3.8 Conservation Along the Ottawa River

The significant and increasing loss of biodiversity and natural heritage areas worldwide has created widespread concern, and is generating a new commitment to conserve and protect threatened species and spaces. In recent years, a succession of world charters have called for accelerated protection of natural

heritage. As part of this growing movement, Canada and 159 other countries signed the *United Nations Convention on Biological Diversity* at the Earth Summit in Brazil in 1992. There, Canada pledged to establish more protected areas, and to find new ways of managing these areas while promoting environmentally sound and sustainable development of natural resources. Conservation initiatives along the Ottawa River, administered by provincial and municipal parks and by other conservation organizations, make a considerable contribution to Canada's commitment.



3.8.1 Parks Along or Near the Ottawa River

In addition to offering excellent recreational opportunities (as discussed in Chapter 4: Recreational Values), parks and nature reserves contribute to environmental conservation efforts in several ways. First, they provide an important service to the species living in their region: habitat protection. Protecting habitat by restricting development and natural resource extraction means supporting the ecosystems that this habitat sustains. It therefore contributes to the well-being of the species that make up the fabric of these ecosystems. In addition, parks and conservation areas frequently support scientific studies, the findings of which are often widely applicable and can guide conservation initiatives both within the protected area and more broadly. Finally, parks and nature reserves contribute to the health of our ecosystems more generally by educating the public about the areas that they protect, fostering sensitivity to the importance of sustaining Canada's natural systems.

Numerous parks line the waters of the Ottawa River, with the combined goals of conservation, education, and recreation. Each of these parks and reserves contributes to the protection of the natural environment of the Ottawa River valley. On the Quebec side of the Ottawa River, there are three provincial (Quebec National) parks, two large nature reserves and several small ones, and several ZECs (Zone d'Exploitation Contrôlée, or fishing, hunting and recreation reserve). On the Ontario side are seven provincial parks and three non-operating provincial parks near the Ottawa River. Municipal parks on both sides of the river also contribute significantly to conservation efforts along the river.

Parc National d'Oka

Parc d'Oka is a Quebec national park located about 35 minutes from Montreal. The park represents Quebec's second largest protected area for threatened or vulnerable plant species (TVP). Oka's 60-nest heron colony and wood duck nesting grounds (Quebec's most productive) make it a popular destination for bird watchers. Four Romanesque oratories and three chapels built around 1740 are located within the park (SEPAQ: "Oka").

Parc National de Plaisance

The Parc National de Plaisance, located east of Papineauville along the Ottawa River, is renowned for its biodiversity. Over 235 bird species, 30 varieties of fish, Quebec's second highest concentration of beaver colonies, and a large number of threatened and vulnerable land vertebrates call the park home. A rare population of more than 22 pairs of Least Bittern are also found here. The extensive wetlands that lie along the banks of the Ottawa are important habitat for migratory waterfowl (SEPAQ: "Plaisance").

Parc National d'Aiguebelle

With its 268 square kilometres located in the Abitibi-Témiscamingue region northeast of Rouyn-Noranda, this park features unique geological formations, and houses a great deal of northern wildlife, including hundreds of beaver dams on its many lakes (SEPAQ: "Aiguebelle").

Voyageur Provincial Park

Voyageur Provincial Park on the shores of the Ottawa River represents land that was expropriated as a result of the flooding following the construction of the Carillon Dam in 1959. As a result, the parklands demonstrate a process of ecological succession as old fields develop into young forests and waterfront areas into marshlands. The changing landscapes provide important habitat for a wide range of plant and animal species. The varied landscape of beaver ponds, fern swamps, and hills of mixed forest provides habitat for Deer, Woodchucks, Muskrats and Beaver. Bird species include Bobolinks,





Meadowlarks, Goldfinches, Robins, and Warblers. In the spring and fall, the bays are filled with migrating ducks and Canada Geese. Terns, Gulls, Sandpipers, Herons, Kingfishers and Osprey live along the shore. The park is also home to the Midland Painted Turtle and the Snapping Turtle (ORHDC: "Landmarks – Voyageur").

