

Lac La Biche

IMPORTANT BIRD AREA CONSERVATION PLAN

Fall 2000

by Jennifer Gammon
for the
Lac La Biche IBA
Stakeholders Committee



Alberta Conservation
Association®

*Funded by Alberta Anglers, Hunters,
and Other Conservationists*



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EXECUTIVE SUMMARY

Lac La Biche Important Bird Area

Lac La Biche has been recognized as an Important Bird Area (IBA) as part of an international program spearheaded by Birdlife International and is part of the Natural Legacy 2000 program. The primary Canadian lead partners are the Canadian Nature Federation (CNF) and Bird Studies Canada (BSC). The provincial lead partner is the Federation of Alberta Naturalists (FAN).

Lac La Biche is located in northeastern Alberta approximately 250 km from Edmonton. It is located in the Dry Boreal Mixedwood Ecoregion of Alberta. Lac La Biche Lake is 34 km long and is the seventh largest lake in Alberta. There are numerous islands on the east arm of the lake and many shallow bays, sand and rock bars, and beaches.

The lake was first designated as a Bird Sanctuary in 1920 by the Government of Canada and became a Provincial Wildlife Sanctuary following the passing of the Alberta Natural Resources Act in 1930. There is one Provincial Park (Sir Winston Churchill) and two Natural Areas (Black Fox Island and High (Shorty's) Island), on the lake. The lake was nominated as an IBA site because of its large numbers of nesting California Gulls and Western Grebes. Lac La Biche is a popular staging and nesting area for shorebirds, waterfowl, geese, swans, American White Pelicans, Double-crested Cormorants, Herring Gulls, Ring-billed Gulls, Great Blue Herons, Common Terns, Black Terns, Forster's Terns, Red-necked Grebes and Eared Grebes. The lake is also important as a nesting and production area for Bald Eagles, Osprey and Great Gray Owls.

The major threats to nesting bird populations on the lake are shoreline development and harassment. This is difficult to control as two-thirds of the lake has cottages and homes on lakefront property and people tend to believe that they can develop to the watermark. The conservation plan outlines a series of objectives and activities necessary for the conservation and protection of the nesting sites and nesting habitat along the shores of Lac La Biche. The plan

focuses primarily on research, monitoring and education. Education will be the key to gaining support of the local community and to the protection of the species mentioned throughout the document.

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1. INTRODUCTION

“The diversity and abundance of bird species is the most significant wildlife feature on and around Lac La Biche” (Alberta Municipal Affairs, 1982).

Birds are key components in Canada’s ecosystems and bird populations are often used as indicators of overall ecosystem health. The conservation of an area to benefit bird life will also conserve other plants and animals present in the areas. The loss and fragmentation of habitat throughout the Americas over the last several decades has resulted in measurable population declines in many bird species in Canada. The future of Canadian wildlife depends on our commitment to provide adequate and good quality habitat throughout their ranges. (IBA, Conservation Planning Manual, 2000).

This conservation plan is a guide for the protection, management and monitoring of the Lac La Biche Important Bird Area (IBA). The plan is written for the community by the community. The community at large will be made aware of the program and encouraged to participate whenever possible. The IBA Committee is made up of members from the Lac La Biche Birding Society. The members all share a common bond with regard to wildlife and natural heritage values of the area. The members also possess considerable knowledge and expertise in regard to these conservation issues and historical information. The plan will reflect the hopes and aspirations for the protection of the area’s resources and the protection of bird habitats on Lac La Biche.

The conservation plan sets goals and objectives for managing resources and working with people to meet those goals. IBA Conservation planning is an open-ended, iterative process, and the plan will continue to develop and evolve, with success being dependent on the interest and involvement of the local community. The goal of the IBA Conservation Planning process is to create a conservation plan that will stimulate local stakeholders and the communities that they live in to take “ownership” of the site and actively participate in site conservation.

2. THE IBA PROGRAM

The IBA program is an international initiative coordinated 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. It is an effort to identify, conserve, and monitor a network of sites that provide essential habitat for bird populations worldwide. Through the protection of birds and habitats, they also promote the conservation of the world’s biodiversity.

BirdLife International began the IBA program in Europe in 1985. Since then Birdlife partners in Europe, Africa, the Middle East, Asia and the Americas have joined together to build a global IBA network.

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.
- to 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
- to 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:

- Sites regularly holding significant numbers of an endangered, threatened, or vulnerable species.
- Sites regularly holding an endemic species, or species with restricted ranges.

- Sites regularly holding an assemblage of species largely restricted to a biome.
- Sites where birds concentrate in significant numbers when breeding in winter, or during migration.

The lead partner for the Alberta Important Bird Area program is the Federation of Alberta Naturalists (FAN). The Alberta program was launched in the spring, 1999, with the hiring of a Community Conservation Planner, (a.k.a. IBA Coordinator). Instrumental to the success of the Alberta program is the Alberta IBA Advisory Committee, animated by members from the Federation of Alberta Naturalists, the Alberta Conservation Association, the Provincial Museum of Alberta, the Canadian Wildlife Service, and the province's Natural Resource Services.

The Alberta IBA Program puts a premium on the voluntary and participatory nature of IBA conservation planning. In this regard, the Program seeks the cooperation and participation of the site's landowners and/or land managers and bird or wildlife agency personnel with an interest in the site. The Program is particularly interested in identifying, supporting, and empowering local, grassroots birders and bird clubs. By supporting these local bird interests, both financially and technically, and by facilitating the participation of local conservationists in the formulation, writing, and implementation of conservation plans for their favourite sites, FAN is working to build local buy-in, ownership, and a commitment to long-term stewardship of the site.

To this date, Bird Studies Canada has identified 31 Important Bird Areas in Alberta. Others will follow. At this time, local stakeholder groups are writing IBA conservation plans at over a dozen sites. If you are curious about any of these sites, one-page site summaries for many sites are posted on the IBA Canada website: <www.ibacanada.ca>. Additional sites will be listed as they receive the requisite approvals. For more information, please telephone the Alberta IBA Community Conservation Planner at (780) 422-5582, or the FAN office at (780) 427-8124.

3. IBA SITE INFORMATION

Name: Lac La Biche IBA

Site #: AB097

Central Coordinates: 54° 54' N, 112° 00' W

Altitude (m): 549m

Area: 28 583 ha

NTS Sheet/map sheet: 83I/16, 73L/13

The Lac La Biche IBA is an Alberta region of the IBA. It is located in northeastern Alberta with the nearest town being Lac La Biche (population ~2800) and the village of Plamondon (population ~302). Lakeland County has approximately 5000 residents. There are also numerous small residential developments around the lake. The economy of the area is based on forestry, oil and gas, farming, fishing, trapping and tourism.

The IBA boundaries include the entire lake, its islands and the shoreline to high water mark. These are the same boundaries the Wildlife Sanctuary status has. (Please see Appendix B, Lac La Biche Habitat Assessment)

3.1 Lake Characteristics

Lac La Biche is the seventh largest lake in Alberta (Alberta Municipal Affairs, 1982). The Lake is generally orientated along a northwest-southeast axis and was formed and shaped as a result of the last continental glacial sheet giving the lake an approximate age of 12,000 years. The lake consists of two large basins. The surface area is approximately 241 sq. km (93sq.mi.) and 171.8 km (107.4mi) of shoreline, including the islands. The lake has a mean depth of 9.1m (30ft.) and a maximum depth of 22 m (72ft.) The major inlet is the Owl River and the outlet is the La Biche River. The lake has a maximum length of 34 km (Epp, T., 1989). There are 11 major islands located on Lac La Biche and numerous other outcrops that occur as small islands when water levels are low (Improvement District #18, 1982).

