

**IMPORTANT BIRD  
AREAS OF CANADA**



**LES ZONES IMPORTANTES  
POUR LA CONSERVATION  
DES OISEAUX AU CANADA**

# **POINT LEPREAU / MACES BAY IMPORTANT BIRD AREA**

**New Brunswick, Canada**

## **Conservation Concerns and Measures - Point Lepreau**

**October 2000**

**In co-operation with the**

**Saint John Naturalists' Club Inc.  
Saint John, New Brunswick**



*A Natural Legacy 2000 program • Un programme de La nature en héritage 2000*

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# 1 Introduction

The Bay of Fundy is not only an extremely rich ecosystem that harbours a great number of different species year round; it also acts as a natural funnel for birds migrating north in the spring. 'The Bay' has enormous importance for species from an ecological point of view, and for people from an economic point of view. Communities along the coast live off the wealth the waters provide, from lobster, to oysters and clams, to rockweed. The sheltered estuaries provide ideal sites for salmon aquaculture, a multimillion-dollar industry for New Brunswick.

Several factors can be attribute to the Bay's rich presence of food available for varied wildlife. Important nutrients come from the estuaries, saltmarshes and bays, which are referred to as nutrient pumps (Harvey 1994). A lot of research has been conducted in the region, focusing on large mammals such as the Right Whale, and on the rich mudflats where shorebirds congregate during migrations.

To the public, the Bay is particularly well known for its tides, and many claim that visitors can observe the highest tidal amplitudes in the world in the Bay of Fundy, as the tidal range reaches over 12 m in the upper reaches of the Bay. Huge expanses of mudflats are exposed at low tide in the upper Bay, providing great foraging habitat for thousands of shorebirds passing through. Rocky islands and ledges in Pasamaquoddy Bay provide nesting habitat for the Common Eider. The nationally endangered eastern population of the Harlequin Duck winters around Grand Manan and the Lepreau area. Large numbers of seaducks such as scoters pass by each spring and fall.

The Bay of Fundy has been known for many years by birdwatchers and ornithologists. It forms part of the Atlantic Flyway, and is strategically located on migration routes. The Bay is known in particular for the great numbers

of seabirds, that pass up the Bay to reach the Northumberland coast and continue north to their nesting grounds, as well as for the great number of shorebirds migrating south in late summer.

The Saint John Naturalists' Club Inc. has been operating the Point Lepreau Bird Observatory (PLBO) since 1995. Strategically located at a point of land sticking out into the Bay, Pointe Lepreau is an excellent observation spot during migration. Thousands of seaducks can be observed from the building constructed on land belonging to the Coast Guard. Over the last five years, the Saint John Naturalists' Club Inc. has invested a great amount of volunteer time, effort and funds to develop the observatory and ensure continued accurate monitoring. The data collected provides a very important piece of a puzzle that needs to be assembled about the migration of seaducks and in particular of the scoters.

Only the Pointe Lepreau site of the Important Bird Area is treated in this plan. Maces Bay, with its numerous stakeholders and issues, will need to be approached in a very different manner, possibly later.

The role of the Maritime Important Bird Areas Program, which commenced in 1999, is to provide interest groups such as the Saint John Naturalists' Club Inc. with tools to protect, conserve, or monitor sites of importance to birds that are identified as Important Bird Areas under the national program (please refer to section 6.2 for more information). The main objectives of the program are to provide documents outlining conservation concerns and measures, promote conservation, encourage action, carry out education, and help groups in develop their own approaches to bird conservation at sites which they are interested in. The Maritime IBA Program facilitates the process. Conservation plans are written with and for the group, and become a tool to be used.

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## 2 IBA Site Information

Site identification number: CANB020

### 2.1 *Site Description*

Point Lepreau is a finger of the mainland shoreline of the Bay of Fundy, located approximately 30 kilometres southwest of Saint John, N.B. It extends approximately 3 kilometres out into the Bay. It forms the eastern end of the Maces Bay - Lepreau Estuary, with the western end being Red Head. The area has an interesting combination of habitats that range from rockweed beds, mudflats in the estuary, and clambeds in the intertidal area. Cobble beaches can be found along the shoreline towards Point Lepreau. Intertidal reefs and waters extend about 10 km south from the point into the Bay of Fundy. Small saltmarshes are also present.

Two islands in the bay, The Brother or Salkeld Island and New River are used by about 1000 nesting Common Eiders and are owned by the New Brunswick Department of Natural Resources and Energy.

The Bay of Fundy acts as a gigantic funnel for birds moving north along the coast in spring. Many thousands of waterbirds, which spend the winter in the south, fly within sight of the Point as they follow the Atlantic coast north. As far as is known, seaducks move up the Bay, fly into Chignecto Bay and up the Peticodiac River to Shediac Bay. They then continue their journey north into the Bay de Chaleur. In autumn, the tide of birds is reversed although the numbers passing Point Lepreau are much lower.

