

Ontario Parks Legacy 2000: Program, Planning and Science Dimensions

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Abstract

In the spring of 1996, Ontario Parks joined with The Nature Conservancy of Canada to initiate Ontario Parks Legacy 2000 (OPL 2000), a new and innovative partnership to secure significant natural areas for new provincial nature reserves to celebrate the millennium. Under the partnership agreement, Ontario Parks is providing \$1.5 million of provincial funding to the Nature Conservancy to enable it to acquire key natural areas having a total land value of \$10 million. Through the partnership, the Nature Conservancy is responsible for fundraising, negotiating land acquisitions and area securement, while Ontario Parks assumes the lead role for protecting, planning and managing acquired areas. Drawing on information from existing ecological surveys, the Natural Heritage Information Centre (NHIC), efforts such as the International Alvar Conservation Initiative (IACI), and other expert sources, candidate sites are carefully identified from areas of natural and scientific interest, wetlands, habitats for vulnerable, threatened and endangered species, and other documented areas known to have outstanding ecological features. Through careful evaluation, sites containing ecosystem types and special features, which are not as yet or only poorly represented in the provincial parks system, are selected as candidate areas for acquisition. In working to protect these sites, OPL 2000 is helping to fulfill international obligations to conserve biodiversity, as called for in the United Nations Convention on Biological Diversity and the Canadian Biodiversity Strategy. Since the program was established, the partners have protected over 2,600 ha (6,440 acres) of prime natural area with a land value of approximately \$5.2 million.

Introduction

In 1992, the Government of Canada became the first industrialized country to ratify the United Nations *Convention on Biological Diversity* (UNEP, 1992). Signatories to the Convention are obligated to develop and to implement a national strategy for biodiversity conservation. The provinces and territories share, with the federal gov-

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ernment, the responsibility for delivering the conservation actions set out in the *Canadian Biodiversity Strategy* (BCO, 1995).

As part of Ontario's commitment to the Convention and the *Canadian Biodiversity Strategy*, Ontario Parks and The Nature Conservancy of Canada formed a partnership, called *Ontario Parks Legacy 2000* (OPL 2000), aimed at acquiring significant natural areas for provincial nature reserves. Through this program, the Nature Conservancy and Ontario Parks are committed to secure at least \$10 million of new nature reserves and other parkland to celebrate the millennium.

OPL 2000 is part of ongoing efforts to complete Ontario's provincial parks system. Since the creation of Algonquin Provincial Park in 1893, Ontario's parks system grew in an often piecemeal way until 1978, when the release of the *Ontario Provincial Parks Policy* (OMNR, 1978a) and the companion *Ontario Provincial Parks Planning and Management Policies* (OMNR, 1978b) first provided a comprehensive blueprint for the completion of the provincial parks system. Subsequent efforts through strategic land-use planning in the 1980s (OMNR, 1983), and *Keep It Wild* (PNHS, 1995) and *Lands for Life/Ontario's Living Legacy* in the 1990s (OMNR, 1999), have realized major gains in the creation of new parks on Crown lands throughout Ontario. However, with these efforts focused on Crown lands, and with insufficient funding to acquire areas under private ownership, it became obvious that creative partnerships with new funding capabilities were required to address the acquisition of critical private lands in the more settled regions of the province.

In 1993, Ontario Parks and the Nature Conservancy formalized a partnership to establish new provincial parks by acquiring private lands of mutual interest to celebrate the Provincial Parks Centennial. This partnership was a natural extension of cooperation that dates back to the 1970s. These earlier collaborative efforts proved very successful with many significant properties having been acquired for provincial nature reserves including: Misery Bay on the south shore of Manitoulin Island; Ojibway Prairie in the City of Windsor; Lighthouse Point on Pelee Island; Hardy Lake in the Muskokas; and Great Manitou Island in Lake Nipissing. As a sequel to the 1993 initiative, Ontario Parks and the Nature Conservancy also operated with annual agreements in 1994 and 1995.

Building on this history, a new agreement—*Ontario Parks Legacy 2000*—was signed in 1996. This agreement provides for a more formal and much more ambitious continuation of the earlier cooperation that has proven to be so successful. OPL 2000 is an innovative five-year venture that combines the unique strengths of each organization, involves local communities in land preservation, and derives its strength from positive relationships with individuals, foundations and businesses. Through the program, Ontario Parks provides the Nature Conservancy with provincial funding that works as seed money to support the acquisition of ecologically significant lands.

