesatrisk.gc.ca or www.cosewic.gc.ca. The status of species at risk is also evaluated on a provincial basis by the Committee on the Status of Species at Risk in Ontario (COSSARO); this list can be found at www.mnr.gov.on.ca/mnr (follow links to ‘species at risk’ and ‘status’). In addition, MNR’s Natural Heritage Information Centre compiles information on the status of rare species, that may not be designated as ‘at risk’ yet. Information on rare species across the province can be found at www.mnr.gov.on.ca/mnr/nhic/nhic.html

Unique or critical habitats

Certain habitat types are locally, regionally or provincially rare and should, wherever possible, be protected. Old-growth areas, such as white and red pine forests, are often selected for inclusion in protected areas. Similarly, many

wetland habitats also merit particular attention, as do the certain particularly sensitive wildlife habitats that are critical to particular wildlife species during all or a part of the year. Nesting, denning or breeding habitats are obviously important, as are the underground, over-wintering habitats of snake species (i.e. hibernacula), as well as resting and feeding areas for migratory species.

Areas of high biodiversity and recognized habitat areas

Local knowledge of wildlife and natural habitats, or new studies, can be used to help improve the design of protected areas to better protect biodiversity in protected areas. Life sciences, which include the study of all living things, are important considerations — as are the protection and inclusion of unique or representative earth science features. Earth science areas could include important geological features, as well as glacially-formed features, such as moraines and eskers (which frequently have interesting flora and fauna associated with them).

Some areas have already been identified as being particularly important for either life science or earth science reasons. Local MNR or Conservation Authority (CA) offices should be able to direct interested persons to Areas of Natural or



Gregor G. Beck

Scientific Interest (ANSIs) in the region, or in some cases to Environmentally Significant/ Sensitive Areas (ESAs).

B. Protected Areas Design

Corridors and connectivity

Linking protected areas one to another through the establishment of 'green' corridors helps to increase the value of parks and conservation reserves for wildlife. This can help create a linked system of protected areas that benefits wildlife more greatly. It can help provide a safe corridor between parks, or between critical habitats. Ideally, a corridor will not only link isolated habitats, but also provide wildlife with shelter, food and water. This is especially important in fragmented landscapes and privately owned land.

Reducing habitat fragmentation

Forestry, roads, trails (as well as agriculture and urbanization) all have an impact on natural habitats. Human impacts typically fragment natural habitats, carving deep into interior forest habitats, creating an 'edge effect' that can have a negative impact on wildlife habitats. Many Ontario species avoid the edge of woods, and will only be found deep within the forest itself. Long, narrow protected areas, or those with irregular edges, will contain more edge habitat. Larger, rounder protected areas frequently benefit native interior species.

The effect of roads provides an example of the impact of habitat fragmentation. With the large network of roads that exists across Ontario, roadless areas are particularly valuable to include in protected areas. Provincial highways, local, regional, and logging roads penetrate deep into Ontario's forests, as do an expanding network of trails. There are relatively few truly roadless areas left. Often, former logging roads become permanent fixtures, used by ATVs, snowmobiles, and off-road vehicles.

The impact of roads and other disturbances (e.g. utility corridors) include:

- fragmentation of plant and animal habitat, isolating genes and weakening species, and disrupting migratory and rearing grounds;
- 'edge' species becoming more dominant at the expense of interior species, and the natural predator-prey balance can become disrupted;
- degradation of rivers and streams from changes in drainage patterns, increased erosion;
- increased likelihood of the establishment of exotic species which typically out-compete native species and result in ecosystem degradation;

- allowance for uncontrolled access related activities (poaching, unregulated camping and fishing, ATV use, snowmobile use), each of which have negative impacts on air quality, wildlife mortality and vegetation health.

C. Aquatic Features

Currently there is not an aquatic classification system in Ontario, so the protection of aquatic areas is typically on a case by case basis. In larger sites, the inclusion of entire head-water areas is preferable. This can be done by looking for height of land areas which mark the boundaries of a watershed. In many cases, the inclusion of entire lakes and rivers within the site is a reasonable solution. Quite often, the proposed OLL boundaries cut half way through a lake or only include one shoreline of a river. In these situations, it is best to ask for the entire lake or both sides of the river (plus shoreline setback / buffer) to be included. This provides protection for the entire water body and is an easily-identifiable boundary in the field for forestry workers and park staff.

The protection of shoreline areas is an important consideration and may require buffers in certain situations. Where forestry operations (or other non-conforming activities) adjoin a water body, a buffer is required to protect aquatic features. Typically, a 100-metre buffer is used, however depending on slope and the specifics of the site, a larger buffer may be needed. Generally, more is better. In some cases, depending on slope or other local conditions, a narrower buffer may be acceptable. The key is to show good cause as to why a boundary should be adjusted for the benefit of the site. (Note: even in areas not protected within a park or conservation reserve, current forestry guidelines do include some provisions for buffers along watercourses.)





D. Park Centered Tourism Opportunities

Benefits of parks to local economies can be considered during the boundary refinement discussions. Parks and protected areas can benefit local economies and communities. Protected areas provide increased opportunities for local businesses ranging from outfitters to restaurants, grocery stores and the hospitality industry. In 1996, accommodation, food, transport, equipment and other related activities for people involved in wildlife viewing generated \$411 million in Ontario. Apart from direct economic benefits, protected areas will also indirectly benefit local economies and communities by helping to reduce pollution levels in air and water. Protected areas can also act as a local educational and recreational resource for communities and bring job opportunities such as eco-tourism or park protection.

E. Other Considerations

An additional concept discussed sometimes during boundary refinement is that of 'viewsheds.' This relates to visual sight-lines (often from the water) based on local topography. Viewsheds have been brought forward in some cases for consideration in boundary refinement, with the intent that park boundaries are established so that park visitors will not see forestry, industry or other land-use practices that may occur

outside protected areas. Sometimes this argument could be used to increase the size of the protected area, but in some cases industry may use this concept to suggest smaller boundaries (e.g. along steep-sided rivers in waterway parks where the sight-line is interrupted by the steep topography). This consideration is based more on aesthetics than conservation science, but the topic could come up during consultation.

While there are many aspects to consider when providing comments on OLL sites to MNR, it is important to strive for ecologically-sound ideas that will also be workable in the field for forestry or other workers. It is important also to keep in mind that comments or suggestions for minor boundary adjustments will likely be subject to further negotiations. Particularly large expansions can generally not be considered during boundary refinement due to land ownership issues or potential impacts on wood supply.

The basic premise of OLL is to work toward completing representation of Ontario's ecosystems in the form of a protected areas system. It is important to consider the natural features /ecosystems that each site is supposed to be protecting. For example, if the area was selected in order to protect a glacial outwash lowland plain with a hemlock forest, boundary refinement negotiations would likely not support the inclusion of a completely different habitat type. Most OLL sites, though, do protect several features and finding out from MNR what the site in question is protecting will help you to provide the most constructive comments.