3.2 Climate and Topography

The Lac La Biche area has a dry continental climate with warm summers, long cold winters, precipitation occurring throughout the year. The mean annual temperature is 0.9°C. Mean daily maximum temperatures range from -2.1°C (28.2°F) to 22.7°C (72.9°F). The mean daily minimum temperatures range from -23.9°C (-11.9°F) to 9.4°C (48.9°F). There is a 97 day frost free period, which varies depending on proximity to the lake and topographic position. The mean annual precipitation is 480 mm (280 mm is as rain). The prevailing winds for the year are from the west to northwest and south to southeast (Alberta Municipal Affairs, 1982).

The topography is undulating to rolling hills interspersed with low-lying muskeg areas, mainly consisting of lacustrine/morainal landforms. The shoreland areas directly adjacent to the lake range from very steep banks in excess of 30 meters (100ft.) to low-lying backshore areas. Elevation in the area ranges from a mean lake level of 549 meters (1,784 ft.) to a maximum height of 608 meters (1,975 ft.) (Alberta Municipal Affairs, 1982).

3.3 Habitats

a) Forests- Deciduous, Coniferous, Mixedwood

Lac La Biche lies entirely within the Dry Mixedwood Subregion of the Boreal Forest Natural Region of Alberta (Government of Alberta, 1994). The dominant forest cover in the area is trembling aspen and it occurs in both mixed and pure stands. Balsam poplar often occurs with the aspen. Successionally, white spruce and balsam fir may replace aspen and balsam poplar. Coniferous stands are interspersed among the aspen stands. Muskeg, swamps and bogs are common in the area and especially along sections of the shore of Lac La Biche (Government of Alberta, 1994). Various species of grouse are commonly found along the backshores along with songbirds, owls, hawks, eagles and osprey.

b) Freshwater Lake

Lac La Biche is a freshwater lake with eutrophic

characteristics – i.e. high nutrient levels, but low oxygen availability. Lac La Biche Lake is 34 km long and is the seventh largest lake in Alberta. It trends in a Northwest-Southeast direction and has a maximum depth of 12 m in the west arm of the lake and a maximum depth of 23 m in the east portion of the lake. Lac La Biche is a moderately eutrophic lake that is known to have high algae growth by late summer. There are numerous islands on the east arm of the lake and many shallow bays, sand and rock bars, and beaches.

c) Freshwater Marsh, Bogs, Fens

There are numerous marshy bays and backwater lakes that provide important bird habitat. Many of the bays are shallow and stagnant by late summer, but provide good nesting and staging habitat. These backwater lakes often have the characteristics of marshes. Birds use these areas extensively because they offer warm, nutrient rich waters and protection from elements.

d) Rivers and Streams

The Owl River is the main inlet into Lac La Biche, The Owl River delta is a rich wetland important to waterfowl, shorebirds and semi aquatic animals. It is known for its exceptional waterfowl production. The La Biche River is the main outlet of the lake and it too has wetlands at the mouth of the river that are important for waterfowl production.

There are other intermittent creeks that flow into and out of Lac La Biche that provide important habitat areas for various bird species.

e) Cultivated Land

The majority of the cultivated and cleared lands are located along the south shore and on Poplar Point, while smaller areas are located in the southern half of the west shore, west of the Owl River Delta and around Golden Sands Bay Resort. The remainder of the area is predominantly under natural forest cover. There are many quarter sections that are presently leased by adjacent farmers. The greatest portion of the shoreland, located mainly along the south and west shores and part of the north shore has severe limitations that restrict the range of crops that can be grown. A quarter of the shoreland is considered only suitable for continuous hay and pasture. The remainder is organic wet areas (Alberta Municipal Affairs, 1982).

f) Islands

There are 11 main islands located on Lac La Biche. The islands include: Red Fox Island, Birch Island, Pelican Island, Cherry Island, Sheep Island, Big Island (Sir Winston Churchill Provincial Park), Black Fox Island and three other small islands. They all act as excellent nesting sites due to their isolation and characteristics. Some of the islands have Parkland Natural Region characteristics due to past farming activity that occurred on the islands.

3.4 Infrastructure

There is substantial infrastructure around the entire lake. Access is available at approximately 25 public boat launches located around the lake. See Appendix D for a map and description of these locations.

3.5 Areas of Importance for IBA species within the Site

There are ten exceptional and eight important waterfowl production and loafing areas on Lac La Biche. The habitat potential on these sites varies from year to year due to fluctuation in water levels. These sites are listed below (*exceptional) and the species commonly found at each site (Alberta Municipal Affairs, 1982b and 2000 LLBBS Lakeshore Survey). See Appendix F for the locations.

a) Islands

- Pelican Island* - cormorants and gulls
- Birch Island and narrows* - ducks, herons, shorebirds, eagles, pelicans, gulls, terns
- Black Fox Island* - mergansers, cormorants, grebes, gulls, terns, loons, shorebirds, pelicans
- Island Northwest of Black Fox Island* - nesting pelicans, herons, cormorants, gulls and loafing mergansers, ducks, terns, gulls and pelicans.
- Long Island* - grebes, ducks, loons, herons, shorebirds
- Current Island* - pelicans, cormorants, gulls, terns, grebes, ducks, herons
- Red Fox Island* - ducks, pelicans, gulls
- Island Southwest of Red Fox Island - ducks, pelicans, gulls

- Cucumber Island - pelicans, cormorants, gulls, grebes
- Sir Winston Churchill Provincial Park - gulls, shorebirds, mergansers, ducks, loons, Osprey

b) Shallow Bays

- Squirrley's Bay - ducks, Osprey, gulls, shorebirds
- Mission Bay (Maccagno's Point)* - coots, shorebirds, terns, grebes, terns, Osprey, ducks, herons and nesting Western Grebes.
- Big Bay - grebes, herons (needs further study the bay was too shallow this year).
- Mouth of the La Biche River - (needs further study)
- McArthur Beach (in town) - Loafing area for Gulls
- Plamondon Bay - Shorebirds (needs further study)
- Owl River Delta* - swans, pelicans, terns, ducks, gulls, coots, loons, grebes
- Owl River Bay* - grebes, ducks, herons, pelicans, Osprey, terns, shorebirds, gulls, geese

3.6 Areas of potential Conservation or Strategic Importance outside of the IBA site

a) Backwater Lakes

There are three backwater lakes that are important staging and loafing areas for ducks grebes and shorebirds. Great Blue Herons are often seen at these locations as well.

b) Owl River Delta

The Owl River Delta and Mud Flats that extend north from the lake are very important staging, loafing and feeding areas for swans, pelicans, ducks and geese during migration and periodically throughout the breeding season.

c) Other Important Loafing Areas

Some other important loafing areas for gulls, away from the lake it self, include the roofs of the schools and the schoolyards, the baseball diamonds and hall roof.