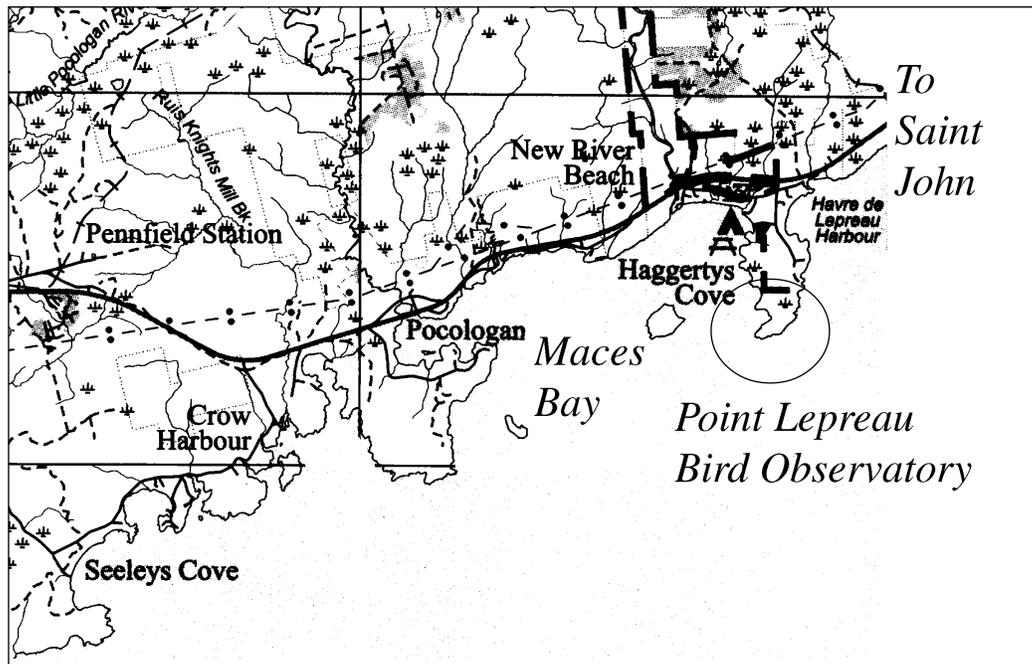
The tidal range is 6 to 8 meters, and the climate is maritime, with considerable fog.

The IBA program is an international initiative co-ordinated by BirdLife International, a partnership of member-based organizations in over 100 countries seeking to identify and conserve sites important to all bird species worldwide. The Canadian BirdLife co-partners are the Canadian Nature Federation (CNF) and Bird Studies Canada (BSC). In the Maritime Provinces the Prince Edward Island Natural History Society, the New Brunswick Federation of Naturalists, and the Federation of Nova Scotia Naturalists sponsor the Important Bird Areas Program.

Point Lepreau and Maces Bay to the north have been nominated as global Important Bird Area because large numbers of scoters and other migrating seaducks pass along this coastline on their way northward to their nesting grounds. In Maces Bay, 1000 Brant (1% of the eastern North American population) stage in the area during March and April. Up to 500 Purple Sandpipers (just over 5% of the eastern North American wintering population) winter along the coast of Point Lepreau. Harlequin Ducks (nationally endangered eastern population) also winter regularly (18 in spring 2000). Thousands of seaducks migrate past the point at the Point Lepreau Bird Observatory (PLBO). The numbers of Black Scoters that pass by are estimated to be up to 44% of the eastern North American population. About 1000 nesting Common Eiders (1% of the Atlantic subspecies) use the islands in Maces Bay.

This document addresses the Point Lepreau part of the Important Bird Area. The Saint John Naturalists' Club Inc. has identified the need for continued monitoring of migrating seaducks and the threat of oils spills as their main concerns. The Club will work towards the objectives outlined in this document in co-operation with the Pointe Lepreau Bird Observatory Committee and other partners.

## 2.2 Map of the IBA Site



## 2.3 IBA Species Information

A number of migratory bird species pass through the Pasamaquoddy / Grand Manan channel during spring and fall migrations, or stage in the vicinity for some time in the winter. Pointe Lepreau and Maces Bay were nominated for the staging Brant (Maces Bay), Black Scoters (passing the Pointe during migration), Common Eiders (using islands in Maces Bay for nesting), and Harlequin Ducks (wintering in the vicinity).

### *Migrating Seaducks*

In addition to this area's importance for staging geese and shorebirds, Point Lepreau functions as a major observation point for thousands of migrating waterfowl that travel along the northern shore of the Bay Fundy during April and May. Systematic coverage in 1999 yielded the following estimates during a total of 39

hours of observation: Common Eider (11 029); Scoters (47 804) (see Table 1 in section 6.1).

Wintering Harlequin Ducks from the eastern population (designated as nationally endangered) have also been recorded at this site with counts of as many as 18 birds (2000) or more overwintering in the area.

### *Purple Sandpipers*

Large numbers of wintering Purple Sandpipers feed along the rocky coastlines around the point. Some estimates highlight the presence of as many as 500 birds, or just over just over 5% of the eastern North American wintering population (Saint John Naturalists' Club Inc.).

For further, more detailed information about these species, please refer to section 6.1.

