

CHAPTER 3. PROTECTING THE PENINSULA



The 156-square kilometre Bruce Peninsula National Park is the largest protected area on the Niagara Escarpment and forms an important northern anchor for the system of special land-use zones and protected areas that run along this natural corridor from Niagara to Tobermory. Officially, the park was established to protect a representative example of the ecosystems and habitats of the Great Lakes-St. Lawrence Lowlands natural region, one of 39 such regions identified by Parks Canada from coast to coast. However, it has also been more informally described as “a living example of what the southern Ontario wilderness once looked like.”

On the northern Bruce, the National Park is joined by a number of provincial protected areas, including provincial parks and nature reserves, and a handful of private nature reserves (some of which are managed by the national park) that together provide relatively strict protection for about 19% of the northern Bruce landscape. In these special places, no industrial activity (logging, mining) or development (cottages, homes, businesses) is allowed.

In addition to these strictly protected areas, there is what might be called a second tier of areas that have been designated for special consideration and management. These include Areas of Natural and Scientific Interest (ANSIs) and significant wetlands, woodlands and wildlife habitats. However, these areas do not have the kind of formal legislated protection enjoyed by the national and provincial parks under the Canada National Parks Act and the provincial Parks Act and are not off-limits to development. (For provincially significant wetlands, no new development is allowed under provincial policy.)

Orchid: ©Ethan Meleg; aerial: Willy Waterton/Parks Canada



The Northern Bruce Peninsula is known for its rare and unusual species, including many orchids. Above: showy lady's slipper.

There are provisions in the Bruce County official plan for identifying significant natural areas and assessing the potential impact of development on such places. In some cases, the plan requires the development of Environmental Impact Statements before any development is allowed within such areas. The 1997 Bruce County Official Plan sets out a number of objectives for protecting the fragile northern Bruce environment and says the county will “identify, conserve, and where possible enhance the natural environment to ensure that natural systems

are sustained, which will also serve to maintain human health.” The plan specifically calls on the county to:

- identify, protect and enhance all Provincially significant wetlands and Areas of Natural and Scientific Interest (ANSIs);
- identify and preserve areas of environmental or ecological significance;
- encourage the preservation of locally significant Environmentally Significant Areas (ESAs); and,
- protect the habitat of endangered and threatened species.

In addition, the Niagara Escarpment Plan (NEP) designates a number of zones that regulate the type of development that can occur along the Escarpment. This NEP zoning covers a wide band along the east side of the Peninsula and ranges from the

“Escarpment Natural” zone, which allows for only very limited development, to zones such as “Recreation,” “Urban Area” and “Mineral Extraction” that allow for a much wider range of developments and activities. (See page 22 for a description of all the NEP zones.) The strongest level of protection (the Escarpment Natural zone) applies to the cliff edge and shoreline areas along the escarpment, although there is significant cottage and residential development along the Georgian Bay shoreline that pre-dates the NEP.



The Niagara Escarpment forms a natural corridor along the eastern edge of the Peninsula.

Protecting Ecological Integrity — Putting Nature First

“Maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority when considering all aspects of the management of parks.”

“Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations.”

Canada National Parks Act, 2000

The Bruce Trail — Promoting protection and appreciation of the Niagara Escarpment from Niagara to Tobermory

The Bruce Trail Association (BTA) has added considerably to the protected areas system in the Northern Bruce Peninsula. By purchasing property and then giving it to the provincial or national parks system, it has secured more than 24 kilometres of trails in the Municipality of Northern Bruce Peninsula while protecting 445 hectares of land.

The Mission Statement of the Bruce Trail Association is to “Provide a public footpath to promote protection of the Niagara Escarpment and appreciation of its natural beauty.” True to its mission, over the past several years the BTA has undertaken a land conservation program for properties along the Niagara Escarpment. Through donations from BTA members, corporate donors and the provincial government, the BTA purchases land on the Escarpment so it can be preserved in perpetuity.

For example, the Dean property, located just north of Lion’s Head at White Bluff, is a spectacular example of Escarpment shoreline topography. The BTA is currently discussing transferring this and other properties to Ontario Parks for their long-term conservation.