4. IBA SPECIES INFORMATION

4.1 IBA Species

Two IBA species in the Lac La Biche IBA fall under the Canadian IBA criteria, Category 4: Congregatory Species which identifies species that concentrate in significant numbers (>1% of their global, biogeographical or national populations) at an IBA site. These two species are the Western Grebe (*Aechmophorus occidentalis*) and the California Gull (*Larus californicus*). Other significant bird species in the Lac La Biche IBA include: Double-crested Cormorant, Herring Gull, Great Blue Heron, Ring-billed Gull, American White Pelican, Common Tern, Eared Grebe, and a large variety of waterfowl and shorebirds.

4.2 IBA Species Accounts

Western Grebe (*Aechmophorus occidentalis*)

The Western Grebe is the largest of the Alberta grebes. This black and white grebe has a long graceful neck and swan-like profile. Its neck is white except for a sharply defined black stripe running the length of the hindneck.

The Western Grebe breeds from western Canada south to Minnesota, Utah and California, and winters mainly along the Pacific Coast, from Alaska to Mexico. In Alberta, the Western Grebe breeds locally from about latitude 56N south to Frank Lake and Namaka Lake and west to Sturgeon Lake and Pigeon Lake. There are presently few lakes in Alberta that are capable of providing suitable nesting habitat for this species. The increasing numbers of people using lakes for recreation have caused considerable disturbance to sensitive species such as Western Grebes. As a result, nesting colonies are presently limited to those lakes or waterbodies that are either unsuitable for human recreation or are relatively inaccessible (Kristensen and Nordstrom 1979,

Nordstrom 1980).

Western Grebes usually arrive in the spring when ice-break up occurs on the deep-water lakes. In central Alberta they usually appear in early May. They build a floating nest of aquatic vegetation and anchor it to reeds or other aquatics. The usual clutch size is 3-5 eggs. Egg laying and incubation begins in late May and early June, and by July young are visible. By mid-October many of these grebes have left for their wintering areas (Kristensen and Nordstrom 1979, Nordstrom 1980).

Western Grebe breeding areas include open water areas, flooded stands of emergent vegetation and minimal human activity. Lakes often have sizeable fish populations, but colony sites are not dependent upon food availability in the immediate vicinity. Sites are chosen on the basis of prevailing winds, wave action and habitat availability (Kristensen and Nordstrom 1979, Nordstrom 1980).

Western Grebes are very sensitive to human disturbance, particularly early in the nesting season. Colonies have been abandoned because of excessive disturbance early in the breeding season. Consistent use of the same colony sites occurs only if emergent vegetation is very limited and patchy, or if water levels fluctuate only to a minor degree. Populations may change colony sites on a lake from year to year. Abandonment of old colony sites should not therefore be cause for concern, unless population levels of the lake decline (Kristensen and Nordstrom 1979, Nordstrom 1980).

California Gull (*Larus californicus*)

The California Gull is a medium-size white-headed gull that breeds on the northern Great Plains including the boreal forest and the valleys of the Rocky Mountain interior. It nests in colonies on islands free of terrestrial predators. The California Gull winters along the West Coast, from southern

SPECIES	SEASON	NUMBER	SIGNIFICANCE
Western Grebe	Breeding	> 500 nests	Global
California Gull	Breeding	> 2,000 nests	Global

Table 1: Numbers of globally significant IBA species at Lac La Biche (Canadian IBA Database, 2000)

British Columbia to central Mexico. Available records suggest that the range of this species has changed little since settlement (Winkler 1996).

California Gulls, like most other gulls, are food opportunists consuming virtually any vertebrate or invertebrate they can find, catch and swallow whole. Feeding strategies include following machinery to eat exposed food, scooping flies in flight or snapping at dense swarms, pursuing mobile prey on ground or on wing over water. California Gulls have been observed paddling in water to churn up food, waiting at burrows for mice trying to escape flood waters, and even catching swallows on the wing. The gulls can dive to a depth of 0.5m and catch fish. Although gulls seem to prefer large and live prey that can be efficiently subdued and swallowed, garbage including vegetable matter and fruit can make up a large portion of the diet. California Gulls can have a severe impact on other species as well (Winkler 1996).

Male and female gulls defend a small territory around the nest only. There is little social interaction beyond roosting and flock formation. Two or three eggs are laid in a nest scrape on the ground, lined with down, vegetation, bones and feathers. Both parents take their 3-4 hour turn in

incubation, and both feed their chicks until they are fledged. Young leave the nest area soon after fledging (40-60 days after hatching) and before the parents do so. California Gulls usually do not breed until their third year. Flocks of non-breeders drift widely in search of food including cities and garbage dumps (Winkler 1996).

At Lac La Biche California Gulls nest on at least three of the islands. More detail will be provided once a nesting habitat survey has been completed.

4.3 Other Bird Species

Lac La Biche has traditionally been a migration stopover point and breeding site for many bird species. It was designated a Migratory Bird Sanctuary in June of 1920 to provide protection to “this extremely valuable wild life” (Federal Government, 1920).

Lac La Biche is also home to species of birds that are considered to be in jeopardy, nationally under the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and provincially under the Alberta Special Status Species.

SPECIES	SEASON	NUMBER	SIGNIFICANCE
Common Tern	Breeding	100 - 400 nests	Provincially
Caspian Tern	Breeding?	16 birds	Provincially
Double-crested Cormorant	Breeding Non-breeding	> 1,500 nests 50-500	Locally Locally
Great Blue Heron	Breeding	<30 nests	Locally
Eared Grebe	Non-breeding/Migration	100 - 1,000	Locally
American White Pelican	Non-breeding Breeding	50 - 500 1 confirmed nest	Locally
Ring-billed Gull	Breeding	<500 nests	Locally
Herring Gull	Breeding	< 60 nests	Locally
American Avocet	Breeding	nests	Locally
Shorebirds	Staging Migration/Breeding	n/a	Locally
Ducks	Staging/Migration/ Breeding	2,000–5,000	Locally

Table 2: Numbers of other species of importance at Lac La Biche (data from the Canadian IBA Database, 2000 and local records)

Double-crested Cormorant (*Phalacrocorax auritus*)

The Double-crested Cormorant is a well-known bird to those who live near the large lakes in Alberta. This species has a very distinctive look with its long tail, long neck, and black color and long hooked beak. In Alberta cormorants nest in the east-central portion of the province. Their range coincides closely with that of the American White Pelican, both species often nesting on the same island. Nesting islands are used year after year unless natural or man-induced alterations occur. Cormorants are often associated with Great Blue Herons on those nesting islands containing trees and with gulls, pelicans or Common Terns on treeless islands. Most of the Alberta cormorants nest on the ground, however some tree colonies are present. Many nest trees are eventually killed off by the guano (droppings) accumulation. When this occurs, these colonies are abandoned and re-established on a nearby treed island. The nests are usually a mass of sticks and rushes lined with grass and reeds, but they can also be just shallow depressions in the ground. The area immediately surrounding the nesting area is usually completely devoid of vegetation due to constant trampling and accumulations of guano. Clutch size is usually 3 or 4 eggs. Peak of hatching occurs sometime in mid-June (Nordstrom 1980).

Cormorants in Alberta are listed as a Yellow B species status (Alberta Special Status Species) which means species are naturally rare but not in decline. The cormorant population of the Lac La Biche area appears to be growing.

