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Canadian Wildlife
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HABITATS

Volume 1 No 3 – October 1990

Managing the Île Brion Ecological Reserve: An Example of Partnership

By **Ginette St-Onge**, Quebec Department of the Environment

Since 1988, the Corporation pour l'accès et la protection de l'île Brion Inc. (Corporation for Ile Brion access and protection, inc.) has been responsible for the Ile Brion ecological reserve, and it is now presenting an educational program for the second consecutive year. This involvement by a local agency in managing an ecological reserve is the result of co-operation among several local organizations and two levels of government.

Under the Ecological Reserves Act passed by the Government of Quebec in 1974, a natural site may be designated an ecological reserve in order to maintain it in its natural condition, to protect representative or exceptional parts of our ecological heritage, to preserve endangered animal and plant species, or for purposes of scientific research or

educational activities. The Ile Brion ecological reserve makes it possible to attain all these objectives. As well, it is at the present time the only ecological reserve in Quebec in which educational activities are being conducted.

Although the Ecological Reserves Act authorizes educational activities in the ecological reserves, these areas are chosen mainly with a view to total conservation of their components. Education in protected areas is primarily centred on the local ecology and natural development processes. It is essential whenever possible to entrust responsibility for an educational program in an ecological reserve to a regional organization. Local people thus have the right to examine the area, which helps to decrease frustration caused by the severe constraints on use which are

adopted, and to develop a feeling of responsibility for the ecological reserve.

The conservation of Ile Brion is of national interest from several points of view. This island has all the characteristic components of a Quebec maritime landscape (red and grey sandstone or red clay cliffs, dunes, and jagged shoreline). It still possesses the Magdalen Islands type of primitive forests (forests of tall and stunted white spruce) nowadays very rare in the archipelago. Indeed, except for Havre Aubert, these are practically absent from the other islands. There is also a great diversity of habitats (forests, peat bogs, meadows), birds of over 140 species, and several native plant species rare in Quebec.

The International Biological Program (Quebec Section) had been proposing that Ile Brion be made an ecological reserve since 1969. Because of its ecological importance, the island was one of the first sites proposed by the international organization. However, this natural site did not officially receive the legal status of an ecological reserve until 1988.

When the Quebec Department of the Environment (MENVIQ) began expropriation procedures to acquire Ile Brion in 1983, the population of the Magdalen Islands were immediately informed of government intentions. This began a long and valuable process of co-operation between the community and the Government of



The île Brion has all characteristic component of a Quebec maritime landscape.
Photo: MENVIQ

Quebec. Before the Department of the Environment acquired Ile Brion, more than 99% of the island belonged to SAREP (company held equally by Texaco Canada Resources Inc. and SOQUIP) and two other owners: Fisheries and Oceans, and Fisheries Canada, Inc. Finally, development plans for private recreational activities greatly concerned the population of the Islands.

In 1985, the Comité pour l'accès et la protection de l'île Brion (Committee for Ile Brion access and protection) was born under the aegis of the Magdalen Islands Regional County Municipality. This committee was first formed to act as an intermediary with respect to MENVIQ. Its main objective was to ensure that complete, permanent protection of Ile Brion because of its status as an ecological reserve would not make it impossible to carry out certain educational activities there. Then in 1986, this committee became the Corporation pour l'accès et la protection de l'île Brion Inc.

In co-operation with MENVIQ, the society had conducted an information campaign among Magdalen Islanders since 1985 on the relevance and consequences of making Ile Brion into an ecological reserve. This initiative thus made them a group whose co-operation was vital for the Department of the Environment.

As well, Magdalen Islanders were consulted on the zoning of Ile Brion through the Corporation. It was agreed that part of the Island would not be included in the ecological reserve. This area is on the western end of the Island, and contains the lighthouse and a few buildings as well as the remains of an old dock. This enclave will allow better management of the ecological reserve, and ensure that Magdalen Islanders will be able to practise certain traditional activities. However, access is controlled as are the activities carried on there.

During the winter of 1988, two five-year agreement protocols were signed between MENVIQ and the Corporation. One of these protocols relates to

management of Ile Brion including the ecological reserve, and the other deals with the establishment of an educational program.