The importance of protecting the Escarpment connection to the overall health of Bruce Peninsula National Park cannot be overstated. As the Ecosystem Conservation Plan for Bruce Peninsula National Park (BPNP) states “It is this thin ribbon of relatively intact forest that provides the terrestrial corridor linking the park to the rest of southern Ontario. Without this land bridge, BPNP would truly be an island. Indeed, the well-being of the park is inherently tied to the well-being of the Niagara Escarpment. It is this thin ribbon of near wilderness known as the Niagara Escarpment Biosphere Reserve that holds the key to the long-term future of Bruce/Fathom Five.”

Another notable category of natural area on the Northern Peninsula is the large county forest near Clarke’s Corners (which also overlaps with ANSIs and other environmentally sensitive areas). County forests are zoned as “open space” under the county’s official plan, meaning development should be limited in these areas, but they have no official protected status. Management of county forests is generally guided by a multiple-use philosophy, with different forms of recreation (including motorized recreation) combining with other uses such as logging.

For the top tier protected areas, which provide the strongest protection for species and ecosystems within their boundaries, the missing link remains a system of corridors or carefully managed landscape linkages to bring these areas together in an actual protected-areas network.

Scientists have come to understand that protected areas on their own cannot provide long-term protection for species and ecosystems. There are a few reasons for this. Firstly, most protected areas are usually too small to meet the full habitat needs of wide ranging species like bears or wolves. Secondly, when protected areas become surrounded by developed landscapes, the populations of species within them become cut off from a healthy interchange with other populations in other areas. This is called the “island effect,” with wild species stranded on isolated protected “islands” that can’t meet their long-term survival needs. Such “islands” are also more vulnerable to things like invasive species and disturbances, such as storms or fires that can leave their wildlife populations with nowhere else to turn.

Fortunately, the Northern Bruce remains well forested and — especially compared to most other areas of Southern Ontario — its natural landscape remains relatively intact. The NEP land-use designations along the Georgian Bay side of the penin-



Unlike many other areas of Southern Ontario, the Northern Bruce Peninsula remains heavily forested.

sula also provide some assurance that the “ribbon of green” running along the Escarpment has some long-term protection. Outside of the NEP plan area, however, protection for environmentally significant areas is much spottier, and much more dependent on things like municipal zoning and the goodwill of farsighted private landowners.

Bruce Peninsula National Park itself is also a less than fully intact natural landscape. Parks Canada’s 2003-04 *State of the Parks* report found that the park faces a number of threats to its ecological integrity, including missing top predators such as wolves, the pressures of surrounding development and population growth (particularly as it leads to increased seasonal use) and the presence of roads within the park that fragment forests and ecosystems.

Some of these issues can be dealt with within the park, such as by removing no-longer-used roads or dwellings. But many other issues reach well beyond the park’s boundaries and require cooperation from the local community. Bruce Peninsula National Park is the jewel that sits at the tip of the Escarpment crown. But if the rest of the crown crumbles away, the wild species and ecosystems that make this place special are not likely to remain intact and in place for long.

Escarpment Biosphere Conservancy — working to create conservation corridors on the Northern Bruce

The mission of the Escarpment Biosphere Conservancy (EBC) is to create nature reserves in the area of the Niagara Escarpment. The land trust has determined that the Huron shore of the Bruce Peninsula is the most ecologically sensitive and most threatened part of Ontario north of Carolinian Canada. Landowners, donors and foundation funders, with provincial government support, have joined with EBC to build ecological corridors, especially along the shore from Stokes Bay to Tobermory with land that is worth \$1,275,000.

While the Conservancy has created 42 reserves from Caledon to Manitoulin, 18 of these properties are on the Bruce, including more than two kilometres of shoreline. EBC’s focus has been the 800 hectares it has protected to create an ecological corridor joining and extending the Bruce County Forest and the national park on the Huron shore. It has two more agreements in progress at Cape Hurd, including a further kilometre of shoreline. Discussions are also underway with three more landowners who are contemplating conservation agreements to prevent development on their land.

Notable reserve discoveries include Massasauga rattlesnakes, a great grey owl, ancient cedars, a queen snake (formerly thought to have been extirpated from the northern half of the Bruce) and three-dimensional glacial formations on alvars.

