

A Summary of
Background Information on
Migratory Bird Sanctuaries
in the
Western and Northern Region



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MEMORANDUM

NOTE DE SERVICE

Trottier/DOE/CWS/420-2525/dg

TO
A

D.I. Gillespie
Habitat Coordinator
Canadian Wildlife Service
Ottawa

FROM
DE

A/Head
Habitat Conservation Section
Canadian Wildlife Service
Edmonton

SECURITY - CLASSIFICATION - DE SÉCURITÉ

OUR FILE/NOTRE RÉFÉRENCE

YOUR FILE/VOTRE RÉFÉRENCE

DATE

September 19, 1985

SUBJECT
OBJET

WNR Migratory Bird Sanctuaries - Summary Document

I am pleased to forward the enclosed report, "A Summary of Background Information on Migratory Bird Sanctuaries in the Western and Northern Region" compiled by Dennis Jurick. The document provides current (to 1 June 1985) and background information on the regional MBSs in a standardized format, and will be updated with supplements as and when required.

I wish to express my appreciation to Dennis Jurick and those persons, acknowledged by Mr. Jurick, who contributed to this report.

Copies of the report are available on request.


G. Trottier

Encl.

A SUMMARY OF
BACKGROUND INFORMATION ON
MIGRATORY BIRD SANCTUARIES
IN THE
WESTERN AND NORTHERN REGION

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HABITAT MANAGEMENT SECTION
Technical Report No. WNR 85-2

Compiled
by
D. Jurick
Canadian Wildlife Service
Winnipeg, Manitoba

July 1985

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INTRODUCTION

This assembly of background information on Migratory Bird Sanctuaries in the Western and Northern Region was undertaken as part of a national initiative to standardize descriptive information on bird sanctuaries and to provide for broad distribution of that background information. The document follows a standard form which facilitates responses to general enquiries on the sanctuary programs.

Under the Migratory Birds Convention Act (1917) the Canadian Wildlife Service is responsible for the management of migratory birds which occur within Canada. Regulations pursuant to this Act are administered by the Canadian Wildlife Service. The Migratory Bird Regulations address the harvest and possession of migratory birds. The Migratory Bird Sanctuary Regulations provide for the establishment and management of bird sanctuaries.

Canada's first bird sanctuary actually preceded the Migratory Birds Convention Act. In 1887, vacant lands around the north end of Last Mountain Lake in Saskatchewan were set aside as breeding grounds for wildfowl to protect them from settlement. After the ratification of the Migratory Birds Convention Act, the establishment of other sanctuaries soon followed. The killing of large numbers of seabirds (gannets, murres, puffins and cormorants) on three islands in the Gulf of St. Lawrence - Perce Rock, Bonaventure, and Bird Rocks - led to these sites being designated as both federal and provincial bird sanctuaries in 1919.

Most of the other federal sanctuaries south of the 60th parallel were set up between 1923 and 1969 to protect breeding and migrating waterfowl. Several of these sanctuaries also provide breeding and feeding habitat for pelicans, cormorants, herons, terns, gulls and shorebirds. During drought years in the 1930s and 1940s, lakes dried up in several Saskatchewan bird sanctuaries, thus rendering them of little value to birds but increased importance to agriculture. Five sanctuaries established in 1948 to replace dry ones did not include adjacent uplands. As well, in 1949-50, four other sanctuaries had their boundaries revised to include only "the land covered by water and the islands therein".

All but one of the bird sanctuaries in the Northwest Territories were established in the late 1950s and early 1960s to protect waterfowl and seabirds from hydrocarbon and mineral exploration and development activities. The Northwest Territories sanctuaries support the majority of Canadian breeding populations of Pacific and Atlantic brant, Greater White-fronted Goose, Greater and Lesser Snow geese, the rare Ross' Goose, Tundra Swan, the endangered Whooping Crane, Northern Fulmar and Thick-billed Murre. Seymour Island was established as a sanctuary in 1975 to protect the rare Ivory Gull.

Presently, there are 82 federal bird sanctuaries covering approximately 11.26 million hectares in Canada. They range in size from the 1-hectare Christie Islet Bird Sanctuary in British Columbia to the 6.28 million-hectare Queen Maud Gulf Bird Sanctuary in the Northwest Territories. Land and water within the sanctuary boundaries may be owned by the Crown (federal or provincial) and/or private interests.

Management activities may include habitat improvement by water level control, fencing, food and cover plantings, provision of nesting sites and provision of interpretation and recreational facilities. Human activity is permitted in the sanctuaries providing it does not harm migratory birds or their nests and young. Hunting and other forms of disturbance are prohibited. The Migratory Bird Sanctuary Regulations are shown in Appendix 1.

Thirty-five federal bird sanctuaries, covering approximately 11.17 million hectares, presently exist in the Western and Northern Region. Four are in Alberta, 15 in Saskatchewan (none in Manitoba) and 16 in the Northwest Territories (Figs. 1 and 2). Two of the 16 are under shared jurisdiction - one with the Quebec Region and the other with the Ontario Region. Summaries of background information on each of the federal bird sanctuaries in other regions are available in separate reports. At present, there are seven sanctuaries in the Pacific and Yukon Region, 13 in the Ontario Region, 17 in the Quebec Region and 12 in the Atlantic Region.

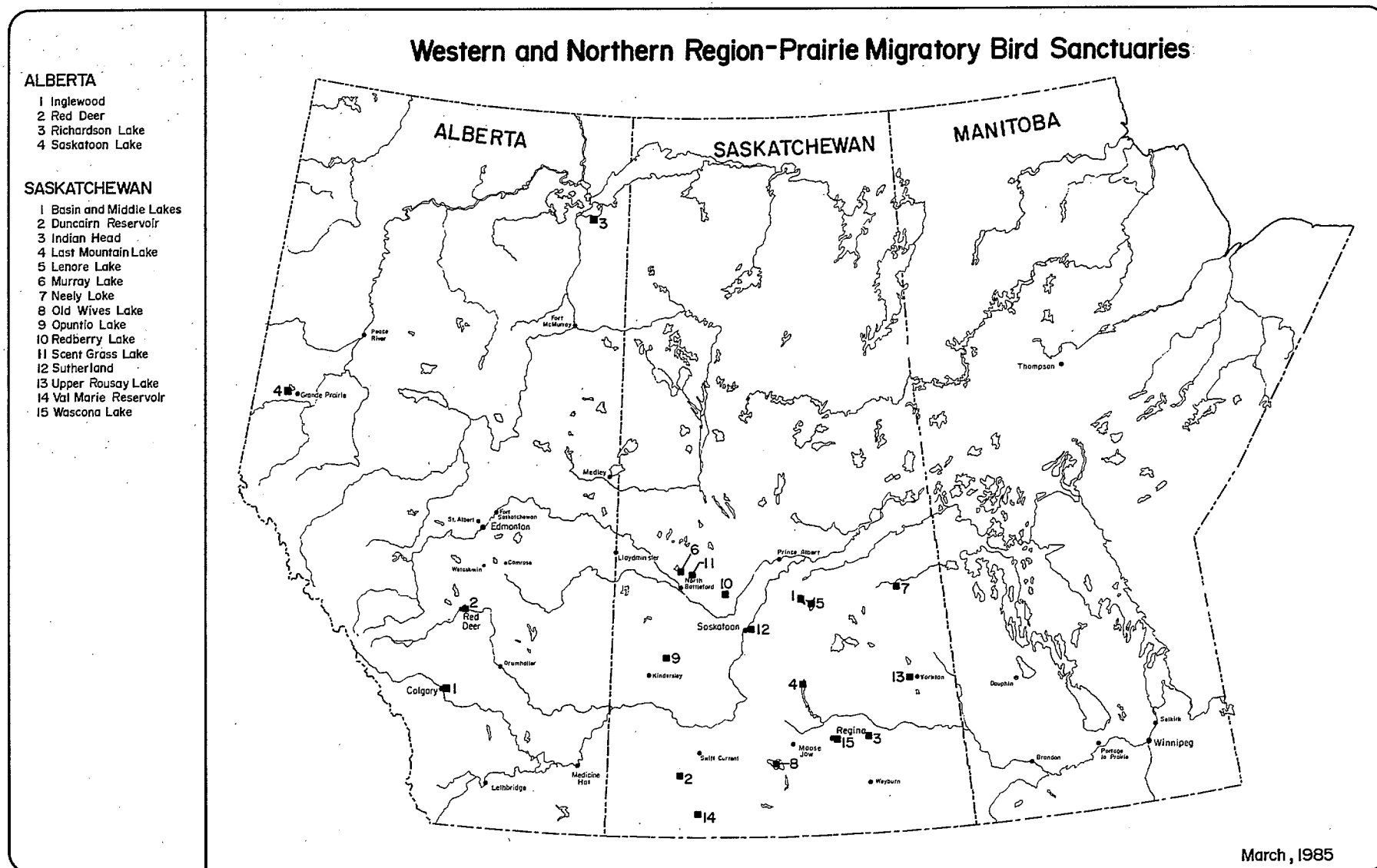


Fig. 1. Locations of bird sanctuaries in the prairie provinces.

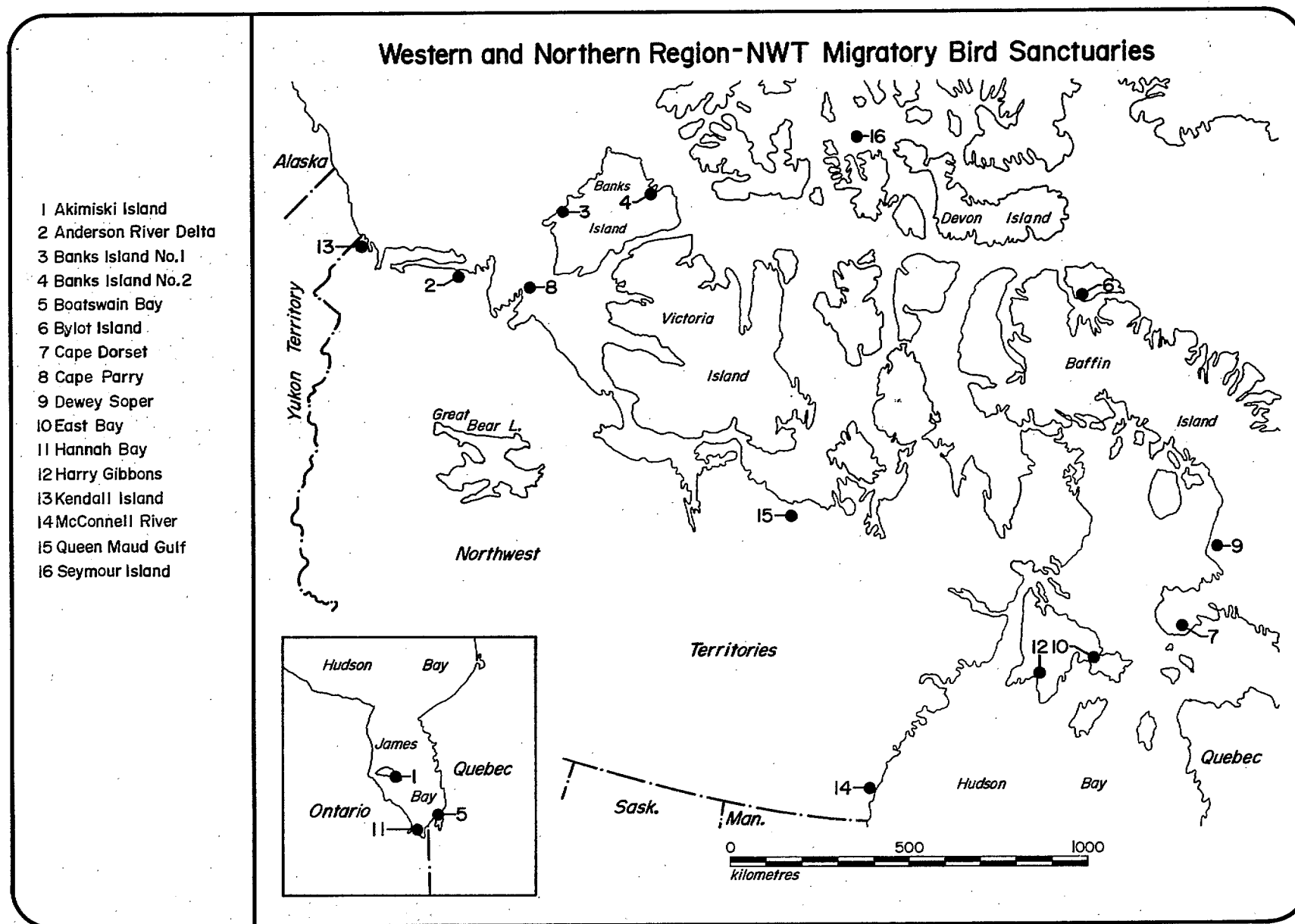
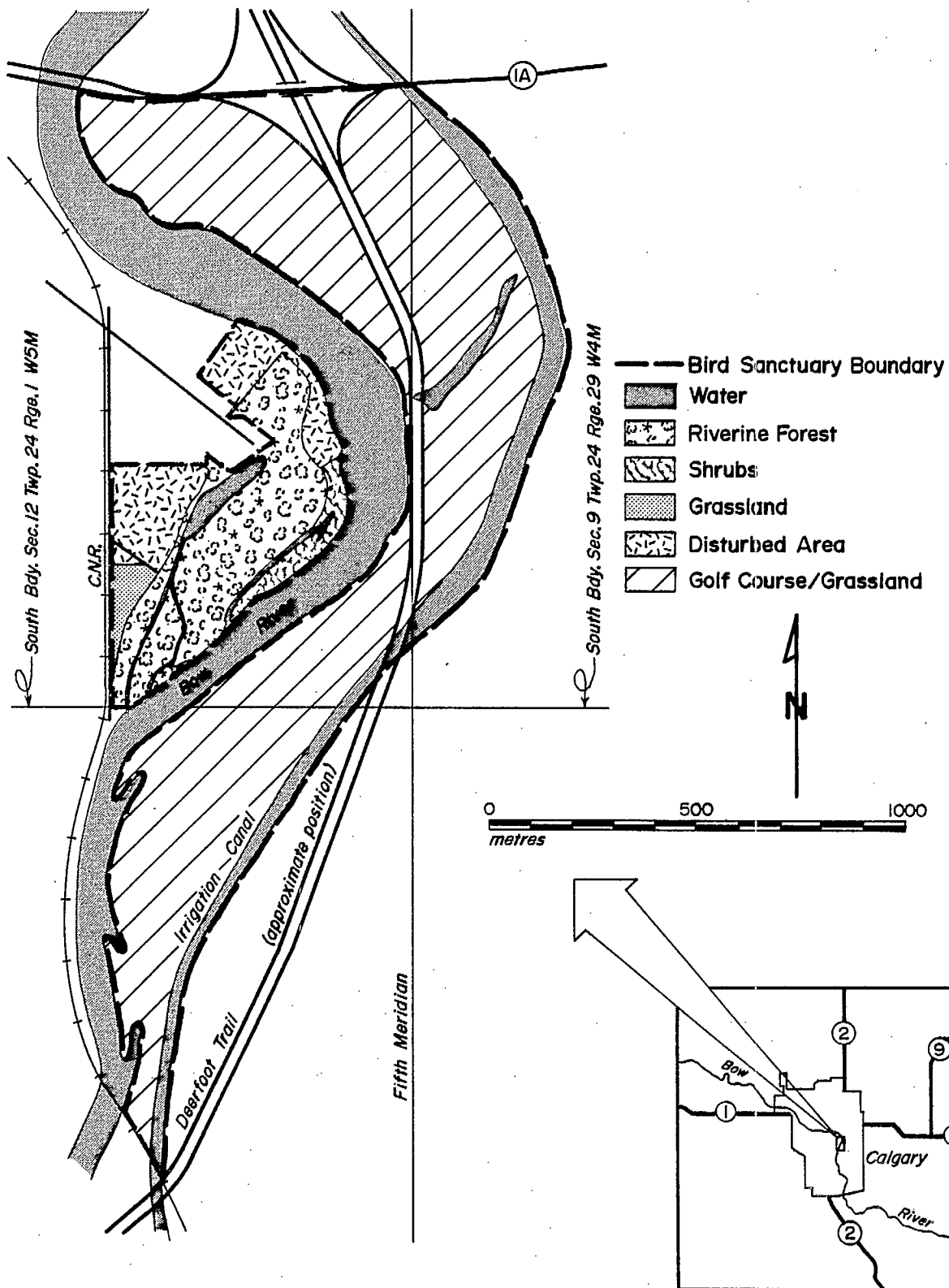


Fig. 2. Locations of bird sanctuaries in the Northwest Territories.

**INGLEWOOD
BIRD SANCTUARY**

INGLEWOOD BIRD SANCTUARY



INGLEWOOD BIRD SANCTUARY

1. Location: Within the City of Calgary, Alberta
 Lat. 51°02'N Long. 141°00'W
 NTS 1:50,000 Sheet No. 820/1, 82P/4
 Legal Description: See Appendix 1

2. Area: 160 hectares

3. Land Ownership:

City of Calgary, Western Irrigation District and
 Canadian Pacific Railway

4. Major Habitat Types:

Riverine forest	9%
Grassland/shrub	3%
Stream	1%
Park/golf course	87%

5. Description of the Area:

Located in central Calgary, the Sanctuary is on the alluvial bottomlands of the Bow River Valley. Native trees and shrubs form a dense band of varying width on both sides of the river. Species include balsam poplar (Populus balsamifera), water birch (Betula occidentalis), silverberry (Elaeagnus commutata), willow (Salix spp.), red osier dogwood (Cornus stolonifera), and saskatoon (Amelanchier alnifolia). On the west part of the Sanctuary, a small spring-fed stream flows in a north-south direction and enters the river. Small dams built on the stream have formed ponds which contain pondweed (Potamogeton spp.), common duckweed (Lemna minor), water milfoil (Myriophyllum spp.), and algae including the rare alga Batrachosperm. A pond in the gravel flat adjacent to the Bow River is colored by the flowers of arrowhead (Sagittaria cuneata) and large-leaved water crowfoot (Ranunculus aquatilis) in late summer. Several small low-lying meadows occur along the dammed stream. Characteristic vegetation includes wire rush (Juncus balticus), northern reedgrass (Calamagrostis inexplansa), silverweed (Potentilla anserina), alkali buttercup (Ranunculus cymbalaria), and common horsetail (Equisetum arvense). Scattered patches of common cattail (Typha latifolia) and small-fruited bulrush (Scirpus microcarpus) occur along a drainage ditch leading from a storm sewer.

The stream banks and part of the adjacent upland are vegetated by trees, shrubs, domestic grasses and forbs such as tufted white prairie aster (Aster pensus), common yarrow (Achillea millefolium), Canada thistle (Cirsium arvense) and perennial sow thistle (Sonchus arvensis).

Almost four km of inter-connecting trails and four pedestrian bridges across the stream permit easy access to most parts of the Sanctuary. On site is located the historic Colonel Walker House which is open to the public for viewing of natural history displays on the main floor. Outdoor washrooms and picnic tables are located near the house.

The eastern part of the Sanctuary (on the east side of the Bow River) is largely golf course and Canadian Pacific Railway property which includes the irrigation ditch.

6. Public Use:

The Sanctuary is considered an important natural area and outdoor classroom in the City of Calgary. Annual visitors to the Sanctuary exceed 20,000 people. This consists of casual visits by the general public, naturalist-guided tours primarily for school children and service clubs, and evening natural history courses.

7. Importance to the Resource:

Of the more than 225 recorded bird species at the Sanctuary, the vast majority use the area during spring and fall migration. From mid-August to mid-September, the riverine forest attracts large numbers of mixed-flocks of warblers, vireos, chickadees, kinglets, nuthatches and woodpeckers. Open water during the winter is used by over 5,000 Mallards and lesser numbers of Common Goldeneye, Common Merganser, Lesser Scaup and Bufflehead as well as other species such as Common Snipe, Killdeer, Bald Eagle and Belted Kingfisher.

Most of the birds which nest in the Sanctuary are passerines. Other nesting species include Mallard, Pintail, Common Merganser, Canada Goose, Killdeer, Spotted Sandpiper, Gray Partridge and American Kestrel.

8. Historical Notes and Land-Use Conflicts:

In 1929, Major Selby Walker, executive secretary, Canadian National Parks Association, applied to have a portion of his property designated as a bird sanctuary because of the natural breeding grounds there for wildfowl. On June 6, 1929, the Inglewood Bird Sanctuary was established by Order-In-Council P.C. 1929-962 covering 58 acres on the west side of the Bow River. On April 19, 1932, an additional 342 acres were enjoined in the Inglewood Bird Sanctuary by Order-In-Council P.C. 1932-396. This expansion embraced the Canadian Pacific Railway irrigation ditch and adjacent land, the old army rifle range and the Inglewood Golf Course. The entire area was also designated a Provincial Game park in 1932. Since then, the rifle range became part of the Golf Course, and a major roadway was constructed through the east portion of the Sanctuary.

Recent major land-use conflicts have been the large numbers of people visiting the Sanctuary and encroachment by residential and industrial expansion. Sanctuary naturalists have recommended the elimination of the bicycle trail in the Sanctuary. A recent oil spill has been cleaned up by the oil company concerned.

Several investigations of the Sanctuary have been undertaken to ascertain whether it should be retained or delisted. In 1939, J.D. Soper supported the retention of the Sanctuary because of its importance to wildlife and educational value. In 1967, a study by the University of Calgary recommended retaining the Sanctuary for its educational and recreational value. In 1957, 1966, 1973, and more recently, CWS staff have recommended delisting the Sanctuary primarily because it is of minimal value to migratory birds.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The area is also under the jurisdiction of the City of Calgary Police, R.C.M.P. and the Alberta Fish and Wildlife Division.

10. References:

Canadian Wildlife Service, Western and Northern Region, File No. 410/09.

Larkin, J. 1977. Management of visitor use at the Inglewood Bird Sanctuary. Unpubl. M. Environ. Design Thesis, Univ. Calgary. 106 pp.

Millham, B. 1976. Pictures of the past-Inglewood Bird Sanctuary. Calgary Field-Nat. 7: 245-249.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Pinel, H.W. 1983. Inglewood Bird Sanctuary. Unpubl. report, Parks and Recreation Dept., City of Calgary. 57 pp.

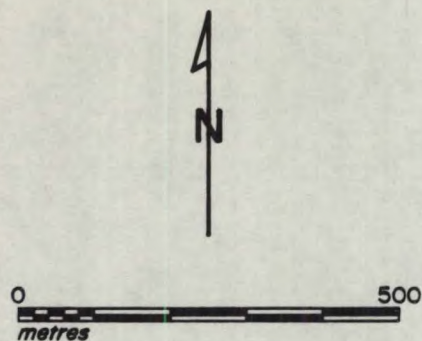
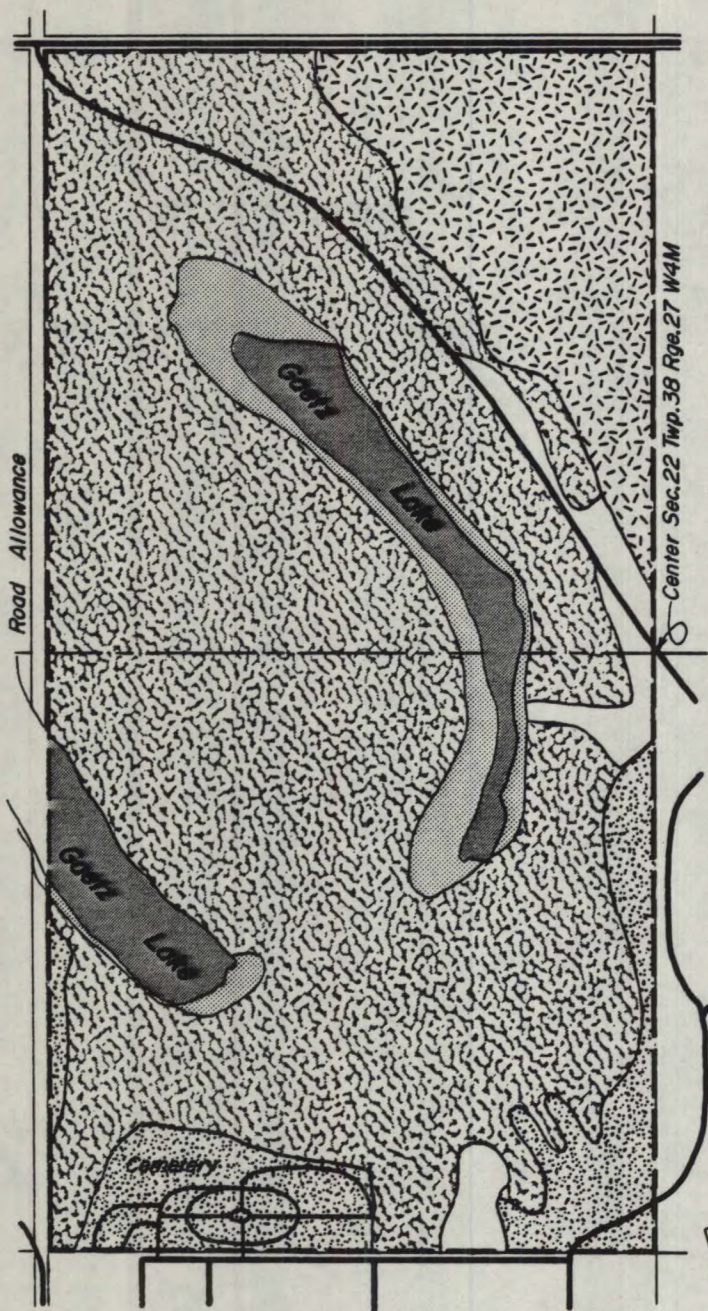
Pinel, H.W. 1975. Birds recorded at the Inglewood Bird Sanctuary during the falls of 1972, 1973 and 1974. Calgary Field-Nat. 7(3): 83-87.

Soper, J.D. 1939. Report on Inglewood Bird Sanctuary, Alberta. Unpubl. report. Dept. Mines and Resources, National Parks Bureau, Ottawa. 14 pp.

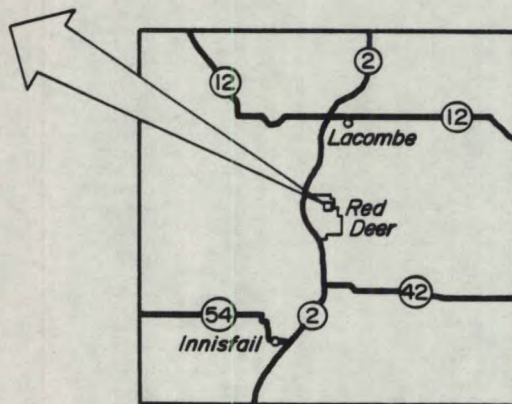
Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

**RED DEER
BIRD SANCTUARY**

RED DEER BIRD SANCTUARY



- Bird Sanctuary Boundary
- Open Water
- ▨ Marsh/Wet Meadow
- ▩ Trees/Shrubs
- ▧ Agricultural Cropland
- ▦ Landscaped
- Disturbed
- Road



RED DEER BIRD SANCTUARY

1. Location: Within the City of Red Deer, Alberta
 Lat. 52°17'N Long. 113°46'W
 NTS 1:50,000 Sheet No. 83A/5
 Legal Description: See Appendix 1

2. Area: 130 hectares

3. Land Ownership:

City of Red Deer and private land

4. Major Habitat Types:

Wetland	12%
Shrub/trees	73%
Cultivated land	11%
Landscaped area/cemetery	4%

5. Description of the Area:

Located within the transitional boreal parkland ecoregion, the Sanctuary centers around two oxbow lakes formed by an abandoned channel of the Red Deer River. Known locally as Gaetz Lakes Sanctuary, the Sanctuary is part of a larger natural area bounded by the river to the west and north, a high (30 m) escarpment to the south and southeast, and an urban subdivision to the southwest. The steepest slopes above the lakes are vegetated mainly by white spruce (Picea glauca). Balsam poplar (Populus balsamifera) dominated mixed-wood occurs on the less steep slopes. Upland vegetation between the lakes is largely aspen and balsam poplar with an understory of red osier dogwood (Cornus stolonifera), wild rose (Rosa spp.) and snowberry (Symphoricarpos spp.).

The relatively shallow lakes are fed by a perennial stream from the southeast and groundwater discharge from the uplands to the east. Aquatic submergents include pondweed (Potamogeton spp.), and duckweed (Lemna minor). Emergents consist largely of cattail (Typha latifolia). Several sedge (Carex spp.) meadow areas are found at the north end of the lakes.

A cemetery is located in the landscaped area at the south end of the Sanctuary.

6. Public Use:

The primary uses of the Sanctuary are education and recreation. Activities include nature study, bird watching, photography, orienteering, picnicking, jogging and boating. City school groups and local natural history clubs are the

main users of the area.

7. Importance to the Resource:

Several species of waterfowl have been observed in the Sanctuary, but only a few species nest there. Those observed include Mallard, Gadwall, Blue-winged and Green-winged teal, Wigeon, Shoveler, Canvasback, Redhead, Lesser Scaup, Common Goldeneye, Bufflehead, Ruddy Duck and Canada Goose. Other waterbirds using the Sanctuary are Horned, Eared, Pied-billed, Red-necked and Western grebes; American Bittern; Great Blue Heron; California, Ring-billed and Franklin's gulls; Common Snipe; Killdeer; Spotted and Solitary sandpipers; Wilson's Phalarope; Upland and Piping plovers; American Avocet, and Common and Black terns.

The mixed poplar-spruce, shrub and wetland habitats support a variety of passerine species, grouse, hawks, and owls, as well as several species of small mammals.

8. Historical Notes and Land-Use Conflicts

The local chapter of the Alberta Natural History Society applied for sanctuary status for the area on behalf of J. Gaetz, the owner of the property. On June 27, 1924, the Red Deer Bird Sanctuary was established by Order-In-Council P.C. 1924-1080.

In 1938, after the death of Mr. Gaetz, the land was sold to the Province of Alberta for future expansion of the Deerhome Institution, but subsequent public pressure helped retain the natural area. In 1952, the area was designated a Provincial Wildlife Park to protect the natural habitat and the wildlife. A commercial recreational development within the Sanctuary was proposed in 1966 and approved by the City of Red Deer, but did not materialize. A parcel of land within the Sanctuary was transferred to the City of Red Deer in 1969 for the expansion of the existing cemetery there.

Other land-use conflicts include contamination by sewage and dumping and the proposed construction of a roadway across the north part of the Sanctuary. Sewage drains into the lakes from the Deerhome complex on the south side of the Sanctuary and from the school on the southwest side. Dumping of refuse has occurred at the south end of the Sanctuary.

Since 1975, the Red Deer Regional Planning Commission has proposed the development of a corridor park (Waskasoo Park) along the Red Deer River Valley which would incorporate and expand the boundaries of the Sanctuary to include additional natural area. In 1983, 30 hectares of adjacent land were acquired, and at present, negotiations for the acquisition of additional lands are underway. The Red Deer Parks Department is developing an interpretive program for the

Sanctuary which is to have an interpretive center, a system of interpretation trails and viewing platforms.

A number of evaluations of the Sanctuary have been done since it was established. J.D. Soper recommended in 1939 that the Sanctuary be retained, as did H.R. Webster in 1954. An investigation by CWS in 1966 recommended delisting the Sanctuary primarily because of its minimal value to migratory birds. At present, CWS staff familiar with the Sanctuary support its delisting for the same reason.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The area is also protected by Provincial Wildlife Regulations. City of Red Deer Parks Department staff obtain enforcement assistance from the Red Deer City Police and the R.C.M.P.

10. References:

Canadian Wildlife Service, Western and Northern Region, File No. 410/09.

Mussell, D. and M. White. 1980. Resource inventory for proposed educational natural areas. Unpubl. report, Alberta Energy and Natural Resources, Edmonton. 4 pp. + appendices.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

P.A.R.D. Associates Ltd. 1975. Gaetz Lakes study area: Analysis and proposals. Unpubl. report prepared for Gaetz Lakes Sanctuary Committee and Alberta Housing and Public Works, Red Deer. 57 pp. + appendices.

Hardy, R.M. and Associates Ltd. 1975. Report on geotechnical and hydrological investigations for Gaetz Lake Sanctuary Red Deer, Alberta. Unpubl. report prepared for P.A.R.D. Associates Ltd., Calgary. 27 pp. + appendices.