Fitzroy Provincial Park

Fitzroy Provincial Park upstream of Ottawa protects a locally significant example of southern mixed forest region. A stand of 300year-old Bur Oak by the Carp River as well as towering, 100-year-old White Pine serve as a reminder of what originally drew the lumbermen into the Ottawa Valley. The forest provides habitat for migratory birds as well as various other plant and animal species, including Killdeer, Goldfinches, Flickers and White-tailed Deer (Ontario Parks: "Fitzroy").





Algonquin Provincial Park

Algonquin Park's 7,725 square kilometres of forests, lakes and rivers, was established in 1893 as a wildlife sanctuary by members of the lumber industry who realized that unmanaged logging and the spread of agriculture threatened the sustainability of the forest. Today, the park plays an important ecological role by preserving a high level of biodiversity and protecting the headwaters of various streams. The park is particularly famous for its Wolves, which are heard but rarely seen, but is also home to significant populations of Moose, White-tailed Deer and Bear. More than 260 bird species have been recorded in the Park. Many southern and overseas birders make special trips to Algonquin just to see northern specialties such as the Gray Jay and the Spruce Grouse, not to mention the rich variety of Warblers or Algonquin's most famous bird of all: the Common Loon, found nesting on most of the park's lakes.

Ottawa River Provincial Park

The Ottawa River Provincial Park is a non-operating Ontario waterway park protecting 125 hectares of shoreline between Mattawa and the Chenaux dam on the Ontario side.

Samuel de Champlain Provincial Park

Samuel de Champlain Provincial Park is a 2,550-hectare natural environment park along an eastern section of the Mattawa River, one of the Ottawa's main tributaries. The park contains a variety of wildlife typical of the area, including Moose, Wolves, Bear and White-tailed Deer, as well as more than 200 species of birds and waterfowl such as Loons, Common Mergansers, Black Ducks and Wood Ducks. Natural heritage and ecological education programs are available.

Westmeath Provincial Park

Westmeath Provincial Park is a non-operating Ontario natural park located east of Pembroke on Lower Allumette Lake. Its 610 hectares of land are situated on a former channel of the Ottawa River, mainly consisting of an active sandspit that encloses Bellows Bay. This habitat is significant for migrating birds, waterfowl, shorebirds, and turtles (Ontario Parks: "Westmeath").

Bonnechere Provincial Park

Bonnechere Provincial Park covers 162 hectares of forest and wetland. Located about 45 kilometres west of Pembroke, the park takes its name from the Bonnechere River, an important tributary to the Ottawa. The Bonnechere meanders around several tiny oxbow lakes before reaching Round Lake. Other natural features include a beaver pond and a marsh (Friends of Bonnechere Rivers: "Bonnechere Provincial Park").

Bonnechere River Provincial Park

Bonnechere River Provincial Park is a non-operating but accessible 1198 hectare, or 23 kilometre, waterway. It encompasses a scenic stretch of the Bonnechere River, historically called the "Little Bonnechere" that connects Bonnechere Provincial Park, on the shores of Renfrew County's Round Lake, with Algonquin Park to the north. Stands of trees, wetlands, and sandy shorelines provide important

habitat for a wide variety of natural resources. The waterway also acts as a corridor for southern plant species such as the Cardinal Flower in the northern portion of its range, and the White Oak (Ontario Parks: "Bonnechere River Provincial Park").

Driftwood Provincial Park

The construction of the Des Joachims hydroelectric dam in 1950 created a sheltered bay on the Ottawa River, later designated an Ontario Provincial Park. More than 200 species of birds have been identified in this riverside park. The southern section of the park was ravaged by a forest fire in 1975, allowing visitors to observe the fascinating process of forest succession. At present, Aspen, Poplar, Jack Pine, and Blueberry bushes are thriving in the ashy soil.

Kap Kig Iwan Provincial Park

Kap-Kig-Iwan Provincial Park is located northwest of Lake Temiskaming near Englehart. The park includes 325 hectares of land and features the Englehart River Valley, providing an excellent opportunity for observing flora, fauna and geological features. The park sits on the northern edge of the Little Clay Belt, one of the richest farming areas in northern Ontario. Although the park is in the boreal forest, its Aspen, Birch and Red and White Pine grow alongside White Elm and Black Ash, species of trees more usually found in the Great Lakes-Saint Lawrence lowlands (Town of Englehart: "Kap-Kig-Iwan").