The Partnership Framework

The goal of OPL 2000 is to establish provincial nature reserves for biodiversity conservation to celebrate the new millennium. Provincial nature reserves are the most strictly protected of Ontario's six categories of provincial parks. By policy,

provincial nature reserves are selected to represent the distinctive natural habitats and landforms of the province for educational purposes and as gene pools for research to benefit present and future generations (OMNR, 1978a, 1978b, 1992).

OPL 2000 is structured around the shared vision and mandate of the partners to preserve biodiversity in highly protected ecological areas, and to exercise their joint outlook to involve community-based interests in biodiversity conservation. Through the program, Ontario Parks is providing \$1.5 million of seed funding that the Nature Conservancy is using to support the acquisition of carefully targeted ecological areas having a land value of \$10 million by December 31, 2000. The program is guided by four protocols: the funding agreement; the memorandum of understanding; the fundraising and acquisition strategy; and, the action list of sites.

The funding agreement details the financial obligations of the partners, general terms of program administration, funding and performance targets, and progress review requirements. The memorandum of understanding sets out details of joint programming. This memorandum assigns the lead for the selection and approval of candidate areas to Ontario Parks, which maintains the 'action list' of sites for potential acquisition. And this memorandum assigns the Nature Conservancy responsibility for fundraising and site securement guided by the fundraising strategy called for in the funding agreement. Both partners share responsibility for the protection and management of acquired areas.

To achieve its goal, *OPL 2000* is developing innovative arrangements for area protection and management. In the simplest case, the Nature Conservancy transfers title of the land to the Crown, under a title holding agreement, with the lands subsequently being regulated under the *Provincial Parks Act*. In another arrangement, the Nature Conservancy retains title to acquired areas, which are then regulated as provincial nature reserves and managed by Ontario Parks under a 99-year lease with the Nature Conservancy. Early acquisitions, including the Menzel Centennial, "Beattie" Alliston Pinery, and the Morris Tract Provincial Nature Reserves have already been established in this fashion. A third arrangement involves short-term custodial agreements for acquired areas to afford them interim protection while efforts proceed on consolidating neighbouring properties.

Planning, Information and Science

Prior to *OPL 2000*, cooperation between the Nature Conservancy and Ontario Parks (and its predecessors) was marked by isolated acquisition projects and opportunism. On a case-by-case basis, the parties cooperated on specific acquisitions of natural areas of mutual interest. With *OPL 2000*, the extended program horizon and the enhanced scale of the venture has enabled the parties to become more focused and more methodical in establishing and pursuing the acquisition agenda.

The *OPL 2000* acquisitions agenda is concentrated in southern Ontario with the focus on securing critical private lands most needed to help in completing a comprehensive series of provincial nature reserves. Provincial nature reserves are a highly choice subset of the larger park system which aim to represent a cross-section of the ecosystem diversity of Ontario. Provincial nature reserves focus on

both fine examples of ecosystems that represent the physiographic and vegetation/landform diversity of site districts (Figure 1), as well as key sites that house special features, such as concentrations of vulnerable, threatened and endangered species and biotic communities (OMNR 1978a, 1992).

From the representation perspective, a review of existing nature reserves and other provincial parks was undertaken to determine site districts, primarily in site regions 6E and 7E, where ecological representation was most deficient. This led to the targeting of site districts with significant gaps, which then guided the search for candidate areas. Established sources, including wetlands surveys, site district assessments for areas of natural and scientific interest, and other available studies were reviewed to identify important representation themes and sites that best represent them.

From the special features perspective, rare ecosystems which support vegetation, flora and fauna largely restricted to these environments were the object of attention. Key ecosystem types in this category include: specialized wetlands, notably bogs and fens south of the Canadian Shield; Carolinian, late successional and old-growth woodlands; prairies and savannahs; alvars and associated habitats; Great Lakes islands; and sites otherwise known to feature concentrations of vulnerable, threatened and/or endangered species. Information was gleaned from many sources to identify prospective sites: published and file reports; opinions of experts, such as those engaged through the International Alvar Conservation Initiative (IACI); consultation with staff of the Natural Heritage Information Centre (NHIC); and leads from the Nature Conservancy's science advisors.