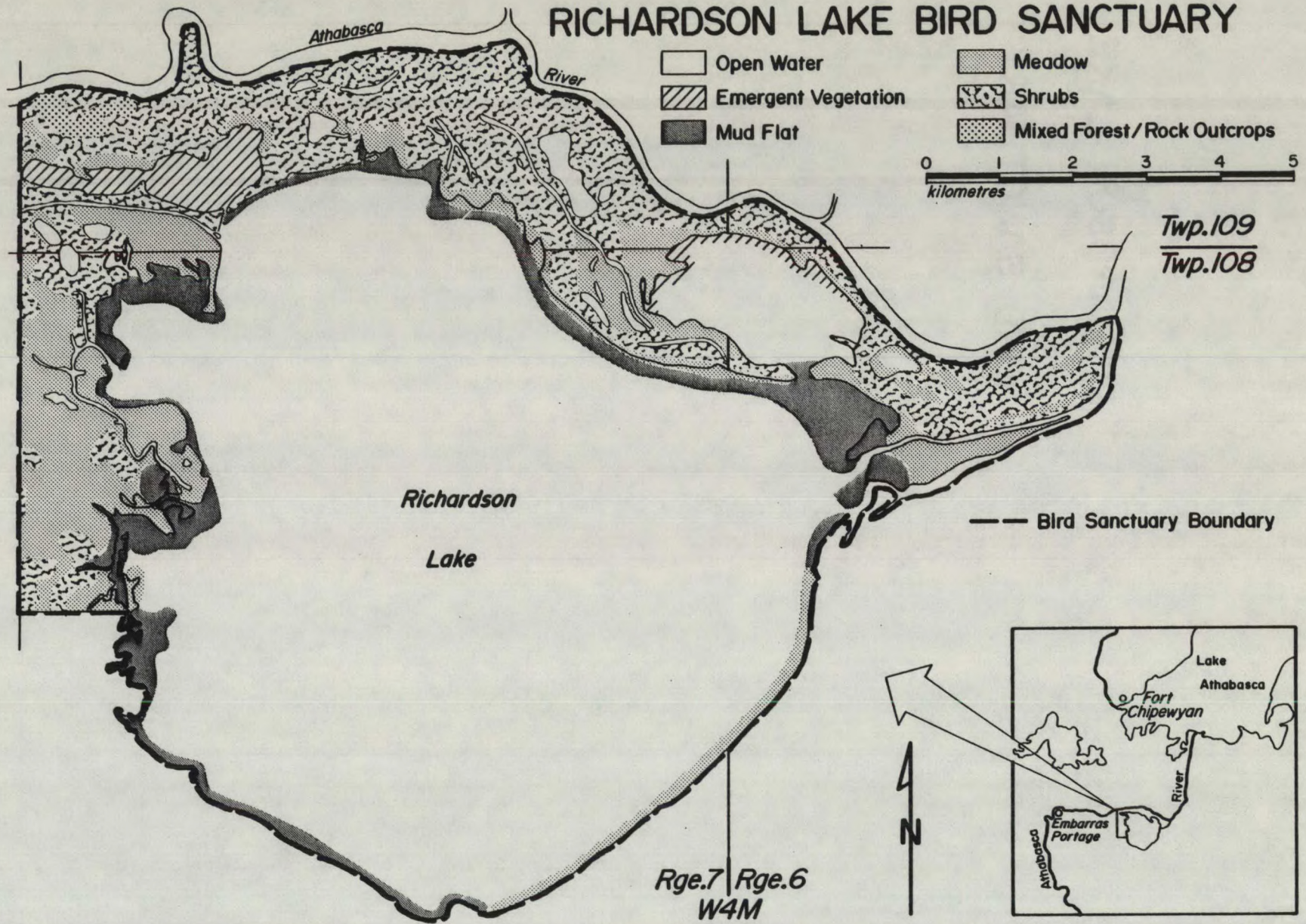
Red Deer Regional Planning Commission. 1983. An analysis of the property owned by Glenmere Farms Ltd. Unpubl. report, City Planning Section, Red Deer Regional Planning Commission, Red Deer. 25 pp. + appendices.

Red Deer Regional Planning Commission. 1982. Waskasoo Park Master Plan. Unpubl. report, City Planning Section, Red Deer Regional Planning Commission, Red Deer. 185 pp.

Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

**RICHARDSON LAKE
BIRD SANCTUARY**

RICHARDSON LAKE BIRD SANCTUARY



RICHARDSON LAKE BIRD SANCTUARY

1. Location: 35 km south of Fort Chipewyan, Alberta
 Lat. 58°24'N Long. 111°4'W
 NTS 1:50,000 Sheet No. 74L/6E, 74L/7
 Legal Description: See Appendix 1

2. Area: Approximately 12,725 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water	60%
Mudflats	5%
Marsh/meadow	15%
Tree/shrubs	20%

5. Description of the Area:

Richardson Lake is part of the Peace-Athabasca Delta, the most northerly "prairie-type" marsh complex in North America. Prior to 1967 when the Peace River began to be controlled by the W.A.C. Bennet Dam, the delta was subjected to annual flooding under natural conditions. This flooding recharged the shallow lakes and perched basins and deposited silt, nutrients and plant seeds. Between 1968 and 1971, the annual summer flooding did not occur resulting in reduced lake water levels by several feet, extensive mudflats and changes in plant cover. While some lakes dried up and others decreased to less than one-half of their former size, the reduction in the size of Richardson Lake was not as severe. In 1970, Richardson Lake decreased in size by 26 percent. Ice jams on the rivers between 1972 and 1974 resulted in the inundation of the delta. Permanent rockfill weirs completed in 1975 on the Riviere des Rochers and the Revillon Coupe have helped restore water levels on the delta, but not to the pre-1968 levels. In May 1984, the water level in Richardson Lake was the lowest on record and mudflats were very extensive. Annual variations in water levels determine the extent of mudflats and emergent zones.

Richardson Lake, somewhat lower in elevation than other lakes in the area, is about 1.2 m deep and freezes to the bottom. The Maybelle River flows into the lake near its only outlet, Jackfish Creek, which flows into the Athabasca River when it is low. During high water levels in the Athabasca River, the water flows into Richardson Lake via Jackfish creek. Sand and silt are deposited in the channel and have formed a small delta on the east side of the lake. Emergent aquatics, recurring along portions of the periphery of the lake and in scattered clumps in other locations, consist of bulrush

(Scirpus spp.) and cattail (Typha latifolia). Submergent vegetation includes pondweed (Potamogeton spp.), watermilfoil (Myriophyllum spp.) and duckweed (Lemna spp.). Exposed portions of the lake and surrounding marsh bottoms have been invaded by reedgrass (Calamagrostis spp.) meadows, marsh cane (Phragmites communis) thickets and willow (Salix spp.). Sedge meadows dominated by Carex atherodes have been replaced to some extent by reedgrass meadows. Tree/shrub vegetation includes balsam poplar (Populus balsamifera), birch (Betula spp.), alder (Alnus spp.), black spruce (Picea mariana), balsam fir (Abies balsamea), willow (Salix spp.), red osier dogwood (Cornus stolonifera), snowberry (Symphoricarpos occidentalis) and low bush cranberry (Viburnum edule).

6. Public Use:

From the early 1960s to the late 1970s, Richardson Lake was commercially fished primarily for walleye and goldeye. During the past several years, sport fishing has occurred largely as a result of guided tours offered by private entrepreneurs.

Residents from nearby Indian Reserves hunt waterfowl in the area. Waterfowl hunters from Fort McMurray are attracted to the area in the fall. Guiding service is available from one of the local Indian Bands.

Two registered traplines (muskrat, fox and wolf) include Richardson Lake.

7. Importance to the Resource:

Prior to the reduced water levels of the Peace-Athabasca Delta, Richardson Lake and other shallow lakes in the area provided good breeding, molting and staging habitat for waterfowl. However, substantially lower water levels caused by the change in the hydrological regime of the area have resulted in the deterioration of the habitat and consequent reduced use by waterfowl. Most of the waterfowl which nest in the area are dabblers, primarily Mallard, Pintail, Wigeon and Shoveler with lesser numbers of Gadwall and Blue-winged and Green-winged teal. From 1969 to 1970, brood production of dabblers and divers (mainly Canvasback and lesser Scaup) decreased by 33 percent on Richardson Lake.

Dabblers and divers use Richardson Lake as a molting and staging area. Snow, Canada, White-fronted and Ross' geese and Tundra Swans also stage on the lake in the fall. In 1970, when water levels were low, aerial surveys identified an average of 18,400 dabblers and 1,900 divers molting in the Athabasca section of the delta (which includes Richardson Lake), and 17,400 dabblers, 3,150 divers and 6,700 geese fall-staging in the same area. Numbers of molting and fall-staging waterfowl by species on Richardson Lake in recent

years are not known.

Other waterbirds reported to nest in the Lake Athabasca region are American Bittern, Semipalmated Plover, Killdeer, Common Snipe, Spotted Sandpiper, Lesser Yellowlegs, Common Loon, and Horned and Red-necked grebes. Summer residents are Semipalmated and Spotted sandpipers; Herring, California, Ring-billed, Franklin's and Bonaparte's gulls; and Common, Arctic, Caspian and Black terns.

A variety of passerines including flycatchers, thrushes, warblers and sparrows breed in the area.

8. Historical Notes and Land-Use Conflicts:

In 1949, J.D. Soper proposed that Richardson Lake be given sanctuary status to protect Ross' geese from hunting in the area. E.S. Huestis, Fish and Game Commissioner for the Province of Alberta, felt that hunting pressure there was not heavy enough to warrant protection of the lake. However, provincial concurrence was obtained when the Federal Government agreed to provide proper supervision of the area. Richardson Lake Bird Sanctuary was established by Order-In-Council P.C. 1949-5989 on November 24, 1949. Four years later, the Sanctuary was expanded to its present size by Order-In-Council P.C. 1953-122.

The major land-use conflict in the area has been the hydroelectric development associated with the Bennet Dam. Remedial measures have been implemented to help restore the previous water levels of some lakes in the delta. An evaluation of the federal bird sanctuaries in Alberta in 1966 suggested that the Richardson Lake Bird Sanctuary should be delisted because it did not support a unique bird population nor an endangered species. CWS staff familiar with the area feel that the Sanctuary should be evaluated to determine its value to the migratory bird resource.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

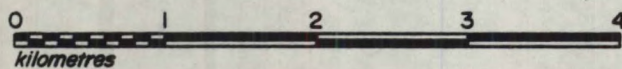
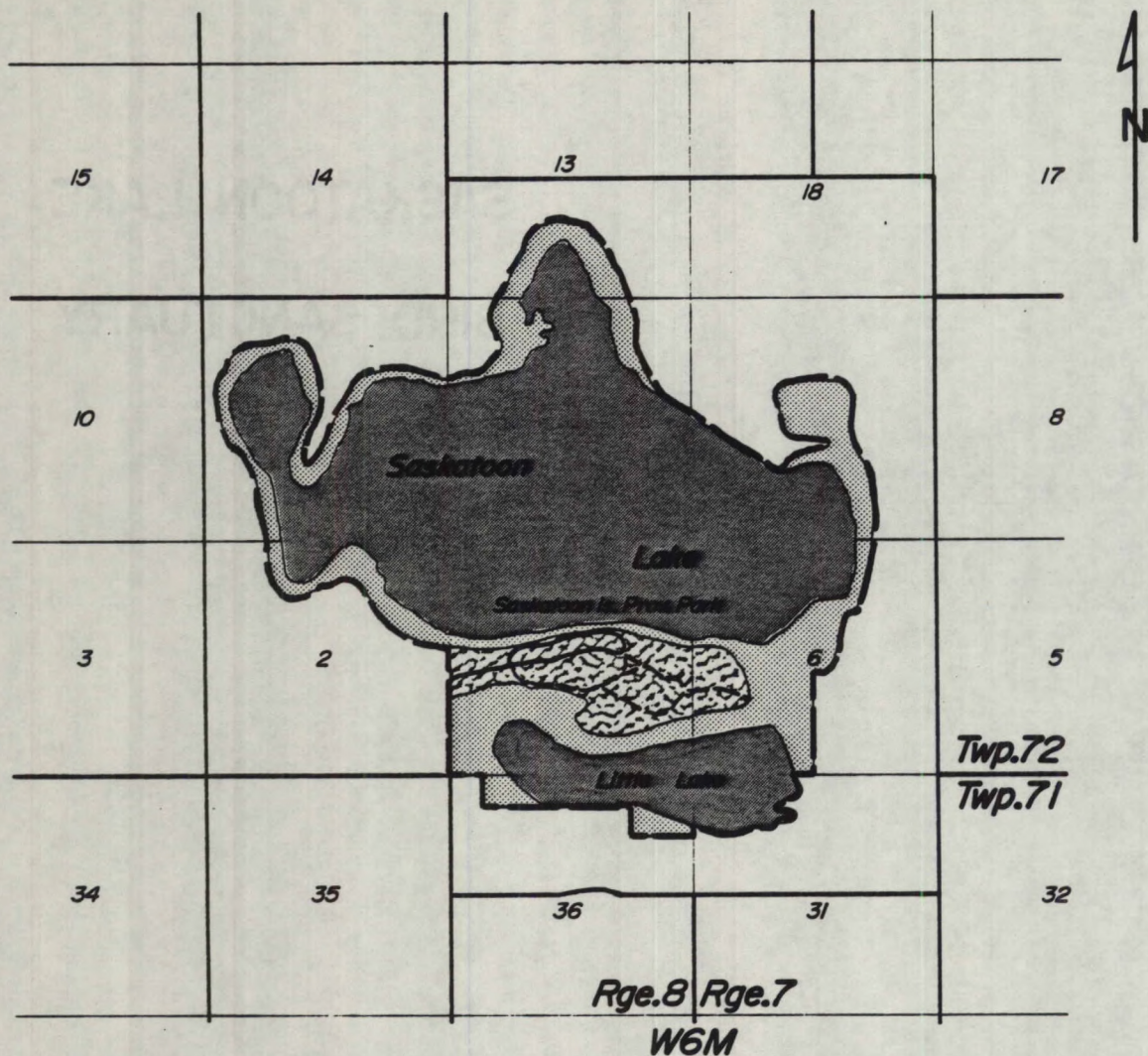
The Alberta Fish and Wildlife Division conservation officer at Fort Chipewyan makes periodic patrols of the Sanctuary in the spring, summer and fall. The Sanctuary is accessible only by boat or aircraft. From about 1954 to the mid-1960s, but apparently not each year, a local Indian was employed as a part-time warden to patrol the Sanctuary. CWS erected a cabin at Richardson Lake in 1957 for the use of personnel conducting investigations in the area.

10. References:

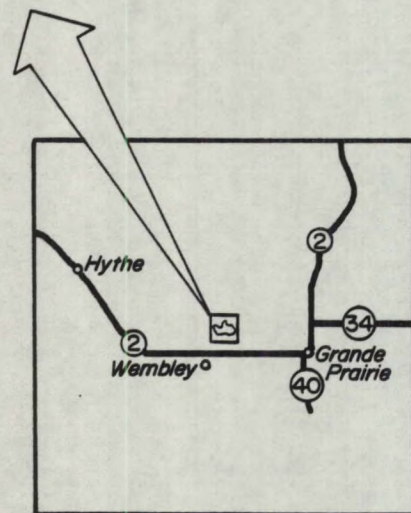
- Allison, L. 1981. Sensitive areas: Literature review, pp. 1-384. In: Mackenzie River Basin Study Report, Supplement 1. Sensitive areas: Literature review. WATDOC References.
- Canadian Wildlife Service, Western and Northern Region, File No. 410/09.
- Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.
- Dirschl, H.J. 1972. Evaluation of ecological effects of recent low water levels in the Peace-Athabasca Delta. Occasional Paper No. 13, Can. Wildl. Serv., Ottawa. 27 pp.
- Gentle, G. 1972. A checklist of plants collected on the Peace-Athabasca Delta, pp. A1-A11. In: The Peace-Athabasca Delta Project, Technical Appendices, Vol. 2: Ecological Investigations.
- Hennan, E. 1972. Status of waterfowl on the Peace-Athabasca Delta, pp. K1-K105. In: The Peace-Athabasca Delta Project, Technical Appendices, Vol. 2: Ecological Investigations.
- Hohn, E.O. 1972. The birds of the Peace-Athabasca Delta and of the Lake Athabasca Region, pp. C1-C33. In: The Peace-Athabasca Delta Project, Technical Appendices, Vol. 2: Ecological Investigations.
- Nieman, D.J. and H.J. Dirschl. 1973. Waterfowl populations on the Peace-Athabasca Delta, 1969 and 1970. Occasional Paper No. 17, Can. Wildl. Serv., Ottawa. 25 pp.
- Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.
- Peterson, E.B., L.M. Allison and R.D. Kabzems. 1981. Alluvial ecosystems of the Mackenzie River Basin. Study Report Supplement 2. 129 pp.
- Soper, J.D. 1952. Investigations concerning Ross' Goose in the Province of Alberta, Canada. Unpubl. report, Can. Wildl. Serv., Edmonton. 22 pp.
- Soper, J.D. 1950. Waterfowl and related investigations in the Peace-Athabasca Delta region of Alberta, 1949. Unpubl. report, Can. Wildl. Serv., Edmonton. 90 pp.
- Townsend, G.H. 1972. Vegetation mapping and topography of the Peace-Athabasca Delta, pp. I1-I23. In: The Peace-Athabasca Delta Project, Technical Appendices, Vol. 2: Ecological Investigations.

**SASKATOON LAKE
BIRD SANCTUARY**

SASKATOON LAKE BIRD SANCTUARY



- Bird Sanctuary Boundary
- Road
- - - Trail
- Open Water
- ▨ Marsh
- ▩ Grass/Shrubs/Trees (Park)



SASKATOON LAKE BIRD SANCTUARY

1. Location: 24 km northwest of Grande Prairie, Alberta
 Lat. 55°13'N Long. 119°05'W
 NTS 1:50,000 Sheet No. 83M/3E
 Legal Description: See Appendix 1

2. Area: Approximately 1,135 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Marsh	32%
Open water	60%
Grassland/shrub/trees	8%

5. Description of the Area:

Saskatoon Lake is located in the boreal parkland ecoregion of northern Alberta. Water levels in the lake, which has an average depth of 2.5 m, are entirely dependent upon runoff from the surrounding gently rolling terrain. No streams flow into or out of the lake. The shoreline varies from muddy and marshy, particularly in the bays, to extensive reaches of stony beach and gravelly boulder-strewn points. At one time, a large bay existed on the south side of the lake. Low water levels over the years has resulted in the bay being cut off from the main lake forming a separate body of water known as Little Lake. Bulrush (Scirpus spp.) and cattail (Typha spp.) occur in small fringes in shallow water along portions of the periphery of the lake. Denser stands of bulrush are found in Little Lake. Spike rush (Eleocharis spp.), sedge (Carex spp.) and lowland grasses occur in abundance in a number of places along the shore. Submergent vegetation is particularly abundant in the shallow water but also is found in the deeper water. Predominant species include pondweed (Potamogeton spp.), water smartweed (Polygonum amphibium), water milfoil (Myriophyllum spicatum) and duckweed (Lemna trisulca). A relatively heavy algal growth (Chara spp.) occurs in the lake.

Saskatoon Island Provincial Park is contained within the Sanctuary. Vegetation on the island, which is actually a peninsula, consists of native and domestic grasses, forbs and an abundance of trees and shrubs including aspen poplar (Populus tremuloides), balsam poplar (P. balsamifera), willow (Salix spp.), saskatoon (Amelanchier alnifolia), chokecherry (Prunus virginiana), red osier dogwood (Cornus stolonifera), low bush cranberry (Viburnum edule), shrub raspberry (Rubus strigosus), snowberry (Symphiocarpus spp.) and rose (Rosa acicularis).

Most of the land surrounding Saskatoon and Little lakes is under cultivation.

6. Public Use:

Saskatoon Lake receives considerable use as a recreation area because of the facilities provided in the Provincial Park. Boating and swimming are common. The abundance of saskatoon shrubs in the park attracts many berry-pickers.

A church camp is located adjacent to the north shore of Saskatoon Lake.

7. Importance to the Resource:

Saskatoon Lake is an important staging area for Tundra and Trumpeter swans as well as ducks including Mallard, Lesser Scaup, White-winged Scoter, Ruddy Duck, Canvasback, Wigeon, Gadwall, Ring-necked Duck and Bufflehead.

Little Lake is one of 45 lakes in the Grande Prairie region where the rare Trumpeter Swan breeds. Annual surveys since 1957 have shown that Little Lake has had a nesting pair of Trumpeters every year since 1957 except 1959 and 1967.

Dabblers and divers nesting in the Sanctuary include Mallard, Pintail, Gadwall, Wigeon, Lesser Scaup, Redhead, Canvasback, White-winged Scoter, Ring-necked Duck and Ruddy Duck. Other water and marsh birds known or believed to nest in the area are Canada Goose, Eared and Horned grebes, Common and Black terns, Franklin's Gull, American Bittern, Sora, and Red-winged, Yellow-headed and Rusty blackbirds. Of the numerous shorebird species observed in the area, only the Killdeer, Black-bellied Plover and Spotted Sandpiper nest there.

The diversity of upland vegetation provides nesting habitat for Common Flicker, Yellow-bellied Sapsucker, Downy Woodpecker, Eastern kingbird, Tree and Barn swallows, Black-capped Chickadee, Warbling Vireo, Yellow and Yellow-rumped warblers, Western Meadowlark, Pine Siskin, several species of sparrow, Ruffed Grouse and several birds of prey.

8. Historical Notes and Land-Use Conflicts:

In 1944, J.D. Soper, Dominion Wildlife officer for the Prairie Provinces, investigated the potential of Saskatoon Lake as a replacement bird sanctuary for Pakowki Lake which had been dry for about 15 years. Soper made a follow-up investigation of Saskatoon lake in 1947 and recommended that Saskatoon Lake be given sanctuary status because of its value for migratory waterfowl and the rare Trumpeter Swan. On April 13, 1948, the

Saskatoon Lake Bird Sanctuary was established by Order-In-Council P.C. 1948-1536.

The primary land-use conflict is the recreational activity encouraged by the Provincial Park. In 1953 and 1957, H.R. Webster, Dominion Wildlife Officer, recommended that the Saskatoon Lake Bird Sanctuary be reduced to contain only that portion (Little Lake) south of the Provincial Park. The basis for this recommendation was the human disturbance by recreationists on Saskatoon Lake.

Recommendations by CWS staff in 1962 and 1966 favored retaining the sanctuary because of its value for geese and swans during migration and its recreational value. In 1968, CWS expressed concern that recreational use of the Sanctuary was disturbing migratory birds.

At present, CWS staff familiar with Saskatoon Lake Bird Sanctuary contend that disturbance by recreationists and berry-pickers continues to be a problem. Increased disturbance is likely to occur as a result of the present upgrading of the Park's recreational facilities and a proposed subdivision near the southeast end of Little Lake.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Provincial Wildlife Regulations provide for no hunting within one-half mile (0.8 km) of Saskatoon and Little lakes until November 1.

In 1979, CWS posted the area with several migratory bird sanctuary signs at access points.

10. References:

Canadian Wildlife Service, Western and Northern Region, File No. 410/09.

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Fairbarns, M., S. Luck and S. Loomis. 1981. Saskatoon Island Provincial Park resource assessment, 1981. Unpubl. report, Alberta Recreation and Parks, Edmonton. 36 pp. + appendices.

Holton, G. 1978. Trumpeter Swan breeding habitat in the Grande Prairie region of Alberta. Preliminary report prepared for Alberta Recreation, Parks and Wildlife, Edmonton. 13 pp. + appendices.

Lumbis, K. 1984. Saskatoon Lake Bird Sanctuary bird observations, 1981, 1982, 1983 and 1984. Unpubl. data.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Sawyer, G. 1981. Assessment of historical resources in Saskatoon Island Provincial Park. Unpubl. report, Alberta Recreation and Parks, Edmonton. 6 pp. + appendices.

Soper, J.D. 1944. Saskatoon Lake, Alberta. Unpubl. report, Can. Wildl. Serv., Edmonton. 5 pp.

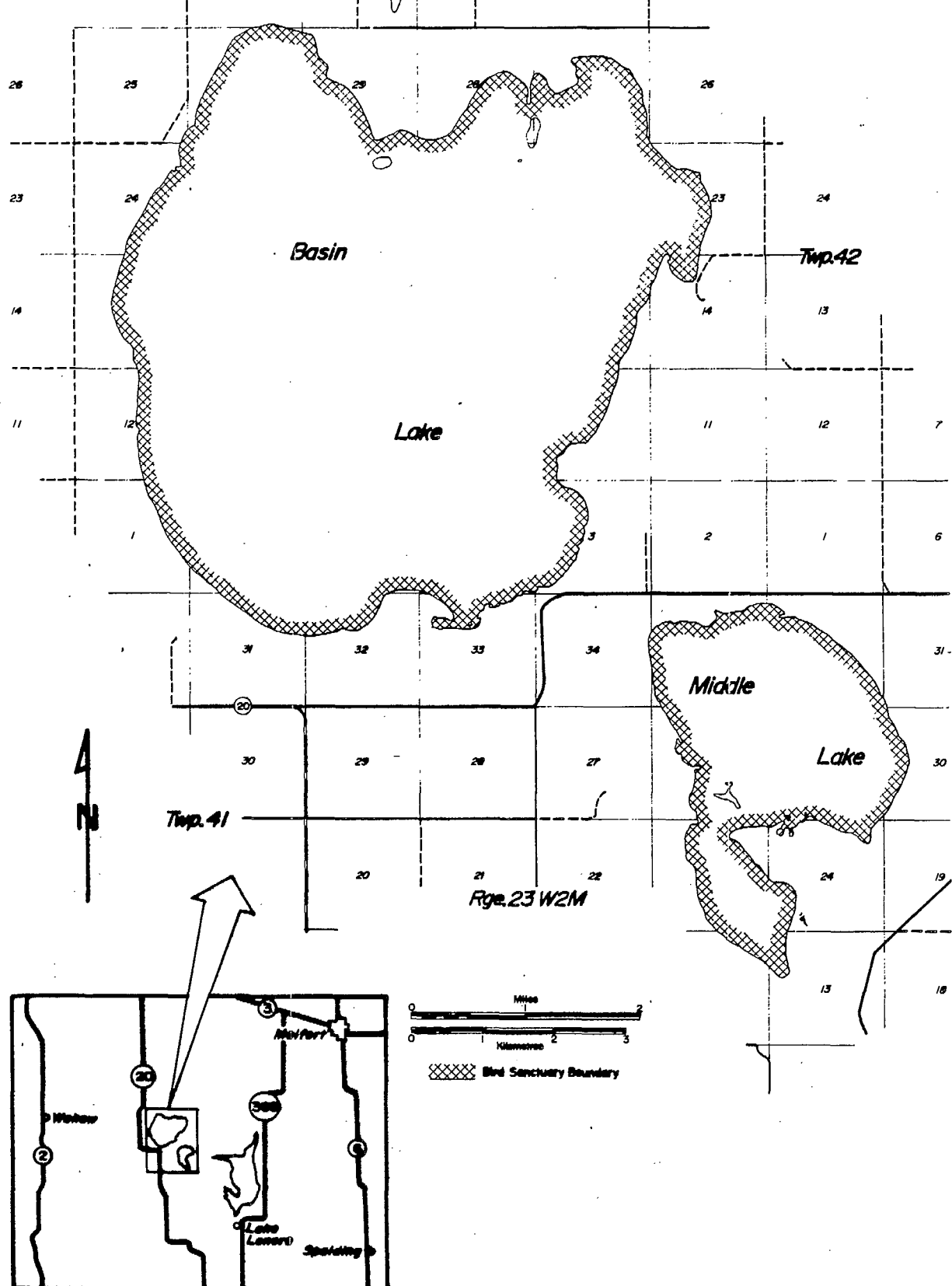
Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

Webster, H.R. 1957. Saskatoon Lake Bird Sanctuary. Unpubl. report, Can. Wildl. Serv., Edmonton.

BASIN and MIDDLE LAKES

BIRD SANCTUARY

BASIN and MIDDLE LAKES BIRD SANCTUARY



BASIN AND MIDDLE LAKES BIRD SANCTUARY

1. Location: 40 km north of Humboldt, Saskatchewan
 Lat. 52°33'N Long. 105°10'W
 NTS 1:50,000 Sheet No. 73A/11
 Legal Description: See Appendix 1

2. Area: Approximately 8,720 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water and mudflats	98%+
Wet meadow/marsh	1%
Rock/sand islands	1%

5. Description of the Area:

The Basin and Middle Lakes Bird Sanctuary consists of two relatively large saline lakes 1.5 km apart located in the boreal parkland ecoregion of Saskatchewan. Both lakes are subject to severe water level fluctuations as spring runoff and seasonal rains are their major water source. Basin Lake, which has an average depth of 9 m, has several islands, the number of which depends upon water conditions. Middle Lake, considerably more shallow with an average depth of 1 m, has one island.

Basin Lake has extensive rocky and sandy areas along its shoreline, a dry meadow zone or mudflats, and is surrounded by aspen (Populus tremuloides), willow (Salix spp.) and some white spruce (Picea glauca). The shoreline of Middle Lake is similar, but extensive wet meadow zones occur on the east and south shores.

Except for thin scattered stands of bulrush (Scirpus spp.), Basin Lake is essentially void of emergent vegetation. Although most of Middle Lake is also open water, good stands of cattail (Typha latifolia) and bulrush (Scirpus spp.) occur in the shallow marshy bay on the south side of the lake. A semi-flooded wet meadow of sedge (Carex spp.) and willow (Salix spp.) occurs on the east shore which has very little relief. Submergent aquatic plants are largely pondweeds (Potamogeton spp.), occurring in isolated stands in the open water of both lakes and in association with hornwort (Ceratophyllum demersum) and water milfoil (Myriophyllum spp.) in the marshy area of Middle Lake.

Basin Lake and the surrounding uplands are a proposed IBP site.

6. Public Use:

The major public use of the area is waterfowl hunting on fields outside the Sanctuary boundary. Both lakes are heavily used by fall staging ducks and geese.

Fishing has occurred on Basin Lake in the past (1950s to 1970s) when the Saskatchewan Department of Natural Resources stocked the lake with Whitefish fry every two to three years. Middle Lake is too shallow and saline for fish.

Other recreational activities such as swimming, boating and picnicking are minimal. No recreational facilities exist to encourage these uses.

7. Importance to the Resource:

This Sanctuary is a major staging area for waterfowl and swans. In the fall, Basin Lake attracts up to 20,000 ducks, 400 Canada Geese, and 600 Tundra Swans while Middle Lake supports half these numbers. Breeding populations of ducks, both divers and dabblers, and Canada Geese on both lakes are restricted by the lack of suitable nesting habitat. Several hundred ducks, primarily divers, and geese use the lakes during their molting period.

White Pelicans and Double-crested Cormorants nest on a small island on Basin Lake. Other waterbirds known or believed to breed on the lakes include Horned, Eared, Western and Red-necked grebes; Ring-billed and California gulls; and Black and Common terns. Over 20 shorebird species have been observed using the area. Common breeders are American Avocet and Killdeer. Suspected breeders are Marbled Godwit, Willet, Piping Plover, Spotted and Upland sandpipers, and Wilson's Phalarope.

Other species known or believed to nest in the area include Horned Lark; Cedar Waxwing; Clay-colored, Vesper, Savannah, Baird's, Le Conte's and Song sparrows; Eastern Kingbird; Barn Swallow; Sprague's Pipit; Red-eyed Vireo; Western Meadowlark; American Goldfinch; Red-winged and Brewer's blackbirds; Brown-headed Cowbird; Northern Harrier; Red-tailed Hawk and American Kestrel.

8. Historical Notes and Land-Use Conflicts:

On May 18, 1915, all vacant quarter sections immediately adjacent to Basin Lake were reserved by the Minister of the Interior as a potential bird sanctuary. Shortly after, Middle Lake and adjacent vacant lands were reserved.

