

NABCI IN CANADA

Bird Conservation Region 13: Conservation Planning in a Busy Industrial Corridor

By J. Alexander (Sandy) Burnett

There is really only one way to develop a bird conservation strategy for the Lower Great Lakes - St. Lawrence Plain and that is very, very carefully. The area spans an international boundary and encompasses parts of two provinces (Ontario and Quebec) and four states (Ohio, Pennsylvania, New York, and Vermont). It is densely populated, heavily industrialized, and most of its remaining natural ecosystems are deeply fragmented by agriculture, by urban expansion, and by roads, rail lines, and other linking infrastructure.

In such a setting, the aspirational quality of the North American Bird Conservation Initiative (NABCI) really shines.

NABCI is a tri-national initiative of Canada, the United States and Mexico to develop and implement plans for the long-term health of all bird species in all habitat regions of North America. Its rationale is simple. Birds are numerous, highly visible, economically significant and ecologically essential components of the biodiversity of all three countries. If all the continent's bird populations are in good health, abundant, and distributed throughout their known ranges, relative to historical norms, it can be inferred that the environmental health of North America is good. If not, then like the celebrated canary in the coalmine, species in trouble will serve as indicators of an urgent need to take remedial action.

To facilitate the initiative, the natural habitats of the continent have been mapped into 67 Bird Conservation Regions (BCRs). The resulting spatial framework has been in use by NABCI since late in 1999. Its units have nothing to do with political boundaries. Rather, each comprises a set of related and contiguous ecosystems.

BCR 13, the Lower Great Lakes – St Lawrence Plain, extends from the western end of Lake Erie almost to the head of the St. Lawrence estuary. It encompasses several major urban concentrations, including Windsor, Cleveland, Buffalo, Toronto-Hamilton, Rochester, Ottawa, and Montreal-Laval, as well as dozens of smaller cities. It also encompasses an array of biologically rich and diverse ecosystems containing a disturbingly large number of plant and animal species at risk or in decline.

Participants in an Integrated Biological Planning Workshop that took place in Alexandria, New York, in April 2001 were very conscious that making the NABCI vision a reality in BCR 13 would be no easy task. In addition to the two national and six state and provincial governments noted above, the event brought together representatives from

three ongoing conservation Joint Ventures (Eastern Habitat, Atlantic Coast, and Upper Mississippi). It also included a wide range of other groups, such as the Audubon Society, Bird Studies Canada, the Cornell Laboratory of Ornithology, Ducks Unlimited, the Federation of Ontario Naturalists, the Nature Conservancy of Canada, the Nature Conservancy, Wildlife Habitat Canada and, of course, NABCI.

Addressing the opening session, Kevin Loftus of the Ontario Ministry of Natural Resources (OMNR) noted that, given the number of government and non-government agencies involved, “we will all have to give a little.” The key to success, he continued, would be “to take things one step at a time; to focus on the biological foundation now and worry about implementation planning later.” Sound, biological planning and a firm, science-based approach would lead to success in the long run.

Of course the event itself was a product of careful planning. On the Canadian side of the international border, for example discussions between the Eastern Habitat Joint Venture (EHJV) and the Canadian Council of NABCI had been ongoing since 1999. These led to a decision by the EHJV Board to adopt NABCI all-bird conservation goals. Provincial EHJV Steering Committees in Ontario and Quebec undertook to set the process in motion and held preparatory meetings leading up to the Alexandria workshop.

The foundation for biological planning that emerged at Alexandria rested on the assumption that birds fall into four broad categories: waterfowl, waterbirds, shorebirds and landbirds (i.e., the four pillars of the NABCI strategy). Within each bird group, workshop participants nominated a few focal species to serve as indicators of ecosystem health. They also identified habitat types and potential focal sites where conservation efforts on behalf of the indicator species might best be concentrated. By the end of the workshop, a framework had emerged that would enable all the jurisdictions to progress, both within their own borders and as dedicated collaborators in a meaningful, multi-stakeholder partnership throughout BCR 13.

In the following months, BCR 13’s Canadian and American partners set to work refining the selection of priority species, sites and first step projects within their respective territories. In addition, they moved ahead with an important mapping exercise. The Peterborough-based Ontario Geomatics Service Centre, with the collaboration of CWS-Quebec and the GIS specialists at the United States Fish and Wildlife Service, produced a series of maps based on satellite images of the region. Using workshop data on species and locations, the maps clearly identified focal planning areas with good potential for each of the four bird groups, making it easy to relate priority areas to physical features and land cover classes within BCR 13.

While this was reason enough for the mapping exercise, its value became even more evident when all the location data were overlaid on a single map. Focal areas for bird conservation planning were widely distributed throughout the region. An especially noteworthy concentration of key sites was visible along portions of two major rivers: the

lower Ottawa and the upper St. Lawrence. Alfred Bog, Mer Bleue Bog, Atocas Bay, and the Frontenac Axis, which links the Canadian Shield and the Adirondack Mountains, are among the many special places in this trans-boundary landscape where the conservation interests of Ontario, Quebec and New York overlap.