Thanks to a subsidy from Wildlife Habitat Canada (WHC), the Corporation is able to present an education program on the reserve. Under an agreement with MENVIQ, the Quebec Wildlife Foundation (QWF), trustee for this subsidiary, sets the terms and conditions for annual payments to the Corporation.

In order to improve organization of reception facilities and to ease the difficulties of access resulting from the absence of safe docking facilities, the Corporation has obtained financial assistance from the Canadian Wildlife Service (CWS) through the Habitat Management and Acquisition Assistance Program. As well, the CWS, through this same program, and MENVIQ help to fund the monitoring of the ecological reserve.

The Corporation hires staff and workers on a seasonal basis according to its budget (collected by fund raising or the sale of membership cards) or under federal employment development programs. We should also mention that several other persons take part in managing the Ile Brion ecological reserve on a volunteer basis.

The commitment of Magdalen Islanders to management of the Ile Brion ecological reserve has led to very positive results. There have already been notable changes in behaviour and attitudes towards this conservation site. Ile Brion is no longer seen as a recreational site as it was before establishment of the ecological reserve. It has become a showcase of Magdalen Islands ecology, a jewel to be preserved and respected. This successful experience also helps create a positive climate favouring the protection of other sensitive, fragile or threatened sites in the archipelago (dunes, lagoons, wetlands).

The Ile Brion experience has been most instructive. It has proven that even within the rigid protection framework of an ecological reserve and in spite of MENVIQ's limited financial resources, which hardly make it possible to do more than ensure the overall protection of the island, success may be achieved. A number of partners, all of them enthusiastic about conservation, were brought together to guarantee complete and permanent protection of this site. Finally, the population responded positively when encouraged to take part in management and presentation of an education program, contributing to the conservation of this ecological reserve and the awakening of a growing environmental spirit.

Protecting the Habitat of the Map Turtle

by Joel Bonin and Roger Bider, St Lawrence Valley Natural History Society

Quebec's greatest hopes for preserving its Map Turtles rest with the population in the Lake of Two Mountains. With approximately 350 adults, this population is the largest in Quebec, since this species is only rarely seen in other parts of the province. However, over the past ten years, their reproduction has seemed to have very limited success. Residential development, degradation of the shoreline, and its intensive use for recreational and tourist activities have reduced the number of available nesting sites. Irregular fluctuations in the lake's water level seem to seriously compromise the survival of eggs by flooding the nests. The turtles are also suffering increasing predation from raccoons, skunks and foxes. As well, dredging projects to facilitate pleasure boating may be altering some of the turtles' hibernation sites.

This situation has led the St Lawrence Valley Natural History Society (SLVNHS) to conduct a program of artificial incubation and raising of the young in captivity since 1985. However, the program does not appear sufficient to guarantee the natural long-term survival of the population. This is why SLVNHS wishes to protect the natural egg-laying areas and other habitats essential to the survival of the Map Turtle population.

The Society also hopes to develop egg-laying areas in the natural environment. In 1989, a lakeshore landowner who had improved his shoreline by removing stones and weeds noticed an increase in the number of turtles at that spot during the incubation period. This rapid favourable response seems to guarantee successful results from development of egg-laying areas where nest flooding and predation can also be limited.

With the support of the Canadian Wildlife Service, the Quebec Wildlife Foundation and the Department of



Cap Saint-Jacques (Lake des Deux Montagnes): a reproduction site for the Map Turtle

Photo: Roger Bider

Recreation, Fish and Game, and with the co-operation of the Montreal Urban Community and the Canadian Nature Conservancy, the SLVNHS has become involved in a project to determine priorities for protecting the species in the Lake of Two Mountains. The proposed protection measures could be diverse, ranging from simple restriction of harmful activities to habitat development or population management (maintenance of nests, limitation of predation). However, in order to set realistic protection objectives, SLVNHS will evaluate the feasibility of each proposed measure according to the social, legal and economic situation affecting the sites. To do this, it is essential to survey the interests and opinions of landowners, determine land ownership (zoning, landowners, market value), and identify legal means of protecting and evaluating available resources (financial partners). These elements will make it possible to select protection measures to be given priority.