Great Blue Heron (*Ardea herodias*)

The Great Blue Heron is the largest, most widely distributed and probably best known of the American herons. It is usually seen as the patient sentry of the wetlands, where it stands statuesquely surveying the shallow waters for prey (Fisher and Acorn, 1998). Its large size, characteristic wing beat and folded neck when flying makes it easily distinguishable from most other birds of Alberta. The Great Blue Heron is distributed across most of North America, breeding

from coast to coast and as far north as the southern fringes of the boreal forest. They require open water for feeding and are forced to migrate south before the onset of winter (Nordstrom 1980).

Their primary food is fish, which may be supplemented with amphibians and reptiles. Occasionally they will take small mammals, birds, domestic fowl, insects, crustaceans and floating plants. Nesting colonies are usually characterized by concentrations of large twig platforms located in the tops of the tallest trees available. Heronries are most often found in trees on islands in lakes or in the vicinity of rivers, creeks, lakes and ponds. They generally arrive at their nesting colonies in the first or second week of April. By the end of May most birds are incubating a clutch of 4 to 5 eggs laid at two-day intervals. In mid-June the young become visible (incubation is 25 to 30 days). Herons usually leave the traditional nesting colonies during late July or early August (Nordstrom 1980).

White Pelican (*Pelecanus erythrorhynchos*)

The American White Pelican is the only member of the family Pelecanidae that occurs in Alberta. It is a large white water bird that is easily recognized by most people. It breeds from western Canada south to South Dakota, Utah and California. Pelicans arrive on their nesting grounds during early May. Nesting as far North as Slave River Rapids near Fort Smith. Only adult birds return to and remain at the breeding grounds, but flocks of non-breeding birds may be seen in summer on lakes, which are not suitable for nesting. They have a communal feeding behavior that reflects the pelicans' highly refined sociability (Fisher, 1998).

All known active American White Pelican colonies in Alberta are located in the northern boreal forest. They nest only on the ground, usually on lake islands far from mainland, and most of these islands are treeless. Nest mounds are constructed of shells, sticks, weeds, reeds, sand, dirt and stones and are usually constructed in sandy areas. Pelicans do not breed successfully before three years of age. The period from the first egg laid to the first young fledged is about 15 to 16 weeks. One to five eggs are laid per nest, the most

common clutch size being two eggs. The young are usually visible in July. During the first six weeks of the nesting period, eggs and young are highly vulnerable to predation. The concentrated nature of the nesting colony contributes to this vulnerability. Pelicans usually leave the rookery by late August or September (Nordstrom 1980).

There are currently no recorded sightings of breeding pelicans on Lac La Biche. However past records indicate they may have nested here at one time.

Caspian Tern (*Sterna caspia*)

A shoreline survey of Lac la Biche in 2000 (by the Lac La Biche Birding Society) found 16 Caspian Terns near Black Fox Island where they are believed to be nesting. This is a Provincially significant range extension as they are usually found in the southern part of the Province (Alberta Breeding Bird Atlas, 1992).

This tern can be distinguished from other Alberta terns by its large size (that of a medium sized gull), slow wing beats, slightly forked tail and fierce temperament. It feeds almost exclusively on fish, which it takes by hovering or diving. The Caspian Tern is a rare breeder, with approximately 50 pairs in Alberta. Only two breeding colonies are known in the province, so protection of these sites is necessary to ensure a viable population. This species frequents large lakes rich in small fish. Nesting habitat is usually a small isolated island with little or no vegetation. They nest on sandy or cobble beaches on higher ground. They may nest singly, but more often in large, tightly packed colonies often in the company of other terns or gulls. The nest is built by both sexes and is usually in a depression in the ground, unlined or lined with a grasses. There are usually 2 -3 eggs, which are buffy and lightly spotted with browns. The young are tended to by both parents and fledge at 37 days. The young stay on the wintering grounds for their first year and where the population is stable, the terns will return to their natal colony to breed (Alberta Breeding Bird

Atlas, 1992).

Waterfowl

Lac La Biche is a popular staging area during migration for various ducks, geese, and swans. Some of these do stay to nest as do Eared Grebes, Horned Grebes, and Red-necked Grebes. Numbers range from 2000 to 5000 birds. See Appendix C for species list.

Shorebirds

Lac La Biche is also a popular staging area during migration for various shorebirds such as Black-necked Stilt, American Golden Plover, Black-bellied Plover, Greater and Lesser Yellowlegs, Willet, Marbled Godwit, Solitary Sandpiper, Short-billed Dowitcher, Long-billed Dowitcher, Wilson's Phalarope and other shore birds. American Avocets have recently been observed nesting on the shores of Lac La Biche.

Raptors

Raptors play an important role on Lac La Biche. Some species include Merlin, American Kestrel, Peregrine Falcon, Red-tailed Hawk, Swainson's Hawk, Bald Eagle, Osprey, Goshawks and a variety of owls. Many of them nest in the vicinity or along the shores of Lac La Biche. As predators, they play an important role in the function of the lake ecosystem.

5. OTHER ELEMENTS OF HIGH CONSERVATION VALUE

5.1 Fish, Mammals and Amphibians

Numerous fish species can be found in Lac La Biche. Some of these include:

Perch, Tulibee, Pike, Spottail Shiners, Sticklebacks, Burbot, Walleye, Whitefish., White Sucker and Long-nosed Sucker. The fish have a high conservation value as the fisheries in the region is near collapse.

A number of mammals occur in the area and utilize the lake. Mammals commonly found are Moose, White-tailed Deer, Mule Deer, Coyotes, Wolves and Black Bears. A number of small mammals are found including Beaver, Muskrat, Mink, weasels, squirrels, and mice.

Three types of amphibians are commonly found around Lac La Biche. They are the Wood Frog, the Boreal Chorus Frog and the Canada Toad.

It is important to remember that all animals depend on wetlands and lakes to survive. Removal of such habitats will negatively affect wildlife.

5.2 Owl River Delta and Backwater Lakes

Numerous important habitat areas exist in lagoons, backshore lakes, river deltas, on islands and along sections of shoreline (Alberta Municipal Affairs, 1982). These serve as important summer nesting and feeding sites for an abundance of birds and a diversity of species.

6. LAND OWNERSHIP AND USE

6.1 Land Ownership

The majority of the land around Lac La Biche is privately owned, with some small parcels of Crown or municipal lands. Not all landowners have been contacted in regard to the IBA designation as the summer survey results were required to be reviewed for critical areas first. Landowners will be contacted this winter prior to the IBA site dedication ceremony. The Town of Lac La Biche, County of Lakeland, the provincial government (regarding SWCPP and Natural Areas) and a few private landowners have been contacted. Refer to Appendix E for the list of landowners and other stakeholders.

Crown

Provincial-SWCPP

Sir Winston Churchill Provincial Park (Big Island) is presently managed by Alberta Environment, Natural Resources Service. Big Island was designated a Provincial Park in 1952. It was named Sir Winston Churchill Provincial Park in 1965 (O.C. # 888/65), and officially opened in 1968 following the completion of the causeway.

Fox Island, High Island

Fox Island and High Island were designated as Natural Areas and are presently managed by Alberta Agriculture, Food and Rural Development, Public Lands Division. This includes any white zone vacant Crown lands and Crown dispositions (lessees) situated on or around the lake, especially on the north side of Lac La Biche.