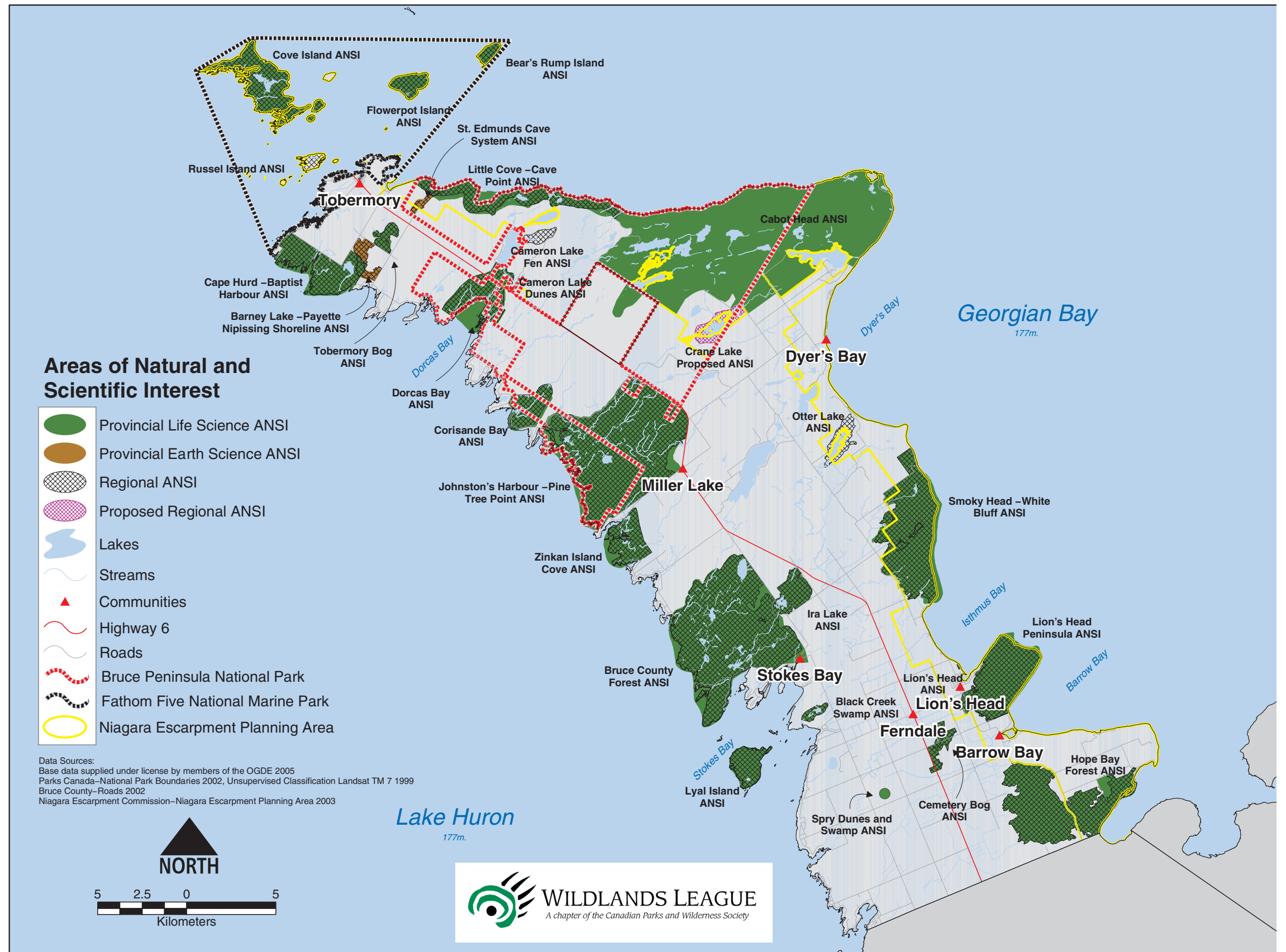
Map 3.1 — Protected areas of the Northern Bruce Peninsula