The mapping clearly identified numerous priority sites of importance to more than one bird group. Two locations in particular, however, Long Point in Ontario and Lac St-Pierre in Quebec, were remarkable for having special importance for all four: waterfowl, waterbirds, shorebirds and landbirds.

Long Point, extending 32 kilometres eastward from the north shore of Lake Erie, near Port Rowan, Ontario, is the longest freshwater sandspit in the world. It has long been known as an important breeding, rearing and staging area for waterfowl. As many as 30,000 Tundra Swans rest here on their northward migration and large numbers of Redhead and Canvasback concentrate at the site each spring and fall. Adjacent marshes harbour a variety of unusual waterbirds, including King Rail, Least Bittern, and Forster's Tern. Canada's rarest breeding shorebird, the Piping Plover has nested at Long Point and among other landbirds, the endangered Prothonotary Warbler nests in the woods at the base of the peninsula.

The Canadian Wildlife Service administers two portions of Long Point as National Wildlife Areas. The site won recognition as a Wetland of International Significance under the Ramsar Convention in 1982, a World Biosphere Reserve under the UNESCO Man and the Biosphere Program in 1986, and a globally significant Important Bird Area in 1996.

Furthermore, since 1960 this priority location has been the site of the Long Point Bird Observatory, an ornithological institution that evolved, over the years, into Bird Studies Canada (BSC), another NABCI partner. BSC's new, national headquarters, built on a piece of idle agricultural land on the outskirts of Port Rowan, is scheduled to open in June 2002. As a further illustration of cooperation among partners, a wetland restoration project associated with the BSC property was undertaken by Ducks Unlimited Canada, yet another non-government participant in the EHJV.

The phenomenon of a cluster of overlapping bird conservation sites affecting a wide range of focal species in all four bird groups is repeated in Quebec, near the industrial city of Sorel, some 70 kilometres downstream from Montreal. Here, the St. Lawrence River divides into a dozen or more channels to thread its way through a maze of low-lying delta islands. Below the islands the river widens into Lac St-Pierre, a shallow lake surrounded by thousands of hectares of wetlands. . In addition, the lake is ecologically linked to Lake Champlain, in the states of Vermont and New York, by the Richelieu River. This long wetland corridor is, itself, an important breeding area and migration route for many species of birds.

The islands are a haven for priority landbirds of the marshes and floodplain grasslands, notably Sedge Wrens, Bobolinks, and Short-eared Owls. Grande Ile is the site of one of the largest heronries in Canada, with an estimated 1,500 nesting pairs of Great Blue Herons. Lac St-Pierre is a significant stopover for migrating shorebirds as well, but it is as a location for waterfowl that the area attains its most impressive bird numbers. A dozen or more species of ducks nest and raise their broods on the marshy islands and shores. In migration, thousands of American Black Duck and Common Goldeneye and tens of thousands of Canada Geese sojourn regularly in the reedy shallows of the lake. Such numbers pale, however, when compared to the annual spectacle of hundreds of thousands of Greater Snow Geese that stop to feed on stubble fields in fall and on emerging grass and grain in springtime.

The enormous concentrations of migrating waterfowl account for the establishment, by the Canadian Wildlife Service, of the Nicolet Migratory Bird Sanctuary on the south shore of Lac St-Pierre. Nicolet, Grande Ile, and Lake St. Pierre itself are all designated Important Bird Areas and the government of Quebec has acted to protect the heronry by creating a provincial wildlife reserve on Grande Ile. Another NABCI partner with important conservation holdings in this priority area is the Nature Conservancy of Canada, with extensive properties on Ile de Grâce and Ile du Moine. And, like Long Point, Lac St-Pierre enjoys the status of a UNESCO World Biosphere Reserve.

The UNESCO designation was granted only in November 2000, but within months it was reportedly influencing conservation consciousness in the surrounding area. Guided ecotours of the islands have become a popular feature at the Sorel Marina, and many ships using the main channel of the St. Lawrence Seaway voluntarily reduce their speed to minimize erosion of the island shorelines.

Nominally, the bird conservation strategy for the Lower Great Lakes - St. Lawrence Plain is still in the planning stages. In fact, as a look at the activities behind the maps soon shows, there are few BCRs in Canada where as many partners are as far advanced with as many programs in support of as many bird groups and species in as many priority locations. The work is ongoing. In November 2001, another biological planning workshop took place. Such encounters between national and international partners accelerate the implementation of real actions in the field. It's a striking illustration of how the NABCI frame of reference can add a sense of renewed impetus and integration to the good work of all the partners for the conservation of all bird species.

J. Alexander (Sandy) Burnett, naturalist and environmental writer, wrote this article as one in a series on Canadian Bird Conservation Regions, commissioned by NABCI Canada.