## **2.4 Other Elements of High Conservation Value**

The intertidal ledges of Maces Bay, adjacent to Pointe Lepreau, are recognised as important staging areas for migrating Brant during the early spring. Large numbers of several shorebird species have also been recorded in the area during fall migration. About 1000 nesting Common Eiders (1% of the Atlantic subspecies *dresseri*) uses the two islands in Maces Bay.

Many bird species pass Pointe Lepreau in early spring. Great and Double-crested Cormorants, Common Loons, and Red-throated Loons can be observed in large numbers. The point itself is also a landfall for a number of landbird species that can be observed, such as a large variety of passerines, as well as a number of species of hawks and owls.

The rocky shoreline provides a habitat for numerous intertidal creatures, and low tide exposes seaweed growing on the rocks. Some of the highest tides in the world are found in the Bay of Fundy.

The Point Lepreau site is demarcated between scattered bogs, dense spruce-fir thickets, and patches of alders.

## **2.5 Land and Water Ownership and Use**

The Canadian Coast Guard owns the land on which the Point Lepreau Bird Observatory was built in 1995. Historically, a lighthouse was situated on the point with associated buildings and a lighthouse keeper. Today the lighthouse is automated. The surrounding area is owned by NB Power (provincial utility), as the Point Lepreau Nuclear Power plant is located in very close proximity to the site. To reach the observatory one has to drive through the closed area of the Point Lepreau Nuclear Power Station.

The Department of Fisheries and Oceans has the authority over the water off the point. The observatory building is owned and operated by the Saint John Naturalists' Club Inc., which has a multi-year agreement with the Coast Guard to use the land.

There are negotiations underway between the Canadian Coast Guard, the Nature Trust of New Brunswick, and the Saint John Naturalists' Club Inc. for a transferral of the land for conservation and the maintenance of the observatory. The Canadian Wildlife Service would have first opportunity to acquire the land for conservation purposes from the Coast Guard, should it become available.

Commercial fishing is the most important economic activity in the waters of the area. Lobster and scallop are fished as well as groundfish. Clam, periwinkles, dulse, and sea urchins are also harvested commercially in the area (Harvey, Coon, and Abouchar, 1998). The land adjacent to the observatory is used by NB Power for the Point Lepreau Nuclear Power Plant. The plant employs a number of local people at the site. The plant area and some surrounding land are inaccessible to the public for security reasons.

The Saint John Naturalists' Club Inc. operates the Bird Observatory and carries out other bird observations on a regular basis in spring and fall. The birdwatching activities are concentrated around the point.

### 3 Conservation Concerns

Oils spills are a major threat to seaducks. Should an oil spill occur, there could be a significant negative impact on migrating seaducks, wintering Harlequin Ducks, or nesting Common Eiders. Oil tanker traffic regularly passes by the site on the way to the Canaport tanker port. Oil poses a number of threats. Hydrocarbons in the water are toxic to marine and other life. Once a slick spreads, birds can get oiled, which is lethal. Either they try cleaning their feathers and thus poison themselves, or the oil causes their feathers to lose their insulating capabilities and the birds die of hypothermia.

New Brunswick Power's nuclear plant and an automated lighthouse are stationed at the end of Point Lepreau. Access to the point through the nuclear station lands is restricted and thus disturbance of birds at the end of the point is limited.

Rockweed harvesting has been growing industry in the Bay of Fundy for a number of years. As rockweed beds provide important foraging habitat to local eider ducklings there are concerns as to the impact large scale harvesting might have on eiders (Harvey, Coon, and Abouchar, 1998; Hicklin, pers. communication). Aquaculture is also a growing industry in the Bay of Fundy. Fish farmers are constantly looking for new, appropriate sites to install their pens. This kind of increased activity could have a negative impact on the nesting eiders in the area (Harvey, Coon, and Abouchar, 1998).

In other areas of the range of the scoters, there is a concern that hunting pressures have increased on this species, as other waterfowl have been less accessible. Potential impact is great because hunting season is long (i.e. 100 days, with a bag limit of up to six per day in major hunting areas). Reproductive success of seaducks is lower than in other ducks, thus they take longer to recover (Savard and Lamothe

1991). In addition, warming trends in northern areas may be causing changes to breeding habitats that are used by scoters, which may reduce annual productivity and recruitment. Large-scale breeding habitat disturbance/fragmentation in their breeding range from resource extraction industries or hydrologic projects (Bordage and Savard, 1995) may put additional stress on the population. Widespread deaths of scoters during moult have occurred and are possibly caused by high heavy metal concentrations in the birds tissues (cadmium and selenium, also PCBs). This may pose an additional stress on the population (Henny et. al., 1995).

### 4 Conservation History

The *Point Lepreau Bird Observatory (PLBO)* was established in late 1995 as a project of the Saint John Naturalists' Club Inc. It was created to enable the study of the spectacular migration of seaducks through the Bay of Fundy each spring and fall. Before the start of this project, virtually nothing was known of the scale of seaduck migration in the Bay of Fundy. Consequently, our knowledge of the migration of seaducks in the Bay has dramatically increased. The objectives of the observatory are to:

- a) Continue development of the database to determine accurate trends in seaduck migration,
- b) Spark interest in other naturalist organizations to establish similar projects at suitable sites in the region, and
- c) Educate the public about the hazard posed to seaducks by oil pollution, particularly during peak migration periods.