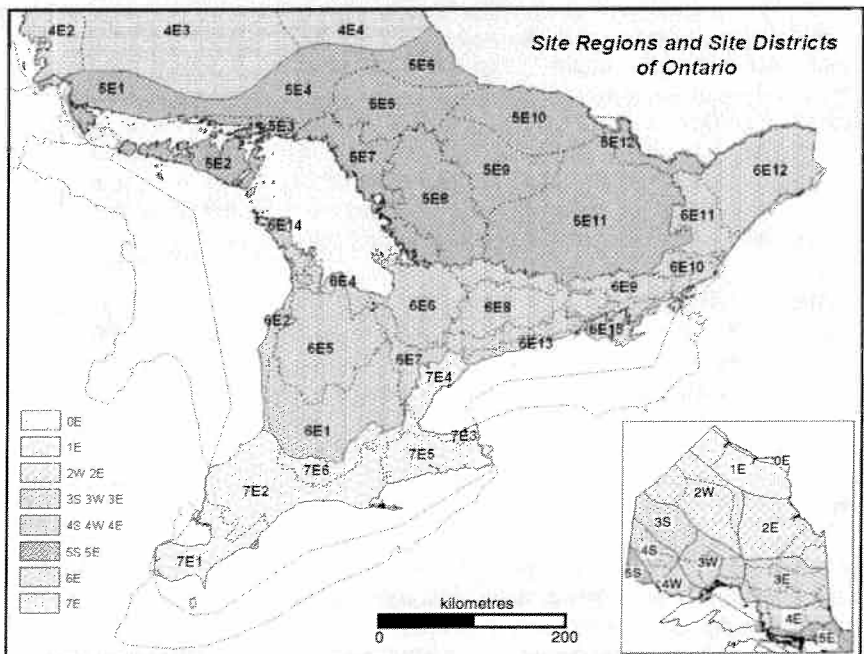


Figure 1: Site Regions and Site Districts of Southern Ontario (Jalava, 1996; Jalava et al., 1997).

As time and resources permitted, efforts were made to visit candidate areas with knowledgeable experts to confirm documented values and to assess the current environmental condition of sites. Timing, opportunism and limited resources, for the most part, prevented any *de novo* field survey to further document ecological values. However, on top of the existing documentation, this on-site familiarization proved extremely valuable for confirming project approvals and assisting with developing acquisition proposals, fundraising and negotiations with landowners, and identifying immediate stewardship needs.

Through this process approximately 50 areas were identified as high priorities for acquisition. This menu remains fluid to incorporate additional areas as information of new sites and acquisition opportunities become available. Working from this process, the Nature Conservancy pursues targeted properties to identify opportunities where securement is feasible. Once prospective acquisitions are identified and approved, the Nature Conservancy undertakes the necessary fundraising and negotiations to acquire or secure the targeted properties by other means.

To assist with program planning and management needs, a supplementary partnership was developed to engage GIS mapping facilities at the Guelph District (formerly Cambridge District) of the Ontario Ministry of Natural Resources (OMNR). This initiative provided much-needed mapping capability, tied to OMNR's Ontario Basic Mapping and information technologies, to enable provincial distribution mapping and area/property specific base-mapping to assist with site assessment, protection and stewardship. This linkage provides access to digital data sets housed with the Natural Heritage Information Centre (NHIC) and other OMNR programs that can pay immediate dividends with longer term capability for area evaluation, planning and management.

Progress with Results

As of May 31, 1999, *OPL 2000* has protected more than 2 600 ha (6,440 acres) of prime natural areas with a land value of more than \$5.2 million. Altogether, key properties have been acquired in 18 natural areas (Figure 2). These areas feature a wide range of woodlands, wetlands, alvars, Carolinian and other communities, and sites important for rare, vulnerable, threatened and endangered species. Following are summaries of several flagship projects, where nature reserves have already been established, to illustrate the diversity of biotic communities, flora and fauna protected through the program at this stage.

Morris Tract Provincial Nature Reserve (Site District 6E-1)

Located 5 km east of Goderich, on the south side of the Maitland River, the Morris Tract consists of 58 ha (144 acres) of diverse deciduous forest within a 202 ha (500 acre) block of contiguous forest occupying the steeply dissected lower Maitland River valley, making this complex one of the largest remaining forest remnants in Huron County. The tract has not been logged for almost 50 years. The area features 21 vegetation communities including seven upland forest types, seven valley slope forest types, and seven bottomland communities including swamp forest, thicket, meadow and barrens. The flora features species of southern, prairie and northern affinity with 13 provincially rare vascular plants including Green Dragon (*Arisaema dracontium*) and Indian-plaintain (*Cacalia plantaginea*), both recognized