3.8.2 Nature Reserves Along or Near the Ottawa River

Réserve Faunique La Vérendrye

The 13, 615 square kilometres protected by the La Vérendrye Faunic Reserve are managed by the Société des établissements de plein air du Québec (SEPAQ). La Vérendrye is SEPAQ's second largest natural territory. Located at the large reservoirs found on the Upper Ottawa River (including Dozois and Cabonga), the reserve offers an extensive lake and river system (SEPAQ: "La Vérandrye" and Québec Vacances: "La Vérandrye").

Parc de la Gatineau

Gatineau Park extends over 50 kilometres to the northwest of the Ottawa/Hull urban area, between the Ottawa and Gatineau rivers, and covers an area of 36,131 hectares. The park is managed by the National Capital Commission (NCC). An important nature reserve, the park is 80% blanketed in forest, including five species of endangered trees: White Oak, Eastern Red Cedar, Black Maple, Common Hackberry and Rock Elm. Altogether, the park is also home to 121 endangered plant species, the largest concentration of rare species in the province of Quebec. In addition, 54 species of mammals live in the park, 14 of which are designated as endangered species in Quebec and/or Canada. Two of the park's potentially endangered mammals are the Wolverine and the Silver-haired Bat. The park's 237 bird species, including the Pileated Woodpecker and Common Loon, draw birdwatchers to the park.

Twelve species of reptiles, three of which are rare in Quebec (the Northern Water Snake, the Wood Turtle and Blanding's Turtle), may be found in the Park. There are 17 species of amphibians, three of which are rare in Quebec: the Western Chorus Frog, the Pickerel Frog and the Four-toed Salamander. Many resident bird species are considered endangered in Quebec and/or Canada, including the Golden Eagle and the

Redheaded Woodpecker. One of the park's molluscs, the Gatineau Tadpole Snail (*Physella parkeri latchfordi*), is very rare and considered to be on the verge of extinction. A rare butterfly, the Juniper Hairstreak (*Mitoura gryneus*), may also be observed in places within the park with Eastern Red Cedars (NCC: "Gatineau Park").

3.8.3 ZECs Along the Ottawa River

There are several ZECs (Zones d'Exploitation Contrôlée) along the Ottawa River. The ZEC system was established by the Quebec government in 1978 to replace privately-owned hunting clubs. ZECs are managed by non-profit organizations in order to conserve the territory's fauna, ensure accessibility of the territory and of the recreational uses of its fauna, and to ensure the participation of territory's users in the ZEC's management. These areas are popular for hunting and fishing as well as for nature appreciation, hiking, camping, and other recreational activities. Unlike most national and provincial parks, forestry is also commonly practiced within ZECs.

Capitachouane - The Capitachouane ZEC located around Saint-André-Avellin, near the Ottawa River's headwaters, covers an area 858 square kilometres and contains 88 lakes and 10 rivers (Hydro Québec: Bassin supérieur 5-2).

Kipawa - The Kipawa ZEC, located around Ville-Marie, covers an area of 2,500 square kilometres and includes 750 lakes and 17 rivers. In addition to the fauna and flora typical of the region, this ZEC also contains some natural features of particular interest, such as the Chute au Lac Pants waterfall, Lake Pommeroy, which displays some interesting geological formations), and several sandy beaches (Hydro Québec: Bassin supérieur 5-2).

Festubert - ZEC Festubert, located around Blainville, covers 1,427 square kilometres and contains 148 lakes and 4 rivers (Hydro Québec: Bassin supérieur 5-2).

St-Patrice, Rapides-des-Joachims, Dumoine, and Magnasipi – These four ZECs span the provinciallyowned land on the Quebec side of the Ottawa River from Petawawa to beyond Mattawa. They include about 150 kilometres of undeveloped shoreline essential to the viability of many animal populations.

3.8.4 Other Conservation Areas Along or Near the Ottawa River

Along the Ottawa River, there are a remarkable number of conservation initiatives, bearing testament to the river's unique and varied natural systems and to the commitment of local citizens to the health of their natural environment. To list each of these initiatives would outside the scope of this study. Conservation projects such as those taking place at McLaurin Bay, Mer Bleue, Alfred Bog, Petrie Island, and Atocas Bay, described earlier, are excellent examples of successful smaller-scale conservation projects along the Ottawa River. A few additional initiatives, of varying scale, are highlighted below.