In 1917 and 1918, Dr. R.M. Anderson, a zoologist with the Geological survey and a member of the Advisory Board in Wildlife Protection recommended that Basin and Middle lakes be

considered for permanent sanctuary status. On November 9, 1925, the Basin and Middle Lakes Bird Sanctuary was established by Order-In-Council P.C. 1925-345. In 1947, two wildlife officials, one federal and the other provincial, inspected the Sanctuary to determine the effect of drought on the value of the Sanctuary. It was decided that the Sanctuary would be retained. A further inspection of the Sanctuary in 1949-50 resulted in the recommendation and approval that the Sanctuary boundary be revised to include only the water area and islands therein. This meant the loss of 967 ha of upland nesting cover.

Follow-up evaluations, carried out in 1957, 1971, and 1972, concluded that the Sanctuary was still an important fall staging area for waterfowl. Both the 1957 and 1972 evaluations further emphasized that there was a need to protect water bodies in that part of Saskatchewan where hunting pressure was heavy.

Despite periodic crop depredation losses caused by fall staging waterfowl on Basin and Middle lakes, several local farmers have supported the retention of the Sanctuary.

During years of low water levels, haying and grazing encroach on the land previously covered by water.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The Humboldt, Saskatchewan detachment of the R.C.M.P. patrols the area in the spring, summer and fall. Conservation officers of the Saskatchewan Department of Parks and Renewable Resources patrol the area during the hunting season.

10. References:

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Cranna, M. D. and J. S. Rowe. 1974. Natural areas in Saskatchewan. International Biological Program - Conservation Terrestrial, Summation Report, Saskatoon. 111 pp.

Gollop, J.B. 1957. Basin and Middle Lakes Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 2 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan

1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H. J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

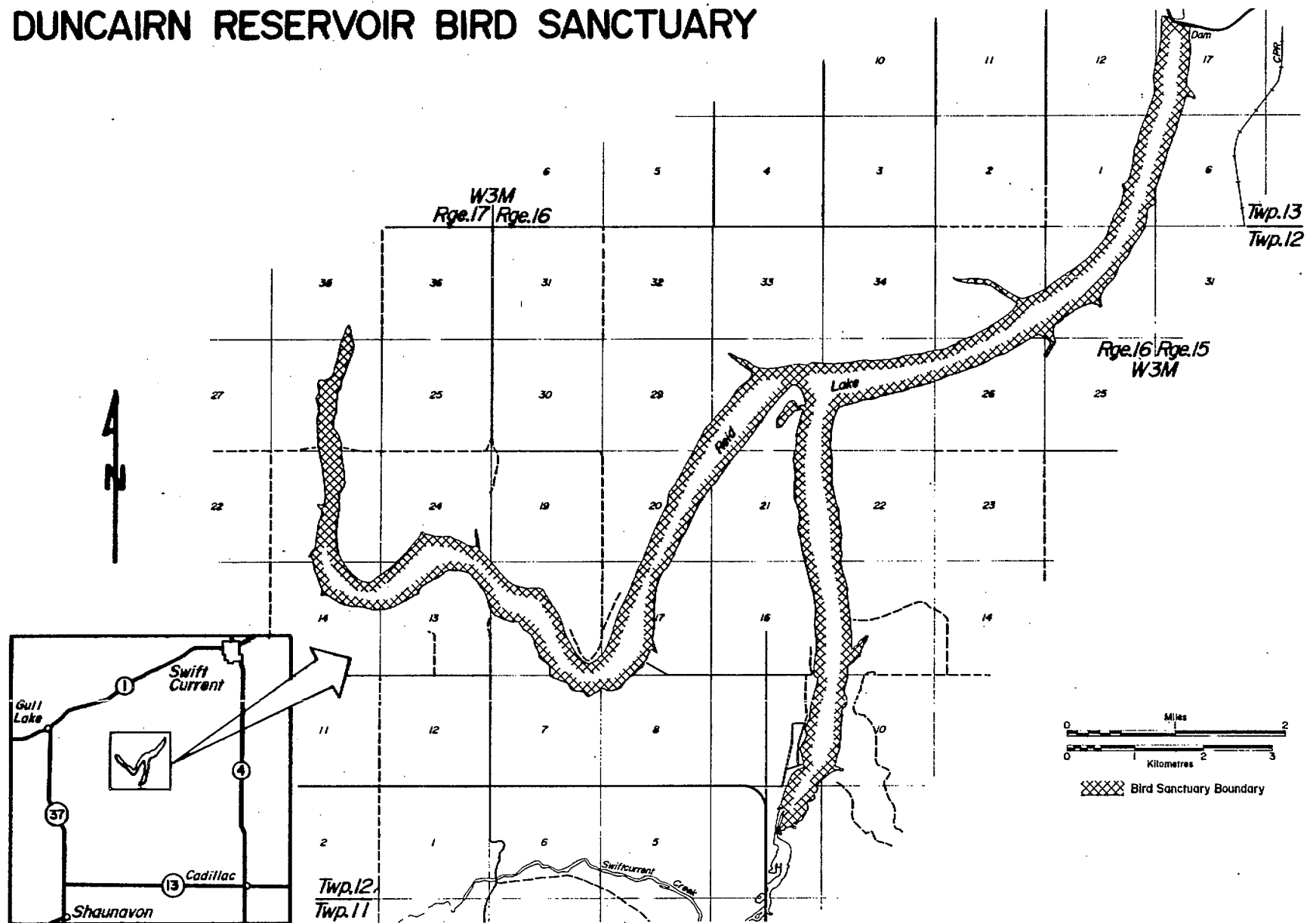
Soper, J. D. 1948. Report on joint inspections of bird sanctuaries in Saskatchewan during the season of 1947 together with recommendations. Unpubl. report, Can. Wildl. Serv., Edmonton. 70 pp.

Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

DUNCAIRN RESERVOIR

BIRD SANCTUARY

DUNCAIRN RESERVOIR BIRD SANCTUARY



DUNCAIRN RESERVOIR BIRD SANCTUARY

1. Location: 32 km southwest of Swift Current, Saskatchewan
 Lat. 50°02'N Long. 108°06'W
 NTS 1:50,000 Sheet No. 72K/11E, 72F/16E
 Legal Description: See Appendix 1

2. Area: Approximately 1,546 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water and mudflats 100%

5. Description of the Area:

Duncairn Reservoir, also known as Reid Lake, is an impoundment formed by a Prairie Farm Rehabilitation Administration (PFRA) dam on the Swift Current Creek. Located in the semi-arid mixed-grass prairie ecoregion of Saskatchewan, the Y-shaped reservoir is relatively deep and is capable of maintaining favorable water levels except during periods of extreme drought. There are no islands in the reservoir. For the most part, the banks of the reservoir are steep, rocky and sandy. Vegetation on the banks consists of grasses (Stipa spartea, Agropyron spp.) and western snowberry (Symphoricarpus occidentalis). Mudflats of variable width between the banks and the water have scattered clumps of willow (Salix spp.), sedge (Carex spp.), water foxtail (Alopecurus spp.), and a variety of other grasses.

Limited emergent aquatics, largely sedge, exist during high spring water levels, but are entirely lacking at normal water levels because of the steep shoreline and extensive wave action. Isolated beds of pondweeds (Potamogeton spp.) are present. Blue-green algal blooms are apparently an annual occurrence.

Surrounding uplands are pasture, hayland and cereal cropland much of which is irrigated. Sixteen public roads provide access to the Sanctuary.

6. Public Use:

Fall staging ducks and geese on the reservoir ensure good waterfowl hunting on adjacent lands.

Use of the reservoir itself is largely limited to fishing for pike, pickerel and perch. The Saskatchewan Department of Natural Resources stocked the reservoir with pickerel fry every five years for a number of years. Brown trout fry

stocking efforts in 1954 and 1955 were not highly successful. Most of the boating activity is for fishing.

Very little other recreational use is made of the reservoir, apparently because of the steep rocky shorelines and frequent blue-green algal blooms. A few cottages and boat docks are located on the south arm of the reservoir. Lake Pelletier, located 16 km east, is more attractive to recreationists; boating, swimming and picnicking facilities are maintained.

7. Importance to the Resource:

Duncairn Reservoir is an important fall staging area for ducks (mainly Mallard), geese and Tundra Swans in the drought-prone, semi-arid region. Inadequate habitat limits the reservoir's value as a breeding and molting area.

The lack of islands makes the reservoir unattractive as a breeding site for colonial nesting birds, however, White Pelicans, gulls, terns and Great Blue Herons use the reservoir during the summer. Shorebirds known or believed to nest in the area are Killdeer, Spotted Sandpiper, Willet and Wilson's Phalarope. Summer residents include Semipalmated, Least, Baird's and Pectoral sandpipers; Sanderling; and American Avocet. Other species commonly nesting in the area are Horned Lark, Bank and Cliff swallows and Brown-headed Cowbird. Summer residents suspected of breeding there are Eastern Kingbird; Sprague's Pipit; Western Meadowlark; Clay-colored, Vesper, and Savannah sparrows; and Red-winged and Brewer's blackbirds.

8. Historical Notes and Land-Use Conflicts:

Duncairn Reservoir was one of five sanctuaries established in 1948 by Order-In-Council P.C. 1948-5070 to replace five other sanctuaries that had become unsuitable as a protected migratory bird area because of drought.

Evaluations of the Sanctuary were made by the Canadian Wildlife Service in 1957, 1971 and 1972. The 1957 evaluation recognized the importance of the Sanctuary for fall staging waterfowl and its high recreation potential, and recommended that the Sanctuary be retained. On the basis of the minimal waterfowl production and the minimal use by colonial nesting birds, the 1971 investigation recommended abolishing the Sanctuary despite its value as a fall staging area for waterfowl. The 1972 investigation recommended that the Sanctuary be retained because of its value for staging waterfowl in the drought-prone area of Saskatchewan and its value for public use.

Crop depredation by waterfowl is not considered a serious problem in the area. The major land-use conflicts are intensive grazing of the adjacent uplands and use of the water

in the reservoir for irrigation.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The Swift Current, Saskatchewan detachment of the R.C.M.P. patrol the area in the summer and fall. Conservation officers of the Saskatchewan Department of Parks and Renewable Resources patrol the area in the fall.

10. References:

Dzubin, A. 1957. Duncairn Reservoir Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

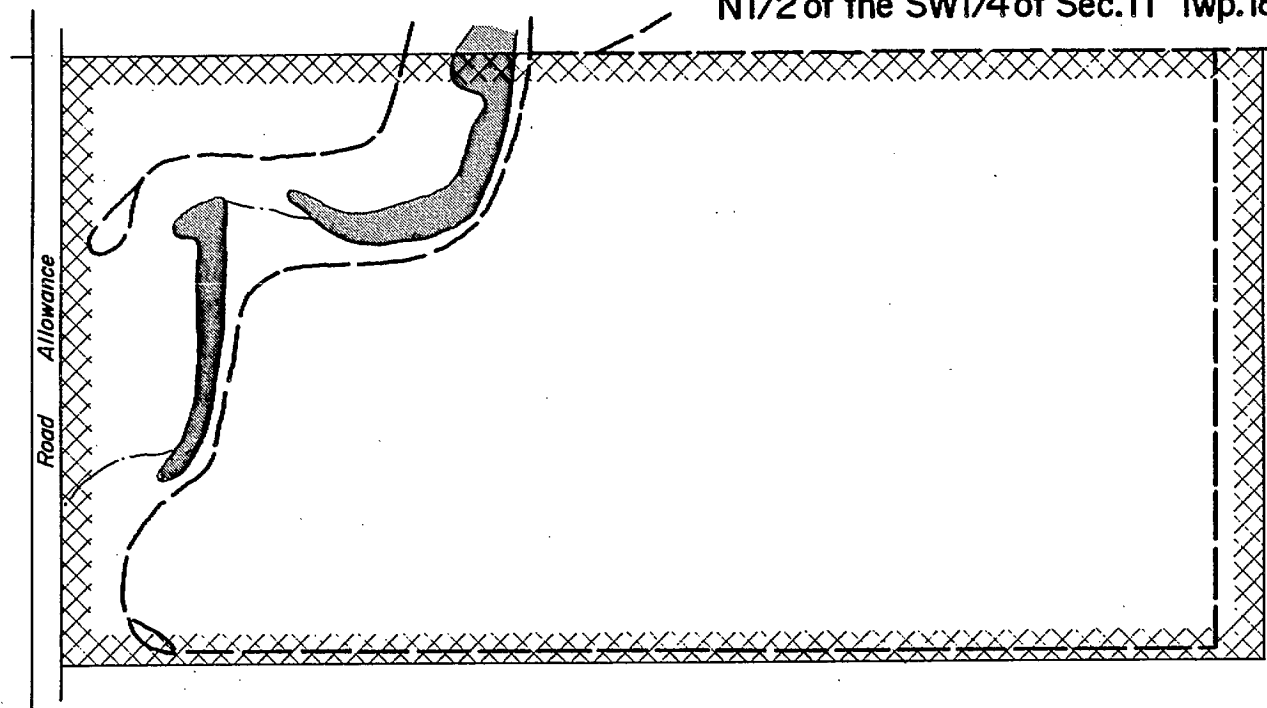
Soper, J.D. 1948. Report on joint inspections of bird sanctuaries in Saskatchewan during the season of 1947 together with recommendations. Unpubl. report, Can. Wildl. Serv., Edmonton. 70 pp.






Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

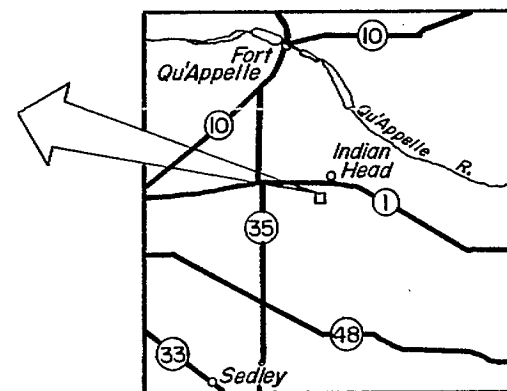
**INDIAN HEAD
BIRD SANCTUARY**

INDIAN HEAD BIRD SANCTUARY

N1/2 of the SW1/4 of Sec.11 Twp.18 Rge.13 W2M



-  Bird Sanctuary Boundary
-  Gravel Road
-  Permanent Water
-  Drainage
-  Tree Nursery



INDIAN HEAD BIRD SANCTUARY

1. Location: 2 km south of Indian Head, Saskatchewan
 Lat. 50°30'N Long. 103°42'W
 NTS 1:50,000 Sheet No. 62L/12E
 Legal Description: See Appendix 1

2. Area: 32 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Wetland	8%
Tree nursery	92%

5. Description of the Area:

The Indian Head Bird Sanctuary covers part of the Canada Agriculture Experimental Farm Tree Nursery which lies in the mixed-grass prairie ecoregion of Saskatchewan. Within the Tree Nursery are three wetlands created by dams on the Indian Head Creek. The impounded water from the reservoirs is used for irrigating the trees and shrubs grown at the Tree Nursery. Only two of the reservoirs are in the Sanctuary. The moderately steep shorelines are vegetated largely by aspen (Populus tremuloides), maple (Acer negundo) and willow (Salix spp.). A small band of mudflat and wet meadow occurs at the edge of the water. Very little emergent vegetation exists. Submergent aquatics consist of pondweed (Potamogeton spp.) and water crowfoot (Ranunculus spp.). One small man-made island is found in the second wetland.

Most of the upland portion of the Sanctuary is cultivated land for growing trees and shrubs. Surrounding lands are under cultivation. One public road provides access to the Sanctuary.

6. Public Use:

The Sanctuary is visited by a relatively large number of people whose main interest is the Tree Nursery. Wildlife observations by visitors are largely incidental. A picnic area is maintained by the Department of Agriculture for the public.

7. Importance to the Resource:

Waterfowl use of the Sanctuary is very minimal because of habitat limitations and frequent human disturbance. A pair of Canada Geese nest on the island in the wetland.

Except for a few shorebirds and several passerine species, the

Sanctuary receives little use by other migratory birds.

8. Historical Notes and Land-Use Conflicts:

The Tree Nursery at the Indian Head Experimental Farm, established in 1902 by the Federal Department of the Interior, was given bird sanctuary status on May 5, 1924 by Order-In-Council P.C. 1924-732. In 1948, the Sanctuary was inspected by two wildlife officials to determine the effect of drought on the value of the Sanctuary. It was recommended that the Sanctuary be retained because of its value to migratory birds. A further inspection in 1949-50 recommended that the uplands surrounding the water area remain as part of the Sanctuary.

The major land-use conflicts are the use of the water for irrigation and the high visitor use of the area.

The Canadian Wildlife Service evaluated the Sanctuary in 1957, 1971, and 1972. Each of these evaluations recommended that the Sanctuary be abolished because of its limited value to migratory waterfowl and minimal recreation potential. The 1972 evaluation concluded that abolishment of the Sanctuary would not affect the public use of the area because its primary attraction is the Tree Nursery.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The area is patrolled by the Indian Head, Saskatchewan detachment of the R.C.M.P.

10. References:

Dzubin, A. 1957. Indian Head Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 2 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl.

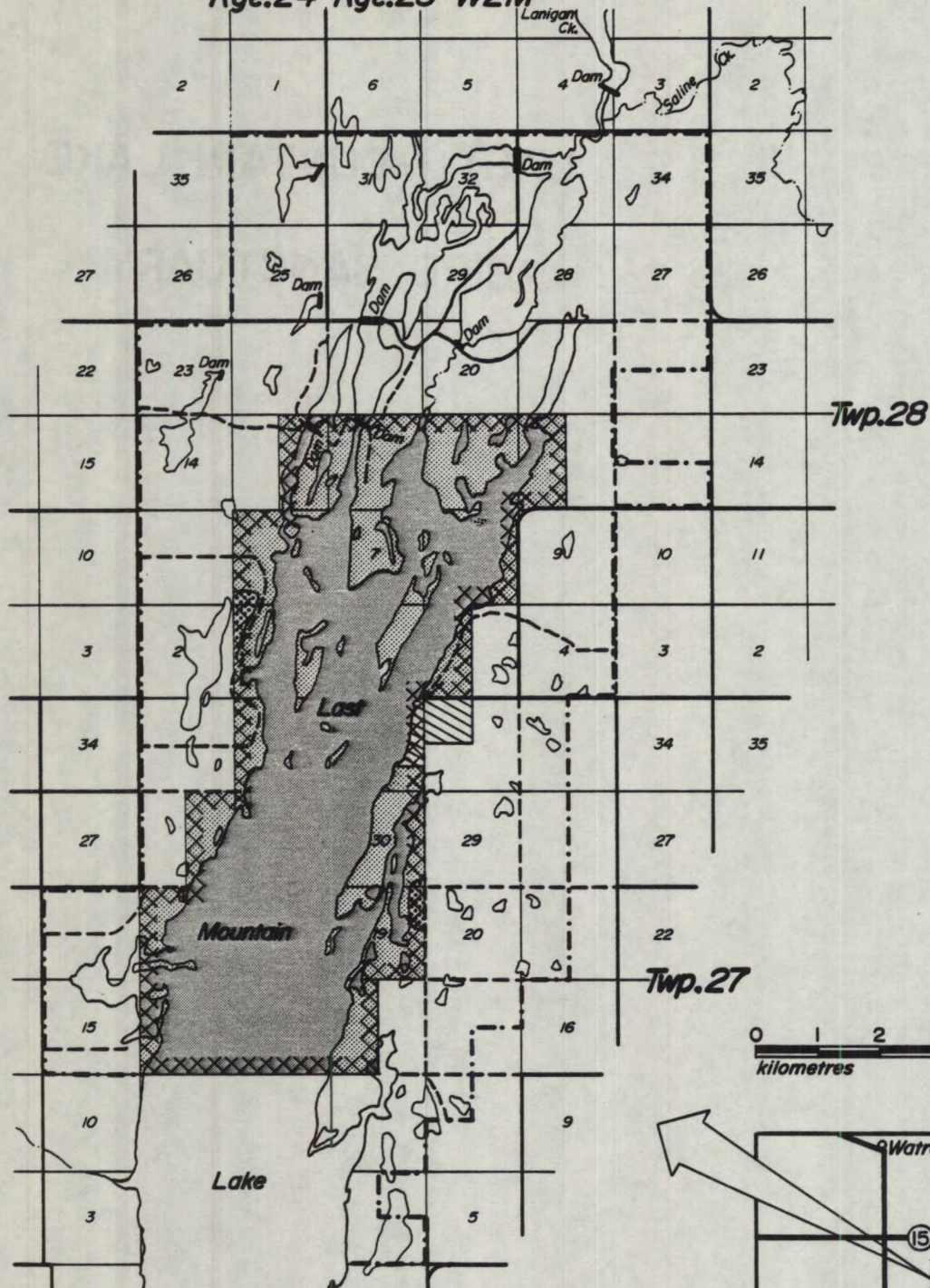
Serv., Saskatoon. 3 pp.

Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

**LAST MOUNTAIN LAKE
BIRD SANCTUARY**

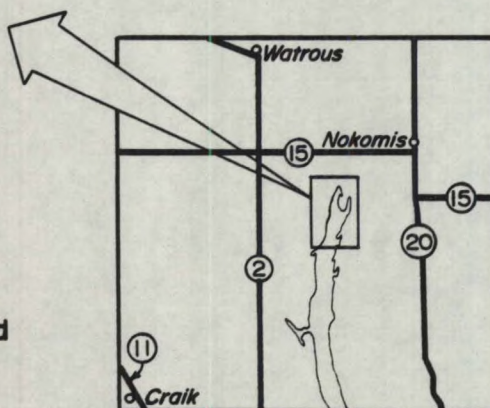
LAST MOUNTAIN LAKE BIRD SANCTUARY

Rge.24 Rge.23 W2M



0 1 2 3 4 5
kilometres

- Management Unit Boundary
- ▨ Bird Sanctuary Boundary
- Open Water and Marsh
- ▨ Grassland
- ▨ Cultivated Land
- ▨ Regional Park



LAST MOUNTAIN LAKE BIRD SANCTUARY

1. Location: 165 km southeast of Saskatoon, Saskatchewan
 Lat. 51°22'N Long. 105°12'W
 NTS 1:50,000 Sheet No. 72P/6E
 Legal Description: See Appendix 1
2. Area: 4,736 hectares
3. Land Ownership:
 Provincial Crown Land and Federal Crown Land
4. Major Habitat Types:

Open water and marsh	68%
Native grassland	30%
Cultivated land	1%
Park	1%

5. Description of the Area:

The Last Mountain Lake Bird Sanctuary, which includes the north end of a large, natural lake and surrounding uplands, is within the Last Mountain Lake Cooperative Wildlife Area located in the mixed-grass prairie ecoregion of Saskatchewan. Runoff water enters the lake via Lanigan and Saline creeks at the north end, Lewis Creek on the west side, and the Arm River at the southwest end. The outlet at the south end is Long Lake Creek which flows into the Qu'Appelle River. A dam on the south end of the lake helps control the depth of the lake which also serves as a spring runoff reservoir for the Qu'Appelle River basin. Water control structures, constructed by Ducks Unlimited (Canada) in the north part of the lake, permit water level manipulation in this part of the lake. Several natural islands and numerous bays and peninsulas exist in the lake.

Marshland rims much of the north end of the lake and the many small potholes. Emergents consist of dense stands of bulrush (Scirpus spp.), cattail (Typha latifolia) and sedges (Carex spp.), particularly in the shallow water. Submergent vegetation is largely water crowfoot (Ranunculus spp.), and water milfoil (Myriophyllum spp.). Beds of pondweed (Potamogeton pectinatus and Ruppia maritima) are present in the deeper water.

Much of the shoreline within the Sanctuary boundaries of Last Mountain Lake are sand with several gravelly rocky tracts. Fluctuating water levels result in extensive mudflats at the north end of the lake. Uplands include extensive alkali areas on low-lying grassland and native prairie with rose (Rosa spp.), western snowberry (Symphoricarpus occidentalis), buffalo berry (Shepherdia argentea), an abundance of forbs,

and scattered clumps of aspen (Populus tremuloides) and willow (Salix spp.).

Part of the Last Mountain Regional Park is within the boundaries of the Sanctuary. The Last Mountain Lake Cooperative Wildlife Area headquarters complex is located outside the Sanctuary boundary. Most of the privately-owned land surrounding the lake is under cultivation. At least 15 public roads provide access to the Sanctuary.

All of the Last Mountain Lake Bird Sanctuary has IBP status as important wildlife lands. In 1982, Last Mountain Lake was designated as a wetland of international importance (RAMSAR Convention) for waterfowl and other wildlife.

6. Public Use:

Large numbers of fall staging Sandhill Cranes and waterfowl provide good hunting on agricultural fields outside the Sanctuary.

Both sport and commercial fishing are permitted within the Sanctuary. Sport fishing is a popular summer and winter activity at Last Mountain Lake which supports a high population of fish. Of the more than 15 species of fish in the lake, pickerel, perch and northern pike are the preferred game species. Commercial fishing is restricted to non-game species such as buffalo fish, whitefish and cisco.

Other public use of the Sanctuary consists of boating, swimming, picnicking, bird-watching and photography. A self-guiding auto tape tour helps "interpret" the area's importance for wildlife. Guided tours for school groups are provided on request. In addition to the recreational facilities and cottages in the Regional Park, several other undeveloped and developed beaches exist within the Sanctuary.

Public use of the area continues year around. Snowmobiling is popular in the winter.

7. Importance to the Resource:

The northern portion of Last Mountain Lake is a major staging area for waterfowl and Sandhill Cranes. Spectacular populations of ducks, geese, and Sandhill Cranes use this area during spring and fall migration. The rare Whooping Crane has been sighted on several occasions during spring and fall migrations. This part of the lake also provides breeding and molting habitat for dabblers and divers, and is particularly important during periods of drought.

Colonial nesting birds which breed on the islands in the lake include the Double-crested Cormorant, Ring-billed and California gulls, and Common and Caspian terns. White

Pelicans use the area, but have nested there on only two occasions (1972 and 1984) since 1954. Other water birds that breed in the area include Horned, Eared, Pied-billed and Western grebes; Black-crowned Night Heron; and a variety of shorebirds. Over 90 of more than 220 bird species recorded on the north end of Last Mountain Lake and vicinity breed there, including the endangered Piping Plover. Year around upland wildlife species include the Sharp-tailed Grouse, Hungarian Partridge, red fox, badger, coyote, jack rabbit and white-tailed deer. The marshes, streams, and shallow waters of the lake are important fish spawning areas.

8. Historical Notes and Land-Use Conflicts:

Last Mountain Lake Bird Sanctuary is North America's first bird sanctuary. On June 8, 1887, by Order-In-Council P.C. 1887-1181, approximately 2,500 acres adjacent to the shoreline at the north end of the lake were reserved from sale and settlement as breeding grounds for wildfowl. In 1917, under the Migratory Birds Convention Act, the reserved area became the Last Mountain Lake Bird Sanctuary.

In 1917 and 1918, Dr. R.M. Anderson, a zoologist with the Geological Survey, evaluated the Last Mountain Lake Bird Sanctuary and recommended that it be retained because of its breeding habitat for waterfowl, cormorants and gulls. In 1947-48, the Sanctuary was inspected by two federal and provincial wildlife officials to determine the effect of drought on the value of the Sanctuary. Because of the lake's permanency during drought, the protected area was retained as a sanctuary. A further inspection of the Sanctuary in 1949-50 to determine if only the water area should be protected resulted in the recommendation and approval that the Sanctuary boundary remain unchanged.

Follow-up evaluations in 1957, 1971 and 1972 concluded that the Sanctuary was of considerable value to migratory birds and recommended that the Sanctuary be retained. The 1957 and 1972 evaluations also concluded that public use of the Sanctuary should be compatible with migratory bird use. The Regional Park, established in 1961 by the Government of Saskatchewan, contributes to the high recreational use of the lake. Some recreational activities, such as boating, may be a major disturbance factor to colonial nesting birds. Buffer zones around the islands and peninsulas have been recommended to reduce the disturbance.

Prior to the establishment of the Last Mountain Lake Cooperative Wildlife Area in 1968, depredation of cereal grain crops by Sandhill Cranes and waterfowl was a serious problem on lands surrounding the lake. Since then, lure crops on the Cooperative Wildlife Area and scaring activities on private land have largely alleviated the problem.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The resident manager of the Last Mountain Lake Cooperative Wildlife Area regularly patrols the area. Additional patrols are carried out by the Saskatchewan Department of Parks and Renewable Resources and the R.C.M.P.

10. References:

Allison, L.O. 1978. A five-year management plan for the Last Mountain Lake Wildlife Management Unit. Prepared for the Can. Wildl. Serv., Saskatoon. 175 pp.

Anonymous. 1982. Canadian sites designated as Wetlands of International Importance. Unpubl. report, Can. Wildl. Serv., Ottawa. 89 pp.

Anweiler, G.G. 1970. The birds of the Last Mountain Lake Wildlife Area, Saskatchewan. Blue Jay 28(2): 74-83.

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Cranna, M.D. and J.S. Rowe. 1974. Natural areas in Saskatchewan. International Biological Program - Conservation Terrestrial, Summation Report, Saskatoon. 111 pp.

Dale, B.C. 1984. Birds of grazed and ungrazed grasslands in Saskatchewan. Blue Jay 42(2): 102-105.

Dale, B.C. 1983. Habitat relationships of seven species of passerine birds at Last Mountain Lake, Saskatchewan. M.Sc. Thesis, Univ. Regina. 119 pp.

Dzubin, A. 1957. Last Mountain Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 4 pp.

Hatfield, J.P. 1973. Pelicans return to Last Mountain Lake. Blue Jay 31(2): 98.

Hatfield, J.P. 1971. Annual report, Last Mountain Lake Wildlife Area, Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 32 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Roney, K. and M. Hlady. 1984. 1982 census of Saskatchewan White Pelican and Double-crested Cormorant colonies. Blue Jay 42(2): 77-82.

Soper, J.D. 1948. Report on joint inspections of bird sanctuaries in Saskatchewan during the season of 1947 together with recommendations. Unpubl. report, Can. Wildl. Serv., Edmonton. 70 pp.

Stephen, W.J.D. 1967. Bionomics of the Sandhill Crane. Report Series No. 2, Can. Wildl. Serv., Ottawa. 48 pp.

Vermeer, K. 1970. Colonies of Double-crested Cormorants and White Pelicans in Saskatchewan. Can. Field-Nat. 84: 39-42.

White, T. 1981. Observations at Pelican Point. Blue Jay 39(4): 248-249.