SLVNHS is presently examining the possibilities of making these protection measures permanent. Acquisition is without contradiction the surest means

when carried out by a recognized, well-established organization devoted to conservation. Two of these organizations, the Canadian Nature Conservancy, and the Quebec Society for the Protection of Birds, Inc., have considerable expertise in acquiring natural areas. However, acquisition requires large investments and rapidly becomes unrealistic when we wish to protect the shoreline habitat of the Map Turtle in the Montreal region.

Similarly, it may be difficult to apply most provincial and federal laws which allow protection of natural areas, since they require acquisition of territory by the government.

These are the Ecological Reserves Act (RSQ, ch. R-26) administered by the Quebec Department of the Environment, the Parks Act (RSQ, ch. C-9), the Recreation, Fish and Game Act (RSQ, ch. M-30.1) (allows acquisition of territory for the creation of parks as commonly understood) administered by the Department of Recreation, Fish and Game (DRFG), the Lands and Forests Act (RSQ, ch. T-9) (allows creation of forest educational centres) administered by

the Quebec Department of Energy and Resources, the National Parks Act (RSC, ch. N-13), and the Canada Wildlife Act (SC, ch. 21) (permits creation of national wildlife sanctuaries) administered by Environment Canada.

However, acquisition is not the only solution. Through their land use and development planning, municipalities and Regional County Municipalities (RCMs) can ensure the protection of natural environments (Land Use Planning and Development Act, (RSQ, ch. A-19.1). However, zoning regulations may be quickly amended in the face of urban development pressures, making this procedure unreliable.

An interesting approach is seen in Bill 15 amending the Wildlife Conservation and Development Act (RSQ, ch. 39), which will allow the DRFG to designate territories as *wildlife habitats* in order to protect the habitat of a threatened species or other important habitats: Virginia Deer runs, heronries, etc. Thus, any development which might threaten the habitat of a designated species will be prohibited. However, this law and the Quebec Threatened or Vulnerable Species Act, which will make it possible to designate a special status for Quebec species (Bill 108 amending the Wildlife Conservation and Development Act) are still not in force.

At present, SLVNHS is studying mutual agreements concluded between landowners and conservation organizations, under which the protection of a habitat may be assured by a *conservation servitude*. This is a contract with the landowner limiting development or activities on part of his land which might threaten the turtle or its habitat. The servitude ensures protection of the territory for a specified period (up to 99 years) by binding the property, that is, it remains in effect whatever transactions affect the property (sale, transfer, etc.).

These contracts offer considerable latitude as to the degree of restriction on activities, allowing the landowner and SLVNHS to reach an agreement



Female Map Turtle
Photo: Joel Bonin

with respect to the interests of each. The owner retains property rights and enjoyment of his property while respecting certain undertakings which could be to his advantage. For example, the Map Turtle requires undisturbed shorelines and water surfaces, sand or gravel beaches for egg-laying, and a healthy, unpolluted aquatic environment for feeding: requirements which are strangely similar to those of many shoreline landowners!

However, for a servitude on a piece of property to be legally valid, it must be in favour of another property. The owner of the second («dominant») property will then be in a position to amend or cancel the servitude agreement. This particular feature thus forces the SLVNHS to acquire a dominant property adjacent to the properties to be protected before it can sign a conservation servitude.

It is nevertheless possible to sign a conservation contract with a landowner other than in the form of a servitude. For example, Ducks Unlimited signs contracts to develop and maintain waterfowl habitats on private property. In return, the landowner must agree not to damage the habitat.

However, unlike a servitude, these agreements do not bind the property, but only the landowner; thus, if the property is sold, the agreement must be renegotiated with the new owner. This type of contract should therefore be resorted to only when the owner does not appear likely to sell his property in the short or medium term.

We should mention that these agreements must be signed by fairly stable organizations, so that contracts may be renewed and any agreement amendments followed up. The Wildlife Conservation and Development Act gives the DRFG power to negotiate agreements and confer the status of *wildlife preserve* upon an area. However, this practice is not common and no wildlife preserves have been constituted to date. If general laws cannot adequately ensure protection of the species, then the creation of a wildlife preserve will certainly be considered. This possibility will receive greater attention if SLVNHS and owners are prepared to become involved in the follow-up and future management of the wildlife preserve.