National Capital Greenbelt

The National Capital Greenbelt is a 20,350-hectare band of open lands and forests surrounding the nation's capital on the Ontario side of the Ottawa River. It was first proposed in 1950 by French planner Jacques Gréber as part of an overall plan to beautify the National Capital. The Greenbelt was also intended to protect the rural land bordering the Capital from urban sprawl. The Greenbelt has expanded

over the years to encircle the Capital from Shirley's Bay on the west to Green's Creek on the east. Most of the total area, or 14,950 hectares, is owned and managed by the National Capital Commission. The rest is held by other federal departments or privately.

The Greenbelt provides residents and visitors with an accessible rural environment rich in natural and historic resources. It offers a range of experiences from rolling farmlands to peaceful forests and wetlands. Each of these supports an array of plant and animal life. The Greenbelt includes the Mer Bleue Conservation Area and Stony Swamp Conservation Area, two wetland communities described earlier, as well as several other natural areas of interest, such as Green's Creek Valley, which cuts through clay and post-glacial fossils from the ancient Champlain Sea, and offers striking natural lookouts (NCC: "Greenbelt").

Petawawa Terrace

Petawawa Terrace, owned by the Province of Ontario and until recently housing a fish hatchery, has been proposed as a provincial nature reserve to protect the area's unique natural features, both ecological and geological. Situated in the heart of the Town of Petawawa, the Terrace is a 150-metre high bluff supporting a forest of middle-aged Jack Pine, Red and White Pine, Oak, and various deciduous trees. Several freshwater streams rush from the Terrace to the flats below, which are covered by fields, treed swamp and natural shoreline of the Ottawa River. Wildflowers hide in shadows and over 60 bird species nest on the land. Petawawa Terrace is an area protected for its forest, plant and wildlife communities, as well as to provide opportunities for public enjoyment, research, and education (Destination Ontario: "Petawawa Terrace").

Gillies Grove

Along the Ottawa River's shore, near Arnprior, lies one of Canada's treasured vestiges of old growth forest: Gillies Grove. The grove features a diversity of forest habitats including old growth hardwood

Figure 3.46 Gillies Grove



forest, old growth white pine forest, and mature hemlock forest. For more information about the ecological significance of the site, please refer to Chapter 3.7.5: Forest Ecosystems.

Ironically, this old growth grove has survived because it belonged to the Gillies family, who, immigrating from Scotland in 1820, soon presided over one of the largest logging operations of the Ottawa River Valley. In 1990, when it appeared that the forest would be destroyed by a housing development, conservationists began campaigning for its ensured protection. As a result of collaborative efforts between non-profits, individuals, and corporations, the site was purchased in 2002 by the Nature Conservancy of Canada and placed under the stewardship of the Ottawa Valley Land Preservation Society. This society is committed to the preservation of the old-growth forest.

Visitors are invited to follow the Gillies Trail, part of Arnprior's municipal Millenium recreational trail system, as it winds through the 23 hectare site along a natural section of the Ottawa

River. The grove is a throwback to the days before the lumber-baron era of the Ottawa Valley, enabling visitors to admire the rich plant and animal diversity, to imagine the "endless hills of pine" described in the journals of the earliest Ottawa Valley settlers, and to reflect upon the impact of forest exploitation.

Omega Park

Omega Park is quite unlike the other parks described in this report. Its function is more like that of a zoo than of a conservation area. Located near Montebello, Quebec, the park is a 607-hectare enclosure containing walking trails and a 10 kilometre driving route through the varied landscape. Its purpose is to offer the public an opportunity to view a range of fauna in a re-creation of their natural environments. Some of the animals in the park are native to the region, but many are introduced. The species featured include the Red Deer, Corsican Moufflon, Wapiti, Alpine Ibex, White Tail Deer, Bison, Wild Boar, Beaver, Black Bear, Raccoon, Moose, and Wolf (Parc Oméga). The Omega Park is included here in virtue of the unique educational opportunities that it offers.