**LENORE LAKE
BIRD SANCTUARY**

LENORE LAKE BIRD SANCTUARY



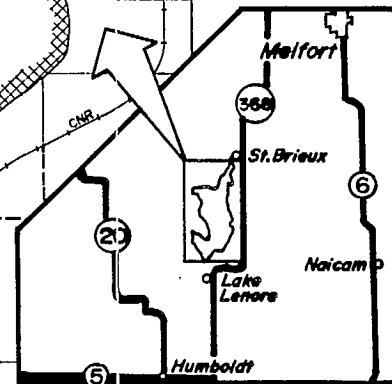
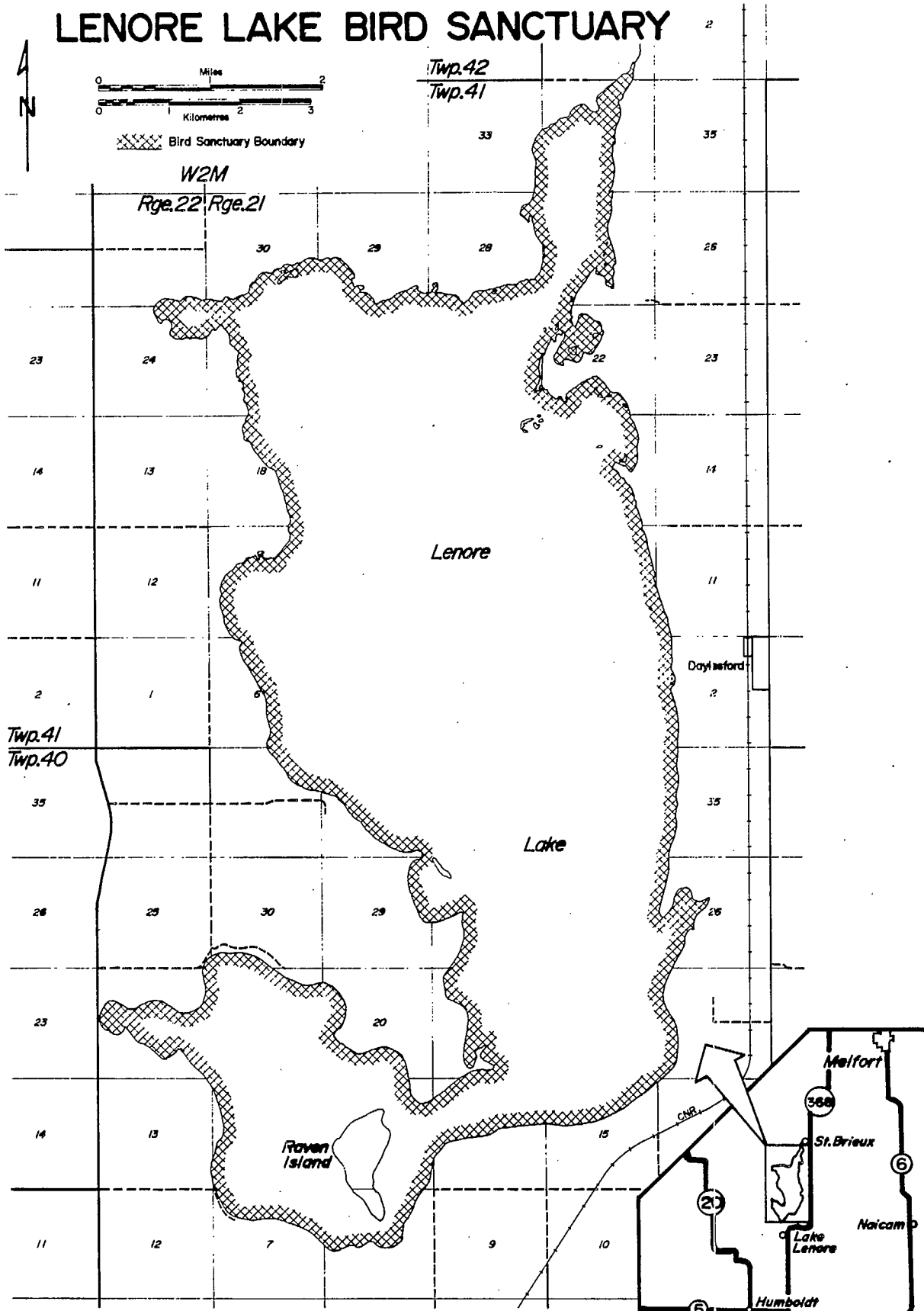
XXXX Bird Sanctuary Boundary

W2M

Rge.22 Rge.21

Twp.42

Twp.41



LENORE LAKE BIRD SANCTUARY

1. Location: 25 km north of Humboldt, Saskatchewan
 Lat. 52°30'N Long. 105°00'W
 NTS 1:50,000 Sheet No. 73A/6E
 Legal Description: See Appendix 1

2. Area: Approximately 8,830 hectares

3. Land Ownership:

Provincial Crown Land and Federal Crown Land

4. Major Habitat Types:

Open water and mudflats	97%
Sedge meadow	2%
Island	1%

5. Description of the Area:

Located in the boreal parkland ecoregion of Saskatchewan, Lenore Lake is a relatively large, slightly saline lake with an average depth of 5.2 m. Water levels fluctuate severely as the lake is dependent upon spring runoff and seasonal rains. Most of the runoff reaches the lake through several small creek channels. Water from nearby Ranch Lake frequently spills over into Lenore Lake as a result of a restored drainage channel connecting the two lakes. Of the several islands that exist, Raven Island (National Wildlife Area) is the largest. Until the drainage channel between the two lakes was opened in 1973, Raven Island was essentially a peninsula which became an island only during wet years.

As water levels recede during summer, a wide expanse of mudflat occurs along the low relief shoreline. A 45-to-180-m margin of wet or dry, sedge (Carex spp.) meadow with associated grasses exists between the upland and mudflat or water.

Except for a number of protected areas and bays of the lake, emergent vegetation is virtually non-existent on most of the lake because of the extensive wave action. Dense stands of bulrush (Scirpus spp.), cattail (Typha latifolia) and spangletop (Scolochloa festuacea) occur in these areas. Sedge is the dominant emergent in flooded wet meadows. Submergent aquatics, restricted primarily to the shallow waters of the protected bays of the lake, consist primarily of water crowfoot (Ranunculus spp.), hornwort (Ceratophyllum demersum) and water milfoil (Myriophyllum spp.). Beds of pondweeds (Potamogeton spp.) are found in the deeper water.

Bands of aspen (Populus tremuloides and P. balsamifera), and willow (Salix spp.), with chokecherry

(Prunus virginiana), saskatoon (Amelanchier alnifolia), gooseberry (Ribes spp.) and raspberry (Rubus strigosus) occur along the west and north sides of Raven Island. Scattered around the perimeter of the island are patches of rose (Rosa spp.) and western snowberry (Symphoricarpus occidentalis). All previously cultivated land on the island has been seeded to dense nesting cover.

Uplands surrounding the lake consist of native grassland used for pasture, and cultivated land used for hay and cereal crop production. Access to the lake is provided by 14 public roads and a causeway to Raven Island. Basin and Middle Lakes Bird Sanctuary is less than 10 km to the northwest.

6. Public Use:

Lenore Lake, an important fall staging area for ducks and geese, ensures good waterfowl hunting on nearby grain fields. The area is considered one of the best for waterfowl hunting in the district.

Commercial, domestic and sport fishing have been permitted on the lake. Commercial fishing was permitted to remove a previously stocked population of whitefish which did not reproduce. Domestic fishing (with dip nets) for the common sucker has declined over the years because of low yields. Most of the sport fishing, done mainly with boats, is for walleye and pike which were previously stocked in the lake for several years.

Local residents also use a small, undeveloped beach in the southwest bay of the lake for swimming and boating. There are no recreational facilities such as wharfs, boat houses or picnic tables. A small Regional Park with recreational facilities exists at the north end of the lake at St. Brieux.

7. Importance to the Resource:

Lenore Lake is an important fall staging area for waterfowl. Over 30,000 ducks (mainly Mallards and assorted divers), 700 Canada Geese and 300 Tundra Swans have been observed on the lake at one time. The protected bays provide breeding and molting habitat for dabblers and divers. Island habitat has been used by 19 to 39 pairs of breeding Canada Geese as well as ducks.

White Pelicans, Double-crested Cormorants and Great Blue Herons nest on the islands during favorable water conditions. Waterbirds and shorebirds using the Sanctuary, but not necessarily breeding there, include the Black-crowned Night Heron, Western Grebe, Tundra Swan, Sandhill Crane, Franklin's Gull, Ring-billed Gull, California Gull, Common Tern, Black Tern, Sora Rail, Piping Plover, American Avocet, Killdeer, Willet, Spotted Sandpiper, Marbled Godwit and Wilson's Phalarope. Other birds observed on or near the Sanctuary

include songbirds, birds of prey, the Gray Partridge, Ruffed Grouse, and the Sharp-tailed Grouse. A herd of 20 white-tailed deer wintered on Raven Island in 1983.

8. Historical Notes and Land-Use Conflicts:

Lenore Lake was one of twelve lakes reserved by the Minister of the Interior on May 18, 1915 for sanctuary purposes. All vacant quarter sections adjacent to the lake were included in the reserved area. In 1917 and 1918, Dr. R.M. Anderson, a zoologist with the Geological Survey and a member of the Advisory Board in Wildlife Protection, recommended that Lenore Lake and its islands be protected as a bird sanctuary. On March 9, 1925, the Lenore Lake Bird Sanctuary was established by Order-In-Council P.C. 1925-345.

In 1947 the Sanctuary was inspected to determine if drought had made it unsuitable as a sanctuary. The decision was in favor of retaining it. However, in 1949-50, the Sanctuary boundary was revised to include only the waters and islands of Lenore Lake. This resulted in the loss of 919 ha of uplands.

Follow up evaluations made in 1957, 1971 and 1972 by the Canadian Wildlife Service recognized the value of the Sanctuary as a fall staging area for waterfowl. For that reason the 1957 and 1972 evaluations recommended retaining the Sanctuary.

Waterfowl depredation on agricultural land around Lenore Lake is a recurring problem. Apparently, farmers at the north end of the lake are more tolerant of waterfowl damage than those at the south end of the lake.

Agricultural drainage of potholes on lands adjacent to Lenore Lake and nearby Ranch Lake has resulted in flooding and blockage (sedimentation) of the natural drainage channel between Lenore and Ranch lakes. The channel was restored in 1973, but in recent years was dammed by beavers. Currently, the channel is again being improved by Ducks Unlimited (Canada) by trenching and the installation of a control dam at the east end of the channel.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The islands in the NW16-41-21-W2 are also protected by Provincial Wildlife Refuge Regulations under the Provincial Wildlife Act.

Conservation Officers of the Saskatchewan Department of Parks and Renewable Resources and the Humboldt, Saskatchewan detachment of the R.C.M.P. patrol the Sanctuary during the hunting season. Fluctuating water levels which alter the

boundaries of the Sanctuary make enforcement difficult.

10. References:

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Carlisle, S. 1984. Management plan: Raven Island National Wildlife Area. Unpubl. report, Can. Wildl. Serv., Saskatoon. 66 pp.

Gollop, J.B. 1957. Lake Lenore Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 2 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Roney, K. and M. Hlady. 1984. 1982 census of Saskatchewan White Pelican and Double-crested Cormorant colonies. Blue Jay 42(2): 77-82.

Soper, J.D. 1948. Report on joint inspections of bird sanctuaries in Saskatchewan during the season of 1947 together with recommendations. Unpubl. report, Can. Wildl. Serv., Edmonton. 70 pp.

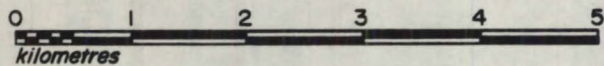
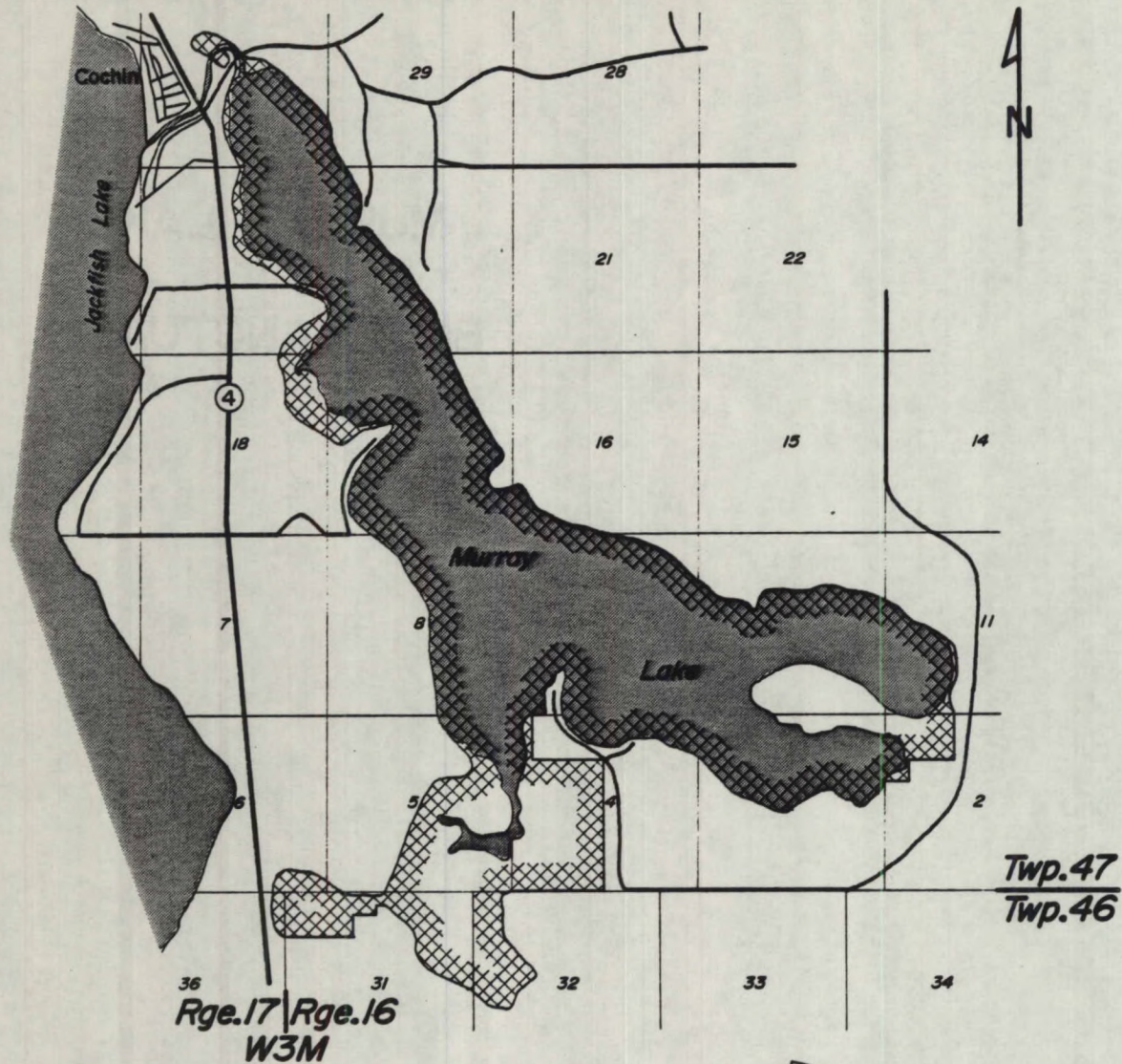
Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.



Taylor, P.S., S.C. Woynarski and J.R. Caldwell. 1980. A proposal to establish a National Wildlife Area at Lenore Lake Migratory Bird Sanctuary, Saskatchewan. Can. Wildl. Serv., Saskatoon. 8 pp. and appendix 12 pp.

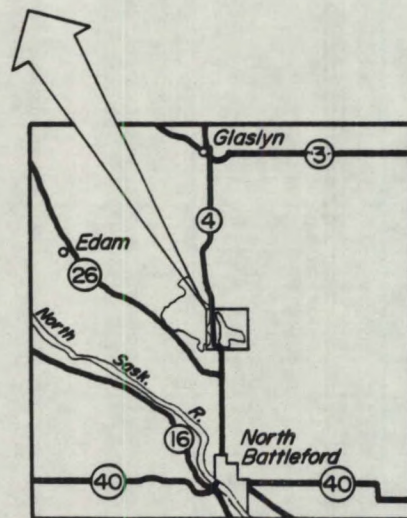
Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

**MURRAY LAKE
BIRD SANCTUARY**

MURRAY LAKE BIRD SANCTUARY



-  Bird Sanctuary Boundary
-  Permanent Water



MURRAY LAKE BIRD SANCTUARY

1. Location: 30 km north of North Battleford, Saskatchewan
 Lat. 53°03'N Long. 108°17'W
 NTS 1:50,000 Sheet No. 73F/1
 Legal Description: See Appendix 1
2. Area: Approximately 1,165 hectares
3. Land Ownership:
 Provincial Crown Land
4. Major Habitat Types:

Open water	60%
Sedge meadow/marsh	36%
Island	4%
5. Description of the Area:

Murray Lake is a relatively large, deep lake located in the boreal parkland ecoregion of Saskatchewan. Water levels do not fluctuate severely as the lake is connected by a short canal to adjacent Jackfish Lake, and several streams, including Crystal Creek and Lost Horse Creek, supplement runoff waters from the surrounding rolling terrain. The shoreline, vegetated with sedges (Carex spp.) and associated grasses to the water's edge, is steep in several places. Generally, there is an appreciable amount of relief between the water and the upland parkland vegetation.

Dense stands of bulrush (Scirpus spp.), cattail (Typha latifolia) and sedge occur on the deltas of Lost Horse and Crystal creeks and at the junction of the canal from Jackfish Lake and Murray Lake. Extending southwest from the Crystal Creek delta is a relatively large sedge meadow with only temporary water. Large tracts of sedge meadow with small stands of bulrush and cattail occur on the extreme east end of the lake near the large island. Two major stands of bulrush grow along the south shore, but no emergents are found along the north shore. Submergent vegetation is largely beds of pondweed (Potamogeton spp.) in the deeper water, and associations of pondweed, water milfoil (Myriophyllum spp.), hornwort (Ceratophyllum demersum), water crowfoot (Ranunculus spp.) and bladderwort (Utricularia vulgaris) in the emergent zones.

The large steep-sided island in the southeast portion of the lake is vegetated with a variety of grasses, western snowberry (Symphoricarpus occidentalis), rose (Rosa spp.), willow (Salix spp.) and aspen (Populus tremuloides).

The Moosomin and Saulteux Indian reserves are adjacent

to the north boundary of Murray Lake, and the Village of Cochin is on the northwestern end of the lake. There are nine major public access roads to the Sanctuary.

6. Public Use:

Fall staging ducks and geese on the lake provide good shooting (primarily Mallard) on surrounding lands for hunters from North Battleford.

Both sport and commercial fishing are permitted. Anglers take whitefish, cisco, suckers, pike, perch and pickerel. The lake was stocked with over four million pickerel fry by the Saskatchewan Department of Natural Resources in the 1950s. Fish from the commercial operation are sold to tourists. Indians are allowed to net fish on the lake at any time.

Private cottages with boat wharfs along the south shore of Murray Lake and several picnicking facilities and a beach attract summer visitors. Boaters from nearby Jackfish Lake use Murray Lake when the former is too windblown.

7. Importance to the Resource:

Murray Lake is primarily used by waterfowl as a staging area in the spring and fall. Over 6,000 ducks have been recorded at one time in the fall. Use by geese is less extensive. Waterfowl production is limited to the marshy area where small numbers of dabblers and divers breed.

Waterbirds and shorebirds known or believed to breed in the area are Pied-billed and Western grebes, Franklin's Gull, Forster's and Black terns, Sora, Killdeer, Common Snipe, and Wilson's Phalarope. White Pelicans, Ring-billed Gulls, Common Terns and American Avocets use Murray Lake and vicinity but do not breed there. Other birds known or believed to nest in the area include Red-winged and Yellow-headed blackbirds, Brown-headed Cowbird, Marsh Wren, Purple Martin, Tree and Barn swallows, Mountain Bluebird, Warbling and Red-eyed vireos, Common Yellowthroat, Northern Oriole, and Clay-colored, Vesper, Savannah, Le Conte's, Sharp-tailed and Song sparrows.

8. Historical Notes and Land-Use Conflicts:

During periods of drought, five sanctuaries had become unsuitable for migratory birds and were delisted. Murray Lake Bird Sanctuary was one of five new sanctuaries established by Order-In-Council P.C. 1948-5050 on November 3, 1948, as replacements.

Evaluations of the Sanctuary, carried out by the Canadian Wildlife Service in 1957, 1971 and 1972, recognized the importance of the Sanctuary as a fall staging area. The 1957 and 1972 investigations recommended retaining the Sanctuary as a protected area and better posting of the Sanctuary to reduce

disturbance to the nesting migratory birds by recreationists.

Crop depredation by fall staging waterfowl occurs frequently on adjacent agricultural lands, but is not considered a major problem.

Cottagers along the south side of the lake have started a garbage dump at Lanz Point. This site should be cleaned up and relocated.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Regular patrols of the area are made in the fall by the Saskatchewan Department of Parks and Renewable Resources and the North Battleford, Saskatchewan detachment of the R.C.M.P.

10. References:

Belcher, M. 1972. An early provincial museum camp in the Battleford area. Blue Jay 30: 8-17.

Gollop, J.B. 1957. Murray Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

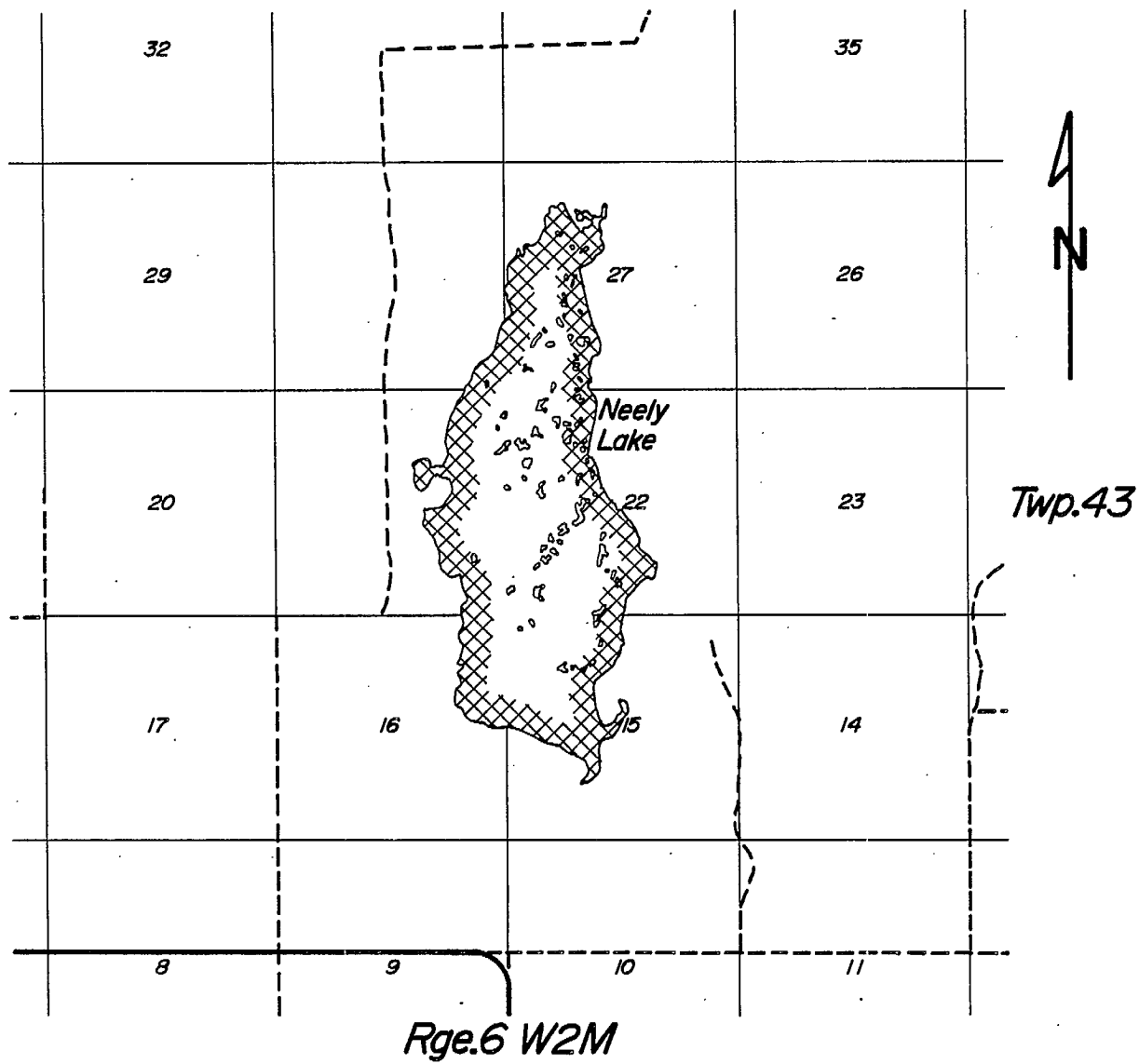
Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Soper, J.D. 1948. Report on joint inspections of bird sanctuaries in Saskatchewan during the season of 1947 together with recommendations. Unpubl. report, Can. Wildl. Serv., Edmonton. 70 pp.

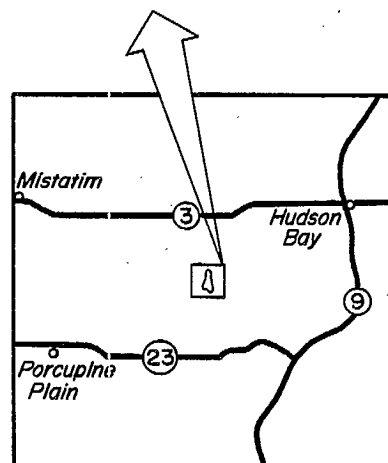
Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

**NEELY LAKE
BIRD SANCTUARY**

NEELY LAKE BIRD SANCTUARY



 Bird Sanctuary Boundary



NEELY LAKE BIRD SANCTUARY

1. Location: 50 km southwest of Hudson Bay, Saskatchewan
 Lat. 52°42'N Long. 53°47'W
 NTS 1:50,000 Sheet No. 63D/10
 Legal Description: See Appendix 1

2. Area: Approximately 800 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water and mudflats	95%
Wet meadow	4%
Islands	1%

5. Description of the Area:

Neely Lake is a relatively shallow lake located in mixed-wood forest and fen-patterned peatland in the boreal transition ecoregion. The main source of water is spring runoff and ground water recharge from surrounding bog and muskeg terrain. Drainage from a tamarack bog into the north end of the lake has been impeded by several beaver dams. Although no streams enter the lake, nearby tributaries of the Red Deer River and Shand Creek are believed to contribute ground water to the lake's water supply. During very high water levels, water drains out of the east side of the lake and eventually reaches Bubbling Creek to the northeast. Water levels do not fluctuate severely seasonally, but periodic low water levels during years of minimal runoff have resulted in extensive mudflats. Shoreline vegetation consists largely of sedges (Carex spp.) and associated wet meadow species. Low water levels have encouraged invasion of the wet meadows by willow (Salix spp.).

During normal water levels, cattail (Typha latifolia), bulrush (Scirpus spp.), spangle top (Scolochloa festuacea) and sedge form a border (up to 75 m) around the entire lake with larger stands at the north and south ends of the lake. These emergents also occur in a number of scattered patches throughout the lake. The numerous islands which exist in the lake are essentially floating mats of bog-rush (Juncus spp.) and buttercup (Ranunculus spp.).

Submergent aquatics are believed to include pondweeds (Potamogeton spp.), water milfoil (Myriophyllum spp.), and hornwort (Ceratophyllum demersum).

Uplands surrounding the lake consist of dense trembling aspen (Populus tremuloides), balsam poplar (P. balsamifera),

black spruce (Picea mariana), patterned peatland bog and fen, and grassland (which was formerly covered by aspen and balsam poplar, but now cleared) and cultivated land. A community pasture is located on the east side of the lake.

Access to the lake is provided by one public road and one private trail.

6. Public Use:

Very little public use is made of Neely Lake, mainly because of its isolated location. Local residents do some waterfowl hunting, mainly for Canada Geese and Mallards, on adjacent agricultural land.

The lake is too shallow to support a fish population.

7. Importance to the Resource:

The lake is an important fall staging area for Canada Geese and is also used by small numbers of staging White-fronted Geese, Tundra Swans and ducks. A few pairs of Canada Geese regularly nest in the area. Artificial nesting islands (flax straw bales) provided in 1982 and 1983 increased the number of breeding pairs to 18 in 1984. Breeding ducks using the area are primarily Lesser Scaup, Ruddy duck, Bufflehead, Common Goldeneye, Canvasback, Mallard and Blue-winged Teal.

Other species known to nest in the Sanctuary and vicinity are Eared and Pied-billed grebes, Black Tern, Killdeer, Marsh Wren, Red-winged and Yellow-headed blackbirds and Le Conte's Sparrow. Suspected breeders in the area include Sora, Common Snipe, Wilson's Phalarope, Franklin's Gull, Northern Flicker, Great Crested Flycatcher, Black-capped Chickadee, Hermit Thrush, Tennessee Warbler, Common Yellowthroat, and Clay-colored, Savannah, Sharp-tailed and White-throated sparrows. Transient visitants include American Bittern; Common Loon; Greater and Lesser yellowlegs; Red-necked Phalarope; Short-billed Dowitcher; American Golden and Black-bellied plovers; Pectoral, Least and Buff-breasted sandpipers; Yellow-shafted Flicker; Horned Lark; Myrtle and Palm warblers; Northern Waterthrush; Vesper, Tree, Harris' and White-crowned sparrows; Slate-colored Junco; Northern Harrier; Goshawk; Pigeon Hawk and Sparrow Hawk.

8. Historical Notes and Land-Use Conflicts:

Neely Lake Bird Sanctuary, along with Opuntia Lake Bird Sanctuary, was established by Order-In-Council P.C. 1952-342 on January 23, 1952, to replace the Quill Lakes Bird Sanctuary which was delisted the same year. The boundary of each newly established Sanctuary was the land covered by the water from day to day.

An evaluation of the Sanctuary in 1957 by the Canadian

Wildlife Service recognized the reported importance of the lake as a breeding and fall staging area for waterfowl, but recommended delisting the Sanctuary because it was also protected as a provincial game preserve. An investigation in 1960 reported on the physical characteristics of the lake, wildlife observed and public use, but made no recommendation concerning continued federal protection of the area. Similarly, an evaluation in 1971 recognized the lake's importance as a waterfowl staging area, but made no recommendations for future protection. An evaluation in 1972 recommended that the Sanctuary be retained because of its value to breeding waterfowl.

The major land-use conflict is the intensive grazing of the shoreline and uplands. The Neely Lake Community Pasture occupies 21 quarter sections of land on the east side of the lake. Crown land adjoining the west side of the lake is leased by local farmers for pasture. Pasture improvement has occurred on the drier parts of the adjacent land previously covered by the lake.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The Sanctuary was posted with four migratory bird sanctuary signs in 1960 and additional signs in 1983.

Neely Lake is patrolled in the fall by conservation officers of the Saskatchewan Department of Parks and Renewable Resources.

10. References:

Gollop, J.B. 1957. Neely Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 2 pp.

Hooper, D. 1984. Neely Lake Bird Sanctuary bird observations, 1955, 1982 and 1984. Unpubl. data.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon.

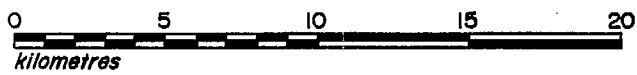
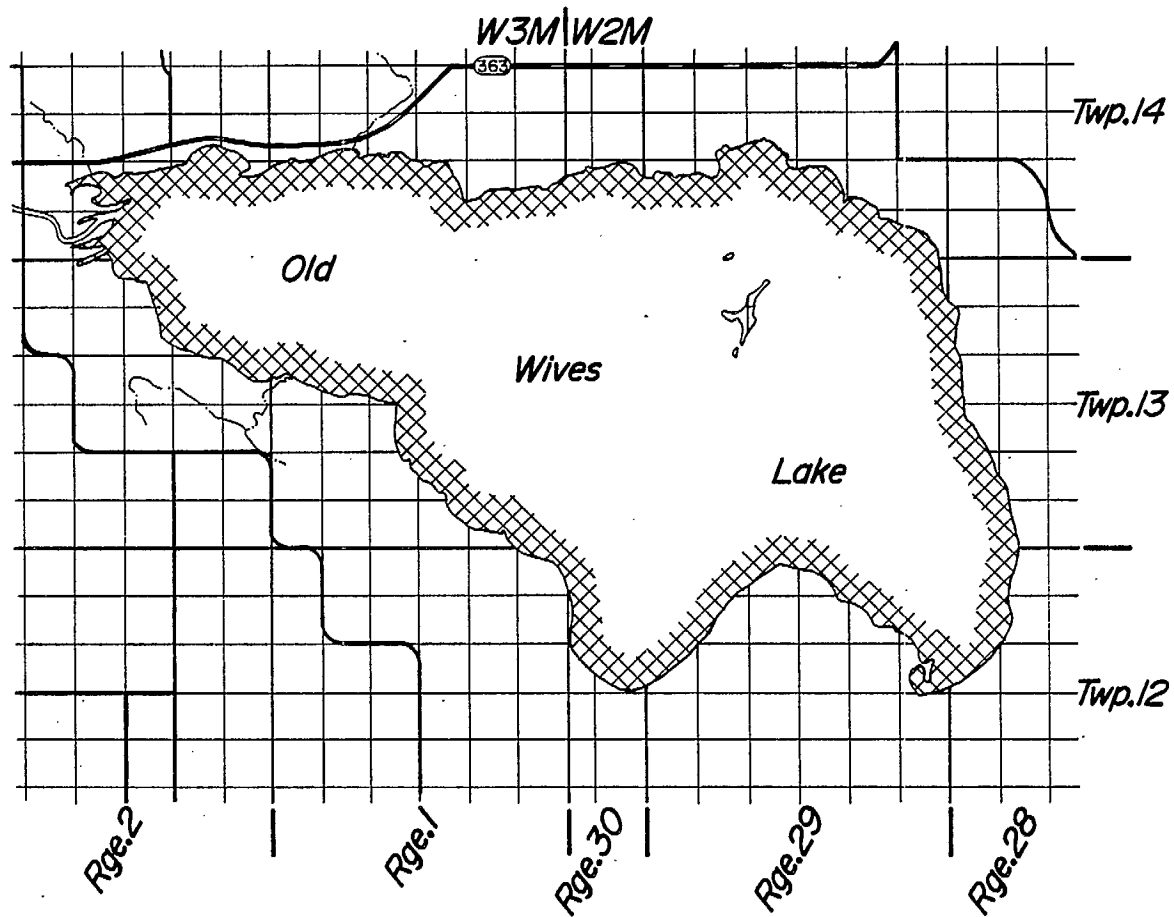
3 pp.

Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

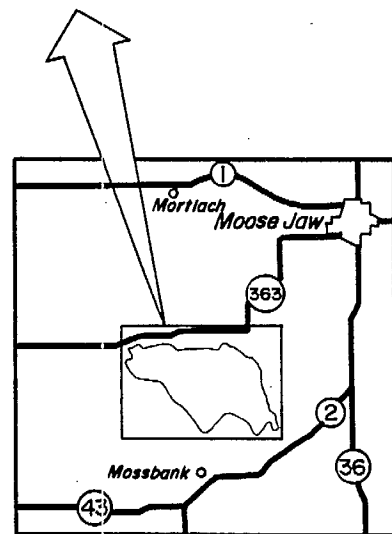
OLD WIVES LAKE

BIRD SANCTUARY

OLD WIVES LAKE BIRD SANCTUARY



 Bird Sanctuary Boundary



OLD WIVES LAKE BIRD SANCTUARY

1. Location: 35 km southwest of Moose Jaw, Saskatchewan
 Lat. 50°06'N Long. 106°00'W
 NTS 1:50,000 Sheet No. 72J/1E, 71I/4W
 Legal Description: See Appendix 1

2. Area: Approximately 26,060 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water and mudflats	96%
Marsh	3%
Rock/sand islands	1%

5. Description of the Area:

Old Wives Lake is a very large, relatively shallow, saline lake, located in the mixed-grass prairie ecoregion of Saskatchewan. Spring runoff, seasonal rains and the Wood River are the major water sources. A Ducks Unlimited (Canada) dam and spillway on the Wood River has resulted in a variable sized marsh on the river delta at the west end of the lake. Because of severe seasonal water level fluctuations and very little relief between the water and the upland terrain, large expanses of mudflat occur during the summer. In 1949, the lake was dry. One large permanent island, known as the Isle of Bays, is located about 5 km from shore. A second island appears during low water levels. For the most part, the shoreline (approximately 70 km), and the islands are rocky and sandy.

Emergent vegetation growth is inhibited by extensive wave action which occurs on much of the lake. Except for a dense stand of bulrush (Scirpus spp.) on the delta of the Wood River, only scattered stands of bulrush, cattail (Typha latifolia), spangletop (Scolochloa festucacea) and sedge (Carex spp.) occur in the shallow water along the shore. Submergent aquatics consist largely of scattered beds of pondweed (Potamogeton spp.) in the open water and a variety of other submergents in the Wood River delta. Vegetation along the rocky, sandy shoreline includes scattered clumps of water foxtail (Alopecurus spp.) and sedge (Carex spp.) and small stands of snowberry (Symphoricarpos spp.); willow (Salix spp.) and rose (Rosa spp.). Shrubs, mainly snowberry and rose, also cover the higher parts of the Isle of Bays. Adjacent uplands are native prairie pasture and cultivated lands.

Old Wives Lake, the Isle of Bays and the surrounding native

prairie uplands are proposed IBP sites.

6. Public Use:

Fall staging waterfowl on Old Wives Lake ensures good duck hunting, particularly Mallards, on fields south and west of the lake. A small harvest of Canada Geese is also taken annually.

Recreational use of the Sanctuary is low. The turbid water, rough shoreline and severity of water level fluctuations is unattractive to recreationists. A small beach on the south side was improved by the Town of Mossbank, but little use is made of it.

The lake is not deep enough to support a fish population.

7. Importance to the Resource:

Old Wives Lake Bird Sanctuary is an important breeding and molting area for both dabbling and diving ducks, as well as small numbers of Canada Geese. Breeding species of ducks include Mallard, Gadwall, Pintail, Wigeon, Canvasback, Redhead Lesser Scaup and Ruddy Duck. The Sanctuary is also a spring and fall staging area which attracts large concentrations of ducks and lesser numbers of Canada, White-fronted and Snow geese and Tundra Swans.

Because of its isolation, the Isle of Bays provides protective nesting habitat for the White Pelican, Black-crowned Night and Great Blue herons, Double-crested Cormorant, Western Grebe, California and Ring-billed gulls and the Common Tern.

A variety of shorebirds use the Sanctuary. Commonly breeding species are American Avocet, Marbled Godwit, Killdeer and Willet. Suspected breeders include Spotted and Upland sandpipers, Long-billed Curlew, Wilson's Phalarope, Common Snipe and the endangered Piping Plover. Common visitants are Black-bellied and Semipalmated plovers, Greater and Lesser yellowlegs, Hudsonian Godwit, Ruddy Turnstone, Red Knot, Sanderling, Red-necked Phalarope, Short-billed Dowitcher, Dunlin, and Semipalmated, Least, White-rumped, Baird's, Pectoral and Stilt sandpipers.

Other birds known or believed to nest in the area are Eastern and Western kingbirds; Barn Swallow; Sprague's Pipit; Marsh Wren; Yellow-throated and Yellow warblers; Red-winged, Yellow-headed and Brewer's blackbirds; Brown-headed Cowbird; Western Meadowlark; Chestnut collared Longspur, Lark Bunting; Clay-colored, Vesper, Savannah, Baird's, Le Conte's and Song sparrows; Northern Harrier, Swainson's Hawk, the threatened Ferruginous Hawk, Grey Partridge and Sharp-tailed Grouse.

8. Historical Notes and Land-Use Conflicts:

Formerly known as Johnstone Lake, Old Wives Lake was apparently an important area for the market hunting of ducks and geese during early settlement. In the early 1900s, a Moose Jaw dealer reportedly handled wagon-loads of geese slaughtered at nearby lakes.

On May 18, 1915, Old Wives Lake and vacant quarter sections immediately adjacent to the lake (and several other lakes) were reserved by the Minister of the Interior for future establishment as a sanctuary. In 1917 and 1918, Dr. R.M. Anderson, a zoologist with the Geological Survey and a member of the Advisory Board in Wildlife Protection investigated the value of Old Wives Lake as a sanctuary for migratory birds. He recommended that the lake be considered for permanent sanctuary status because of its heavy use by fall staging waterfowl and its importance for colonial nesting birds. On March 9, 1925, the Old Wives Lake Bird Sanctuary was established by Order-In-Council P.C. 1925-345.

In 1948, the Sanctuary was inspected by two federal and provincial wildlife officials to determine the effect of drought on the value of the Sanctuary. The recommendation of this inspection was to retain the Sanctuary. However, a further inspection of the Sanctuary in 1949-50 resulted in the revision of the Sanctuary boundary to include only the water area. Over 2150 ha of upland habitat thus became agricultural land.

The Sanctuary was evaluated by the Canadian Wildlife Service in 1957, 1971 and 1972. The 1957 and 1972 evaluations recommended retaining the Sanctuary because of its value to migratory waterfowl and colonial water birds. The 1971 evaluation recognized the importance of the Sanctuary for fall staging ducks, geese and swans but did not recommend retaining or delisting the Sanctuary.

Waterfowl depredation on surrounding agricultural lands, particularly south of the lake, has been a problem of varying magnitude since 1950. In 1953, when crop damage was severe, the whole area was declared open to shooting under section 40 of the Migratory Birds Convention Act. Crop damage prevention and insurance/compensation programs since then have helped ameliorate the problem.

In the 1950s and 1960s, saline water from Old Wives Lake was diverted (drained or pumped) into nearby Frederick Lake which served as an evaporation pond for the recovery, through crystallization, of sodium sulphate (Glauber's salt). Some sodium sulphate is still presently recovered from Frederick lake.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980.

The Isle of Bays in the Sanctuary is also protected by Provincial Wildlife Refuge Regulations under the Provincial Wildlife Act.

The Moose Jaw, Saskatchewan detachment of the R.C.M.P. and conservation officers of the Saskatchewan Department of Parks and Renewable Resources patrol the Sanctuary. Fluctuating water levels which alter the boundaries of the Sanctuary make enforcement difficult.

10. References:

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Cranna, M.D. and J.S. Rowe. 1974. Natural areas in Saskatchewan. International Biological Program - Conservation Terrestrial, Summation Report, Saskatoon. 111 pp.

Duffus, D.A., P.M. Browne and T.B. Smith-Windsor. 1980. Botulism on several Saskatchewan marshes, 1979. Blue Jay 38(3): 167-170.

Dzubin, A. 1957. Old Wives Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Lahrman, F.W. 1957. Birds of the Isle of Bays, 1957. Blue Jay 15(3): 106-109.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister, 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Roney, K. and M. Hlady. 1984. 1982 census of Saskatchewan

White Pelican and Double-crested Cormorant colonies. Blue Jay 42(2): 77-82.

Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

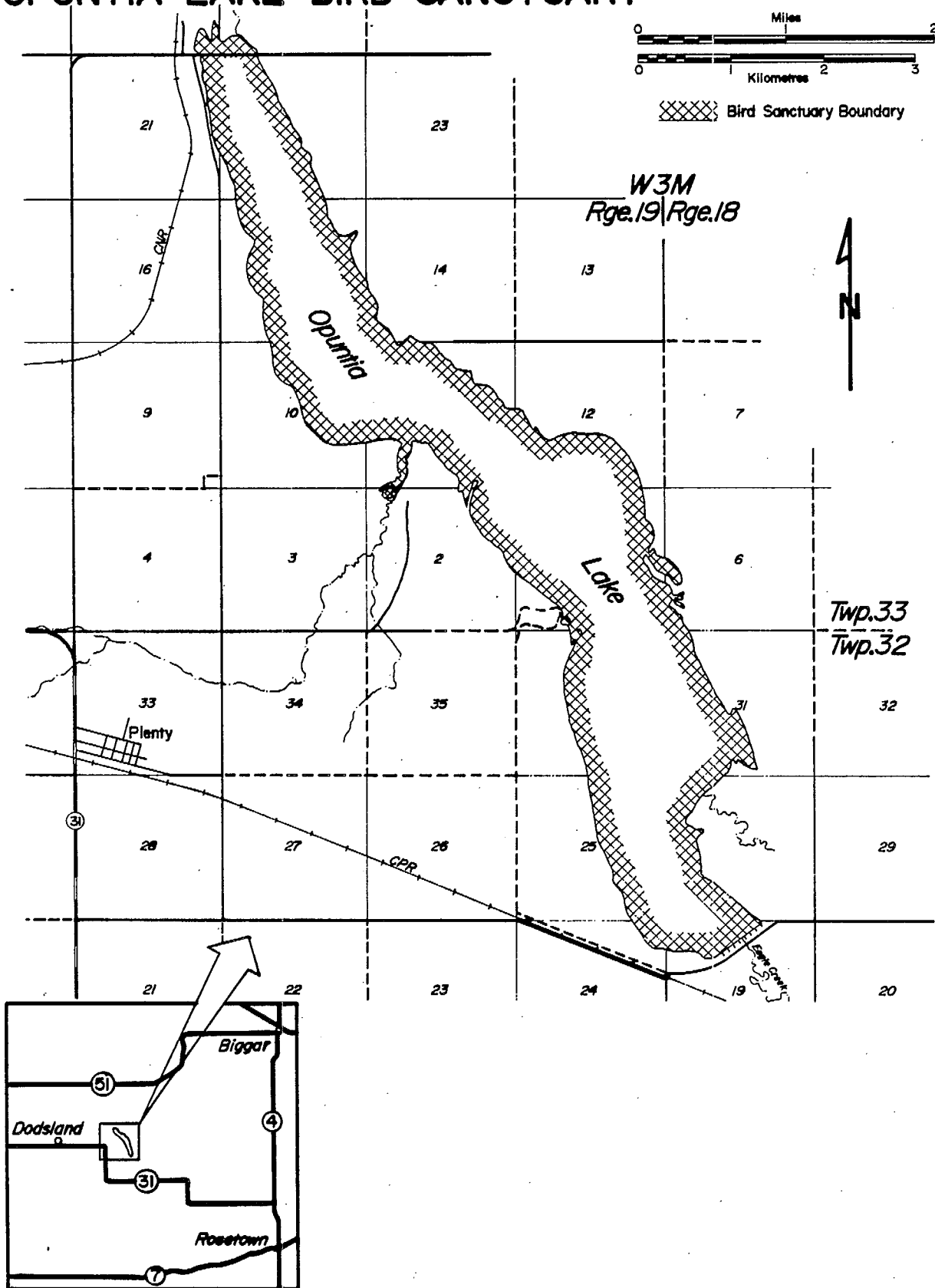
Vermeer, K. 1970a. Colonies of Double-crested Cormorants and White Pelicans in Saskatchewan. Can. Field-Nat. 89: 39-42.

Vermeer, K. 1970b. Aquatic breeding birds of the Isle of Bays. Blue Jay 28: 86-87.

Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

**OPUNTIA LAKE
BIRD SANCTUARY**

OPUNTIA LAKE BIRD SANCTUARY



OPUNTIA LAKE BIRD SANCTUARY

1. Location: 60 km southwest of Biggar, Saskatchewan
 Lat. 51°48'N Long. 108°35'W
 NTS 1:50,000 Sheet No. 72N/15E
 Legal Description: See Appendix 1

2. Area: Approximately 1,395 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water and mudflats	95%
Marsh/sedge meadow	5%

5. Description of the Area:

Located in the mixed-grass prairie ecoregion of Saskatchewan, the Opuntia Lake Bird Sanctuary is a relatively large, saline, shallow lake formed by a Prairie Farm Rehabilitation Administration (PFRA) dam on Eagle Creek. Water levels, largely dependent upon spring runoff and seasonal rains, are subject to severe fluctuations. Extensive mudflats form during the progressive water level decline in the summer. Prior to the construction of the dam, the lake became dry during periods of severe drought. Steep clay banks with rocky, sandy areas form the east shoreline. The west shore is not as steep and has fewer rocky areas. There are no islands in the lake. For the most part the lake is open water which is quite turbid. Blue-green algae blooms occur infrequently. Emergent vegetation is largely restricted to the extreme southeast portion of the lake where bulrush (Scirpus spp.) and sedge (Carex spp.) occur, and to the delta of Eagle Creek where sedge grows on the large, shallow mudflat area. Small scattered patches of bulrush and sedge are found on the west shore. Submergent vegetation consist of pondweeds (Potamogeton spp.) in the deep water and water milfoil (Myriophyllum spp.) in the shallow water.

Uplands surrounding the lake are grassland, used for pasture and hay, and cropland. Gravel pits are located near the southeast side of the lake. Ten public roads provide access to the lake.

6. Public Use:

The Sanctuary provides good waterfowl hunting on stubble fields adjacent to the lake. Both resident and non-resident hunters are attracted to the area by the large numbers of fall staging geese.

Although the Saskatchewan Department of Natural Resources stocked the lake with yellow perch in 1952 and 1953, and pickerel in 1968, angling has not been very successful, presumably because of lower water levels and increased salinity.

Very little other recreational use is presently made of the area. Fluctuating water levels and the turbid, alkaline water have discouraged activities such as boating, and swimming. Recreational facilities consisting of boat and bath houses, a wharf, a ballpark and picnic tables, placed there in the 1950s, no longer exist.

7. Importance to the Resource:

Opuntia Lake, strategically situated in the major goose fall staging area of Western Canada, is a very important staging area for waterfowl. Estimated maximum fall concentrations include 15,000 to 20,000 geese (Canada, White-fronted, Snow and Ross' geese), up to 30,000 ducks (mainly Mallard, Pintail, and assorted divers), 2,000 Sandhill Cranes and 500 Tundra Swans. The lake supports only a small number of breeding and molting dabblers and divers.

Other birds known or believed to breed in the area are Spotted and Upland sandpipers; American Avocet; Killdeer; Willet; Marbled Godwit; Wilson's Phalarope; Long-billed Curlew; Franklin's gull; Eastern Kingbird; Horned Lark; Barn Swallow; Sprague's Pipit; Lark Bunting; Clay-colored, Vesper, Lark, Savannah and Baird's sparrows; Chestnut-collared Longspur; Red-winged Blackbird, Brown-headed Cowbird, Western Meadowlark, Northern Harrier, Swainson's Hawk and American Kestrel. Ring-billed Gulls, Eared Grebes and several shorebird species are common visitants.

8. Historical Notes and Land-Use Conflicts:

Opuntia Lake Bird Sanctuary was one of two sanctuaries established by Order-In-Council P.C. 1952-342 on January 23, 1952, to replace the Quill Lakes Bird Sanctuary which was abolished the same year.

The Canadian Wildlife Service evaluated the Sanctuary in 1957, 1971, and 1972. The 1957 evaluation recommended that the Sanctuary be retained because of its importance as a fall staging area, and that the recreational facilities be further improved because of the lake's high public use. The 1971 evaluation recognized the Sanctuary's importance as a fall staging area for waterfowl, but did not specifically recommend retaining or abolishing the Sanctuary. The 1972 investigation recommended that the Sanctuary be retained because of its importance as a fall staging area for waterfowl in a region susceptible to severe droughts.

Generally, waterfowl depredation to cereal crops in the area is not considered a serious problem. Some fields adjacent to the water have had moderate to severe damage. During years of low water levels, grazing encroaches on the land previously covered by water.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Periodic patrols of the Sanctuary are made by the Kerrobert, Saskatchewan detachment of the R.C.M.P. during the waterfowl hunting season. During part of the waterfowl hunting season, the area is posted by the Saskatchewan Department of Parks and Renewable Resources as a restricted waterbody (no hunting within 500 m of the water).

10. References:

Dzubin, A. 1957. Opuntia Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 48 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D.J. and R.J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

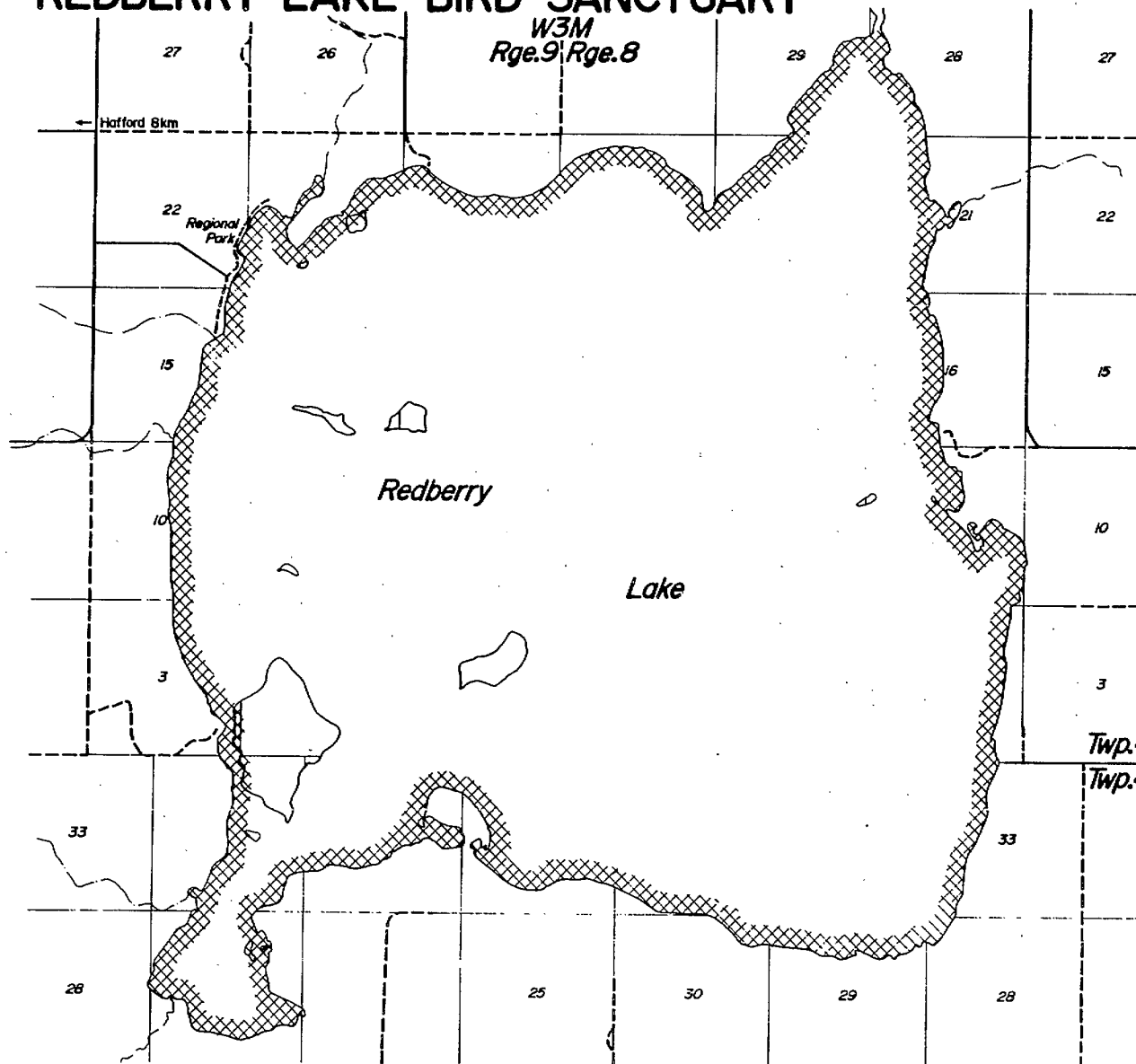
Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

REDBERRY LAKE

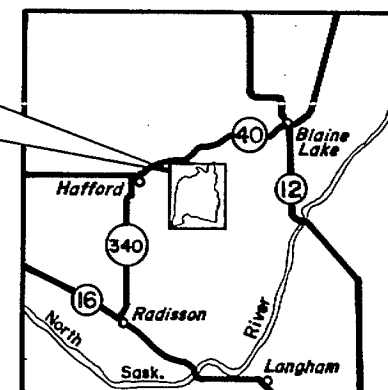
BIRD SANCTUARY

REDBERRY LAKE BIRD SANCTUARY

W3M
Rge.9 Rge.8



Twp.43
Twp.42



REDBERRY LAKE BIRD SANCTUARY

1. Location: 56 km northwest of Saskatoon, Saskatchewan
 Lat. 107°10'N Long. 52°42'W
 NTS 1:50,000 Sheet No. 73B/11E
 Legal Description: See Appendix 1

2. Area: Approximately 6,395 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water	95%
Marsh	4%
Grass/shrubs/trees (islands)	1%

5. Description of the Area:

Located in the boreal parkland ecoregion of Saskatchewan, Redberry Lake is a relatively deep, saline lake and one of the largest in the area. Most of the shoreline is very sandy with intermittent areas of gravel, rocks and boulders. Water levels have not fluctuated greatly from year to year, but slow declines in the water regime have occurred in the past. Spring runoff from surrounding lands and Marshy Creek, which enters the lake at the southwest end, help maintain the water levels. At present, four islands exist in the lake.

Most of the lake is open water with little emergent vegetation. Emergents consist of a small stand of bulrush (Scirpus spp.) on the west shore, scattered clumps of sedges (Carex spp.) around the periphery of the lake and a large stand of bulrush, cattail (Typhus latifolia) and sedges in the shallow protected marsh area. Submergent vegetation includes beds of pondweeds (Potamogeton spp.), in the deep water and water milfoil (Myriophyllum spp.) in the shallow water.

The four islands which range in size from 2.5 to 37 ha, have exposed beaches with rocks and boulders. Vegetative cover is a mixture of tall grasses, snowberry (Symphoricarpus albus), rose (Rosa spp.), and gooseberry (Ribes setosum). Areas exposed during periods of lower water levels have supported dense growth of lamb's quarter (Chenopodium album), Canada thistle (Cirsium arvense), flixweed (Descurainia sophia) common burdock (Arctium minus) and sow thistle (Sonchus arvensis). The largest island has willow (Salix spp.) and trembling aspen (Populus tremuloides) on the higher elevations and phragmites (Phragmites communis) along the higher beaches.

Surrounding uplands have trembling aspen, scattered clumps of willow, snowberry, rose, and grasses, primarily fescue (Festuca scabrella) and associated species. Six public roads provide access to the lake.

Redberry Lake and the surrounding natural area is a proposed IBP site.

6. Public Use:

Large numbers of fall staging Mallards and Pintails on the lake provide excellent duck hunting on grain fields south of the lake. Whitefish and pickerel stocking efforts by the Saskatchewan Department of Natural Resources over the years have been successful in providing good fishing for local residents and others. Redberry Lake is heavily used by recreationists because of its size, good beaches, and clear water.

Commercial development in Redberry Lake Regional Park, on the west shore of the Lake, includes a concession stand, boat wharf, picnic tables, camping grounds, toilet facilities, parking areas and a golf course. Private development consists of cottages on beach lots and a bible camp and sailing club located on the east side of the lake.

7. Importance to the Resource:

The lake is primarily used by waterfowl as a fall staging area. An estimated 30,000 ducks, mainly dabblers, and small numbers of Canada Geese and Tundra Swans have been observed during aerial surveys. Waterfowl production is minimal because of habitat limitations. The islands and the marsh at the southwest end of the lake attract nesting ducks including the White-winged Scoter, Lesser Scaup, Mallard and Pintail. Canada Geese nest occasionally on the islands. The islands of Redberry Lake provide important breeding habitat for colonial birds including the threatened White Pelican, Double-crested Cormorant, Common Tern and California and Ring-billed gulls. Other waterbirds known or believed to nest in the Sanctuary are Common Loon; Pied-billed, Horned Eared, Red-necked and Western grebes; Great Blue Heron; and Bonaparte's Gull.

Numerous shorebirds use the extensive expanses of sandy beaches around the lake and the islands. Regularly nesting species include Spotted Sandpiper, Killdeer, and the endangered Piping Plover. Suspected breeders are American Avocet, Willet, Upland Sandpiper, Marbled Godwit, Common Snipe and Wilson's Phalarope. Several other shorebirds are common visitants.

Other birds commonly observed in the area include several species of sparrows, Barn Swallow, Cedar Waxwing,

several species of sparrows, Barn Swallow, Cedar Waxwing, Yellow Warbler, Red-winged and Brewer's blackbirds, Western Meadowlark, Eastern Kingbird, Horned Lark and American Goldfinch.

8. Historical Notes and Land-Use Conflicts:

On May 18, 1915, all vacant quarter sections immediately adjacent to Redberry Lake and several other lakes in Saskatchewan were reserved by the Minister of the Interior for future use as bird sanctuaries.

In 1917 and 1918, Dr. R.M. Anderson, a zoologist with the Geological Survey and a member of the Advisory Board in Wildlife Protection, recommended that Redberry Lake and its islands be protected as a bird sanctuary. On March 9, 1925, the Redberry Lake Bird Sanctuary was established by Order-In-Council P.C. 1925-345. The protected area included all vacant quarter sections of land adjacent to the lake.

In 1948, two wildlife officials, one federal and the other provincial, inspected the Sanctuary to determine the effect of drought on its value as a sanctuary. The decision was in favor of retaining the lake as a sanctuary. However, further inspection of Redberry Lake in 1949-50, resulted in the recommendation and approval that the Sanctuary boundary be revised to include only the water area. This meant the loss of 506 ha of upland habitat.

Follow-up evaluations were made in 1957, 1964, 1971, 1972 and 1984 by the Canadian Wildlife Service. The 1957, 1971, 1972 and 1984 investigations showed that Redberry Lake was still of considerable value for waterfowl and colonial birds and recommended that its status remain unchanged. The 1964 investigation was in response to complaints that boaters were disturbing colonial nesting birds.

The high recreational value of the area is the major conflict factor for the Sanctuary. The establishment in 1968 of the Redberry Lake Regional Park by the Government of Saskatchewan has increased the recreational impact. To protect colonial nesting birds, the Government of Saskatchewan designated as a Wildlife Refuge the island on which pelicans nest. However, recently there has been a proposal for the development of a condominium-recreation complex (including a marina with over 300 boat stalls) adjacent to the southwest portion of the Sanctuary. If implemented, the development would jeopardize colonial bird productivity in the Sanctuary.

Crop depredation by waterfowl is not considered to be a problem serious enough to warrant a government sponsored prevention and compensation program.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The island on which pelicans nest is also protected by Provincial Wildlife Refuge Regulations under the Provincial Wildlife Act.

The Hafford, Saskatchewan detachment of the R.C.M.P. patrols the Sanctuary during the summer. The major problem has been disturbance to colonial nesting birds on the islands.

10. References:

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Cranna, M.D. and J.S. Rowe. 1974. Natural areas in Saskatchewan. International Biological Program - Conservation Terrestrial, Summation Report, Saskatoon. 111 pp.

Gollop, J.B. 1957. Redberry Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Renaud, W. 1974. Nesting Piping Plover in Saskatchewan. Blue Jay 32(3): 158-162.

Renaud, W. 1972. Birds of Redberry Lake. Unpubl. report, Can. Wildl. Serv. 11 pp.

Roney, K. and M. Hlady. 1984. 1982 census of Saskatchewan White Pelican and Double-crested Cormorant colonies. Blue Jay 42(2): 77-82.

Stephen, W.J.D. and J. Hatfield. 1964. Investigation of Redberry Lake Bird Sanctuary. Unpubl. report, Can. Wildl. Serv., Saskatoon. 4 pp.

Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

Toews, T. and D. Weidl. 1983. Redberry Lake Bird Sanctuary bird observations, 1983. Unpubl. data.

Vermeer, K. 1970. Colonies of Double-crested Cormorants and White Pelicans in Saskatchewan. Can. Field-Nat. 84: 39-42.

Weidl, D. 1984. Redberry Lake Bird Sanctuary bird observations, 1980, 1981 and 1982. Unpubl. data.