The *Saint John Naturalists' Club Inc.* has negotiated a 10-year agreement with the Coast Guard to erect and maintain a small seabird observatory at the tip of the Point; the agreement is renewable. Either party may cancel it at any time upon three months notice.

*New Brunswick Power* occupies the main portion of the Point, and controls all access. All visitors must pass through security gates, and obtain permission and security clearance to visit in advance. There has been excellent co-operation with NB Power concerning facilitating access to the observatory. There exists an agreement with NB Power for regular access to the Point at any time, with 48 hours notice. They also have their security staff keep an eye on the observatory, which includes regular visits to the tip of the Point. The fact that the site is closed off to the public has ensured that the observatory is free from vandalism.

The *Canadian Wildlife Service* has an interest in the bird observatory and the site and has already contributed in-kind services and financial help to have an observer present during peak seaduck migrations. Observations carried out by naturalists greatly contribute to the knowledge about the migration of seaducks.

Since 1998, the *Annual Seabird Superwatch*, a project of the *New Brunswick Federation of Naturalists*, has been carried out co-operatively with the Canadian Wildlife Service in the three Maritime provinces. The objectives of the Superwatch are to:

- Provide volunteers with the opportunity to participate in a scientific study of migrating seaducks, thereby adding to our understanding of the target species.
- Provide a means for volunteers to acquire field experience in identifying and counting migratory water birds.
- Collect baseline information in a systematic manner.
- Make this information available to researchers.
- Determine the chronology of seaduck migration through the Maritime Provinces in spring.
- Determine seaduck population trends over time.

Although the information gathered through this project is only one piece of the puzzle, and a detailed analysis has not been carried out yet, Superwatch has already added information that gives a clearer picture. Apparently, the tides in the upper Bay of Fundy play an important role in the movement of the birds in this part of the Bay. Nova Scotia and eastern Prince Edward Island do not seem to factor very much in the movement of scoters, at least during the time of the Superwatch. In the Bay of Fundy, the birds appear to be mostly on the move, but in the Northumberland Strait and Chaleur Bay, staging birds have been reported. Some information has been gathered on some of the regular staging sites (Arsenault pers. com.).

Oils spills pose one of the major threats to seabirds (see below). Oil response plans are in place for tanker traffic and the routes they take as well as for unloading facilities. These plans are required by law via the *Coast Guard*, and are regularly up-dated, and verified by agencies such as the Canadian Wildlife Service.

## 5 Conservation Measures

### **Objective 1** **To continue research and observations at site.**

Knowledge about bird movements through the Bay of Fundy is relatively recent. Through the Point Lepreau Bird Observatory and diligent monitoring there is a clearer understanding now of the numbers and species of seaducks that use the Bay of Fundy during migration. Better knowledge will ensure that we can manage our activities more appropriately, particularly when the birds are most vulnerable. Observations and monitoring over a greater number of years will help better estimate populations and understand fluctuations.

Action	Target date, Key contact
1. Continue the monitoring to complete the five-year data set as planned by the PLBO.	On-going, SJNC
2. Develop firm plans for the continuation of the monitoring, either through volunteers or through hired observers.	On-going, SJNC
3. Explore funding opportunities (i.e. which organizations fund such activities).	On-going, SJNC
4. Extend monitoring to landbirds to evaluate the site as a point of geographical importance for migrating landbirds.	2001 or 2002, SJNC
5. Continue to participate in the annual Superwatch.	2000 and beyond, SJNC

### **Objective 2** **To provide and establish linkages with other Clubs who are monitoring scoters.**

Areas along the coast also have significant numbers of seaducks that pass through during migration. In 1998/9 and 2000, observations were organised via the volunteer program called Superwatch to help understand the overall pattern of seaduck movements in the region (please refer to section 6.3 for more information on Superwatch). Naturalists from across the Maritime provinces were able to follow these movements, and were able to help with observations. This information provides scientists with a clearer picture about migration movements, and it provides excellent educational possibilities.

Action	Target date, Key contact
1. Connect points such as Cape Jourimaine, Miscou Island, and Restigouche with Pointe Lepreau to monitor the movement of seaducks.	On-going, SJNC, CWS, other naturalist clubs
2. Establish and continue a regular information exchange.	2000, various naturalist clubs, NBFN
3. Establish links with other provinces.	2001, NBFN

**Objective 3**    **Carry out education about seaduck migration.**

Education is an important factor in changing attitudes and actions of the public and industries. Although this is an objective that will only show results in the long-term, it is crucial in ensuring that informed decisions are made by the public and governing bodies when it comes to managing and protecting our resources.

Action	Target date Key contact
1. Collect all relevant data about the role of the Bay of Fundy and Point Lepreau as a migratory route.	2000 and beyond, SJNC
2. Prepare a document outlining the importance of the Bay for the birds (i.e. a poster, brochure).	2001, SJNC and NBFN
3. Present information to the local industries such as Irving Oil.	2001, SJNC and NBFN
4. Encourage members of the Saint John Naturalists' Club Inc. and the public to get involved.	2000, 2001, SJNC and NBFN

**Objective 4**    **Acquisition of the property.**

Acquisition of the property would ensure long-term accessibility to naturalists, and guarantee that the site will remain a bird observatory. At present, the agreements with the Coast Guard and NB Power have no legally binding implications.

