





NOVA SCOTIA Environment and Labour Environmental and Natural Areas Management Division Protected Areas Branch

Additional Information

For further information about the Nature Reserves program, or to report unauthorized activities in a nature reserve, please contact:

Protected Areas Branch—Provincial Office Box 697, Halifax, NS B3J 2T8 Tel: (902) 424-2117 E-mail: protectedareas@gov.ns.ca Web: www.gov.ns.ca/enla/pareas

Protected Areas Branch—Eastern Region Box 714, 295 Charlotte Street Sydney, NS B1P 6H7 Tel: (902) 563-2100

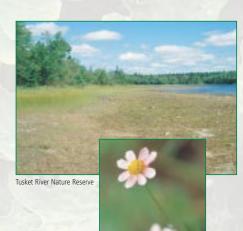
Protected Areas Branch—Western Region 60 Logan Road, Bridgewater, NS B4V 3J8 Tel: (902) 543-4685

Nature reserves are managed by Department of Environment and Labour in partnership with Department of Natural Resources and, where applicable, private landowners

Landowners interested in learning about other options for protecting land can contact Protected Areas Branch, or the Nature Conservancy of Canada—1-877-231-4400; Nova Scotia Nature Trust—(902) 425-5263; or a local land trust.

NOVA SCOTIA

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Pink Coreopsi

This small, 22-hectare nature reserve on the shore of Wilsons Lake, Yarmouth County, protects a group of rare plants of international significance. The gently sloping lake margins of Wilsons Lake are home to at least six rare plants of the Atlantic Coastal Plain. Three of these plants—Pink Coreopsis, Water Pennywort, and Plymouth Gentian—are considered either nationally endangered or threatened. Throughout southwestern

Nova Scotia, the lakeshore habitat of

threatened by shoreline development, recreational use, and dam construction.

these coastal plain plants is highly

Golden-crest

Tusket River Nature Reserve

Sporting Lake Nature Reserve

This 24.7-hectare reserve consists of three small islands in Sporting Lake, Digby County. The nature reserve has one of the finest examples of old-growth forest remaining in the province. The remnant, primeval forest, including scattered, metre-wide Eastern Hemlock and White Pine, was once a common forest type in much of Nova Scotia. The surrounding land, much of which is now barrens and young forest, contrasts sharply with the cool, mossy, towering forests of the nature reserve.



Sporting Lake Nature Reserve

Ponhook Lake Nature Reserve

The 42.7-hectare Ponhook Lake Nature Reserve consists of 39 separate island and shoreline properties on six lakes along the Medway River system in Queens County. The reserve is home to populations of globally, nationally, and provincially rare plants of the Atlantic Coastal Plain, including Redroot, Golden-crest, Virginia Meadow-beauty, Buttonbush, Long's Bulrush, Swamp Milkweed, and others. Throughout much of their range, the habitat of these lakeshore plants is threatened by shoreline development and recreational use.





Ponhook Lake Nature Reserve





Yellow Ladyslipper

MacFarlane Woods Nature Reserve

The 52.5-hectare MacFarlane Woods Nature Reserve protects an intact oldgrowth hardwood forest in Mull River, Inverness County. The reserve is privately owned by Jim St. Clair, whose ancestors settled in this river valley near Mabou in 1820. Mr. St. Clair wished to ensure that the old-growth hardwood forest, which was once widespread in the region, be retained for the benefit and enjoyment of current and future generations. The Sugar Maple, Red Maple, and Beech hilltop forest in the Mull River area has trees as high as 30 metres, and as wide as one metre in diameter. From early spring through to autumn, a profusion of ferns are visible from the walking paths. The forest is also home to a variety of native orchids, including Twayblade orchid, Coral Root orchid, and the rare Yellow Lady's Slipper. Northern Goshawks, birds-of-prey which prefer the deep woods, have been observed in this reserve.



Bornish Hill Nature Reserve

The 960-hectare Bornish Hill Nature Reserve is located in the Creignish Hills near Melford, Inverness County. It contains steeply sloping hills, ravines, and several bogs. The reserve protects an excellent example of the oncecharacteristic, old-growth Sugar Maple, Beech, and Yellow Birch hardwood forests in the region.

Keep It Wild Nova Scotia's Protected Areas

Photography: Nova Scotia Department of Environment and Labour, unless noted. Background images by Oliver Maass.



Panuke Lake Nature Reserve

In the early 1990s, the Bowater Mersey Paper Company offered to protect an old-growth Eastern Hemlock and Red Spruce forest along the shores of Panuke Lake, Hants County. This stand was one of the best old-growth hemlock-spruce forests left in Nova Scotia. In 1992, Bowater and the government of Nova Scotia entered into a formal agreement to protect this outstanding ecosystem, establishing the 150.9-hectare Panuke Lake Nature Reserve. With trees well over 300 years old, this remnant oldgrowth forest provides an ideal outdoor laboratory to study a once-common forest type of Nova Scotia.

Indian Man Lake Nature Reserve

This 126-hectare reserve north of Lower Caledonia, Guysborough County, has a mature mixed-wood forest with medium- to large-sized Red Oak and White Pine. This forest is representative of a now uncommon forest type in the province. Due to Nova Scotia's land use



history, largesized Red Oaks have all but disappeared from the woodlands of Nova Scotia.

Indian Man Lake



Nova Scotia is rich in natural diversity. Our ecosystems and plant and animal species are irreplaceable. Nature reserves help to ensure that this priceless natural legacy is preserved for the benefit of present and future generations.