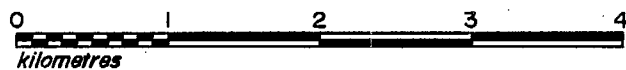
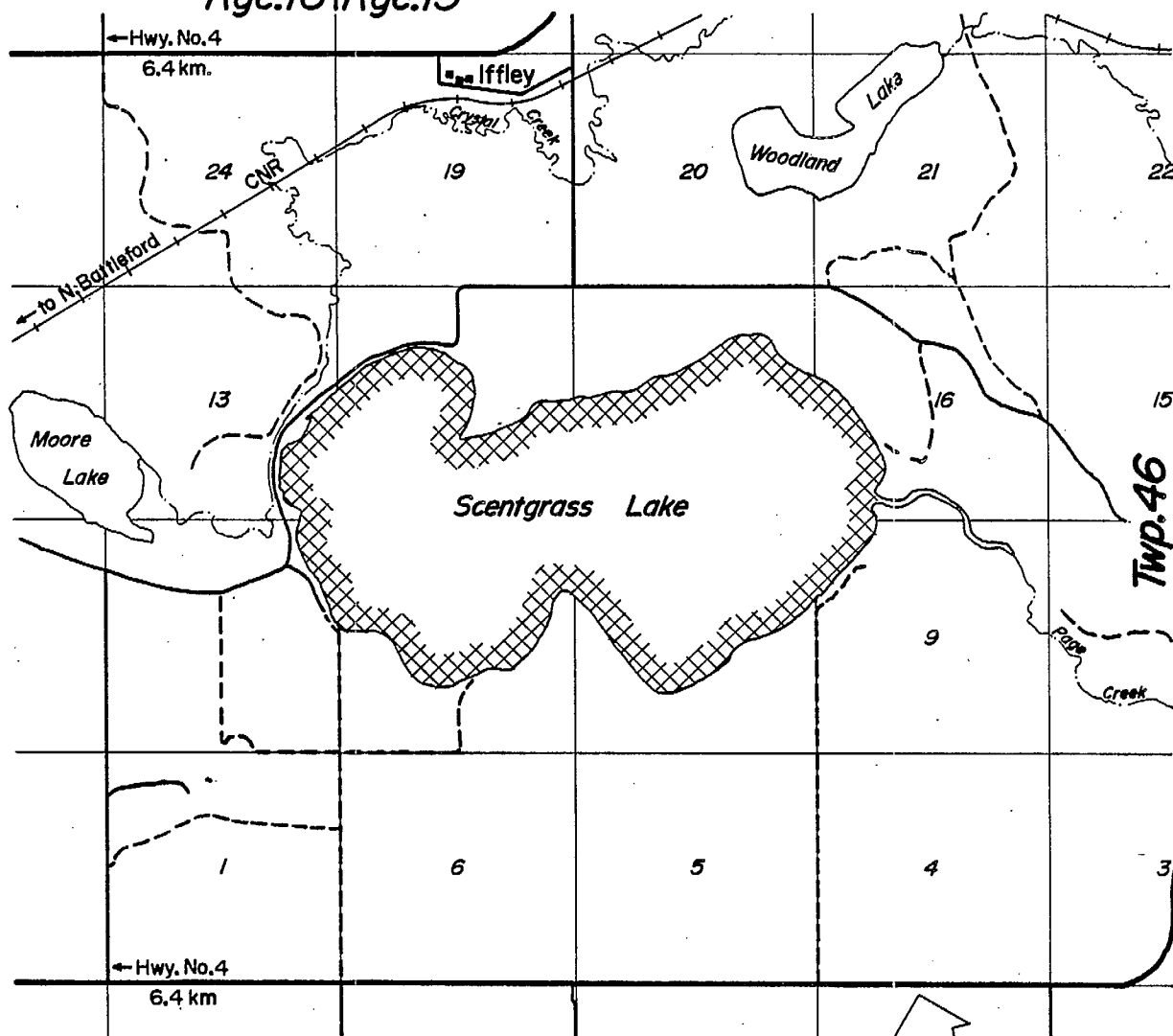
Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

SCENT GRASS LAKE

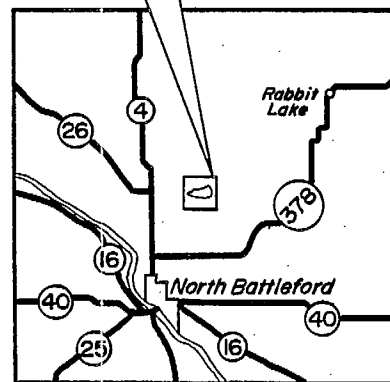
BIRD SANCTUARY

SCENT GRASS LAKE BIRD SANCTUARY

W3M
Rge.16/Rge.15



 Bird Sanctuary Boundary



SCENT GRASS LAKE BIRD SANCTUARY

1. Location: 24 km northeast of North Battleford, Saskatchewan
 Lat. 52°58'N Long. 108°09'W
 NTS 1:50,000 Sheet No. 73C/16E
 Legal Description: See Appendix 1

2. Area: Approximately 633 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water	85%
Marsh	15%

5. Description of the Area:

Located on rolling topography in the boreal parkland ecoregion of Saskatchewan, Scent Grass Lake is a medium sized lake of moderate depth. Spring runoff, seasonal rains, several natural springs, and Page Creek are the main sources of water. An earthen dam on the west end of the lake and a dyke on the east end help to maintain water levels. Shoreline vegetation ranges from dense aspen (Populus tremuloides), maple (Acer negundo) and willow (Salix spp.) on the south shore to grassland with isolated clumps of aspen and willow on the remainder.

Emergent vegetation, largely bulrush (Scirpus spp.), cattail (Typha latifolia) and sedge (Carex spp.), occurs in dense stands on the northwest end of the lake and on the delta of Page Creek. A narrow band of these emergents borders the north shore. Submergent vegetation consists of pondweeds (Potamogeton spp.) in the deeper, open water zone and water milfoil (Myriophyllum spp.), hornwort (Ceratophyllum demersum), water crowfoot (Ranunculus spp.) and similar species in the emergent zones.

Surrounding uplands are largely under cultivation with intermittent areas of rolling grassland composed of fescue (Festuca scabrella) and associated grasses. The Moosomin and Thunderchild Indian Reserve is located nearby.

Three public roads provide access to the lake.

6. Public Use:

Waterfowl hunters from North Battleford are regularly attracted to the area by the fall staging ducks and geese. Most of the hunting is done on the adjacent stubble fields, but hunting within the Sanctuary also occurs.

Local residents angle for pike and pickerel which are believed to enter Scent Grass Lake from nearby Murray Lake during high water levels.

Very little other recreational activity occurs as the shoreline type and water depth are not conducive to activities such as swimming, boating and picnicking.

7. Importance to the Resource:

Most species of dabbler and diver ducks use Scent Grass Lake as a breeding area. However, the Sanctuary has greater value as a molting area for ducks produced there and nearby Moore Lake, an excellent marsh capable of high waterfowl production. Concentrations of 2,000 ducks (mainly Mallard and Pintail and divers) and 7,000 geese (Canada, White-fronted, Ross' and Snow geese) have been observed on the lake in the late fall.

A variety of other birds use the Sanctuary, adjacent marsh and upland habitat. Known and suspected breeders include Pied-billed Grebe, American Bittern, Black-crowned Night Heron, Sora, Killdeer, Willet, Spotted Sandpiper, Marbled Godwit, Common Snipe, Wilson's Phalarope, Franklin's Gull, Black Tern, Marsh Wren, Red-winged and Yellow-headed blackbirds, Alder Flycatcher, Eastern Kingbird, Tree and Barn swallows, Veery, Cedar Waxwing, Yellow and Yellow-throated warblers, American Goldfinch, and Chipping, Clay-colored, Savannah, Le Conte's, Sharp-tailed and Song sparrows.

8. Historical Notes and Land-Use Conflicts:

In 1948, an inspection of bird sanctuaries by two federal and provincial wildlife officials resulted in the delisting of five sanctuaries made unsuitable by drought as breeding and resting grounds for migratory waterfowl. Scent Grass Lake Bird Sanctuary was one of five replacement sanctuaries established by Order-In-Council P.C. 1948-5070 on November 3, 1948.

Three evaluations of the Sanctuary by the Canadian Wildlife Service in 1957, 1971, and 1972 recognized the importance of the Sanctuary as a waterfowl refuge. The 1957 evaluation recommended that the Sanctuary be delisted as the area was also protected by Provincial Game Preserve Regulations. The 1972 evaluation recommended that the Sanctuary should be retained because of its value to waterfowl and other marsh and water birds.

In the late 1960s, agricultural interests considered draining Moore Lake and using water from Scent Grass Lake for irrigation purposes, but this has not materialized, as yet. Most of the local residents felt that Scent Grass Lake should be retained as a protected area.

Crop damage by waterfowl is not considered a major problem although a number of farmers have sustained periodic severe

crop depredation.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The Sanctuary is also protected by Provincial Game Preserve Regulations under the Provincial Wildlife Act.

Regular patrols of the area are made in the fall by the Saskatchewan Department of Parks and Renewable Resources and the North Battleford, Saskatchewan detachment of the R.C.M.P. Fluctuating water levels which alter the boundaries of the Sanctuary make enforcement difficult.

10. References:

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Gollop, J.B. 1957. Scent Grass Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Renaud, W. 1972. Birds of Scent Grass Lake. Unpubl. report, Can. Wildl. Serv., Saskatoon. 4 pp.

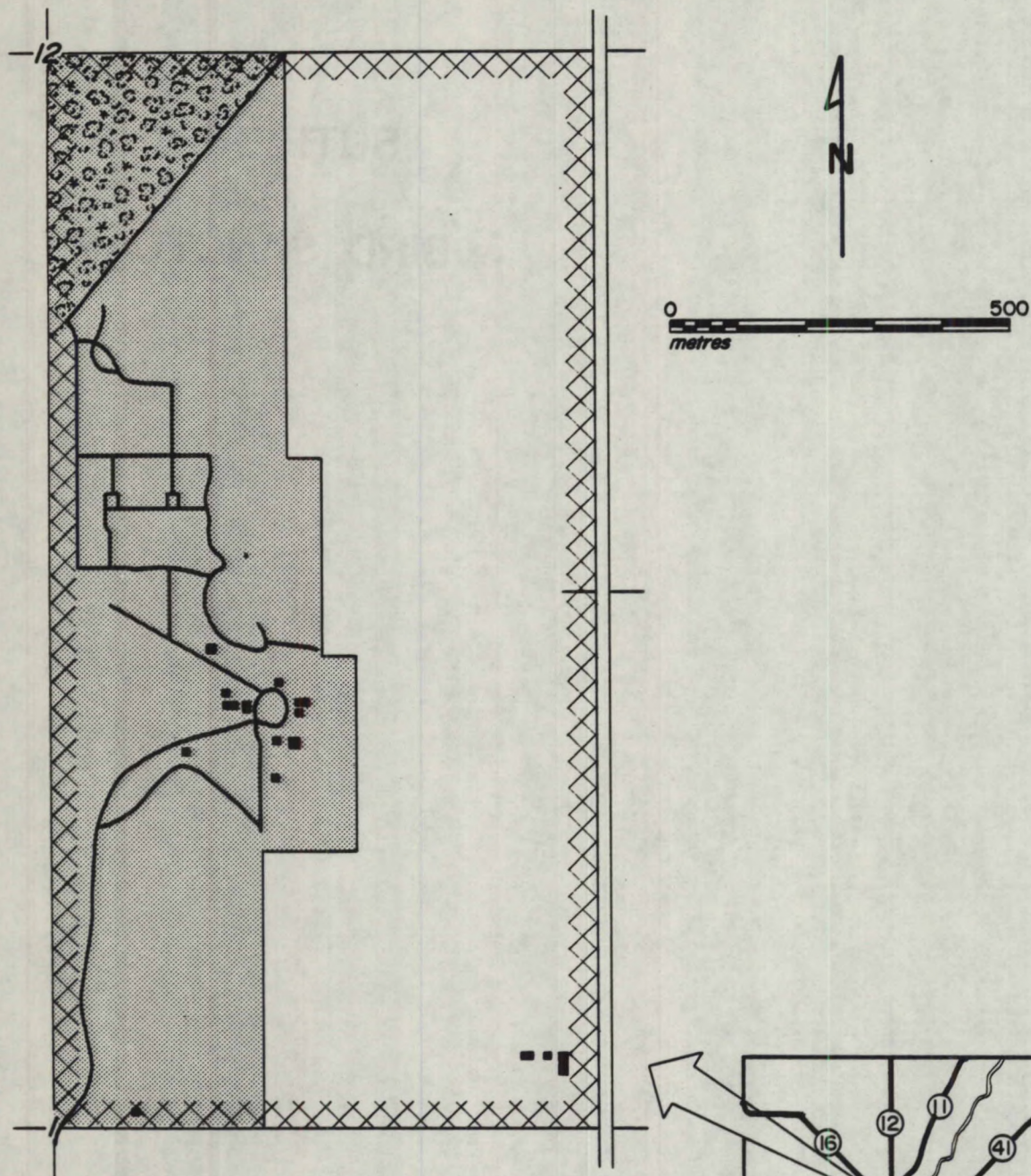
Soper, J.D. 1948. Report on joint inspections of bird sanctuaries in Saskatchewan during the season of 1947 together with recommendations. Unpubl. report, Can. Wildl. Serv., Edmonton. 70 pp.





Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

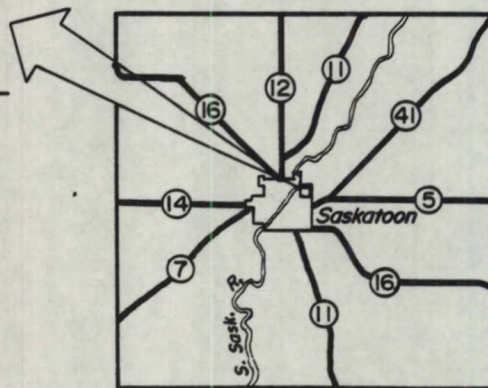
**SUTHERLAND
BIRD SANCTUARY**

SUTHERLAND BIRD SANCTUARY

NE1/4 of Sec.1 and SE1/4 of Sec.12 Twp.37 Rge.5 W3M



-  Bird Sanctuary Boundary
-  Forestry Farm Park and Zoo
-  Native Grassland / Trees / Shrubs
-  Cultivated Land



SUTHERLAND BIRD SANCTUARY

1. Location: Within the City of Saskatoon, Saskatchewan
 Lat. 52°08'N Long. 106°36'W
 NTS 1:50,000 Sheet No. 73B/2E
 Legal Description: See Appendix 1

2. Area: 130 hectares

3. Land Ownership:

City of Saskatoon

4. Major Habitat Types:

City Park and Zoo	35%
Native grassland/trees/shrubs	5%
Cultivated land	60%

5. Description of the Area:

The Sutherland Bird Sanctuary includes a park and zoo, known locally as the Forestry Farm Park, and a Canada Agriculture Research Station within the City limits of Saskatoon. Minimal natural vegetation exists within the Sanctuary. Except for about 7 ha of native grassland with scattered clumps of aspen poplar and associated shrubs, most of the Forestry Farm Park landscape consists of large expanses of lawn with exotic trees and shrubs. Two artificial ponds are maintained in the zoo portion of the park. Islands within the ponds are vegetated with grasses, forbs, shrubs and trees. Recreational facilities in the park include picnic tables and ball diamonds. The Agriculture Research Station is largely cultivated land with numerous field shelterbelts and trees along the perimeter of the area and the main buildings.

6. Public Use:

The Sutherland Bird Sanctuary receives high public use because of the park and zoo.

7. Importance to the Resource:

A variety of captive native and exotic species of ducks, geese and swans use the zoo ponds. Few wild species of waterfowl use the Sanctuary.

Other birds observed in the Sanctuary and vicinity include shorebirds, gulls, sparrows, swallows, kingbirds, warblers, blackbirds, woodpeckers, chickadees, grosbeaks, hawks and owls.

8. Historical Notes and Land-Use Conflicts:

The Sutherland Bird Sanctuary was established on May 5, 1924

by Order-In-Council P.C. 1924-732. Between 1948 and 1950, federal sanctuaries were inspected on two occasions to determine if they were still of value to migratory waterfowl during periods of drought, and to revise the sanctuary boundaries to include only the water area. Apparently, these inspections were not carried out at the Sutherland Bird Sanctuary; the Sanctuary had limited value for waterfowl and the land area, the major part of the Sanctuary, was not deleted from the protected area.

Evaluations of the Sanctuary were carried out by the Canadian Wildlife Service in 1957, 1971, and 1972. All three investigations recommended the delisting of the Sanctuary because of its minimal value to migratory birds.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The area is regularly patrolled by the Saskatoon Police Department.

10. References:

Gollop, J.B. 1957. Sutherland Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 2 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

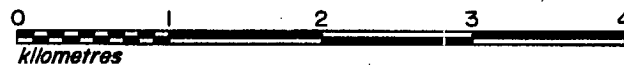
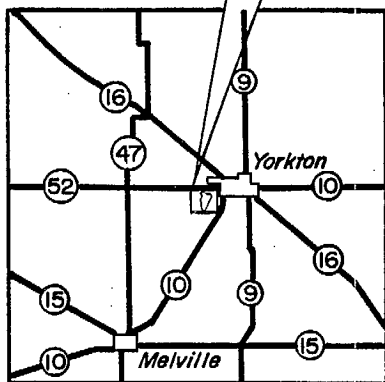
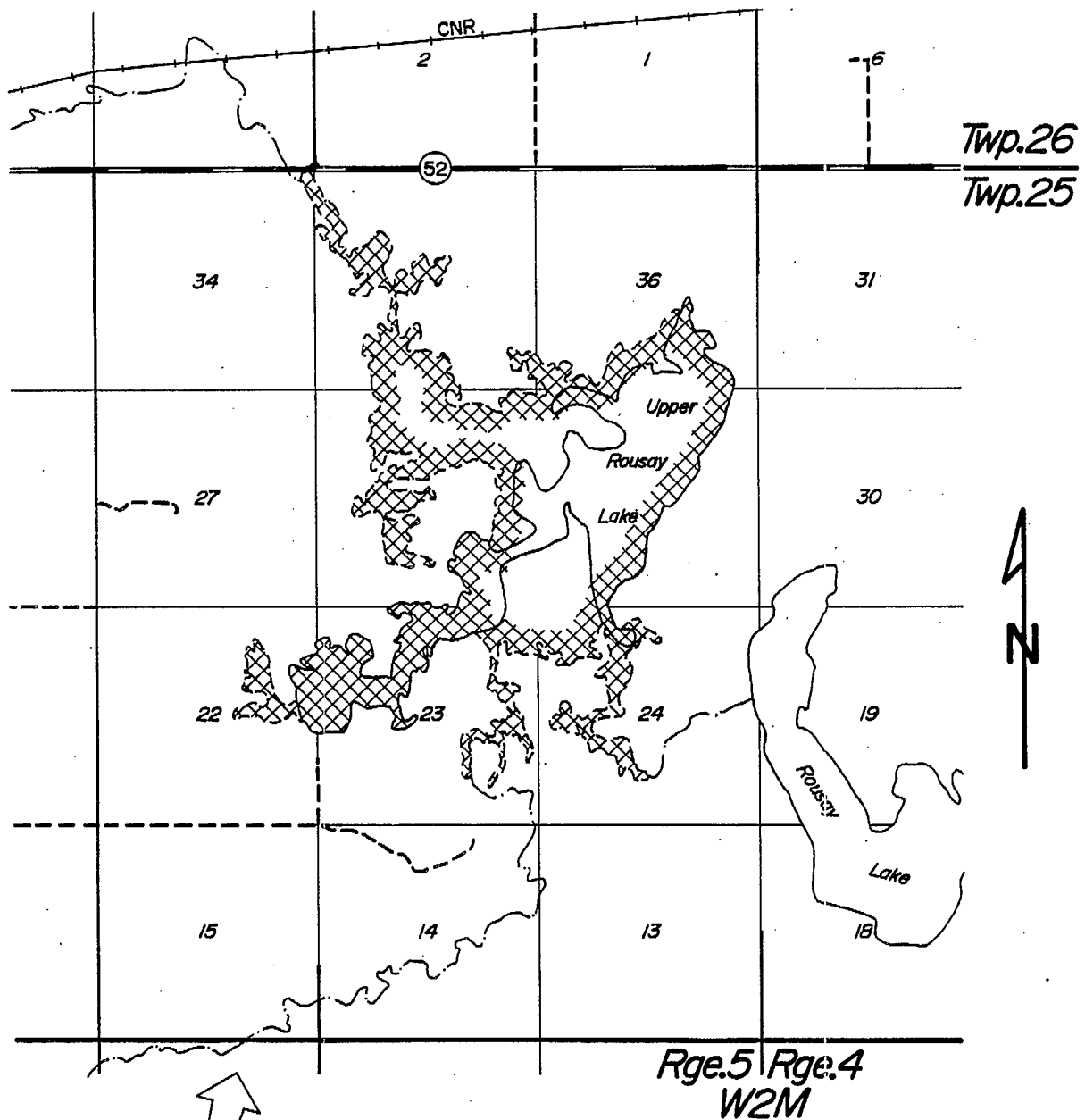
Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

**UPPER ROUSAY LAKE
BIRD SANCTUARY**

UPPER ROUSAY LAKE BIRD SANCTUARY



-  Bird Sanctuary Boundary
-  Usual Permanent Water

UPPER ROUSAY LAKE BIRD SANCTUARY

1. Location: 6 km southeast of Yorkton, Saskatchewan
 Lat. 52°11'N Long. 102°35'W
 NTS 1:50,000 Sheet No. 62M/2E
 Legal Description: See Appendix 1

2. Area: Approximately 518 hectares

3. Land Ownership:

Provincial Crown Land

4. Major Habitat Types:

Open water	55%
Marsh/sedge meadow	45%

5. Description of the Area:

Upper Rousay Lake is part of the Yorkton wetland complex located on level to gently rolling terrain in the boreal parkland ecoregion of Saskatchewan. The entire wetland complex consists of a series of relatively shallow interconnected water bodies including Rousay, York, Leech and Crescent lakes. Water levels in the wetland complex, largely dependent upon local runoff and a number of streams, fluctuate substantially. Several alterations to the natural flow of water through the complex have divided some of the larger lakes into smaller sub-units. Water flows into Upper Rousay Lake via a division of Willowbrook Creek from the northwest and Ruesh's Creek from the southwest. Excess water in Upper Rousay Lake flows through a number of channels without control structures into Lower Rousay Lake.

Upper Rousay Lake, which has an average depth of 0.5 m, consists of numerous bays, peninsulas and temporary islands, as well as several man-made islands. Because of the low relief between the water's edge and the upland terrain, the configuration of the lake and its associated marshes vary considerably between seasons. The entire shoreline of the lake is characterized by sedge (Carex spp.) and associated wet meadow grasses. Scattered clumps of aspen (Populus tremuloides) and willow (Salix spp.) occur on the periphery of the lake. A small stand of maple (Acer negundo) is found on the east shore.

During years of average spring runoff, much of the lake has abundant emergent vegetation. Bulrush (Scirpus spp.) forms an uninterrupted 45 to 90-m fringe around the lake and associated marshes. Intermittent areas of cattail (Typha latifolia), spangletop (Scolochloa festucacea) and phragmites (Phragmites communis) occur in this fringe. Sedges occur in many areas, and stands of bulrush in a wide

range of densities occur on the entire lake. Common submergent aquatics found throughout the lake include pondweeds (Potamogeton spp.), water milfoil (Myriophyllum spp.), mare's tail (Hippuris vulgaris), bladderwort (Utricularia spp.), wigeon grass (Ruppia spp.) and associated species.

Most of the uplands bordering the lake are used for pasture, hayland and cereal crops. Access to the Sanctuary is by three public roads.

6. Public Use:

Waterfowl hunters are the primary users of the area. Large concentrations of fall staging waterfowl provide excellent hunting on adjacent lands for local and non-residents.

The lake is not deep enough to support a harvestable population of fish and is unsuitable for recreational activities such as boating and swimming.

7. Importance to the Resource:

Upper Rousay Lake Bird Sanctuary provides excellent breeding and molting habitat for waterfowl. Large numbers of ducks, both dabblers and divers, and several pairs of Canada Geese nest there every year. The lake is also an important fall staging area for ducks, particularly Mallards, and geese.

Other water and marsh birds which breed there include Horned, Eared, Pied-billed and Red-necked grebes; Sora; Marsh Wren; and Red-winged and Yellow-headed blackbirds. The Great Blue and Black-crowned Night herons, American Bittern, Common Loon, Western Grebe, White Pelican and Herring and Ring-billed gulls have been observed there in the summer. A variety of shorebirds use the area. Wilson's Phalarope, Marbled Godwit, Killdeer, Common Snipe, Upland Plover, Willet, Spotted and Baird's sandpipers and American Avocet are known or suspected breeders. Semipalmated Plover; Greater and Lesser yellowlegs; Pectoral, Least and Solitary sandpipers; and Short-billed Dowitcher are migrants.

Upland species known or believed to breed in the area include Belted Kingfisher; Yellow-shafted Flicker, Eastern Kingbird; Yellow and Yellow-throated warblers; Barn and Tree swallows; Western Meadowlark; Clay-colored, Savannah, Vesper and Song sparrows; Chestnut-collared Longspur; Red-tailed and Swainson's hawks; and Northern Harrier.

8. Historical Notes and Land-Use Conflicts:

In 1948, wildlife officials recommended the cancellation of five federal bird sanctuaries because drought had made them unsuitable as breeding and resting grounds for migratory

waterfowl. Upper Rousay Lake Bird Sanctuary was one of five replacement sanctuaries established by Order-In-Council P.C. 1948-5070 on November 3, 1948.

The Canadian Wildlife Service evaluated the Sanctuary on a number of occasions. In 1957, its importance as a fall staging area for waterfowl and increased importance during periods of drought was recognized. The recommendation was either retain the Sanctuary, providing that it was posted, or delist it because of its status as a Provincial Game Preserve. In 1962, delisting of the Sanctuary was recommended, but no significant reasons were given. An evaluation in 1971 recognized the value of the lake as a fall staging area for waterfowl, but neither retention nor delisting of the Sanctuary was recommended. The most recent evaluation in 1972 recommended that the Sanctuary be retained because of its importance as a breeding, molting and fall staging area for waterfowl.

In the past, crop depredation by waterfowl has been a serious problem, particularly at the north end of Upper Rousay Lake. Crop damage prevention and compensation programs in recent years have helped ameliorate the problem.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Part of the Sanctuary is also protected by Provincial Game Preserve Regulations under the Provincial Wildlife Act.

Regular patrols of the area are made by the Yorkton, Saskatchewan detachment of R.C.M.P. and conservation officers of the Saskatchewan Department of Parks and Renewable Resources. Enforcement is difficult because of the lack of access roads and fluctuating water levels which alter the boundaries of the Sanctuary.

10. References:

Canadian Wildlife Service. 1979. Migratory bird habitat priorities: Prairie Provinces. Unpubl. report, Can. Wildl. Serv., Edmonton. 104 pp.

Gollop, J.B. 1957. Upper Rousay Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

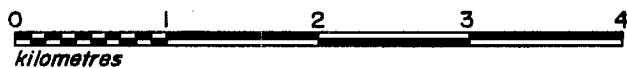
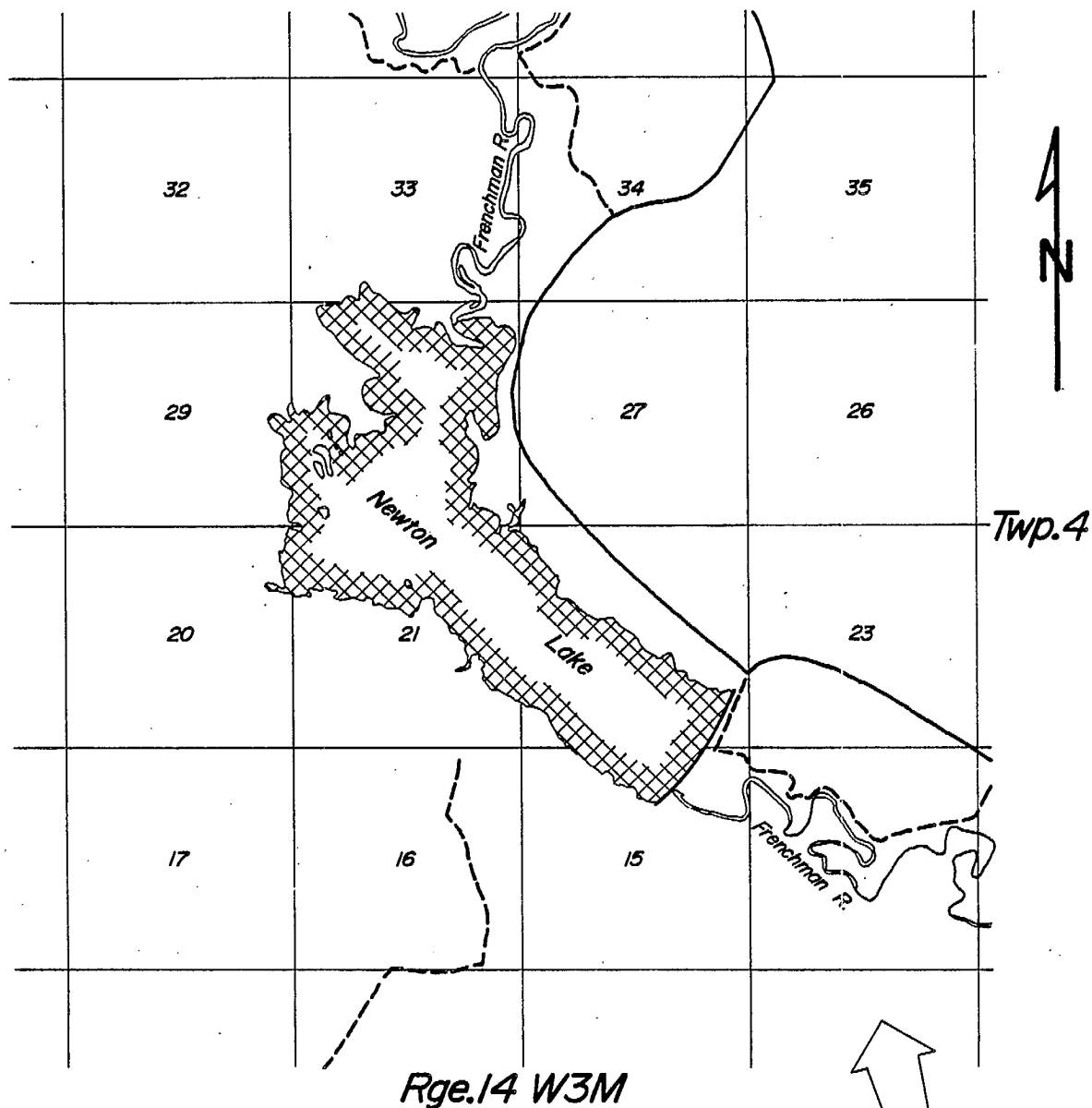
Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Schmidt, A. 1973. An ecological survey of the Yorkton wetland complex. Unpubl. report, Sask. Dept. Nat. Resources, Saskatoon. 105 pp.

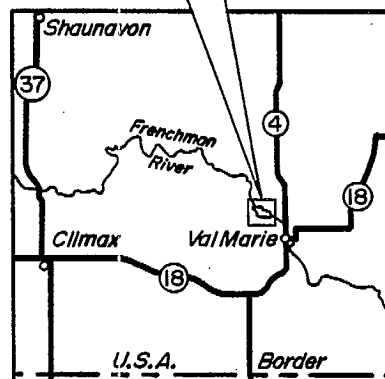
VAL MARIE RESERVOIR

BIRD SANCTUARY

VAL MARIE RESERVOIR BIRD SANCTUARY



 Bird Sanctuary Boundary



VAL MARIE RESERVOIR BIRD SANCTUARY

1. Location: 10 km northwest of Val Marie, Saskatchewan
 Lat. 15°19'N Long. 107°50'W
 NTS 1:50,000 Sheet No. 72G/5W
 Legal Description: See Appendix 1

2. Area: Approximately 505 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Open water and mudflats	90%
Marsh	9%
Islands	1%

5. Description of the Area:

The Val Marie Reservoir, also known as Newton Lake, is an impoundment on the Frenchman River behind a Prairie Farm Rehabilitation Administration (PFRA) dam completed in 1937. It is located in the short-grass prairie ecoregion of Saskatchewan. Although there is a good water supply to the reservoir, water levels often fluctuate because of the heavy demand on the stored water for irrigation purposes. By mid-summer, wide expanses of mudflat are exposed between the rocky, sandy shoreline and the water. There are several small islands and peninsulas whose numbers are dependent on the fluctuating water levels.

Emergent vegetation is largely restricted to the west end of the reservoir where the Frenchman River enters the reservoir. Here, a variety of sedges (Carex spp.) and associated dry meadow plants occur. Stands of cattail (Typha latifolia) and bulrush (Scirpus spp.) grow in this area of low relief when water levels are not high. Submergent aquatics consist largely of beds of pondweed (Potamogeton spp.) and water milfoil (Myriophyllum spp.) found throughout the reservoir.

Surrounding PFRA land is used for hay production and pasture. Semi-arid grassland species represented are spear grass (Stipa spp.), blue grama (Bouteloua gracilis) and wheat grass (Agropyron spp.). Two public roads provide access to the reservoir.

6. Public Use:

The main recreational use of the Sanctuary is waterfowl hunting on adjacent fields. Fall staging concentrations of ducks and geese on the reservoir provide the only good

waterfowl hunting for many miles in the semi-arid region. Some fishing is done near the PFRA dam and spillway. Local residents occasionally picnic near the water.

7. Importance to the Resource:

Val Marie Reservoir is an important spring and fall staging area for Canada Geese and ducks, mainly dabblers. The reservoir does not support large numbers of ducks and geese during the breeding and molting seasons, but is important during droughts as it is the only large permanent water body in the area. Moderate numbers of dabbler broods and several broods of Canada Geese are produced in most years.

Colonial nesting birds known or believed to nest on the islands are Double-crested Cormorant, Great Blue Heron, Ring-billed and California gulls and Common Tern. White Pelicans, Black-crowned Night Herons, Franklin's Gulls and Black Terns use the area during the summer, but are not known to breed there. Suspected breeding shorebirds include Killdeer, American Avocet, Spotted Sandpiper, Marbled Godwit, and Wilson's Phalarope. Several other shorebird species are common transients.

Other birds known or believed to nest in the area are Horned Lark, Eastern Kingbird, Yellow-throated Warbler; Clay-colored and Vesper sparrows; Chestnut-collared Longspur; American Goldfinch; Red-winged Blackbird; Bank, Cliff, Barn and Northern Rough-winged swallows; and Swainson's Hawk.