Action	Target date Key contact
1. Maintain communication link between CWS, Nature Trust of NB, and the Saint John Naturalists' Club to acquire the land for conservation purposes.	2000 / 2001, CWS, Nature Trust of NB, SJNC
2. Use best efforts to see the land is turned over to CWS or the Nature Trust of New Brunswick.	2000 /2001, CWS, Nature Trust of NB, SJNC

**Objective 5**    **Maintenance and upgrading of observatory facilities.**

The site has presently no toilet facilities for volunteers and observers. This could be added to the site to make it more comfortable.

Action	Target date, Key contact
1. Explore the possibilities of installing composting toilets or permanent toilets at the site.	2000, SJNC
2. Explore the option of using the facilities at the Power Station.	2000, SJNC

**Objective 6**     **Provide data to CWS to help it press for decreased oil tanker traffic during specific peak periods.**

It appears that large portions of seaduck populations pass through the Bay of Fundy during a specific number of weeks. The precautionary approach should be applied in this case, as an oil spill at this time of the year could have a disastrous impact on some bird populations.

Action	Target date	Key contact
1. Establish a committee to look at the options and develop a strategy on how to achieve this objective.	2001, SJNC,	NBFN
2. Contact ACAP Saint John about their involvement in spill response planning	2001, SJNC,	NBFN
3. Assess oil spill response plans for adequacy in light of new findings.	2001, CWS, DFO	SJNC
4. Use best efforts to see that oil spill response planning includes local naturalists to a greater degree.	DFO, CWS	

**6 Background Information**

**6.1 IBA Species Accounts**

**SCOTERS**

All three scoter species can be observed during their migrations along our coasts. They nest further north, and spend their winter along the coasts further south (for example in Chesapeake Bay). Their diet consists primarily of mollusks on their wintering grounds and during migration, and of invertebrates on their breeding grounds inland. Scoters have a low reproductive success, a relatively long life span, and a high adult survival rate. While total populations of both Surf Scoter and White-winged Scoter exceed the number of Black Scoters, their migration routes differ; therefore the two former are not as numerous during their northward migration in the Bay of Fundy as the Black Scoter. All scoters migrate to specific sites where they congregate and moult (Gauthier and Aubry (sous la direction de) 1995).

The Black Scoter (*Melanitta nigra americanus*) is one of the least known seaducks in North America. Adult males are completely black with a yellow protuberance on their bill, which distinguishes them from the other two scoter species, the White -winged, and the Surf Scoter. The females are dark brown and have a whitish face that distinguishes them from other female scoters.

On their way north, the bulk of Black Scoters seem to pass through the Bay of Fundy during two weeks in April. Many then migrate up the Peticodiac River to Shediac Bay and on to the Restigouche Estuary where they stay for a few weeks. It seems they then continue their way north once the conditions are favourable. In fall, the peak migration occurs in October, but is more spread out. The birds also migrate to moulting sites in James and Hudson bays in the summer (probably after incubation by females has started, Ross, 1977). Confirmed breeding

areas include Northern Québec and Labrador, and Alaska and the northern Arctic. In the winter, the Black Scoter ranges on the Atlantic Coast from Florida north to Newfoundland, and in the interior, and in Alaska to northern Washington. Black Scoters also breed in Iceland, the British Isles, and Russia and Siberia (Bordage and Savard, 1995).

The Surf Scoter (*Melanitta perspicillata*) can be distinguished by its all-dark wings and two defined white patches, one on the forehead, the other on the neck. It is named for its habit of diving through breaking surf. It winters along the Atlantic coast from Newfoundland to Florida, and on the Pacific coast, where Surf Scoters are more numerous (Savard, Bordage, and Reed, 1998).

The White-Winged Scoter (*Melanitta fusca*) is the largest of the three species of scoters and can be distinguished by a white patch on the wing, which is very conspicuous in flight. The bill is orange with a black enlargement at the base. This species is the most numerous and best known of the scoters. The birds nest in northern North America. They winter on the Atlantic and Pacific coast in large bays and estuaries. Eastern breeding populations generally winter on the Atlantic coast (Brown and Frederickson, 1997).

#### **PURPLE SANDPIPER** (*Calidris maritima*)

This plump sandpiper is grey with a pale belly and undertail and is about the same size as a Sanderling. It has a yellowish, drooping bill and short yellow legs. Purple Sandpipers breed in the eastern regions of the Arctic. In winter, these sandpipers are found mainly on rocky shores. They eat small molluscs, algae, worms, and insects. Their breeding areas range from the Canadian north to Siberia. In locations that they prefer to roost, up to 100 birds can sometimes be observed (Richards, 1988). Flocks of as many as 250 have been observed at Point Lepreau, and up to 500 birds are estimated to be present during some winters.