Municipal

There are numerous municipal lands located around the lake. These include the public access points, vacant Crown Land, recreation grounds, campsites, historic sites, etc.

Private

Cottages, Farms, and Residential Acreage's

There are presently nine cottage/acreage developments along Lac La Biche at this time.

The majority of the cottage owners are seasonal residents. The number of year-round residents is slowly increasing, however not enough to impact the lake. Scattered in-between the developments are numerous farms. The majority of farms are for cattle, grazing and hay land.

Town

Town land is located in the southern-most bay of Lac La Biche and it has the highest concentration of development and people year round. There is a new trail through town which provides residents a great opportunity for bird watching on the lakeshore.

6.2 Land Use

Historical

Historically the area was used mainly for trapping, farming, and fishing. Lac La Biche was situated along a main trade route for explorers and fur traders, due to its location it also became a travel destination. In the late 19th Century, 79 settlement lots were created, these were primarily located along the south and west shores (Alberta Municipal Affairs, 1982). Lac La Biche has been a favorite tourist spot since as early as 1916 (Edmonton Bulletin 1916) and even earlier.

Current

Cottages

There are at least nine cottage subdivisions around the lake. Some have permanent residents while others are mainly for summer use.

Agricultural

Agricultural activity around Lac La Biche primarily consists of mixed farming, with cattle and associated cropping as the main objective. This area is still referred to as a developing farm area.

Golf Course

There is presently one golf course situated along a section of the south shore of Lac La Biche, near Sir Winston Churchill Provincial Park..

Recreation – Water, Beach

Water is the focal point for the majority of recreational activities undertaken within close

proximity to a lake. Local residents, tourists, cottage owners and others use it for various activities in summer and winter.

7. CONSERVATION MANAGEMENT ACHIEVED AT THE IBA SITE

The value of Lac La Biche as a migrating bird staging area was recognized a many years ago. Lac La Biche has been a favorite tourist spot since as early as 1916 (Edmonton Bulletin, 1916) and even earlier. The federal government designated Lac La Biche as a migratory bird sanctuary in 1920. In 1925, the boundaries of the sanctuary were placed on the lake to include all land covered by the waters of Lac La Biche and the islands contained within the lake. In 1947 the federal government gave up its regulation on Lac La Biche with the understanding that the provincial government would replace it with similar protection. In 1930, following the passing of the Alberta Natural Resources Act, Lac La Biche became a Provincial Wildlife Sanctuary. The provincial regulations are still in effect and prohibit hunting or disturbance of birds found on the lake surface or its islands Alberta Municipal Affairs, 1982).

8. IBA STAKEHOLDERS

The stakeholder group consists of the Lac La Biche Birding Society, private landowners, lessees, and the provincial and municipal governments. The main stakeholder at this time is the Lac La Biche Birding Society led by an IBA sub-committee. Other stakeholders will be defined once the nesting site survey has been completed and critical areas have been identified. A list of landowners and stakeholders appears in Appendix E.

9. OPPORTUNITIES

Community

The community could benefit economically from the enhancement of tourism to the area due to the IBA international recognition. There may be high potential to promote ecotourism activities and recreational activities for Lac La Biche and the surrounding area.

Conservation

The large number of bird species found breeding and using the lake and its islands during the spring, summer and fall makes Lac La Biche an important stopover area for migrating birds. Some new birds were discovered during the shoreline survey, including several provincially significant species, thus enhancing the conservation value of Lac La Biche. The IBA designation will further conservation efforts as it will help increase awareness and help with education programs.

Recreational

The IBA designation will enhance and help to initiate weekend trips to Lac La Biche by other clubs from around the province for birding and other natural history pursuits.

There is an opportunity to use festivals to promote recreation, education and conservation about the birds of Lac La Biche and area.

Educational

Education serves to heighten public awareness and gain support for protection and conservation measures.

The IBA designation will provide opportunities for local schools, clubs and other organizations to enhance awareness about the importance of the Lac La Biche ecosystem.

It will help to develop educational programs like tours and provide educational materials like educational signage and birding platforms and

blinds around the lake so that the lake may be enjoyed in its entirety.

10. THREATS

Threats to Lac La Biche include those that affect the lake and its ecosystems, and those that affect the wildlife directly.

Harassment

Harassment usually occurs in the form of motorized boat, watercraft, dirt bikes, ATV's and unmotorized methods. The harassment usually occurs during nesting and migration times when bird numbers and flock sizes are large, however it does occur throughout the year. Bird species nesting on rocky outcrops and islands and in the shallow highly vegetated shallow areas are particularly vulnerable. This harassment spooks the birds causing them to look for less disturbed nesting sites

Lakeshore Development

Increased lakeshore and cottage development, beach expansion and clearing, removal of riparian areas all can adversely affect water quality, habitat, food availability, nesting sites and feeding areas in turn affecting the birds that utilize Lac La Biche. Lakeshore development can also be in the form of agriculture, industrial (oil and gas) and commercial operations. All of these activities currently occur around Lac La Biche.

Filling and Draining of Wetlands

Increased lakeshore, cottage, residential housing and commercial development have increased demand for land. This has caused some important wetland areas to be drained and filled in. These wetlands are not always along the lake, but adjacent to or slightly set back from the lake. Loss of these wetlands adjacent to the IBA decrease habitat quality and affect the hydrology of the area

and drainage to the lake itself. It is not just the lake that needs protection but the critical habitats along the lake.

11. CONSERVATION GOALS AND OBJECTIVES

The project will address migratory staging and nesting sites, nesting habitats, wetlands along the lakeshore, loss of nesting sites due to lakeshore development and harassment. This will be addressed through a detailed recording, site rating and mapping process which will provide the details necessary for the conservation plan.

This information will be used to educate the community and increase awareness of the importance of the birds and the habitat on Lac La Biche. A signage program around the lake will begin this education process.

As part of the IBA conservation plan signs acknowledging the Bird Sanctuary and IBA site have been placed at 20 access points. Please see Appendix D.

There are historical records of bird sightings but no detailed information of the entire lakeshore on the nesting and staging grounds used by migratory birds of Lac La Biche. To date a shoreline survey around the entire lake has been completed, but vegetation mapping of habitats and nesting/staging areas is still outstanding. Please see Appendix F.

11.1 Vision (Mission) Statement

The Lac La Biche Important Bird Area stakeholders will identify, monitor, and strive to protect and conserve the important bird habitats and bird populations of Lac La Biche.

11.2 Goals and Objectives

The conservation/management plan will address and identify high priority bird conservation goals. These goals may include:

- Identifying the nesting sites of the California

Gulls and Western Grebes;

- Acknowledgment and identification of other birds such as colonial nesting birds, shorebirds, waterfowl, Osprey, eagles, etc., and their staging or nesting areas will be recorded and discussed;
- Reducing loss of nesting sites due to lake shore development and harassment;
- Identifying new and important breeding species that are important provincially.

Objectives of the Lac La Biche IBA Conservation Plan are to:

Map and monitor important nesting and staging grounds on Lac La Biche. A comprehensive survey of nesting and staging grounds is lacking. Confirming and recording these sites is needed so they can be monitored and protected. A recording and mapping process is required to map important habitats, staging and nesting areas on shores adjacent to public and private land:

- To map private and crown land shorelines around the lake for habitat nesting sites (rate for quality);
- Evaluate threats (i.e., loss of habitat due to shoreline development and harassment);
- Begin education and awareness program.