8. Historical Notes and Land-Use Conflicts:

On November 3, 1948, by Order-In-Council P.C. 1948-5070, the Val Marie Reservoir Bird Sanctuary was one of five sanctuaries established to replace five other sanctuaries that had become unsuitable as migratory bird refuges because of drought conditions.

An evaluation of the Sanctuary in 1957 recognized the value of the Sanctuary as a fall staging area for waterfowl, but recommended delisting the Sanctuary since it was also a Provincial Game Preserve. Evaluated again in 1971, the Sanctuary was recognized as having waterfowl production value, but no recommendations were made. The last major evaluation, in 1972, recommended that the Sanctuary be retained because of its value as a breeding, molting and staging area, particularly during periods of drought.

Crop depredation by waterfowl is not considered a serious problem in the area.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory

Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Routine patrols of the reservoir are made by the Val Marie, Saskatchewan detachment of the R.C.M.P. Conservation officers of the Saskatchewan Department of Parks and Renewable Resources patrol the area in the fall.

10. References:

Dzubin, A. 1957. Val Marie Reservoir Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Murray, L.H. 1966. Bird Sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

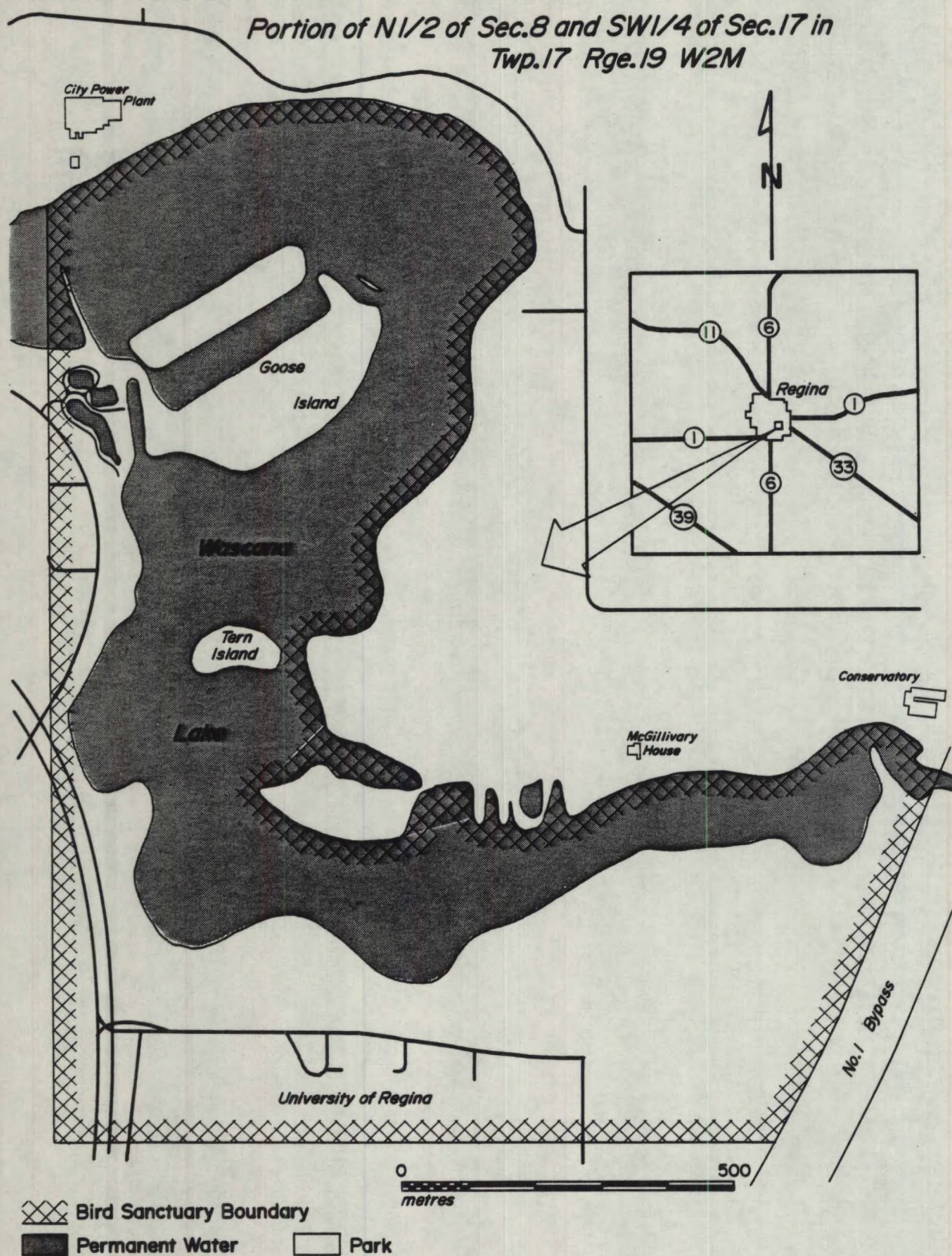
Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

Wiercinski, M. 1984. Baseline monitoring of selected migratory bird sanctuaries and national wildlife areas, Saskatchewan, May-August 1984. Unpubl. report, Can. Wildl. Serv., Saskatoon. 90 pp.

**WASCANA LAKE
BIRD SANCTUARY**

WASCANA LAKE BIRD SANCTUARY

*Portion of N1/2 of Sec.8 and SW1/4 of Sec.17 in
Twp.17 Rge.19 W2M*



WASCANA LAKE BIRD SANCTUARY

1. Location: Within the City of Regina, Saskatchewan
 Lat. 50°26'N Long. 104°36'W
 NTS 1:50,000 Sheet No. 72I/7E
 Legal Description: See Appendix 1
2. Area: 104 hectares
3. Land Ownership:
 City of Regina, Saskatchewan Power Corporation,
 University of Regina, and Wascana Centre Authority
4. Major Habitat Types:

Open water and marsh	55%
Islands	5%
City Park	40%
5. Description of the Area:

The Sanctuary embraces part of Wascana Waterfowl Park which is located within a larger park complex, Wascana Centre. The park complex, developed around a man-made lake and associated marshes on Wascana Creek, includes the Museum of Natural History, the Legislative Buildings, the main campus of the University of Regina and several other buildings. Large expanses of lawn interspersed with native and exotic trees, shrubs and flowers occur throughout the park complex. Native upland vegetation including snowberry (Symphoricarpus occidentalis), rose (Rosa spp.), scarlet mallow (Sphaeralcea coccinea), woolly yarrow (Achillea lanulosa) and Lewis' wild flax (Linum lewisii) are found within the Sanctuary.

Most of the emergent vegetation occurs on the southeast portion of the lake and along the banks of Wascana Creek where there are dense stands of cattail (Typha latifolia), bulrush (Scirpus spp.), sedges (Carex spp.) and phragmites (Phragmites communis). Submergent vegetation includes pondweeds (Potamogeton spp.) and water milfoil (Myriophyllum spp.), found throughout the lake, and hornwort (Ceratophyllum demersum), water crowfoot (Ranunculus spp.) and other species found in association with the emergent aquatics. Three man-made islands within the Sanctuary provide protected nesting habitat for waterfowl and other waterbirds.

A 40-hectare parcel of land adjacent to the southeast end of the Sanctuary is used for lure crops to protect nearby commercial grain crops outside the city limits.

6. Public Use:

The major public use of the Sanctuary is by local residents and visitors interested in sight-seeing in the Park. Several picnic and barbecue areas, field sport facilities and a children's playground, are maintained.

Sailing, rowing, canoeing, skating, cross-country skiing, snowshoeing and ice boating are popular activities. Boating and fishing are not permitted within the Waterfowl Park.

The Wascana Centre employs a full time naturalist for the benefit of the many visitors to the Park. Thousands of children visit the Park annually.

7. Importance to the Resource:

Over 200 breeding pairs of Canada Geese nest in the Park each year. The main species of duck which regularly nest there are Mallard, Pintail and Blue-winged Teal. The Sanctuary also attracts large numbers of spring and fall staging waterfowl, particularly Canada Geese. In recent years, up to 7,500 geese have used the area. Canada Geese from the Wascana flock have been used in restocking programs throughout Saskatchewan and as far away as Quebec, British Columbia, Florida and New Mexico.

Other water and marsh birds which nest in the area are Pied-billed, Horned and Eared grebes; Common and Black terns; Sora; Marsh Wren; and Red-winged, Yellow-headed and Brewer's blackbirds. Breeding shorebirds include Killdeer, American Avocet, Spotted Sandpiper and Wilson's Phalarope. The upland habitat supports a variety of breeding songbirds including flycatchers, swallows and sparrows.

Over 115 species are migrant visitors which include Common Loon, White Pelican, Double-crested Cormorant, Great Blue and Black-crowned Night herons and Tundra Swan, Forster's Tern and several shorebird species.

8. Historical Notes and Land-Use Conflicts:

In the early 1950s when the City of Regina began expanding, Fred Bard, Director of the Saskatchewan Museum of Natural History initiated action to preserve the Park area surrounding Wascana Lake, creek and contiguous marshes. On July 12, 1956, the Wascana Lake Bird Sanctuary was established by Order-In-Council P.C. 1956-1060. Since then, the City of Regina and the Wascana Centre Authority (an eleven-member statutory group established in 1962 to represent the City of Regina, the Government of Saskatchewan and the University of Regina) have developed and administered the park complex including the Sanctuary.

The Canadian Wildlife Service evaluated the Sanctuary in 1957 primarily because of proposed plans by the City of Regina and the Saskatchewan Museum of Natural History to develop the Sanctuary as a wildlife and recreational area. Apparently, no specific recommendation was made to retain or delist the Sanctuary because of the proposed recreational development.

Two further evaluations of the Sanctuary by CWS were done to determine the future sanctuary status of the area. In 1971, it was recommended that the Sanctuary be delisted because the City of Regina and the Wascana Centre Authority assumed administrative control of the area. The 1972 investigation also recommended that the Sanctuary be delisted primarily because migratory birds using the area are protected by the City of Regina and Provincial Game Preserve regulations.

The lure crop in the Wascana East area has helped ameliorate crop depredation by waterfowl on grain fields adjacent to the city limits.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The Sanctuary is also protected by Provincial Game Preserve Regulations under the Provincial Wildlife Act, and Wascana Centre Authority Regulations under the Wascana Centre Act.

Wascana Centre Police and the Regina City Police regularly patrol the area.

10. References:

Bard, F.G. 1956. Proposed Wascana Bird Park. Unpubl. report, Saskatchewan Natural History Society. 6 pp.

Belcher, M. 1969. Birds of Regina. Saskatchewan Natural History Society. 78 pp.

Donison, R. 1976. Regina Waterfowl Park nesting survey - 1975. Blue Jay 34(2): 103-116.

du Toit, R., R. Allsopp, J. Hillier, P. Taylor and G. Wilcox. 1983. Wascana Centre 1982 Master Plan. Unpubl. report, Roger du Toit Architects, Toronto. 94 pp.

Dzubin, A. 1957. Wascana Lake Bird Sanctuary (Saskatchewan). Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Lahrman, F. 1956. The Wascana Waterfowl Park. Blue Jay 14(4): 113-116.

Murray, L.H. 1966. Bird sanctuaries in Saskatchewan 1887-1965. Blue Jay 24(3): 110-120.

Nieman, D. J. and R. J. Isbister. 1973. An evaluation of the migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 219 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Poston, H.J. 1971. Comments on migratory bird sanctuaries in Saskatchewan. Unpubl. report, Can. Wildl. Serv., Saskatoon. 3 pp.

Renaud, W. 1972. Birds of Wascana Lake. Unpubl. report. Can. Wildl. Serv., Saskatoon. 3 pp.

Sanderson, R.M. 1964. Regina Waterfowl Park nesting survey, 1962. Blue Jay 22: 14-17.

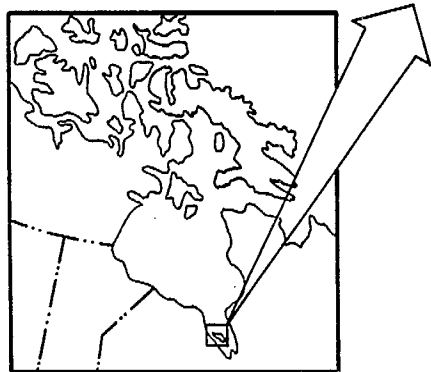
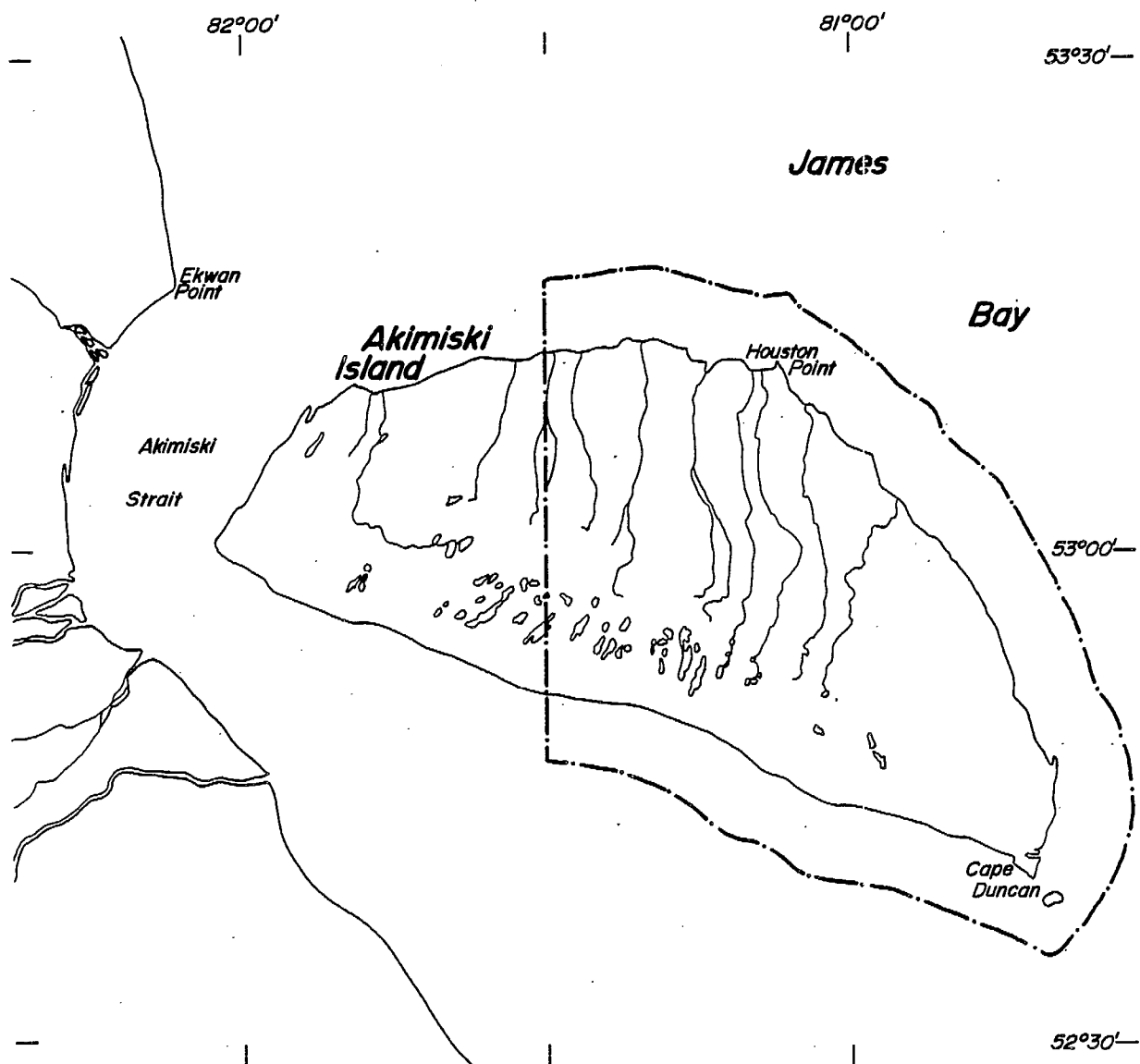
Scott, L. 1984. Wascana Park bird checklist. Unpubl. data.

Suggett Consulting. 1980. Interpretive assessment of prairie national and cooperative wildlife areas, migratory bird sanctuaries, and potential wildlife areas. Prepared for the Can. Wildl. Serv., Edmonton. 256 pp.

AKIMISKI ISLAND

BIRD SANCTUARY

AKIMISKI ISLAND BIRD SANCTUARY



--- Bird Sanctuary Boundary



0 20 40 60
kilometres

AKIMISKI ISLAND BIRD SANCTUARY

1. Location: 250 km north of Moose Factory, Ontario in James Bay in the District of Keewatin, Northwest Territories
 Lat. 53°02'N Long. 81°15'W
 NTS 1:500,000 Sheet No. 43SE
 Legal Description: See Appendix 1

2. Area: 336,700 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal mudflats and open water	40%
Sedge meadow	Data
Muskeg	not
Spruce forest	available

5. Description of the Area:

Akimiski Island, a relatively large island in James Bay, has a steep south shore and a gently sloping north shore with extensive mudflats and coastal marsh. These fertile flats which support dense stands of sedge (Carex spp.) become narrower along the northeast shore where willows (Salix spp.) fringe the sedge marsh. From the north shore, sedge fens with numerous hummocks or frost palsas extend inland. Muskeg occurs from the top of the south bank as far north as the sedge meadows. The southeastern part of the island near Cape Duncan is characterized by sedge flats and open ponds. Several small islands occur offshore from Cape Duncan. Offshore waters here contain eelgrass (Zostera spp.) beds. Spruce forest found on Houston Point, a sandy glacial deposit, has been repeatedly burned. Apparently, no botanical surveys have been done on Akimiski Island, however, it is believed that flora there is similar to that on the mainland.

6. Public Use:

Native residents of Attawapiskat, 18 km from the west side of Akimiski Island, hunt and trap on the island in the spring and summer.

No mineral or oil exploration activities have occurred on the island.

Few tourists visit the island.

7. Importance to the Resource:

Up to 250,000 Lesser Snow Geese and several thousand small Canada Geese which breed on Baffin Island use the Sanctuary during spring and fall migrations. A few thousand Lesser Snow Geese nest in the willow fringe at the edge of the sedge meadow along the northeast coast. Large Canada Geese from the Tennessee Valley population nest on the permafrost hummocks in the inland sedge fens. Other waterfowl which use the Sanctuary for nesting, molting and/or staging are Black Duck, Mallard, Pintail, Green-winged Teal, Lesser and Greater scaup, Red-breasted Merganser, Ring-necked Duck and Brant.

Colonies of Herring Gull, Common Tern, White-winged Scoter, Black Scoter and Oldsquaw are found on the small islands near Cape Duncan. Although the northwest coast of the island (which is not within the Sanctuary) is considered the most important area for shorebirds, large concentrations of migrant shorebirds also use the other coastal areas on the island. The northwest coast may be a breeding site for the Marbled Godwit whose nearest breeding grounds are on the prairies.

8. Historical Notes and Land-Use Conflicts:

The boundaries of the Sanctuary on Akimiski Island were set up with the advice and cooperation of the local Indians who were assured access to the nearest parts of the island for their summer hunting. On March 3, 1941, by Order-in-Council P.C. 1941-1477, the Akimiski Island Bird Sanctuary was established.

Potential land-use conflicts are hydrocarbon exploration and development and ancillary activities such as coastal airstrip construction, seaport development and increased shipping. A gas pipeline from the Arctic islands south along the Hudson Bay coast was proposed in the late 1970s. At present, it is unlikely that the pipeline, as proposed, will proceed. Future construction of such a pipeline may not directly affect Akimiski Island Bird Sanctuary, but the loss of coastal habitat on the mainland and the displacement of birds may increase the importance of the Sanctuary.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Carreiro, J.F. and G.D. Tessier. 1976. Critical and important areas for migratory birds in southern Ontario and James Bay. Unpubl. report, Can. Wildl. Serv., Ottawa. 123 pp.

Curtis, S.G. and L. Allen. 1976. The waterfowl ecology of the Quebec coast of James Bay. Unpubl. report, Can. Wildl. Serv., Ottawa. 72 pp.

Hanson, H.C., H.G. Lumsden, J.J. Lynch and H.W. Norton. 1972. Population characteristics of three mainland colonies of blue and lesser snow geese nesting in the southern Hudson Bay region. Ontario Ministry of Natural Resources Research Report No. 92. 38 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

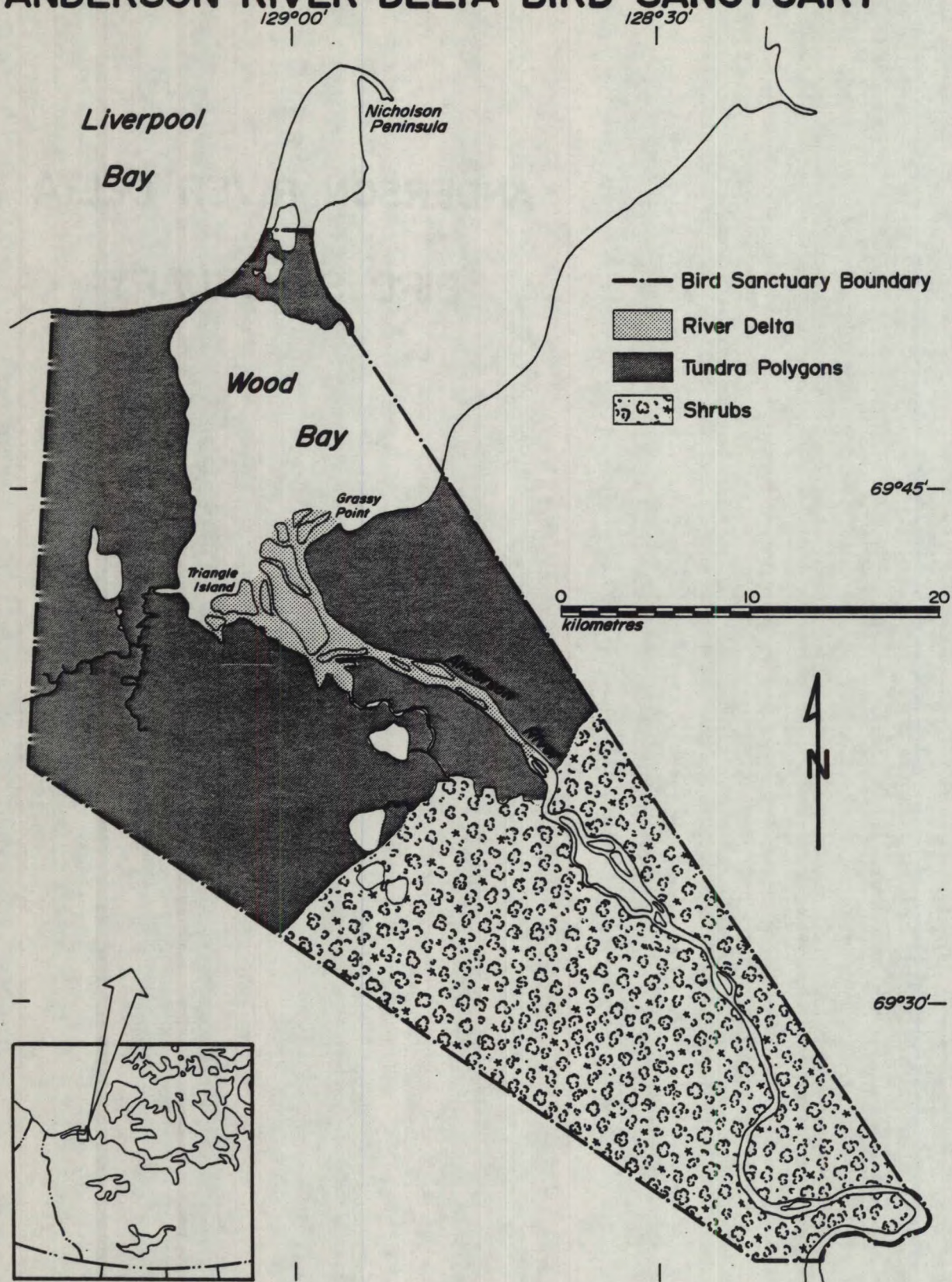
Morrison, R.I.G., T.H. Manning and J.A. Hagar. 1976. Breeding of the Marbled Godwit, Limosa fedoa, in James Bay. Can. Field-Nat. 90: 487-490.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Pimlott, D.H. 1975. The hazardous search for oil and gas in arctic waters. Nature Canada (3)4: 20-28.

**ANDERSON RIVER DELTA
BIRD SANCTUARY**

ANDERSON RIVER DELTA BIRD SANCTUARY



ANDERSON RIVER DELTA BIRD SANCTUARY

1. Location: 20 km southeast of Tuktoyaktuk Peninsula
in the District of Mackenzie,
Northwest Territories
Lat. 69°42'N Long. 129°00'W
NTS 1:500,000 Sheet No. 107SW, 107SE
Legal Description: See Appendix 1

2. Area: 108,300 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Open water and sandy beaches	12%
Delta	5%
Wetland (tundra polygons, ponds, river)	47%
Shrubs	36%

5. Description of the Area:

Spanning the transition from spruce forest to Dryas tundra, the Anderson river flows through a gradually widening flood plain flanked by river terraces. The lower portion of the river passes through sedimentary rock, the source of its heavy load of silt and clay. These sediments are deposited in the delta of low alluvial islands, channels and lakes as well as in the shallow waters of Wood Bay. Five tributary streams flow into the Anderson River delta. Cutbanks and shallow mud bars form the edges of the streams. Near the mouth of the Anderson River tundra polygons have developed on poorly drained soils.

Sandy beaches with intermittent areas of gravel extend along much of Wood Bay and the south shore of Nicholson Peninsula. Wave and tide action, which reach the banks above the beaches, inhibit the growth of vegetation on portions of the sandy beaches. Characteristic plants on the beaches are beach grass (Elymus arenarius), seabeach-sandwort (Arenaria peploides), sea-lungwort (Mertensia maritima), and wormwood (Artemisia tilesii).

A dense stand of willow (Salix spp.) and occasional concentrations of ground birch (Betula glandulosa) cover the flat former floodplain and lower hills. This habitat, referred to as the ptarmigan willows, also has tundra polygons in the poorly drained areas. Newly formed polygons have bare centers. Cranberry (Vaccinium vitis-idaea), crowberry (Empetrum nigrum) and bearberry (Arctostaphylos rubra) cover the pushed up hummocks. A variety of grasses and sedges are interspersed with the

willows. Spruce trees (Picea mariana), no higher than 1 m, are found in the ptarmigan willows and as far north as the mouth of the Anderson River.

The outer delta, the newest and lowest portion of the delta, is a series of islands and mud bars frequently washed by storm tides. Vegetation is primarily grasses (Elymus arenarius, Dupontia fisheri), sedges (Carex subspathacea) and arctic willows (Salix arctica). The older, middle delta, about 1 m high, contains marshy areas, ridges and hummocks and is bordered by low cutbanks. About every second year, storm tides inundate the area. Dominant plants include big-sheath pondweed (Potamogeton vaginatus), grasses, sedges, arctic willows, small-flowered anemone (Anemone parviflora), mare's tail (Hippuris vulgaris), and marsh felwort (Lomatogonium rotatum). The inner delta is flat and is studded with lakes, lush marshy meadows, and shallow sloughs. Grassy ridges on the edge of the lakes have formed as a result of ice action. Sphagnum and sedge are the dominant vegetation in meadows where permafrost is only 20 to 25 cm below the surface. The channel banks, rounded and covered with mats of grasses and arctic willow, support ground birch, crowberry (Empetrum nigrum) and cranberry. Widely dispersed clumps of alder (Alnus crispa), 1 to 1.5 m high, occur further inland.

The tops of a number of bluffs and Nicholson Peninsula, which are better drained and more windswept, have vegetation more characteristic of the high arctic. Dryas spp. and associated plants predominate. Willows are sparse and grow no higher than 25 cm. Decomposing shale cliffs support plants such as fireweed (Epilobium angustifolium), ground birch, chickweed (Stellaria edwardsii), wallflower (Erysimum inconspicuum), tansy mustard (Descurainia sophioides), saxifrage (Saxifraga reflexa), prairie sagewort (Artemisia frigida) and sweet coltsfoot (Petasites frigidus).

Numerous archaeological sites occur in the area; the abundance of wildlife and availability of driftwood once supported a thriving Inuit community.

The Anderson River Delta Bird Sanctuary is a proposed IBP site because of its diverse flora and fauna.

6. Public Use:

Inuit hunters and trappers use the Sanctuary for hunting caribou and moose and trapping marten, Arctic and coloured fox and muskrats.

Whitefish, inconnu and herring are taken from several excellent fishing sites around Wood Bay.

The Anderson River is suitable for travel by small boats, canoes or kayaks, however, the remoteness of the area limits its use.

7. Importance to the Resource:

The Sanctuary is used by large numbers of breeding and moulting waterfowl from mid-May to mid-September. An estimated 6 percent of the Canadian population of Black Brant, up to 2,500 birds, nest on the outer delta. Approximately 4 percent of the Western arctic population of Lesser Snow Geese, about 4,200 pairs, nest on islands in the middle delta. The inner delta is used by 75 breeding pairs and 1,200 non-breeding Tundra Swans. White-fronted and Canada geese, King Eider, Oldsquaw, Pintail, Green-winged Teal, Mallard, Wigeon, Greater Scaup, and White-winged Scoter nest in the Sanctuary. Several water bodies in the Sanctuary are used by moulting waterfowl.

Other waterbirds that breed in the Sanctuary are Glaucous, Common (Mew) and Bonaparte's gulls; Arctic Tern, Red-throated and Arctic loons; Semipalmated, Golden and Black-bellied plovers; Hudsonian Curlew; Red and Northern phalaropes; Hudsonian Godwit; Wilson's Snipe and several species of sandpiper. The endangered Eskimo Curlew formerly nested along the Anderson River. Six sightings were reported between 1961 and 1964.

Gyrfalcons and Peregrine Falcons nest on bluffs in the Sanctuary. A high diversity of passerine species are attracted to the variety of plant communities.

Barren-ground grizzly bears are fairly common in the delta area and several denning sites are known. Barren-ground caribou and moose move into the area during the summer.

8. Historical Notes and Land-Use Conflicts:

A proposal by the CWS in 1961 for the establishment of a sanctuary on the Anderson River Delta emphasized the need to protect nesting populations of several species of geese from disturbance by oil exploration activities and possible pollution from any development for oil extraction. It was also pointed out that intensive grazing by reindeer would threaten nesting habitat if reindeer herds were re-established. On November 9, 1961, the Anderson River Delta Bird Sanctuary was established by Order-In-Council P.C. 1961-1617.

No oil exploration activities have been conducted in the area since the 1950s. Should oil be discovered, and produced, adequate pollution control measures would be required before development occurs.

Although the Mackenzie Reindeer Grazing Reserve extends

into the western side of the Anderson River Delta, present management of the herd does not permit grazing within the Sanctuary. Present hunting and trapping by Natives in the Sanctuary is not considered a threat to the migratory bird resource.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

10. References:

Allison, F. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Barry, T.W. 1982. Significant wildlife resource areas in the Beaufort Sea, Amundsen Gulf, and Prince of Wales Strait. Unpubl. report, Can. Wildl. Serv., Edmonton. 71 pp.

Barry, T.W. 1967. The geese of the Anderson River Delta, N.W.T. Unpubl. Ph.D. Thesis, Univ. Alberta, Edmonton. 212 pp.

Barry, T.W. 1961. Proposed migratory bird sanctuaries - Anderson River Delta, Mackenzie District, N.W.T., Kendall Island and vicinity, Mackenzie Delta, Mackenzie District, N.W.T. Unpubl. report, Can. Wildl. Serv., Edmonton. 12 pp.

Barry, S.J. and T.W. Barry. 1982. Seabird surveys in the Beaufort Sea, Amundsen Gulf, and Prince of Wales strait, 1981 season. Unpubl. report, Can. Wildl. Serv. for Dome Petroleum Ltd. and Esso Resources Canada Ltd., Calgary. 52 pp.

Gollop, J.B. and C.E.P. Shier. 1978. Status report on Eskimo Curlew (Numenius borealis) in Canada. Can. Wildl. Serv. and Com. Stat. End. Wildl. Can., Ottawa. 41 pp.