Sweet Pepperbush

What Are Nature Reserves?

Nature reserves are areas of land in Nova Scotia that are protected under the Special Places Protection Act. Nature reserves are identified for their unique, rare, or outstanding natural features, such as oldgrowth forests or the habitats of rare or endangered plants or animals. They may also protect typical examples of the province's ecosystems. Nature reserves safeguard natural features, while providing opportunities for scientific research, education, and nature appreciation.

Nova Scotia currently has seven nature reserves totalling 1,400 hectares. The largest, Bornish Hill Nature Reserve, Inverness County, is 960 hectares, and the smallest, Tusket River Nature Reserve, Yarmouth County, is 21.9 hectares. The average size of existing nature reserves is small at 200 hectares (about 500 acres). Overall, protected areas amount to 8.1% of the province. Wilderness areas and national parks account for most of this.



Showy Ladyslipper



History

The province began to identify potential nature reserves in the late 1960s with the work of the International Biological Program (IBP). This program aimed to identify representative examples of the world's ecosystems for biological research, education, preservation, and for use as benchmarks for comparison with similar ecosystems altered by human activity.

In Nova Scotia, early efforts by a local IBP team of scientists identified 69 fragile, relatively undisturbed ecosystems. These ecosystems included old-growth forests, sand dunes, river floodplains, coastal islands, lakeshores, and estuaries. In 1981, the Special Places Protection Act was proclaimed, allowing for the designation of special "ecological sites" like those identified by the IBP committee. Since that time, seven nature reserves have been established in Nova Scotia under this legislation, including two on private land.



d Hemlock forest

Who Owns Nature Reserves?

Nature reserves that are on provincial Crown land are owned by the province. However, they can also be established on private land. Private land can only become a nature reserve if the owner is interested in conserving an area and has granted consent. The size of a nature reserve depends on the extent of the features to be protected, as well as the interest and needs of the landowner.



Giant Silkworm moth





are lichen (Cetrariastr

Managing and Protecting Nature Reserves

The Protected Areas Branch of the Nova Scotia Department of Environment and Labour works with the Department of Natural Resources to manage and protect nature reserves.

Most nature reserves are open to the public. However, some nature reserves protect habitats, ecosystems, or species that are so vulnerable to disturbance or damage that public visitation is restricted throughout the year. In such cases, visitors require the permission of the owner or the Protected Areas Branch.

Bird watching, canoeing, hiking, nature photography, and other types of "nonconsumptive," low-impact activities are generally permitted in nature reserves, so long as vulnerable features and species are not disturbed. Restricted activities include logging, mining, road construction, motorized vehicle use, camping, hunting, and trapping.

ves of Nova Scotia Il Natural Places



Research and Education in Ecological Reserves

Ecological research is one of the principal functions of nature reserves. Many types of ecological research require the establishment of permanent plots or observation stations that researchers can return to over time. Such research is encouraged, provided it is not detrimental to the natural values of the reserve.

Nature reserves also offer opportunities for environmental education activities. Activities range from simple observation and nature interpretation, to the teaching of complex ecological processes. As surrounding environments are progressively altered by human activities, nature reserves will become increasingly important as a place to study untouched ecosystems.

Nature Reserves on Private Land:

Individuals and companies can have their lands designated.

Two of Nova Scotia's nature reserves are on privately-owned land.

In the mid-1980s, historian Jim St. Clair approached the province with an interest in protecting his 52.5 hectares of oldgrowth hardwood forest at Mull River, Inverness County. The land was designated as a nature reserve in 1988. Mr. St. Clair encourages visitors to walk the trails and learn about the forest.

In 1992, Bowater Mersey Paper Company, recognising the importance of old growth forests, committed to the designation of almost 151 hectares of old-growth hemlock-spruce forest on their land along Panuke Lake.

Both these nature reserves protect irreplaceable, ecologically significant forest stands that are now very rare in the province. Designation offers long-term protection as well as landowner recognition.

How Are Nature Reserves Established?

Candidate nature reserves may be identified in several ways. Government departments make systematic inventories of significant natural features such as old-growth forests and habitats of rare species. Reports of potentially significant areas may also come from naturalists, scientists, and field staff of conservation organizations. Landowners, too, can report sites of interest.

The Protected Areas Branch then documents, evaluates, and prioritizes promising sites and develops nature reserve proposals. These proposals are shared with interested government departments and agencies to identify conflicts with other land or resource uses. If all works out, nature reserves are established by the Special Places Protection Act.



Ganoderma fungu

What Can I Do to Help?

You can help support the province's nature reserve program in the following ways:

- report unique, rare, or outstanding natural features
- consider designating ecologically significant sites on your land
- voluntarily monitor nature reserves for unauthorized activities



Greater Yellowlegs eggs

As the pace of human activity and landscape change has accelerated, opportunities to protect many of Nova Scotia's representative and special ecosystems, life forms, and features have diminished.

Some species have become extinct. Other plant and animal species in the province are considered at risk of extinction. One tool to adequately protect species is a system of natural areas that represents the diverse environments of Nova Scotia, and protects unique, outstanding, and rare habitats or features.

With the majority of Nova Scotia in private hands, private land conservation initiatives, including designation of nature reserves with landowner consent, are a critical element in maintaining biodiversity and protecting genetic resources. Such initiatives are also a part of our obligation to other life forms and to future generations.



Swamp Milkweed