Protection of the Map Turtle's habitat is seen to rest in great part on the participation of shoreline landowners. The SLVNHS therefore intends to increase the conservation awareness of these owners by gradually encouraging them to protect the natural environment which they own. Their co-operation will provide temporary protection until contractual agreements make it more permanent.

The good relations maintained by the SLVNHS with some of the owners over the years should certainly facilitate such a project. As well, using representatives to carry out this work who have something in common with the owners (age, language or culture) will probably increase our chances of success. The importance of the role individuals can play in protecting habitats should remind us to be attentive to their needs and to respect their property rights. The success of the conservation project may thus depend more on our relations with them than on the exceptional ecological value of the site.

The St Lawrence Valley Natural History Society

The SLVNHS was legally constituted as a not-for-profit organization in June 1981. A group of wildlife biologists noted that in spite of the growing importance given to wildlife and the environment in the media, most of the information given to the public concerned exotic and spectacular species, with very little attention to local or regional wildlife species. On the other hand, research funding seemed to be directed towards «principles and methods», leaving no financing for applied research. As well, it was noted that researchers could not assume the costs of keeping animals over a long period of time when their behavioural research lasted only a month or two.

The ECOMUSEUM was created to meet these needs. It was modelled on the Arizona Sonora Desert Museum, a great success in this field, and provided a base to meet both research and education needs. At present, the ECOMUSEUM supports research projects on waterfowl, fish, turtles, and mammals, and also has facilities for studying the behaviour of animals under the ice.

Its interest in the wildlife of the Montreal region has led the Society over the years to study and monitor local amphibian and reptile populations. It has become more particularly interested in two species, the Map Turtle and the Striped Chorus Frog, whose local populations are in a precarious position. With increasing funds and growing general interest in reptiles and amphibians, the mandate has been widened. The Society has

carried out wildlife research, has begun compiling an atlas of Quebec reptiles and amphibians, and will soon complete a program to reintroduce a spectacular and fascinating population of the Map Turtle at the northern limit of its range.

The ECOMUSEUM is situated in St Anne de Bellevue and is open daily from 9 a.m. to 4 p.m. For further information contact:

The St Lawrence Valley Natural History Society

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The Land Trust Alliance by Francine Hone, Canadian Wildlife Service

The *Land Trust Alliance*, a nation-wide American organization, held its annual conference last June in Villanova near Philadelphia, under the theme **Strength through Diversity**.

The Canadian Wildlife Service took part for the first time in this major conference, which brought together nearly 500 persons from most of the United States. The importance of this event is seen not so much in the number of participants as in the motivation and commitment of those present. Whether volunteers (more than 70 per cent) or workers for not-forprofit organizations, they were all devoted to the same cause: the protection of habitats.

The Land Trust Alliance (formerly the Land Trust Exchange) brings together more than 800 land trusts, which have to date protected nearly 800,000 hectares throughout the United States. More than half of these trusts were formed over the last ten years

and nearly a third are less than five years old. According to Jean Hocker, chairman of the Land Trust Alliance, new land trusts have been forming at the rate of one a week over the past two years.

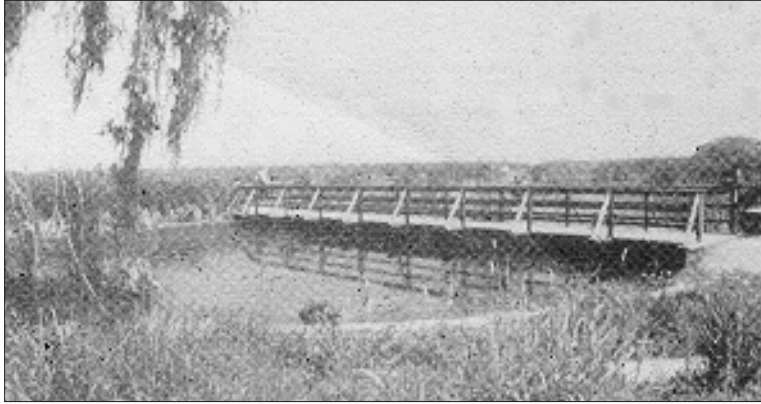
The strength of this movement is based on the fact that this innovative approach, supported by hundreds of organizations with local community backing, is effective and produces concrete results.