Four Seasons Forest Sanctuary

This forest sanctuary contains 400 hectares of predominantly mature forest, a secluded bay and a wetland along the Ottawa River. It was purchased in 1995 from Atomic Energy of Canada Limited, who had protected the area for half a century. Now owned jointly by the Town of Deep River, the Four Seasons Conservancy organization and private individuals, it contains many walking and skiing trails, and is used for educational purposes.

3.8.5 Organizations with a Conservation Mandate

Just as there are many conservation initiatives along the Ottawa River, so too are there several organizations with a mandate to protect the health of its natural systems and environment. The following section highlights just some of the many organizations working towards the goal of environmental conservation along the Ottawa River.

The Ottawa Riverkeeper

The Ottawa Riverkeeper is a citizen-based, non-profit organization dedicated to the ecological welfare of the Ottawa River. The Ottawa Riverkeeper aims to achieve a healthy, ecologically sustainable Ottawa River, available for the enjoyment and benefit of its Ontario and Quebec communities. It seeks to do so by working independently as well as with individuals, businesses, community groups, and all levels of government on both sides of the river.

The Ottawa Riverkeeper facilitates the maintenance and enhancement of the ecological integrity of the Ottawa River through the following activities:

- monitoring water quality
- conducting original research
- identifying breaches of the law and reporting them to the appropriate authorities
- developing and maintaining an expert understanding of the river's ecological values, processes and special features, and the protective framework offered by various federal, provincial and municipal jurisdictions
- creating additional methods to sustain and enhance the ecological health of the river

• developing educational programs and projects in order to increase the public's understanding of the Ottawa River, so that they are able to become stewards of the river, and carry out habitat restoration projects along the Ottawa River

Web site: www.ottawariverkeeper.ca

CREDDO (Conseil régional de l'environnement et du développement durable de l'Outaouais/Regional Council for the Environment and Sustainable Development of the Outaouais Region)

Figure 3.47 Wetland - Outaouais Region



CREDDO is one of sixteen regional environmental councils in Quebec. CREDDO's members include various groups, companies, individuals, and local government bodies with an interest in the conservation of the Outaouais region's natural environment and in the region's sustainable development.

CREDDO's objectives are to:

- Promote well-planned development in the Outaouais region so that future generations will be able to benefit from a quality of life and an environment comparable with what we experience today.
- Develop a regional vision regarding the Outaouais environment by promoting dialogue between the region's decision-makers.
- Encourage people to work together to address important environmental issues, such as issues related to particular ecosystems, riverbank development, and educational programming, in order to increase people's awareness of environmental issues in the region.
- Contribute to the well-being of people in the Outaouais region.

Web site: www.creddo.ca

Ottawa River Institute (ORI)

The Ottawa River Institute (ORI) is a federally-incorporated non-profit organization based in Pembroke dedicated to fostering sustainable communities in the Ottawa River watershed. Specifically, its objectives are:

- To organize or to participate in environmental projects designed to: preserve and protect flora and fauna of the Ottawa River watershed; preserve, protect and restore rivers in the Ottawa River watershed; improve urban environments in the Ottawa River watershed.
- To educate and increase the public's understanding of the environment in the Ottawa River watershed and its importance by offering courses, seminars, conferences and meetings, and by collecting and disseminating information on that topic.
- To develop and provide programs promoting the protection and preservation of the environment in the Ottawa River watershed.
- To conduct research relating to the environment in the Ottawa River watershed and to disseminate the results of such research.

• To do all such other things as are incidental or conducive to the attainment of the above objects.

Web site: www.ottawariverinstitute.ca

The National Capital Commission (NCC)

The National Capital Commission (NCC) is a Crown corporation that was created by Parliament in 1959 with a mandate to "develop Canada's Capital Region as a source of pride and unity for Canadians." The National Capital Region is much more than simply the Parliament buildings: it encompasses about 4,715 square kilometres of land in and around Canada's Capital.

Since 1903, when the first general plan for this area was drafted, there has been a sense that if Canada's Capital is to represent Canada and be meaningful to Canadians, then it should be a "green Capital." Certainly, the landscape around Ottawa and Gatineau has extraordinary natural potential, with ancient rocks of the Canadian Shield bordering the region to the north, a rich river valley extending to the south, and, of course, with the Ottawa River itself flowing through the heart of the Capital Region.