Activities would include:

Bird nesting site surveys of the entire lakeshore including the islands and river mouths (research, photography and mapping) (March/June 2000)

- Review baseline information (March-April 2000);
- Boat Surveys of the entire lake shore and backwater sites (May-June 2000);
- Record and map important sites (August 2000);
- Analyze data and develop conservation plan (September-October 2000);
- Complete Plan by November 2000 and have dedication ceremony in June of 2001.

Education and Awareness Program

- Create and put up signage recognizing the bird sanctuary and IBA status of Lac La Biche;
- Include on signs the importance of not harassing and disturbing the birds and wildlife in and around Lac La Biche;
- Develop slide shows of the birds of Lac La Biche for use in presentations;
- Look into the cost and requirements for birding platforms and blinds, to put in specific locations that are yet to be determined.

Monitoring nesting sites annually:

- Annual boat surveys of shorelines and critical nesting areas;
- Maintain database of nesting information.

Detailed information on nesting sites and important staging areas on Lac La Biche is lacking. Confirming, recording, and monitoring these areas is crucial to the conservation plan. Some of this background information needs to be collected for our conservation plan to be accurate and for us to obtain our goals. Our goal in the conservation plan is to collect this information and use it in conservation and protection of these sites, education at local schools/general public and for tourism information and enhancement. We plan to utilize volunteers and donations for the surveys and much of the planning process.

Lac La Biche is already a Bird Sanctuary and Provincial Wildlife Sanctuary with one Provincial Park (Sir Winston Churchill), High Island Natural Area and Black Fox Natural Area on it. This in itself can be used as a tool when addressing conservation issues as the IBA is already protected in a few areas.

The project will benefit the local community by enhancing public knowledge and awareness about the international importance of Lac La Biche, about wildlife conservation and preservation, about birds of the area and their nesting sites and important habitats along the lakeshore. The IBA status will provide international awareness of the birds in the Lac La Biche area and the birding/wildlife watching opportunities available here, thus

enhancing tourism in the area. This could take the form of festivals, bird/wildlife watching tours, photography, sightseeing, boating, etc., in turn providing economic value to businesses during the summer months. It will also benefit the schools through education. The children would learn about local birds/wildlife and the environment in general.

12. EVALUATING SUCCESS

Feasibility

There have been various methods of protection put on this lake, but there has been little to no formal conservation management of the entire lake. This is the first attempt by a volunteer organization to put a conservation plan together and to monitor it annually. This project will require many volunteer hours and may be demanding sometimes, but with this initial step taken and education of the community about the importance of the lake, this process should pay off in the longer term.

Education Program

Evaluating the program is an essential management tool. The evaluation will be a formal evaluation based on the identification of measurable goals.

Success can not be evaluated until completion of the plan and a one year trial period to obtain some results and feedback. A brief annual update will be completed each year to monitor and evaluate the success of the program and achievements of the conservation plan.

Survey and Monitoring Program

The survey program has already been a success with the identification of new and important species found on Lac La Biche and through public recognition via the signage program. The survey program was successful. We identified important nesting, loafing and feeding areas all around the lake. However, a few locations on the lake could not be surveyed adequately due to the low water

levels. These areas included Big Bay, Plamondon Bay and the mouth of the La Biche River.

The monitoring program can not be assessed at this time as this is only the first year the program has run. The monitoring program can only be assessed after data has been collected over at least two consecutive years.

13. ACKNOWLEDGEMENTS

Lac La Biche Birding Society acknowledges the initiative and efforts of members: Jennifer Gammon, who researched, reviewed data and drafted the plan with the assistance of Tom Maccagno, Ted Johnson, and Jerry Sykes who assisted in the editing of the plan. Thanks to all the volunteers that put in many hours on the lakeshore survey and the signage program. These include Don and Jean Welke, Bob and Mary Dunn, Tom and Annette Maccagno, Marc Maccagno, Terry Maccagno, Jerry and Vi Sykes, Pat Okrainec, Jennifer Gammon and the Wood Buffalo Wild Bird Club. Also thanks for the guidance of George Newton, IBA Coordinator and the support of the Federation of Alberta Naturalists and the many Lac La Biche Birding Society Volunteers.

The Important Bird Areas Program is part of the Natural Legacy 2000 program, a nationwide initiative to conserve wildlife and habitats on private and public lands. We gratefully acknowledge the financial support of the Government of Canada's Millennium Partnership Program. Additionally, we gratefully acknowledge the financial support of the Alberta Conservation Association and the Alberta Ecotrust Foundation.

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APPENDIX A: IBA PARTNERS

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. BirdLife 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 programs. 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 web site:

<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 our grassroots naturalists' network allows us to work effectively and knowledgeably on national

conservation issues that affect a diversity of ecosystems and human populations in Canada. The CNF also works in partnership with other environmental organizations, government and industry, wherever possible.

Our approach is open and cooperative while remaining firm in our 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. Bird Studies Canada 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.

Bird Studies Canada is recognized nation-wide as a leading and respected not-for-profit conservation organization dedicated to the study and understanding of wild birds and their habitats. Bird Studies Canada's web site is <http://www.bsc-eoc.org>.

Federation of Alberta Naturalists

The Federation of Alberta Naturalists (FAN) is a provincial conservation organization, founded in 1970. FAN is an affiliate of the Canadian Nature Federation and is composed of corporate clubs and individual members. The objectives of FAN are:

- to encourage Albertans to increase knowledge and understanding of natural history and ecological processes;
- to provide a unified voice for naturalists on conservation issues; to promote field meetings, conferences, nature camps, research symposia and other activities;
- and, to promote the exchange of information

APPENDIX B: LAC LA BICHE - HABITAT ASSESSMENT

among clubs and societies.

FAN publishes Alberta Naturalist four times a year.

Phone: (780) 427-8124.

Fax: 422-2663.

Website: www.fanweb.ca/.

APPENDIX C:

Breeding Birds of Lac La Biche (Alberta Breeding Bird Atlas)

Bird Check List for Lac La Biche (the May Species Count List)

Lac La Biche Birding Society

Y = Observed ? = Non-verified Observation
Blank Space = Not Observed

*= Observed in Sir Winston Churchill Provincial
Park(SWCPP)

“CW”. = Count week?