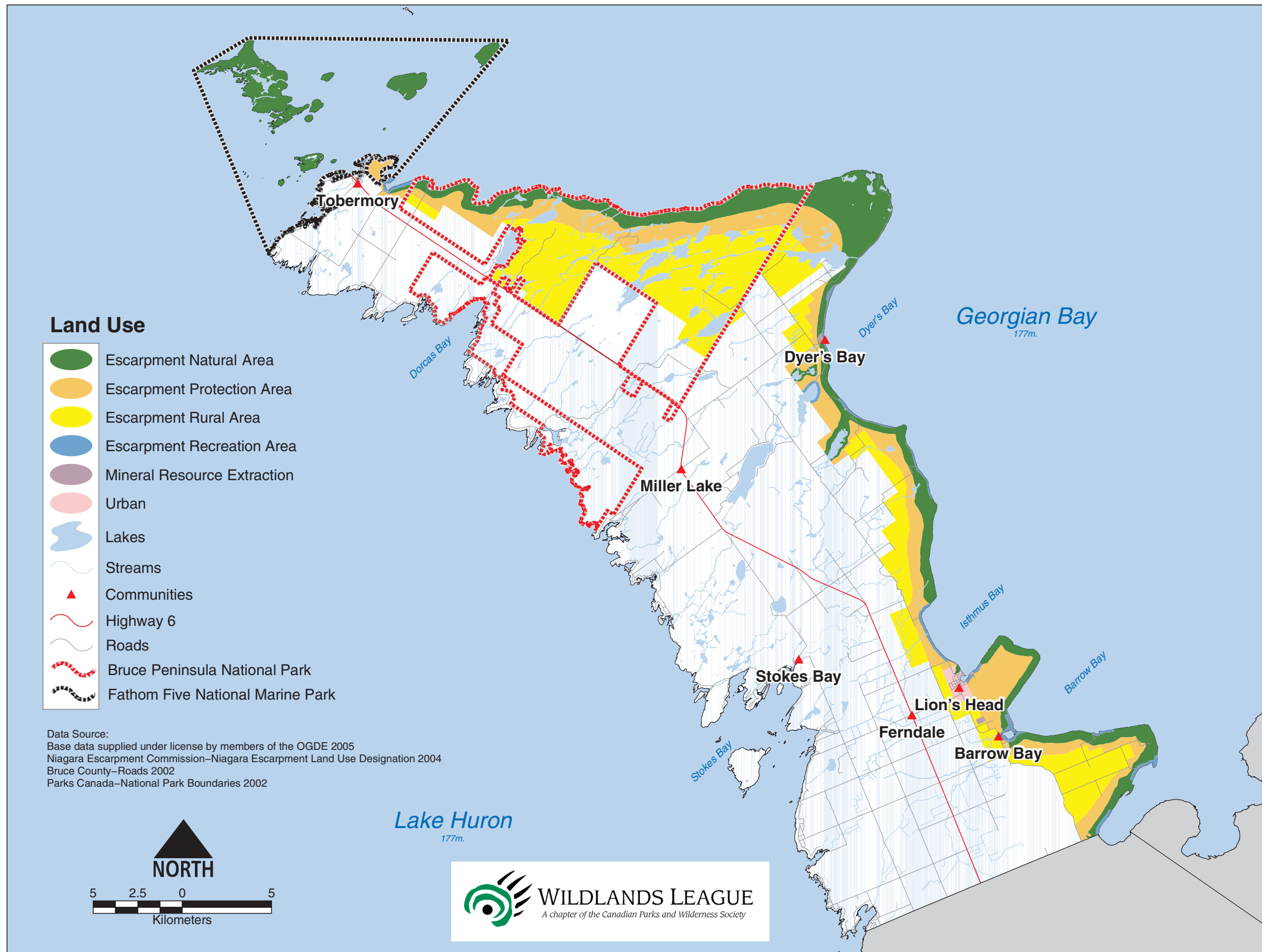
Bruce Peninsula National Park is the largest, but not the only, fully protected area on the northern Bruce Peninsula. There are five provincial parks and nature reserves within the greater park ecosystem of Bruce Peninsula National Park as well as a handful of private nature reserves and Fathom Five National Marine Park (which includes a number of islands and a small mainland area). This diversity of protected areas reflects the high degree of biological diversity and the number of rare and unusual species and ecosystems found on the Bruce. But protected areas on their own cannot protect species and ecosystems. Species may have home ranges that are much larger than any one protected area or rare species may be found in areas that are not protected. This is why scientists are increasingly calling for the establishment of landscape linkages between different protected areas and for stewardship of private lands.