#### **HARLEQUIN DUCK** (*Histrionicus histrionicus*)

The male Harlequin Duck is a very colourful medium sized seaduck. Harlequin Ducks nest in Newfoundland and Labrador, Québec, and Baffin Island (Godfrey, 1986). Nesting has also been confirmed along the Restigouche estuary, in the Benjamin and Jacquet Rivers in New Brunswick. Harlequins winter in rocky shore areas such as around the Wolves in the Bay of Fundy; which is the most important wintering area in New Brunswick for these birds (Squires, 1976). They feed on molluscs, crustaceans, and echinoderms. The estimated North American population is around 1000 (pers. communication, Diane Amirault). The eastern population of the Harlequin Duck was designated as endangered by COSEWIC in 1990 (McAlpine and Heward, 1994).

**Table 1 Point Lepreau Bird Observatory - Summary of Birds Counted (1996 to 1999)**

	<u>SPRING</u>	<u>FALL</u>						
	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
<b><u>Observation dates:</u></b>								
<b>Start</b>	Mar 17	Mar 22	Mar 29	Mar 14	Sept 7	Sept 21	Sept 25	Aug 27
<b>End</b>	May 27	May 22	May 1	May 4	Nov 23	Oct 31	Oct 30	Oct 30
<b>Number of days</b>	<b>51</b>	<b>34</b>	<b>20</b>	<b>42</b>	<b>20</b>	<b>16</b>	<b>15</b>	<b>20</b>
<b>Hours actually counting</b>	<b>112</b>	<b>72</b>	<b>40</b>	<b>98</b>	<b>37</b>	<b>32</b>	<b>28</b>	<b>39</b>
<b><u>Total birds counted:</u></b>								
Black Scoter	40 782	23 990	20 224	14 904	473	2 943	545	3 398
Surf Scoter	14 953	15 165	4 864	10 423	221	204	374	4 320
Scoter - Spec?	3 566	3 453	3 964	21 636	45	323	181	59
White-w. Scoter	912	894	388	841	83	126	129	660
<b>Total Scoters</b>	<b>60 213</b>	<b>43 502</b>	<b>29 440</b>	<b>47 804</b>	<b>822</b>	<b>3 596</b>	<b>1 229</b>	<b>8 437</b>
<b>Common Eider</b>	<b>16 078</b>	<b>10 568</b>	<b>4 957</b>	<b>11 029</b>	<b>5 266</b>	<b>3 522</b>	<b>4 264</b>	<b>3 218</b>
D.-c. Cormorant	163	503	151	229	590	1 348	1 610	447
Great Cormorant	161	89	15	73	23	14	26	2
Cormorant - Sp?	46	87	21	0	1 756	2 321	37	0
<b>Total Cormorants</b>	<b>370</b>	<b>679</b>	<b>187</b>	<b>302</b>	<b>2 369</b>	<b>3 683</b>	<b>1 673</b>	<b>449</b>
Common Loon	549	405	85	206	20	39	69	25
Red-th. Loon	3 413	1 289	241	286	14	15	62	27
Loon - Spec?	32	56	6	154	1	0	9	0
<b>Total Loons</b>	<b>3 994</b>	<b>1 750</b>	<b>332</b>	<b>646</b>	<b>35</b>	<b>54</b>	<b>140</b>	<b>52</b>
<b>Grand Total (A)</b>	<b>80 655</b>	<b>56 499</b>	<b>34 916</b>	<b>59 781</b>	<b>8 492</b>	<b>10 855</b>	<b>7 306</b>	<b>12 156</b>

*Note A— This total is only of the major species listed above, but represents approximately 97% of all birds of all bird species that were counted. (table from Jim Wilson, 2000)*

## 6.2 *The IBA Program*

The IBA program is an international initiative co-ordinated by BirdLife International, a partnership of member-based organizations in over 100 countries seeking to identify and conserve sites important to all bird species worldwide. Through the protection of birds and habitats, they also promote the conservation of the world's biodiversity. There are currently IBA programs in Europe, Africa, the Middle East, Asia, and the Americas.

The Canadian BirdLife co-partners are the Canadian Nature Federation (CNF) and Bird Studies Canada (BSC). The Canadian IBA program is part of the Americas IBA program which includes the United States, Mexico, and 17 countries in Central and South America.

*The goals of the Canadian IBA program are to:*

- ▶ Identify a network of sites that conserve the natural diversity of Canadian bird species and are critical to the long-term viability of naturally occurring bird populations;
- ▶ Determine the type of protection or stewardship required for each site, and ensure the conservation of sites through partnerships of local stakeholders who develop and implement appropriate on-the-ground conservation plans; and
- ▶ Establish ongoing local involvement in site protection and monitoring.

*IBAs are identified by the presence of birds falling under one or more of the following internationally agreed-upon categories:*

1) Sites regularly holding significant numbers of an endangered, threatened, or vulnerable species.

- 2) Sites regularly holding an endemic species, or species with restricted ranges.
- 3) Sites regularly holding an assemblage of species largely restricted to a biome.
- 4) Sites where birds concentrate in significant numbers when breeding, in winter, or during migration.

The Maritimes Important Bird Areas program is a co-operative effort with the New Brunswick Federation of Naturalists, the Natural History Society of Prince Edward Island, and the Federation of Nova Scotia Naturalists. For further information on these organizations, please refer to the appendix.