NOTE: For 1999 all numbers recorded are for
SWCPP only

SPECIES	1998	1999	2000	2000 SWCPP
SPECIES TOTAL	164	176	194	113 (7cw)
Common Loon	Y	4*	21	9
Horned Grebe	Y	Y	8	
Red-necked Grebe	Y	36*	47	18
Eared Grebe	Y	2*	2	
Western Grebe	Y	5*	500+	2
Pied-billed Grebe		Y	1	
American White Pelican	Y	26*	195	46
Double-crested Cormorant	Y	~2000*	2400+	1683
American Bittern	Y	2		
Great Blue Heron	Y	3*	17	6
Turkey Vulture	Y	1*	2	
Canada Goose	Y	192*	249	17
Ross's Goose		1		
Trumpeter Swan	Y	Y	2	
Tundra Swan	Y			
Gadwal	Y	36*	40	26
Eurasian Wigeon	?	Y	1	
American Wigeon	Y	36*	46	19
Mallard	Y	58*	174	86
Blue-winged Teal	Y	12*	130	24
Cinnamon Teal		Y	1	
Green-winged Teal	Y	8*	8	4
Northern Shoveler	Y	2*	78	4
Northern Pintail	Y	Y	17	1
Canvasback	Y	Y	32	4cw
Redhead	Y	8*	9	1

Ring-necked Duck	Y	Y	5	
Wood Duck			1	
Greater Scaup		Y	24	2
Lesser Scaup	Y	48*	14	4
Surf Scoter			1	
White-winged Scoter	Y	5*	21	9
Bufflehead	Y	16*	60	6
Common Goldeneye	Y	19*	75	37
Barrow's Goldeneye	Y	Y		
Hooded Merganser	Y		4	
Red-breasted Merganser	Y	4*	8	
Common Merganser	Y	5*	33	10
Ruddy Duck	Y	Y	19	
Osprey	Y	8*	2	5
Bald Eagle	Y	2*	11	3
Northern Harrier	Y	Y	1	
Sharp-shinned Hawk	Y	1*	1	
Cooper's Hawk		1*	1	
Northern Goshawk	Y	Y	2	2
Broad-winged Hawk		Y	1	
Swainson's Hawk		Y	2	1
Red-tailed Hawk	Y	Y	12	
American Kestrel	Y	Y	16	1
Merlin	Y	3*	4	3
Peregrine Falcon			2	1
Spruce Grouse		Y		
Ruffed Grouse	Y	15*	13	4
Sharp-tailed Grouse			3	
Ring-necked Pheasant		Y		
Gray Partridge			1cw	
Sora	Y	Y	9	2
American Coot	Y	Y	150+	1
Sandhill Crane	Y	Y	5	1
Black-bellied Plover	Y	Y	4	
American Golden Plover	Y	Y	2	
Killdeer	Y	7*	18	7
Black-necked Stilt	Y			
American Avocet	Y	Y	62	12
Greater Yellowlegs	Y	Y	5	1
Lesser Yellowlegs	Y	Y	15	1cw
Solitary Sandpiper	Y	Y	4	
Spotted Sandpiper	Y	Y	4	
Marbled Godwit		Y	5	
Hudsonian Godwit	Y			
Ruddy Turnstone	Y			
Sanderling	Y		5	
Semipalmated Sandpiper	Y	Y	8	6
Least Sandpiper	Y	Y	50	
White-rumped Sandpiper	Y	Y	2	
Baird's Sandpiper	Y	10*	5	
Pectoral Sandpiper	Y		2	
Stilt Sandpiper	Y		5	4
Dowitcher sp.		Y		
Short-billed Dowitcher	Y		1	
Common Snipe	Y	2*	9	1cw
Red Knot			1	
Whimbrel			1	
Red-necked Phalarope			1	

Wilson's Phalarope	Y	Y	8	2	Brown Creeper	Y			
Franklin's Gull	Y	2*	53	47	House Wren	Y	5*	26	16
Bonaparte's Gull	Y	Y	13	6	Winter Wren	Y	13*	17	16
Ring-billed Gull	Y	11*	86	26	Marsh Wren	Y	Y	4	
California Gull	Y	106*	240	140	Golden-crowned Kinglet	Y	8*	6	5
Herring Gull	Y	7*	2		Ruby-crowned Kinglet	Y	140*	86	79
Caspian Tern		Y			Mountain Bluebird	Y	Y	6	
Common Tern	Y	6*	70	4	Swainson's Thrush	Y	34*	35	33
Forster's Tern	Y	Y	1	3cw	Hermit Thrush	Y	Y	4	2
Least Tern			1		American Robin	Y	16*	49	10
Black Tern	Y	1*	66		European Starling	Y	9*	7	1cw
Rock Dove	Y	Y	1		American Pipit			1	
Mourning Dove	Y	Y	1		Bohemian Waxwing	Y	Y	1	
Barred Owl		Y	7		Cedar Waxwing	Y	Y	1	
Great Gray Owl		Y	2		Tennessee Warbler	Y	53*	201	164
Long-eared Owl		Y			Yellow Warbler	Y	92*	142	84
Short-eared Owl		Y			Orange-crowned Warbler		9*	7	6
Boreal Owl		Y	1		Magnolia Warbler	Y	51*	36	35
Northern Saw-whet Owl		Y	1		Cape May Warbler	Y	12*	5	4
Great Horned Owl	Y	1*	10	1	Yellow-rumped Warbler	Y	191*	169	137
Common Nighthawk	Y	Y	15	2	Black-throated Green Warbler	Y	16*	17	17
Ruby-throated Hummingbird	Y	2*	16	6	Blackburnian Warbler	Y	6*	6	4
Belted Kingfisher	Y	2*	4		Palm Warbler	Y	4*	1	1
Yellow-bellied Sapsucker	Y	3*	9	2	Bay-breasted Warbler	Y	15*	35	33
Downy Woodpecker	Y	2*	11		Blackpoll Warbler		6*	7	4
Hairy Woodpecker	Y	6*	18	6	Black-and-white Warbler	Y	Y	10	6
Northern Flicker	Y	3*	15	3	American Redstart	Y	46*	59	53
Three-toed Woodpecker	Y	Y	2	1	Ovenbird	Y	10*	22	15
Pileated Woodpecker	Y	2*	6	2	Northern Waterthrush		5*	3	
Black-backed Woodpecker			2	2	Connecticut Warbler	Y	Y	1	1
Western Wood-Pewee	Y	9*	7	3	Mourning Warbler	Y	2*	2	1
Olive-sided Flycatcher	Y	4*	5	4	Common Yellowthroat	Y	1*	7	2
Alder Flycatcher	Y	7*	5	5	Wilson's Warbler	Y	2*	1	1
Yellow-bellied Flycatcher		2*			Canada Warbler		2*	3	3
Least Flycatcher	Y	79*	125	110	Western Tanager	Y	11*	9	6
Say's Phoebe		1?*	4		American Tree Sparrow	?	Y	2	1
Eastern Phoebe	Y	2*	4	1	Chipping Sparrow	Y	57*	169	73
Eastern Kingbird	Y	1*	7	2	Clay-colored Sparrow	Y	19*	25	7
Solitary/Blue-headed Vireo	Y	9*	15	14	Vesper Sparrow	Y	Y	1	
Warbling Vireo	Y	2*	2	1	Savannah Sparrow	Y	Y	3	1
Philadelphia Vireo	Y	4*	5	4	Le Conte's Sparrow	Y	Y		
Red-eyed Vireo	Y	10*	15	9	Song Sparrow	Y	18*	41	26
Gray Jay	Y	2*	19		Lincoln's Sparrow	Y		6	
Blue Jay	Y	3*	14		Swamp Sparrow	Y	Y	1	1cw
Black-billed Magpie	Y	6*	48	4	White-throated Sparrow	Y	27*	150	104
American Crow	Y	25*	82	36	White-crowned Sparrow	Y	2*	10	1
Common Raven	Y	8*	23	12	Fox Sparrow			3	
Horned Lark			4		Nelson's Sharp-tailed Sparrow			1	
Purple Martin	Y	Y	8		Dark-eyed Junco	Y	14*	7	1
Tree Swallow	Y	13*	65	4	Rose-breasted Grosbeak	Y	8*	16	6
Bank Swallow	Y	Y	150		Western Meadowlark			2	
Barn Swallow	Y	24*	31	4	Red-winged Blackbird	Y	6*	111	6
Cliff Swallow	Y	1*	100		Yellow-headed Blackbird	Y	Y	47	
Black-capped Chickadee	Y	17*	42	14	Rusty Blackbird		Y	11	
Boreal Chickadee	Y	7*	16	12	Brewer's Blackbird	Y	Y	2	
Red-breasted Nuthatch	Y	10*	34	23	Brown-headed Cowbird		27*	117	93
White-breasted Nuthatch	Y	Y	4		Common Grackle	Y	Y	2	
					Baltimore Oriole	Y	Y	11	1