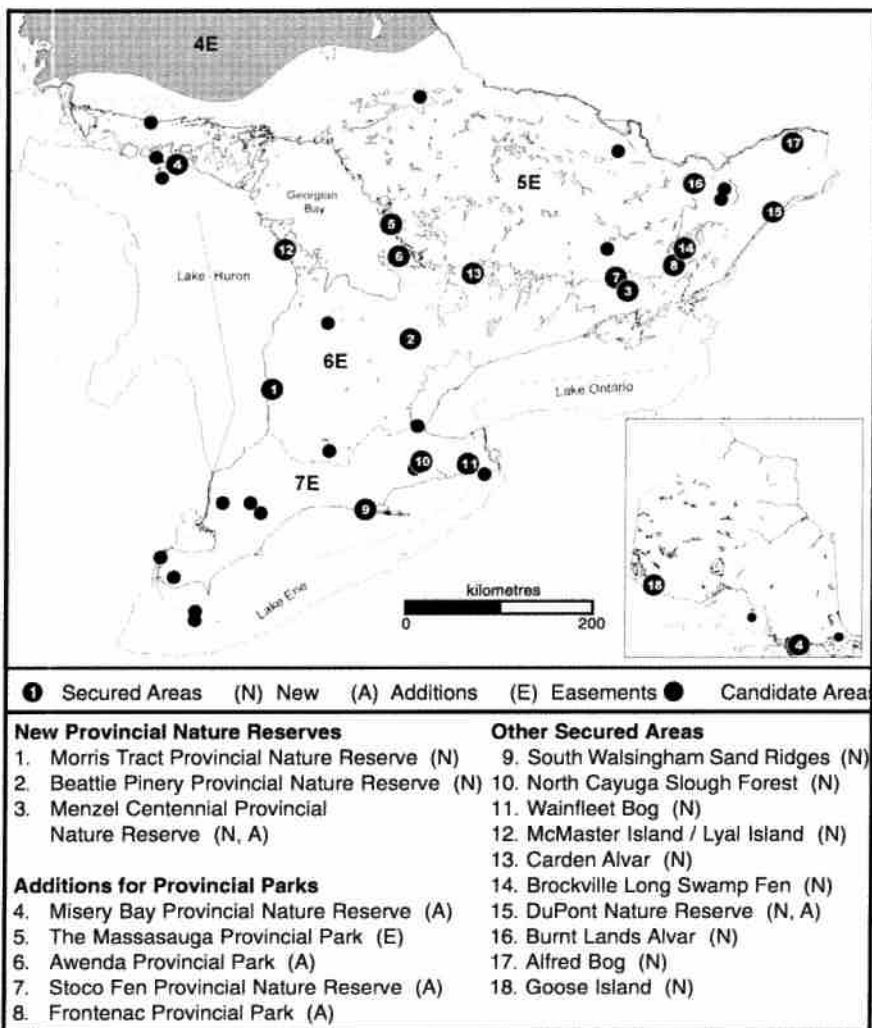


Figure 2: Secured Ontario Parks Legacy 2000 Sites, as of May 1999.

as "vulnerable" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and Golden Seal (*Hydrastis canadensis*) listed as "threatened" by COSEWIC (COSEWIC, 1999). The avi-fauna is marked by birds such as Screech Owl (*Otus asio*), Red-bellied Woodpecker (*Melanerpes carolinus*), Pileated Woodpecker (*Dryocopus pileatus*), and others which favour interior forest conditions. Louisiana Waterthrush (*Seiurus motocilla*) and Pickerel Frog (*Rana palustris*) have been confirmed to occur in the reserve, with the possibility of Queen Snake (*Natrix septemvittata*) also inhabiting riparian habitats (see Bowles, this volume; Bowles et al., in prep.). The Morris Tract is owned by the Nature Conservancy, and regulated and managed as Morris Tract Provincial Nature Reserve by Ontario Parks under a long-term lease with the Nature Conservancy.

“Beattie” (Alliston) Pinery Provincial Nature Reserve (Site District 6-6)

The Beattie Pinery is an 80 ha (197 acre) forest patch, located approximately 2 km southeast of Alliston, which features excellent representation of White Pine (*Pinus strobus*)-Sugar Maple (*Acer saccharum*) sand plain forests and bottomland features associated with the Simcoe Lowlands. Altogether, the area features 17 vegetation types, including six bottomland forest communities, eight upland forest types, natural meadow/marsh, and thickets and old fields of anthropogenic origin. Almost 300 vascular plants have been confirmed to occur in the area, including a number of regionally and locally rare species. The area provides nesting habitat for almost 50 bird species, including 11 area-sensitive interior species. The pinery also provides an important patch for two species, Pine Warbler (*Dendroica pinus*) and Pine Siskin (*Carduelis pinus*), which are largely confined to the pine woodlands. The mature character of the woodlands, with many chicots and arboreal cavities, provides habitat for species such as Hairy Woodpecker (*Dendrocopos villosus*) and Northern Flying Squirrel (*Glaucomys sabrinus*) (Varga and Schmelefske, 1992). Although the Beattie Pinery was acquired prior to OPL 2000, the area was dedicated through the program and is now protected in regulation as Alliston Pinery Provincial Nature Reserve by Ontario Parks, under a long-term lease with the Nature Conservancy.