Conservation plans for a number of sites in the Maritimes are developed over the next few years in co-operation with interested groups, people, and communities. They are a tool to be used to move towards protecting species and their habitat in the long term. Although the plans are site specific, larger issues can be taken into consideration as well, if they affect the site and the species.

## 6.3 *Information on the Lead Organizations of the IBA Program*

### *Natural History Society of Prince Edward Island*

The Natural History Society of Prince Edward Island is a naturalist group that is particularly interested in natural history issues and conservation. They record natural events on the island, maintain a bird check list, offer bird identification courses, field trips, conduct bird counts and record unusual or rare sightings.

### ***New Brunswick Federation of Naturalists***

The New Brunswick Federation of Naturalists (NBFN) is a non-profit organization formed in 1972 to encourage the understanding of nature and the environment, and to focus concern for the natural heritage of New Brunswick. The NBFN represents the concerns of twelve local naturalist clubs throughout the province. That represents over eight thousand members. <<http://personal.nbnet.nb.ca/maryspt/NBFN.html>>.

### ***Federation of Nova Scotia Naturalists***

The Federation of Nova Scotia Naturalists (FNSN) furthers communication and co-operation among naturalists in Nova Scotia. The Federation promotes enjoyment and understanding, encourages the establishment of protected natural areas, defends the integrity of existing sanctuaries, promotes funding and research, and encourages and engages in the protection of endangered and threatened species and their habitats. <<http://www.chebucto.ns.ca/Environment/FNSN/>>.

### ***BirdLife International***

A pioneer in its field, BirdLife International (BL) is the first non-government organization dedicated to promoting world-wide interest in and concern for the conservation of all birds and the special contribution they make to global biodiversity. BL operates as a partnership of non-governmental conservation organizations, grouped together within geographic regions (e.g. Europe, Africa, Americas) for the purpose of planning and implementing regional programmes. These organizations provide a link to on-the-ground conservation projects that involve local people with local expertise and knowledge. There are currently 20 countries involved in the Americas program throughout North, Central, and South America. For further information about BirdLife International, check the following website: <http://www.birdlife.net/> The Canadian Important Bird Areas Program has been undertaken by a partnership of two

lead agencies. The Canadian Nature Federation and Bird Studies Canada are the Canadian BirdLife International partners.

### ***The Canadian Nature Federation (CNF)***

The Canadian Nature Federation is a national conservation organization with a mission to be Canada's voice for the protection of nature, its diversity, and the processes that sustain it. The CNF represents the naturalist community and works closely with our provincial, territorial and local affiliated naturalists organizations to directly reach 100,000 Canadians. The strength of the grassroots naturalists' network allows CNF to work effectively and knowledgeably on national conservation issues that affect diversity of ecosystems and human populations in Canada. The CNF also works in partnership with other environmental organizations, government and industry, wherever possible. The organizations approach is open and co-operative while remaining firm in the goal of developing ecologically sound solutions to conservation problems. CNF's web site is <<http://www.cnf.ca>>

### ***Bird Studies Canada (BSC)***

The mission of Bird Studies Canada is to advance the understanding, appreciation, and conservation of wild birds and their habitats, in Canada and elsewhere, through studies that engage the skills, enthusiasm and support of its members, volunteers, staff and the interested public. BSC believes that thousands of volunteers working together, with the guidance of a small group of professionals, can accomplish much more than could the two groups working independently. Current programs collectively involve over 10,000 volunteer participants from across Canada. BSC is recognised nation-wide as a leading and respected not-for-profit conservation organization dedicated to the study and understanding of wild birds and their habitats. BSC's web site is <http://www.bsc-eoc.org/>.

## 6.4 *Information on Organizations and Groups*

The Saint John Naturalists' Club Inc. was formed in 1962 and is dedicated to the study, conservation, and enjoyment of nature. A committee, the Point Lepreau Bird Observatory Committee looks after the observatory. The Club has a multi-year operations plan for the observatory. The group already has five years of experience undertaking activities at the observatory.

The New Brunswick Federation of Naturalists is a province-wide organization, which has been in existence since 1972. The federation supports the activities of its federated clubs, which includes the Saint John Naturalists' Club Inc. The Federation also sponsors projects such as the Superwatch.

The Canadian Wildlife Service works closely with the Saint John Naturalists' Club Inc. to analyse the collected data. This information is used for monitoring seaduck populations as part of the broader Seaduck Joint Venture between Canada and the U.S. Fish and Wildlife Service.

The Nature Trust of New Brunswick is a charitable, non-profit corporation dedicated to the protection of natural areas in New Brunswick that are of specific scientific, educational, or aesthetic value. The Trust has approached the Coast Guard indicating its interest in the property at Point Lepreau.

Fisheries and Oceans, Canada, Coast Guard  
The Coast Guard is responsible for oil response planning and response. They have an interest in not only ensuring that their response planning is adequate, but as well that the public is well informed and involved in response planning. As well, presently the federal government owns the site at which the observatory is located.