APPENDIX D: LAKE ACCESS LOCATIONS MAP

LAKE ACCESS LOCATIONS DESCRIPTIONS

Comments on Conditions of the Current Boat Launching Sites on the Lake and on Owl River

1. Sunset Bay Boat Launch: River Lot 72 - Concrete pad needs upgrading.
2. Lakeview Estates Boat Launch: River Lot 75 - Poor launch site, but is used.
3. Golden Sands Boat Launch: NE 3-68-13-W.4 - Boat launch site not suitable for sign. Possible suitable location at entrance to resort (at entrance map). Would need authorization from Land Owner's Association. Contact Bob Crossley. Boat launch site in very poor condition.
4. Owl River Boat Launch: Pts. NW 22 and 27-68-13-W.4 - Access by public road and has good gravel access. Needs a lot of clean up.
5. Owl River Recreation Board Campground: NE 29-68-13-W.4 - Boat launch is into Owl River. Suitable spot for sign (post already on site).
6. Popular Point: SE 8-68-14-W.4 (winter road) - No proper launching facility, has frequent use. Suitable site for a sign.
7. Blais Resort: NW 31-68-14-W.4 - Concrete pad but is a low use area and currently very weedy. Ok site for a sign.
8. Plamondon White Sands REcreation Area: NE 25-68-16-W.4 - Launch concrete pad entirely out of the water. Contact Ben and Sheila Gaudet: 798-2183 or 798-2254.
9. Plamondon Bay - Between Plamondon and White Sands Recreation Area. All private property; possible site for sign but will need more research.
10. Bayview Beach Private Resort: Plan 5156 TR RL 8-68-15-W.4 - Private access to lake but road allowance grown over, no visible use. Possible site for sign.
11. Ulliach Beach: No visible public access.
12. Entrance to Maccagno Point: River Lot 38 - Excellent gravel road to Lake, good concrete boat launch. Very good spot for sign.
13. Road Allowance to Lake: Grown in with rushes and grass, no boat launch use found here.
14. Mission Historical Site: R.L. 42-67-14-W.4 - Suitable site for large sign at viewing platform. Contact Danny Chevigny: 798-3803. Poor launch area at winter road entrance.
15. (a) Mission Beach: Public Access near Bill Rollans Cottage. Shore very sandy - no boat launch.
(b) Public Access: End of Mission Beach Resort (past McMillan cabin site). No concrete boat launch. Good site for a sign. RL 50-67-14-W.4.
16. Boat Launch at Public Dock, Lac La Biche: River Lot 62. Launch site very weedy. Bird Sanctuary sign present on site.
17. McArthur Place, Town of Lac La Biche. Large sign to be placed in the park.
18. Fish Pond: Large sign to be placed at lakeshore entrance to Hamilton Park.
19. Squirrely's Point: At present the best boat launching site on the lake. Good site for a small sign.
20. Sir Winston Churchill Park: Has boat launch but water very shallow. Has Bird Sanctuary sign which is damaged. Needs replacing.

Pine Grosbeak	Y		1	
Purple Finch	Y	3*	24	2
White-winged Crossbill			5	5
Red Crossbill	Y		2	
Common Redpoll	Y	Y	6	
Pine Siskin	Y	40*	54	6
American Goldfinch	Y	Y	22	1cw
Evening Grosbeak	Y	Y	29	
House Sparrow	Y	Y	33	

APPENDIX E:

LANDOWNERS LIST AND STAKEHOLDERS LIST

Landowners	Stakeholders
Natural Resources Service - Parks -AB Gov*	Alta. Log Homes Resort Inc.
County of Lakeland*	Pat Leibe
Town of Lac La Biche*	HAF Holdings Ltd.
William Dostalar	Eda & Andrew Thompson
Peter and Doreen Benuik	Jean & Don Welke*
Sophie Benuik	Maxine Skyrpan
407881 Alberta Ltd.	Mark & Cheryl Cardinal
Northern Canada Evangelica	Ilarion Ganovicheff
Runar Lindblom	Anthony Mischuk
Lac La Biche Golf & Country Club	Tony & Evelyn Mischuk
Martin Niles and Rene Bohning	Savaty Martushew
Jerry and Vi Sykes*	Alexander McGillvary
Mark and Bernice Cardinal	Harold Hrynyk
Alvina Deschambeau	Nick & Frances Hrynyk
Charles A. deschambeau	Smith, Mazurek, Lindberg
Norman Pawlowich	Harold & Rena Hrynyk
Gordon Kruger	Rich & Millie Lansing
Dept. Energy and Natural Resources	Larry Plamondon
William Hogko	Victor & Barbara Ostapezuk
John and Victor Brezinski	Harold & Howard Hrynyk
Denise Cadieux	Gerald Rogne & Linda Burnett
Ernest and Arema Laboucane*	Wilbert Plamondon
Micheal and Kathy Maccagno*	Ernest Pietsch
Ken Kemke	Tony Kuznetsov
Ronald Wheele	Lorraine Bouvier
Marleen Shukalak	Vianney Borque
Bert Arthurs	Keithrop Browne
Everet Mcassey	Valerie Grahame
Bonnie McMillan	Kevin Valastin
George N. Mcnawych	Victor Wasuk
Ludwig & Mary Diesel	Romeo & Jeanette Plamondon
Daniel & Rene Veillette	Emile Cloutier
Ronald Johnston	Ronald Breault
Dolphus Johnston	Barrie Rederberg

Lester & Emma Bates	William Sawchuk
Glenn & Elba Anderson	Edgar Ladouceur
Paul Cardinal	Jerome Libouron
Wayne Cardinal	Robert Rollau
Alan & Mary Waters	Maurice & Susan Plamondon
M. Koziak Professional Corp.	Dorothy Torrance
Andrew Thompson	Marc Plamondon

Landowners Cont'd	Stakeholders Cont'd
Grant St.Onge	Dian Ruth Eldeiry
Andre Cloutier	Alexis Ladouceur
Mark Richard Winger	D. L. Cadieux Construction and Transit Mix Ltd.
A & M Developments Ltd.	Venture Building Supplies
Russel & Dianelin Ladoceur	Leon & Louise Rudiger
Johann GeisBrecht	Richard Diesel
Lily Flemming	Douglas Burrows
Thomas Maccagno*	John Karpetz Holdings Ltd.
Marcel Bourque	A & T Construction
Isaie Bourque	Mike Boyko
Richard, Oscar & Josephine Annette McCullough	various cabin owners within the developments
Teepee Bear Inc.	*Landowners that have been contacted
Mara Development	

APPENDIX F: LAC LA BICHE SHORELINE SURVEY MAP