Land trusts, which are generally established by groups of citizens interested in protecting important habitats within their community or region, vary enormously. Some are very small, managed entirely by teams of volunteers working on a local scale. Other trusts began small but over the years have become large organizations with permanent staffs of professionals who carry out transactions calculated in millions of dollars. In a small community, a land

trust has the advantages of familiarity with its territory, appreciation of the value of its resources, and ability to anticipate area conservation needs as well as the needs of those living within the community.

Some land trusts own and manage nature preserves or sites accessible to the public. Other trusts do not possess title to any land, but hold conservation servitudes which allow them perpetual rights over any type of destruction or deterioration of the area. Some work in association with government conservation agencies to acquire properties of major importance which they then turn over to the agencies. Conservation projects include the protection of natural habitats, urban gardens, agricultural land, parks and historic buildings.

During the three days of the conference, we quickly came to understand the meaning of the theme chosen. Almost every land trust



Up to date, 800 000 hectares were protected in the United States
by the 800 groups from the Land Trust Alliance
Photo: Jean-Marc Coulombe

has developed its own management methods which make it most effective within the social, economic and political context of its region and according to the type of habitat it protects. It is this very distinctiveness and incontestable community support which constitute the real force of this conservation movement.

The Land Trust Alliance arose from a pressing need by the groups being formed for professional and technical assistance. As well, they looked for a national spokesperson capable of taking political action: in other words, a solid influential organization.

When it was founded in 1982, this co-ordinating organization had as its mission to inform and assist land trusts, and to influence national conservation policy and legislation.

The Land Trust Alliance seeks to develop innovative methods of permanently protecting habitats and assisting local and regional groups to protect these habitats in the best way possible. Since its beginning, the Land Trust Alliance has established a large national communications network to keep in touch with its members. A land trust may always obtain advice or support from the Land Trust Alliance or from another trust. The Land Trust Alliance is an extremely effective leader for its 800 groups.

For us, the conference meant increased familiarity with the concept of land trust and the conservation techniques being applied in the United States (conservation servitudes, limited development, private land stewardship programs, etc.), and above all an opportunity to establish direct contacts with the Americans.

A meeting of representatives from the United States, France and Canada was held to discuss closer links with the Alliance. The Canadian Wildlife Service expressed great interest in cultivating such links. A committee made up of representatives of the main organizations was created to evaluate the usefulness of such an association.

The CWS is already benefitting from the scope of the American conservation movement and will not hesitate to associate itself with this organization to share knowledge and expertise.

For further information on the Land Trust Alliance, contact:

The Land Trust Alliance
900 Seventeenth Street NW
Suite 410
Washington, DC
20006-2596
Tel.: (202) 785-1410

NEWS BRIEFS

The North American Wildfowl Management Plan

by Raymond Sarrazin

The partners in the Eastern Habitat Joint Venture (EHJV) recently submitted their first five-year plan (1990-1994). It provides for expenditures of \$52.5 million, including \$14.0 million in Quebec, where priority will be given to the protection of threatened wetland habitats (nearly 8,000 hectares). Six biogeographical regions were identified for Quebec: the Abitibi lowlands, the Ottawa valley, the Richelieu valley, the St Lawrence valley, the St Lawrence estuary and gulf, and the Lac St Jean and Saguenay lowlands. The Quebec program also provides funds for research and project evaluation (3%), co-ordination (3.5%) and communications (0.6%).

July 9, 1990 was the first deadline for submitting plans under the **NORTH AMERICAN WETLANDS CONSERVATION ACT** signed last December. Quebec EHJV partners submitted projects to the committee created under this Act, which amounted to \$2.9 million, including \$2 million from American funds. We should recall that this legislation allows Canada and Mexico to obtain funds varying from \$15 to \$20 million a year.

A brochure describing EHJV's goals, objectives and principles is now available. HABITATS readers who have not yet received it and who wish to obtain a copy may simply contact the office of the Canadian Wildlife Service.