NB Power owns the Point Lepreau Nuclear Power Plant and has co-operated with the Point Lepreau Bird Observatory in the past to a great extent.

Canaport is the major unloading facility for oil of Irving Oil Limited in the area. The oil is used in the refinery in Saint John. The refinery is presently completing a multi-billion dollar expansion.

## 6.5 *Contacts*

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## 6.6 Bibliography

- Alaska Natural Heritage Program. 1998. Status Report on the Black Scoter (*Melanitta nigra americana*) in Alaska. Unpub. Rep. on file as reported from the Heritage web site <[http://www.uaa.alaska.edu/enri/aknhp\\_web/index.html](http://www.uaa.alaska.edu/enri/aknhp_web/index.html)>. The Alaska Natural Heritage Program, University of Alaska Anchorage, 707 "A" Street, Anchorage, AK.
- Arsenault, Ron. 2000. Personal communication on the annual Superwatch results from 1999 and 2000.
- Bellrose, F.C. 1980. Ducks, Geese and Swans of North America. Stackpole Books, Harrisburg, Pa. 544pp.
- Bordage, D., and J. L. Savard. 1995. Black Scoter (*Melanitta nigra*). In The Birds of North America, No. 177 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, and The American Ornithologists' Union, Washington, D.C.
- Brown, P. W., and L.H. Frederickson. 1997. White-winged Scoter (*Melanitta fusca*). In The Birds of North America, No. 274 (A. Poole and F. Gills, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Canadian Wildlife Service. 1989. Hinterland's Who's Who. Common Eider. Minister of Supply and Services, Canada.
- Conant, B. and D.J. Groves. 1998. Alaska-Yukon waterfowl breeding population survey, May 16 to June 13, 1998. U.S. Fish and Wildl. Serv. Rep., Juneau, AK. 29 p.
- Erskine, A.J. 1992. Atlas of Breeding Birds of the Maritime Provinces. Nimbus Publishing limited and the Nova Scotia Museum. 270 pp.
- Gauthier, J., et Aubry, Y. (sous la direction de) 1995. Les oiseaux nicheurs du Québec : Atlas des oiseaux nicheurs du Québec méridional. Association québécoise des groupes d'ornithologues, Société québécoise de protection des oiseaux, Service canadien de la faune, Environnement Canada, région du Québec, Montreal, xviii + 1295 pp.
- Harvey, J., D. Coon, and J. Abouchar. 1998. Habitat Lost: Taking the Pulse of Estuaries in the Canadian Gulf of Maine. Conservation Council of New Brunswick, Fredericton, New Brunswick.
- Henny, C.J., Rudis, D.D., Roffe, T.J., and E. Robinson-Wilson. 1995. Contaminants and sea ducks in Alaska and the circumpolar region. Environ. Health Perspect 103(Suppl. 4):41-49.
- King, J.C., and G.A. Sanger. 1979. Oil vulnerability index for marine oriented birds. Pp. 227-239 in Conservation of marine birds of North America (J.C. Bartonek and D.N. Nettleship, eds.) U.S. Fish and Wildl. Serv. Wildl. Res. Rep. No. 11.

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- McAlpine, D.F., and A.D.B. Heward. 1994. The Harlequin Duck in New Brunswick. Chickadee Notes. A Series on the Natural History of New Brunswick. No. 9. New Brunswick Museum, Saint John, New Brunswick.
- Point Lepreau Bird Observatory Steering Committee. 1998. Point Lepreau Bird Observatory. Annual Report. A project by the Saint John Naturalists' Club Inc. Saint John, New Brunswick.
- Raveling, D.G., 1984. Geese and hunters of Alaska's Yukon Delta: management problems and political dilemmas. Trans. N. Am. Wildl. Nat. Resour. Conf. 49:555-575.
- Richards A. 1988. Shorebirds: A complete guide to their behaviour and migration. Gallery Books, W.H. Smith Publishers Inc. New York City.
- Ross, R.K. 1977. An estimate of the Black Scoter (*Melanitta nigra*) population moulting in James and Hudson bays. Can. Field-Nat. 97: 147-150.
- Savard, J.-P.L., and P. Lamothe. 1991. Distribution, abundance, and aspects of breeding ecology of Black Scoters, *Melanitta nigra*, and Surf Scoters, *M. perspicillata*, in northern Québec. Can. Field-Nat. 105:488-496.
- Savard, J.-P.L., D. Bordage, and A. Reed. 1998. Surf Scoter (*Melanitta perspicillata*). In The Birds of North America, No. 363 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
- Squires, W. Austin. 1976. The Birds of New Brunswick. Monograph Series No. 7, N.B. Museum.
- Terres, J.K. 1980. The Audubon Society Encyclopaedia of North American Birds. Alfred A. Knopf, Inc.
- Tufts, R.,T. 1986. Birds of Nova Scotia. Third Edition. Nimbus Publishing Ltd. And Nova Scotia Museum. Halifax, NS.
- Wentworth, C. and S.G. Seim. 1996. Subsistence waterfowl harvest survey Yukon-Kuskokwim Delta. U.S. Fish and Wildlife Service, Migratory Bird Management, Anchorage, AK. 236 pp.