Map 3.2 — Areas of Natural and Scientific Interest of the Northern Bruce Peninsula

The Ontario Ministry of Natural Resources designates ANSIs that recognize either distinctive “life science” features, such as rare species or ecosystems, or “earth science” features, such as unusual or unique geological formations. ANSI designation is often supported by a detailed inventory of the species and special characteristics of the area, but the designation itself provides no protection from development or resource harvesting within the area. The Bruce County Official Plan recognizes that ANSIs should be managed as special natural environments and that development, if it occurs, should be planned to avoid undermining the ANSIs natural values. However, the plan also recognizes the County has limited means to control or permanently protect these special areas.



Map 3.3 — Niagara Escarpment Plan land-use zones of the Northern Bruce Peninsula



The Niagara Escarpment Planning and Development Act, passed in 1973, created seven land-use zones for the Niagara Escarpment planning area. Of the total plan area, about 93% has been designated as Escarpment Natural Area, Escarpment Protection Area or Escarpment Rural Area, the most protective categories under the plan (see page 22 for details on what uses are allowed in each category). The Niagara Escarpment Plan, which is the implementation mechanism for the act and is overseen by the Niagara Escarpment Commission, was most recently reviewed in 2001. The goal of the plan is to “ensure that there is a balance between environmental protection, development and enjoyment of this precious resource.”

Table 3.1 — Niagara Escarpment Plan land-use zone classifications

<p>Escarpment Natural Area is the most protective designation in the plan. It includes escarpment cliffs, slopes at the base of cliffs, forested lands on top of cliffs, river and stream valleys, wetlands, and the most significant Areas of Natural and Scientific Interest (ANSIs). The aim is to maintain these lands and features in their natural state in order to protect significant ecological, cultural and scenic values. Only very limited types of development are permitted upon lands in this designation.</p>
<p>Escarpment Protection Area includes escarpment slopes and related landforms that are visually or environmentally significant, but which have been significantly altered by existing land uses. It also includes regionally significant ANSIs and lands that serve as buffers to protect Escarpment Natural Areas. This designation permits some development and is intended to maintain the remaining natural features and open, rural landscape character of the escarpment and lands near it.</p>
<p>Escarpment Rural Area includes minor escarpment slopes and related landforms, as well as lands that are necessary to provide an open landscape and/or are of ecological significance to the escarpment environment. The intent is to buffer ecologically sensitive lands — Escarpment Natural and Escarpment Protection Areas — and to provide a transitional zone where additional types of agricultural, residential and commercial land uses are permitted. In some instances, lands designated as Escarpment Rural Areas may be redesignated as Mineral Resource Extraction Areas (see below) if certain conditions are met.</p>
<p>Minor Urban Centre identifies rural settlements, villages and hamlets within the Plan Area. It is intended to concentrate further rural growth in these localities in order to prevent sprawl and scattered rural development, and to protect more environmentally significant or sensitive areas. Residential subdivisions are permitted in this designation; however, changes to the boundaries of a Minor Urban Centre require a Plan amendment. A number of development and growth objectives in this designation ensure that natural and cultural heritage values are maintained in Minor Urban Centres.</p>
<p>Urban Area identifies the larger towns and cities within the Plan Area. The intent of this designation is to minimize the impact and further encroachment of urban growth upon the rural escarpment environment. A wide range of land uses and development are permitted in this designation, subject to certain objectives and restrictions intended to protect adjacent Escarpment Natural, Escarpment Protection, and Escarpment Rural Areas.</p>
<p>Escarpment Recreation Area includes areas of intensive existing or potential recreational development such as ski centres, lakeshore cottage areas and resorts. Various buildings, facilities, commercial establishments and residential developments are permitted in this designation, subject to development restrictions intended to minimize the impact of recreational uses on natural and cultural heritage values.</p>
<p>Mineral Resource Extraction Area identifies pits and quarries licensed under the Aggregate Resources Act and areas where mineral resource (aggregate) extraction may be permitted subject to certain restrictions. A small number of land uses related to aggregate operations are permitted in this designation, including accessory buildings and facilities. However, asphalt plants, concrete plants, brick plants and similar manufacturing uses are prohibited. The aim of the designation is to minimize the impact of aggregate extraction upon the escarpment, and to ensure that appropriate rehabilitation measures are undertaken and compatible “after-uses” are approved in such areas.</p>
<p>Source: Coalition on the Niagara Escarpment</p>