Tools for Success: Dynamic Fundraising

On June 11 and 12, 1990, the Canadian Centre for Philanthropy, in cooperation with the YMCA Montreal Foundation, held the First Quebec Conference for Charitable Non-Profit

Organizations. This event was organized to allow new organizations to take advantage of experience acquired by those who have been working in fund-raising and philanthropy for some time. Special funds were collected to allow low-income organizations to take part.

Non-governmental organizations interested in this subject may obtain information from the Canadian Centre for Philanthropy, 74 Victoria #920, Toronto, Ontario M5C 2A5. Tel.: (416) 368-1138.

The Municipality of Lac Brome

Wishes to Protect Wetland Fauna and Flora

In order to protect the quality of their environment, members of the Lac Brome municipal council plan to amend the town zoning regulations to create ecological zones. The fragile zones inventoried include a number of wetlands such as marshes and swamps.

The regulations are aimed at restricting certain activities carried on in these areas. If this plan is accepted, we can only congratulate the municipality of Lac Brome, which is setting an example for other municipalities through its commitment to the protection of natural habitats.

Satellite Monitoring of Waterfowl Breeding Habitats

by Daniel Bordage, Canadian Wildlife Service

In the past, there were severe restrictions on research on waterfowl breeding sites, which was limited to on-site surveys of habitat parameters or interpretation of aerial photos. Although exhaustive analysis of the

data could permit extrapolation of results, it was often unrepresentative. Nowadays, satellite imaging and computer processing offer automated environmental interpretation of vast areas at reasonable cost. By associating waterfowl inventories with the computerized mapping of habitats, we obtain a very useful management tool. Models of habitat use by waterfowl will make it possible to regularly monitor habitats and even to simulate various types of impact. In spite of a low level of definition, optimal sharpness of 10m by 10m, and a limitation on the number of habitat parameters, the models obtained are simple, have measurable reliability, and are representative and objective.

The Canadian Wildlife Service is working within an agreement with HydroQuebec's Environmental Vice-Chairmanship to develop models of breeding habitat use by the Canada Goose, the Surf Scoter and the Black Scoter, in relation with the Great Whale hydro-electric project. The Canada Goose population, which occupies a very important place in the lives of the Natives of this region, has been decreasing for several years in the east of the continent. As for scoters, the only major nesting areas known in Quebec are located on the territory where this project is planned. Modelling will make it possible to evaluate the populations and distribution of the various species, and to verify the likelihood of scoters being present elsewhere in Quebec, while limiting the need for costly air inventories. It will also be possible to simulate the effects of flooding and drying resulting from the project and to plan appropriate and realistic measures to mitigate them.

Calendar of Events

October 15 to 19, 1990

A Global Issues Symposium joining the Seventeenth Annual Natural Areas Conference and with the Yosemite Centennial Celebration under the theme **NATURAL AREAS AND RESOURCE MANAGEMENT: PROSPECTS FOR THE FUTURE**, at Concord, California, organized by the Natural Areas Association, 320 South Third Street, Rockford, Illinois, 61104.

October 27-28, 1990

Workshops on habitat protection in Quebec (Mont St Anne), organized by the Canadian Wildlife Service for non-governmental groups interested in habitat protection. Information: Francine Hone (418) 648-4554.

November 16-20, 1990

Partners in Philanthropy: Eleventh Annual Canadian Conference for Charities and Not-For-Profit Organizations, held in Toronto and organized by the Canadian Centre for Philanthropy. Information: Canadian Centre for Philanthropy, 74 Victoria St., #920, Toronto, Ontario M5C 2A5. Tel.: (416) 368-1138.

HABITATS is published and distributed free of charge by the Canadian Wildlife Service to facilitate exchanges of information between the various groups and individuals interested in habitat protection.

Those who wish to take part in this exchange and share their experiences in the various aspects of habitat protection may do so by writing articles and sending them to Francine Hone, at the Canadian Wildlife Service.

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March 1, 1991

Deadline for submission of projects under the Habitat Management and Acquisition Assistance Program. For further information and to obtain the guidelines, contact Francine Hone of the Canadian Wildlife Service at (418) 648-4554.

The opinions expressed herein do not necessarily reflect the view or policies of Environment Canada.

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ISSN 0847-2947