The NCC is not only responsible for the Gatineau Park and the National Capital Greenbelt, but also for urban lands and green spaces. The many urban parks and green spaces that exist in the Capital Region today are a result of careful planning, and reflect the NCC's vision to develop a system of linked parks, with small urban parks, larger suburban parks, and very large conservation areas in the outskirts. The green spaces of the Capital Region are linked by some 170 kilometres of recreational pathway, designed for walking, cycling and in-line skating.

Web site: http://www.canadascapital.gc.ca

Club des ornithologues de l'Outaouais

The Club des ornithologues de l'Outaouais (Outaouais Ornithologists' Society) is a non-profit organization that has been working since 1978 to further develop knowledge about the birds of the Outaouais region. It has compiled a list of the bird species most commonly seen in the Outaouais region.

The organization regularly engages in conservation initiatives. For example, in the summer of 2004, the club collaborated with the Canadian Wildlife Service (Quebec region), McGill University's bird research and conservation centre and the Nature Conservancy of Canada to re-introduce the endangered Eastern Loggerhead Shrike in Pontiac County along the Ottawa River.

Web site: http://coo.ncf.ca

Ducks Unlimited Canada

Ducks Unlimited Canada (DUC) is a non-profit organization working to achieve "a mosaic of natural, restored and managed landscapes capable of perpetually sustaining populations of waterfowl and other wildlife in Canada." DUC's conservation efforts take many forms, including research on-the-ground as well as policy-level work aimed at changing policy in favour of wetland and habitat conservation. Ducks Unlimited Canada also delivers wetland and environmental education programs to teach Canadians about wetlands and the importance of their conservation.

Figure 3.48 Common Mallard



In 1973, DUC undertook the protection of its first site in Quebec: a wetland near Thurso along the Ottawa River. DUC invested over three million dollars into the protection and the restoration of 2,500 hectares of wetlands and adjacent areas along the Ottawa, between Plaisance and Gatineau. The organisation has also worked to promote public education and engagement, as well as ecological responsibility among farmers in the region.

More recently, DUC has completed a three-year program to conserve habitat threatened by development along the Ottawa River. DUC

worked hand-in-hand with Quebec Wildlife and Parks, as well as with landowners, to conserve 149 hectares of habitat east of Ottawa. The main focus areas for this conservation action plan were wetland restoration, planning farm management to conserve upland habitats, and habitat purchases. Today, the area is used by hunters, birdwatchers and thousands of migratory waterfowl.

Web site: www.ducks.ca

Ontario Stewardship Councils

Ontario Stewardship is an initiative of the Ontario Ministry of Natural Resources. Individual Stewardship Councils (defined usually by counties) provide a local and community-oriented means of linking landowners with funding, information, and expertise to ensure that good management practices flourish.

Both the county of Prescott-Russell and the city of Ottawa have Stewardship Councils. The county of Lanark, within the Ottawa River Watershed, also has a Stewardship Council. These councils are engaged in a wide range of initiatives, including tree-planting, water quality monitoring, various education and outreach programs, and creek restoration projects.

Web site: www.ontariostewardship.org.

Comités de Bassins Versants

In 2002, the Quebec Ministry of Sustainable Development, Environment, and Parks developed the Quebec Water Policy regarding the protection and proper management of water in the province. As part of this policy, the province implemented a mechanism for citizen-based integrated watershed management (DDEPQ: "Politique de l'eau").

Through this mechanism, community members representing a range of interests become stewards of their local watershed by forming a Watershed Council. These organizations take a watershed-based management approach. That is, they take into account everything that occurs within a watershed, including both naturally occurring activities and human activities. In this regard, soil, vegetation, animals

and humans are all an integral part of a watershed. Watershed Councils exist for 38 rivers all over Quebec, including two tributaries of the Ottawa River: the Gatineau and the Lièvre rivers.

Web site : <u>www.robvq.qc.ca</u>

River Recreation Improvement Association

This volunteer organization has cleaned and maintained beaches and provided picnic tables and outhouses along the Deep River stretch of the Ottawa for thirty years. Donations from local area users and supporters fund these ongoing initiatives.