Menzel Centennial Provincial Nature Reserve (Site District 6-9)

This highly significant area includes 627 ha (1,549 acres) of the core of the Westplain Mud Lake Fen Area of Natural and Scientific Interest, located west of the village of West Plain, northwest of Napanee. Property consolidation through OPL 2000 has added to the initial 141 ha (348 acres) acquisition initiated as a Provincial Parks Centennial project in 1993. The area features some 19 plant communities including seven wetland types, five upland forest types and seven open field/meadow types. Of particular note are the open and treed fen communities associated with a 60 ha lake where marsh, emergent, floating and submergent plant communities inhabit this headwaters for Otter Creek. The area is noteworthy for housing Prairie White-fringed Orchid (*Platanthera leucophaea*) and Handsome Sedge (*Carex formosa*), with records of Olive Hairstreak Butterfly (*Mitoura gryneus*) and Cooper's Hawk (*Accipiter cooperi*). Of particular note is the good representation of high quality fen communities and associated species (Norris, 1994). Most of the acquired area owned by the Nature Conservancy is regulated and managed as Menzel Centennial Provincial Nature Reserve by Ontario Parks under a long-term lease with the Nature Conservancy.

Wainfleet Bog Nature Reserve and Conservation Area (Site District 7E-5)

Wainfleet Bog, located northwest of Port Colborne, is the only extensive raised bog in the Carolinian Region, making it the southernmost bog of its size and character in Canada. Although the wetland has been severely reduced in size, segments of it still retain typical bog vegetation to support its designation as a Class 1 Wetland with an Area of Natural and Scientific Interest. Ericaceous species such as Leatherleaf (*Chamaedapne calyculata*), Labrador Tea (*Ledum groenlandicum*), and Bog Rosemary (*Andromeda glaucophylla*) still dominate heath communities, with carnivorous species such as sundews (*Drosera* spp.), Pitcher-plant (*Sarracenia purpurea*) and bladderworts (*Utricularia* spp.) in bog pools. The bog supports two provincial endangered species—Spotted Turtle (*Clemmys guttata*) and Eastern

Massassauga Rattlesnake (*Sistrurus catenatus catenatus*)—as well as a number of other rare and obligate bog species (Macdonald, 1992). Through *OPL 2000*, the Nature Conservancy was successful in acquiring 926 ha (2,288 acres) of the bog, most of which has been turned over to the Niagara Peninsula Conservation Authority as a conservation area. The management plan for the bog has designated a 142 ha (350 acre) nature reserve on the north side for scientific research, which complements the conservation reserve on the east side managed by OMNR, thereby enhancing the protection status of the bog in line with the goal of *OPL 2000* (see Frohlich, this volume; Frohlich and WBAC, 1997).

Additional Areas

In addition to the foregoing areas, *OPL 2000* has been successful in securing a number of other significant ecological areas. Six properties have been acquired as additions to five existing provincial parks. And another nine areas have been secured as candidates for new provincial nature reserves. Among the latter, are sizeable tracts at Burnt Lands Alvar, acquired from the Department of National Defence, and three properties formerly owned by DuPont Canada Inc, one of which was donated and the other two acquired (Figure 2). In addition, sites such as Lyal Island and the "Krug Tract" in Kinghurst Forest, which have been acquired by the Federation of Ontario Naturalists with the involvement of other partners, are tremendous achievements that complement efforts to secure some of the highest priority areas identified by *OPL 2000*.

Conclusion

Ontario Parks Legacy 2000 builds on over 30 years of cooperation between The Nature Conservancy of Canada and provincial interests aimed at establishing nature reserves and other parklands for conservation purposes. Hallmarks of *OPL 2000* include the business framework, a five-year planning horizon, expanded resources, and many new innovations in fundraising, securement and stewardship.

Central to *OPL 2000's* success is its application of conservation science and information in the selection, planning and stewardship of sites. The wealth of information on ecological areas and vulnerable, threatened and endangered species in Ontario, combined with pre-established targets for representation, has enabled the partners to focus on key areas of highest priority for provincial nature reserves. Successes achieved in protecting sites targeted by *OPL 2000*, either directly through the partnership, or through other equally successful complementary initiatives, provide templates for future rounds of creative conservation.

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