Hanson, H.C. and R.L. Jones. 1976. The biogeochemistry of Blue, Snow, and Ross' geese. Special Pub. No. 1. Illinois Natural History Survey, Urbana. 281 pp.

Hohn, E.O. 1959. Birds of the mouth of the Anderson River and Liverpool Bay, Northwest Territories. Can. Field-Nat. 73: 93-114.

Johnson, S.R., W.J. Adams and M.R. Morrell. 1975. The birds of the Beaufort Sea. Unpubl. report, LGL Ltd. for Can. Wildl. Serv., Beaufort Sea Project, Victoria. 310 pp.

Kerbes, R.H. (In Press). Lesser Snow Geese nesting in the western Canadian Arctic in 1981. Can. Field-Nat.

Kerbes, R.H. 1983. Lesser Snow Goose colonies in the western Canadian Arctic. J. Wildl. Manage. 47(2): 523-526.

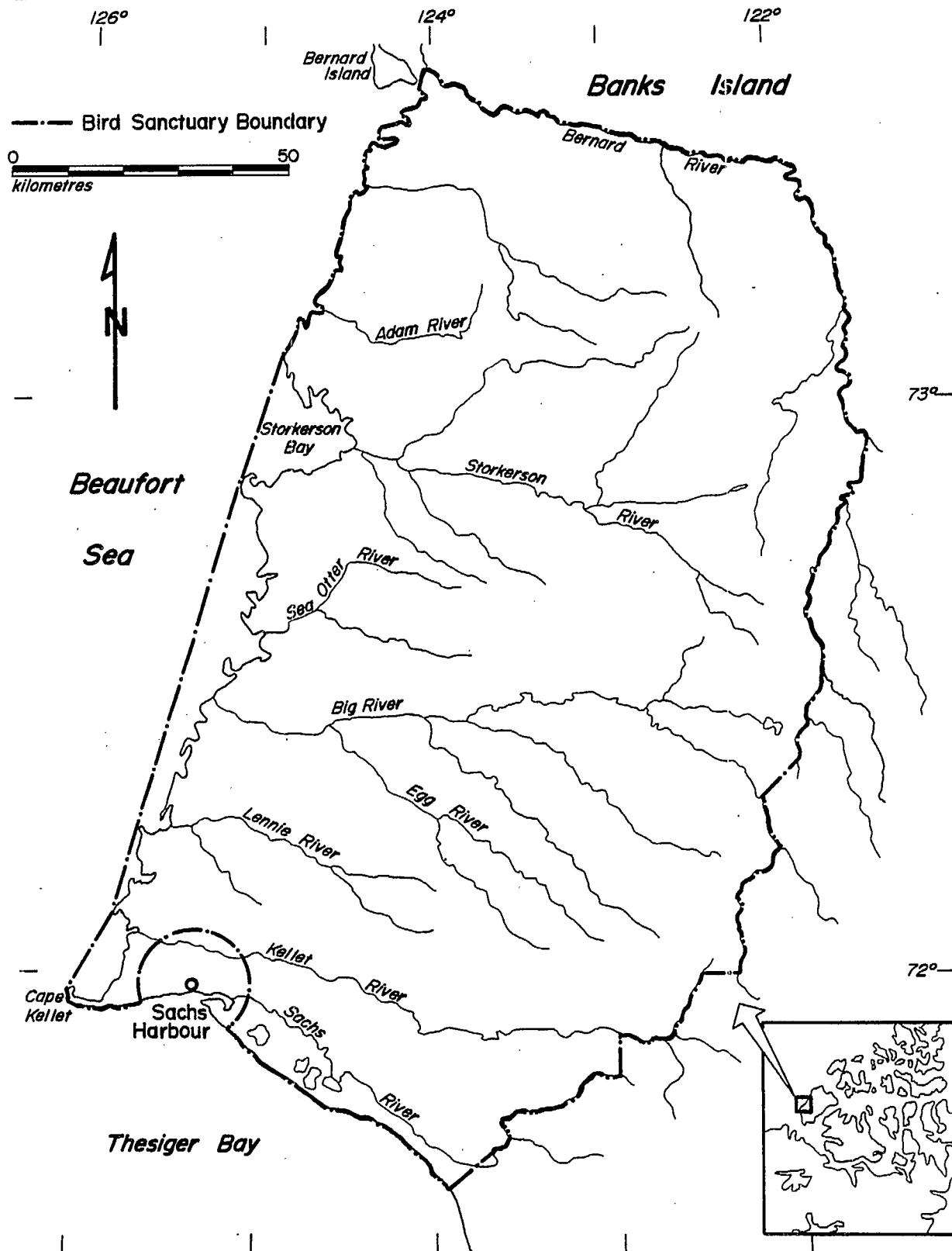
McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratoy bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Nettleship, D. N. and P. A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

BANKS ISLAND
BIRD SANCTUARY No.1

BANKS ISLAND BIRD SANCTUARY No.1



BANKS ISLAND BIRD SANCTUARY NO. 1

1. Location: Adjacent to Sachs Harbour on the southwestern quarter of Banks Island in the District of Franklin, Northwest Territories
 Lat. 72°40'N Long. 123°30'W
 NTS 1:500,000 Sheet No. 97NW, 97NE, 98SW, and 98SE
 Legal Description: See Appendix 1

2. Area: 2,051,800 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal mudflats and open water	4%
River delta	Data
Wetland meadow	not
Dryas barrens	available

5. Description of the Area:

Most of the area consists of a low plain (within 150 m of sea level) of gently rolling hills covered by glacial drift deposits, sand and gravel. Several long rivers drain the area from the east to the Beaufort Sea. Several tributary streams are found on the surface of the plain and in shallow draws. The broad shallow river valleys are characterized by gravelly and sandy alluvium deposits and swampy tundra containing large polygons and numerous shallow ground-moraine ponds. Broad swampy deltas occur at the mouths of the rivers which are quite braided in their lower reaches. Wide terraces occur at the confluence of the Egg and Big rivers.

Most of the coast consists of sand and gravel beaches. Dry mud cliffs occur between Sachs Harbour and Cape Kellett and at a few other locations. Sandbars and spits are common in the small, coastal bays. Between December and July, open water occurs off the west coast of Banks Island along the Arctic Ocean shorelead system.

Wetland meadows in the river valleys are characterized by sedges (Carex spp.), grasses (Eriophorum spp., Dupontia spp.) and mosses. Arctic willow (Salix arctica), Saxifrage (Saxifraga spp.) and fernweed (Pedicularis spp.) also occur. On the drier slopes, associations of Dryas spp. and other flowering perennials such as saxifrage are common. Hilltops have limited vegetation.

The Egg River-Big River area is a proposed IBP site.

6. Public Use:

Sachs Harbour Native people trap Arctic fox and hunt seal, polar bear, caribou and muskoxen within the Sanctuary.

7. Importance to the Resource:

Approximately 95 percent of the western Arctic population and about 15 percent of the Canadian population of Lesser Snow Geese nest on the lowlands at the confluence of the Egg and Big rivers. In 1981, there were an estimated 99,100 breeding pairs. After hatching, adults and broods move inland as far as 110 km. In addition, up to 3,000 Black Brant, about 100,000 King Eiders, several thousand Oldsquaw and lesser numbers of Tundra Swans, Ross' Geese and Sandhill Cranes nest in the Sanctuary.

Other birds known or believed to nest in the area include Yellow-billed, Arctic and Red-throated loons; Semipalmated, Black-bellied and Golden plovers; Ruddy Turnstone; Hudsonian Curlew; White-rumped, Baird's and Semipalmated sandpipers; Sanderling; Red Phalarope; Pomarine and Long-tailed jaegers; Glaucous and Sabine's gulls; Arctic Tern; Peregrine Falcon; Snowy Owl; Willow and Rock ptarmigans; and Horned Lark.

Polar bear maternity dens, Peary caribou winter range, Arctic fox dens and muskox habitat occur within the Sanctuary.

8. Historical and Present Land-Use Conflicts:

In 1961, CWS recommended that the area be given sanctuary status to protect the Lesser Snow Goose nesting grounds. At the time, anticipated oil exploration activities in the area were considered a major threat. On November 9, 1961, Banks Island Bird Sanctuary No. 1 was established by Order-in-Council P.C. 1961-1617. Since then, seismic activities have occurred within the Sanctuary boundaries and the potential for further activity remains.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Barry, T.W. 1973. The significance of the Beaufort Sea coast

for migratory birds. Unpubl. report, Can. Wildl. Serv., Edmonton. 9 pp.

Barry, S.J. and T.W. Barry. 1982. Seabird surveys in the Beaufort Sea, Amundsen Gulf, and Prince of Wales Strait, 1981 season. Unpubl. report, Can. Wildl. Serv. for Dome Petroleum Ltd. and Esso Resources Canada Ltd., Calgary. 52 pp.

Hanson, H.C. and R.L. Jones. 1976. The biogeochemistry of Blue, Snow, and Ross' geese. Special Pub. No. 1, Illinois Natural History Survey, Urbana. 281 pp.

Harrington, C.R. 1963. Bird observations - Banks Island, N.W.T. Unpubl. report, Can. Wildl. Serv., Ottawa. 36 pp.

Kerbes, R.H. (In Press). Lesser Snow Geese nesting in the western Canadian Arctic in 1981. Can. Field-Nat.

Kerbes, R.H. 1983. Lesser snow goose colonies in the western Canadian Arctic. J. Wildl. Manage. 47(2): 523-526.

Latour, P. and L.M. Allison. 1976. Four new bird records for Banks Island, Northwest Territories. Can. Field-Nat. 90(4): 470-471.

Manning, T.H., E.O. Hohn and A.H. Macpherson. 1956. The birds of Banks Island. Bulletin No. 143, National Museum of Canada. Ottawa. 144 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

McEwen, E.H. 1958. Observations on the Lesser Snow Goose nesting grounds, Egg River, Banks Island. Can. Field-Nat. 72: 122-127.

Nash, P.A. and K.J. McCormick. (In Prep.) Banks Island Bird Sanctuary No. 1 Management Plan (Draft). Can. Wildl. Serv., Yellowknife.

Nettleship, D.N. and P.A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Porsild, A.E. 1951. Bird notes from Banks and Victoria islands. Can. Field-Nat. 65: 40-42.

Stirling, I., D. Andriashek, P. Latour and W. Calvert. 1975. The distribution and abundance of polar bears in the eastern Beaufort Sea. Tech. Report No. 2, Beaufort Sea Project, Dept. Environ., Victoria. 59 pp.

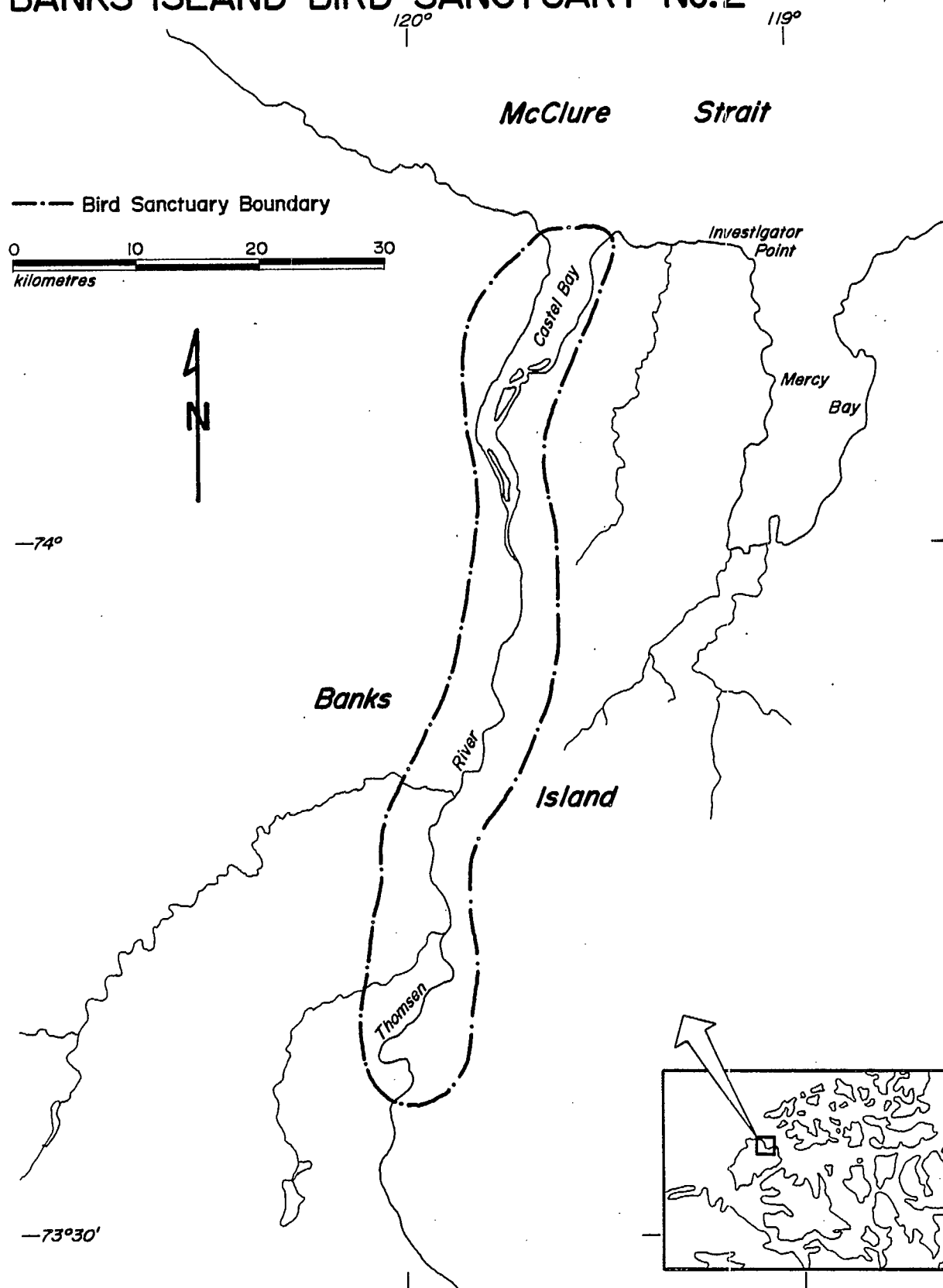
Stirling, I. and H. Cleator (Eds.). 1981. Polynyas in the Canadian Arctic. Occasional Paper No. 45, Can. Wildl. Serv., Ottawa. 70 pp.

Thorsteinsson, R. and E.T. Tozer. 1962. Banks, Victoria and Stefansson Islands, Arctic Archipelago. Memoir 330, Geol. Survey Can., Ottawa. 83 pp.

Walkinshaw, L. 1965. Sandhill crane studies on Banks Island, NWT. Blue Jay 23: 66-72.

BANKS ISLAND
BIRD SANCTUARY No.2

BANKS ISLAND BIRD SANCTUARY No.2



BANKS ISLAND BIRD SANCTUARY NO. 2

1. Location: On the north-central portion of Banks Island in the District of Franklin, Northwest Territories
 Lat. 74°00'N Long. 119°45'W
 NTS 1:500,000 Sheet No. 88SW, 88SE, 88NW,
 88NE and 98NE
 Legal Description: See Appendix 1

2. Area: 14,200 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal mudflats and open water	9%
Wetland meadow	Data not available
Dryas barrens	

5. Description of the Area:

The Thomsen River plain, underlain by sandstone and shale formations, is located in a steep-sided valley. Gently rolling hills, dissected by gullies surround the plains. Closer to the coast, lowlands replace the plain, and the Thomsen River becomes a broad, braided channel. Soils are poorly developed on the landscape which is covered by till and lacustrine deposits. Various patterned ground formations associated with frost action occur on the plain, rolling hills and lowlands.

Wetland meadows occur on poorly drained lowlands usually in association with polygons. Dominant vegetation includes sedges (Carex spp.), grasses (Eriophorum spp., Dupontia spp., Alopecurus spp.), forbs (Saxifraga spp., Pedicularis spp.) and mosses. Arctic willow (Salix arctica) is found on the borders of the better drained polygons. Willow-sedge tundra vegetation on the imperfectly drained slopes contain Dryas-Salix and Salix-grass subtypes. Drier slopes are characterized by associations of Dryas spp. and other flowering perennials such as saxifrage (Saxifraga oppositifolia) and poppy (Papaver radicatum). Hilltops are usually barren.

At the entrance to McClure Strait, open water appears between January and July. This polynya extends up to Mercy Bay in some years.

The southern part of the Sanctuary is included within the proposed Shoran Lake IBP site.

6. Public Use:

Little hunting or trapping is done in Banks Island Bird Sanctuary No. 2. It is beyond the area used by the Inuit of Sachs Harbour.

7. Importance to the Resource:

An estimated 25,000 Lesser Snow Geese use the Thomsen River Valley as a molting area. Most of these birds are apparently non-breeders from the Egg River - Big River area (Banks Island Bird Sanctuary No. 1.). Up to 5,000 Black Brant also use the Castel Bay and the lower Thomsen River area as a molting area. Molting Canada Geese have also been observed on the river.

Recorded breeding species in the area include Glaucous Gull, Baird's Sandpiper, Peregrine Falcon, Gyrfalcon, Rough-legged Hawk, Pomarine Jaeger, Snowy Owl, Rock Ptarmigan, Sanderling, Semipalmated Sandpiper, Sabine's Gull, Horned Lark, Water Pipit and Snow Bunting.

Muskoxen use the dissected uplands and the Thomsen River valley throughout the year.

8. Historical Notes and Land-Use Conflicts:

In 1961, CWS recommended that the area be given sanctuary status to protect molting habitat for Lesser Snow Geese and Black Brant. On November 9, 1961, Banks Island Bird Sanctuary No. 1 was established by Order-in-Council P.C. 1961-1617. Since then, seismic activities have occurred within the Sanctuary. At present the potential for further seismic activity is unclear.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12 1980).

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Beak Consultants Ltd. 1975. Snow Geese, pp. 222- 252. In: Banks Island development. Environmental considerations; 1974 research studies. Unpubl. report, Beak Consultants Ltd. for Panarctic Oils Ltd., Calgary. 3 Vols. 506 pp.

Hanson, H.C. and R.L. Jones. 1976. The biogeochemistry of

Blue, Snow, and Ross' geese. Special Pub. No. 1, Illinois Natural History Survey, Urbana. 281 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Nettleship, D.N. and P.A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

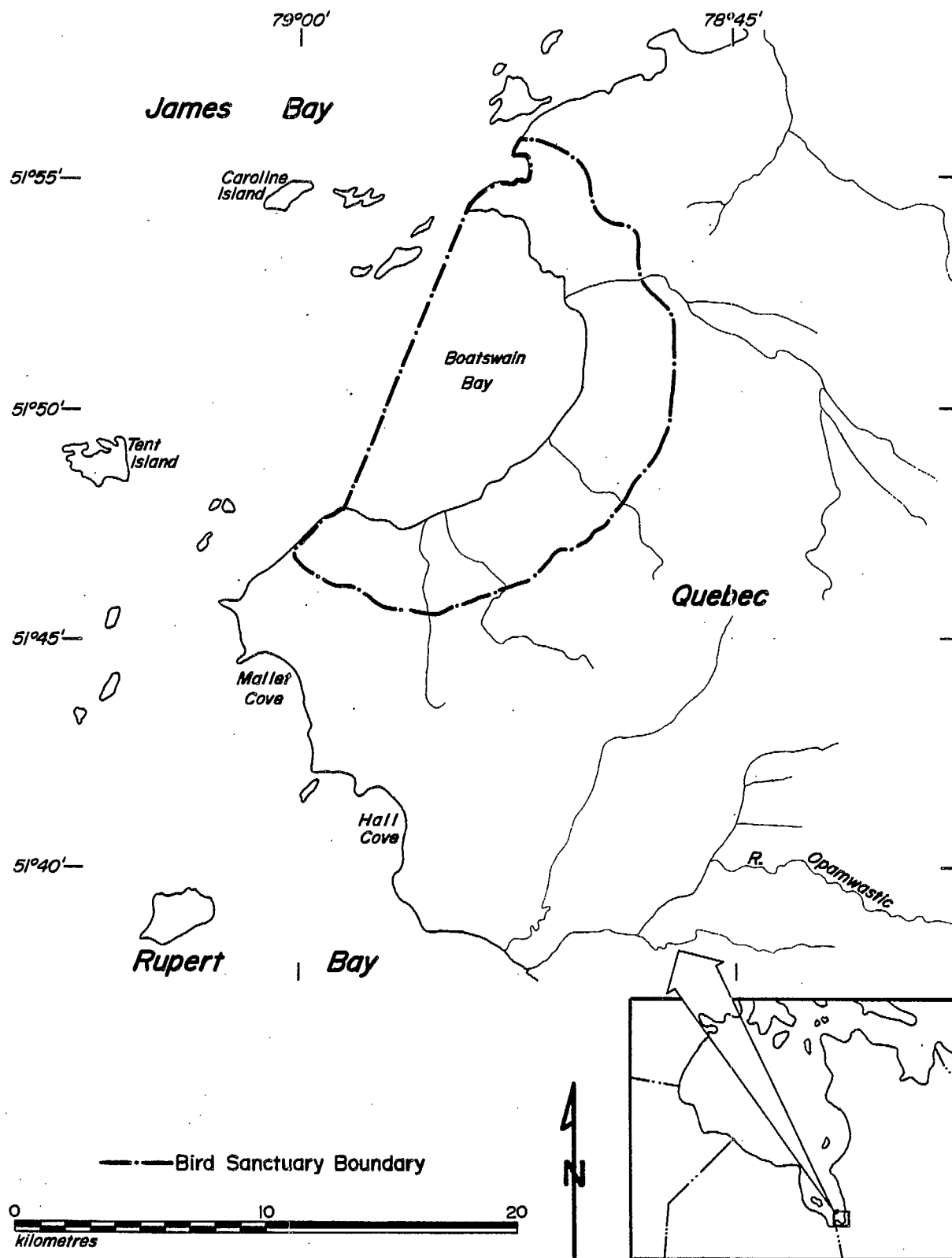
Stirling, I. and H. Cleator (Eds.). 1981. Polynyas in the Canadian Arctic. Occasional Paper No. 45, Can. Wildl. Serv., Ottawa. 70 pp.

Thorsteinsson, R. and E.T. Tozer. 1962. Banks, Victoria and Stefansson Islands, Arctic Archipelago. Memoir 330, Geol. Survey Can., Ottawa. 83 pp.

Zoltai, S.C., D.J. Karasiuk and G.W. Scotter. 1980. A natural resource survey of the Thomsen River area, Banks Island, Northwest Territories. Unpubl. report, Can. Wildl. Serv., Edmonton. 153 pp.

BOATSWAIN BAY
BIRD SANCTUARY

BOATSWAIN BAY BIRD SANCTUARY



BOATSWAIN BAY BIRD SANCTUARY

1. Location: 40 km north of Fort Rupert, Quebec.
 All lands, marshes and inland water are located in the District of Mistassini, Quebec. All offshore areas are located in the District of Keewatin, Northwest Territories
 Lat. 51°50'N Long. 78°55'W
 NTS 1:500,000 Sheet No. 32NW
 Legal Description: See Appendix 1
2. Area: 17,900 hectares
3. Land Ownership:
 Provincial Crownland and Federal Crown Land
4. Major Habitat Types:

Tidal mudflats and open water	44%
Coastal marsh	Data not available
Spruce forest	
5. Description of the Area:
 Boatswain Bay, located on the southeast side of James Bay between Rupert Bay and the mouth of the Eastmain River, is a shallow boulder-strewn flat, which is exposed during low tide. The marsh, which surrounds the bay is narrow on the south side and up to 1.6 km wide on the north side. Marsh vegetation at the edge of the mudflats is largely of spike rush (Eleocharis palustris). Scattered clumps of prairie bulrush (Scirpus paludosus) occur on the higher terrain and form solid stands in association with tussocks of grasses (Hierochloa odorata, Deschampsia caespitosa). Sedge (Carex spp.) flats interspersed with spike rush, arrow grass (Triglochin maritimum) and soft stemmed bulrush (Scirpus validus) are found further inland. The marsh is also characterized by numerous small ponds and drainage channels. Most of the ponds which hold water when the tide is out have small amounts of sago pondweed (Potamogeton pectinatus). Dominant species found further from the coast include moss (Sphagnum spp.) in association with buckbean (Menyanthes trifoliata), wild calla (Calla palustris), wild iris (Iris versicolor), and mare's tail (Hippuris vulgaris). Willows (Salix spp.) occur at the upper edge of the sedge-grass complex. Black spruce (Picea mariana) dominates the forest area.
6. Public Use:
 Native people from the settlements at Fort Rupert and Eastmain hunt waterfowl in the area in the fall. Geese are preferred, but in years of low goose production, ducks are taken.

Preferred duck species are Black Duck, Mallard, Pintail, Wigeon, Lesser Scaup and Eider.

7. Importance to the Resource:

The Sanctuary is an important staging area for geese. Up to 14,000 Canada Geese, 9,800 Lesser Snow Geese, and 2,600 Atlantic Brant use the marshy area of Boatswain Bay during spring and fall migrations. Dabbling ducks, which breed, molt, and stage in the Sanctuary are Black Duck, Mallard, Wigeon, Green-winged and Blue-winged teal and Shoveler. Greater and Lesser scaup, Common Goldeneye, Ring-necked Duck, Common and Red-breasted mergansers, Bufflehead and Redhead use the Sanctuary, but it is not known if they nest there. Black, White-winged and Surf scoters use the offshore water during the summer.

Many species of shorebirds use the Sanctuary during the summer.

8. Historical Notes and Present Land-Use Conflicts:

The James Bay Cree requested that Boatswain Bay be given sanctuary status to protect the waterfowl there. On January 29, 1941, by Order-in-Council P.C. 1941-681, the Boatswain Bay Bird Sanctuary was established.

The major land-use conflict has been native hunting of waterfowl within the Sanctuary.

Potential threats to the habitat of the Sanctuary are hydrocarbon exploration and development. At present, a proposed pipeline along the Hudson Bay Coast is unlikely to proceed. Future construction of the pipeline, which would decrease the amount of coastal habitat, may increase the importance of the Sanctuary.

A proposed boundary change is presently under consideration. This change would reduce the land area of the Sanctuary to that contained between the low water mark and the high water mark of Boatswain Bay.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980.)

The area is visited periodically by the R.C.M.P. and enforcement staff of the Quebec Ministere du Loisir, de la Chasse et de la Pêche.

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Curtis, S.G. 1973a. The Atlantic brant and eelgrass (Zostera marina) in James Bay - a preliminary report, James Bay Report Series No. 8, Can. Wildl. Serv., Ottawa. 5 pp.

Curtis, S.G. 1973b. The movement of geese through James Bay, spring 1972. Unpubl. report, James Bay Report Series No. 10, Can. Wildl. Serv., Ottawa. 29 pp.

Curtis, S.G. and L. Allen. 1976. The waterfowl ecology of the Quebec coast of James Bay. Unpubl. report, Can. Wildl. Serv., Ottawa. 72 pp.

Lumsden, H. 1971. Goose surveys on James Bay, 1971. Unpubl. report, Ontario Dept. Lands and Forests, Ottawa. 20 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

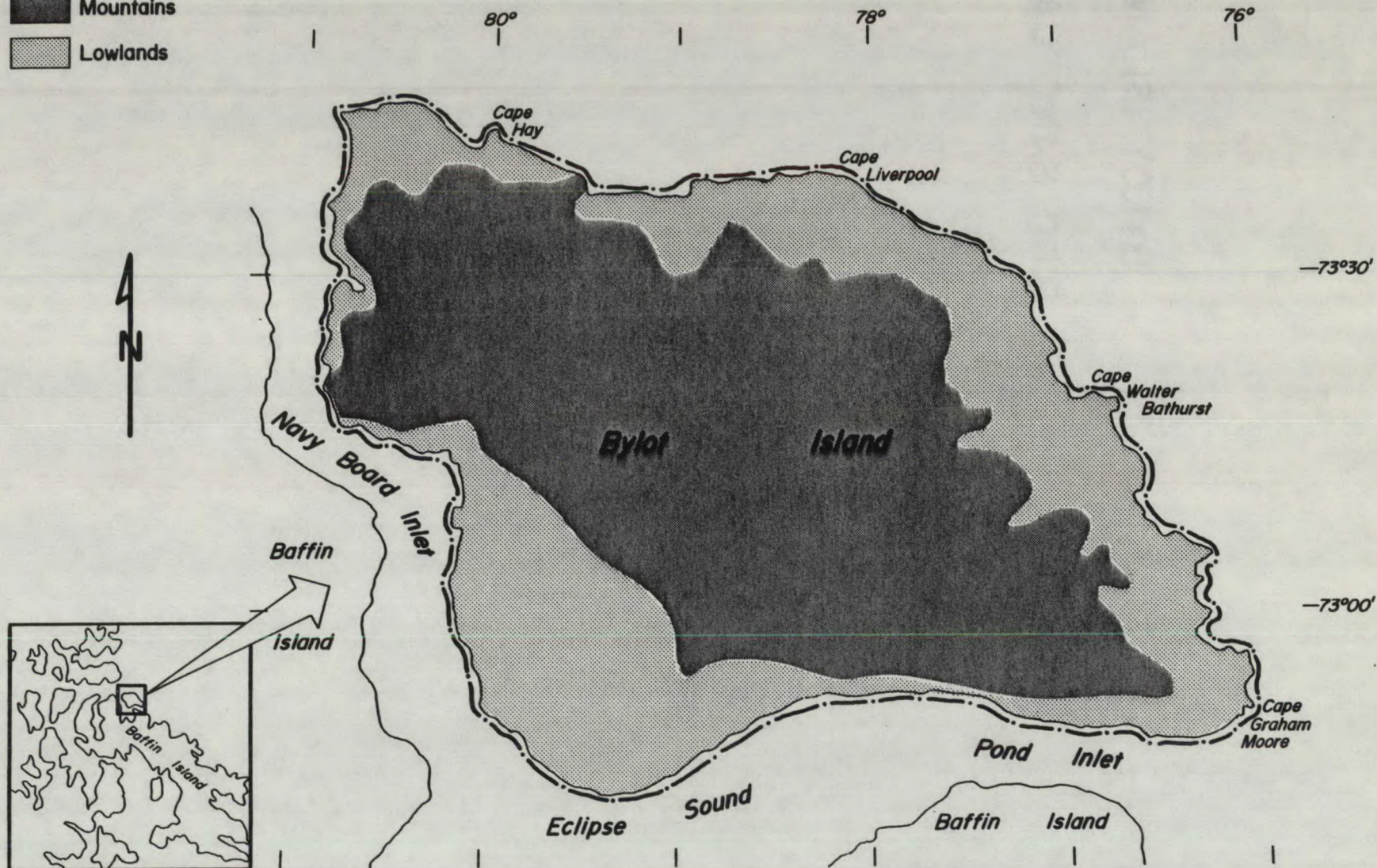
Smith, R.H. 1944. An investigation of the waterfowl resources of the south and east coasts of James Bay 1944. Unpubl. report, Can. Wildl. Serv., Ottawa. 61 pp.

**BYLOT ISLAND
BIRD SANCTUARY**

BYLOT ISLAND BIRD SANCTUARY

- Bird Sanctuary Boundary
- Mountains
- ▨ Lowlands

0 50
kilometres



BYLOT ISLAND BIRD SANCTUARY

1. Location: Northeast of Baffin Island at the eastern entrance to Lancaster Sound in the District of Franklin, Northwest Territories
 Lat. 73°13'N Long. 78°34'W
 NTS 1:500,000 Sheet No. 38SW, 38SE, 48SW and 48SE
 Legal Description: See Appendix 1

2. Area: 1,087,800 hectares

3. Land Ownership:

Federal Crown Land and approximately 20 hectares of privately owned land.

4. Major Habitat Types:

Open water	7%
Mountains	80%
Limestone cliffs	1%
Tundra lowland	12%

5. Description of the Area:

Most of Bylot Island is mountainous (Pre-Cambrian) rising to about 1900 m at its highest point. The mountains extend to the sea except along the southwest, north and east coasts where lowlands occur. Approximately 5000 sq. km of the island are covered by glaciers which radiate from the central mountain chain. Steep limestone cliffs border the northwest and southeast coasts which are interrupted by glacial valleys that terminate in outwash plains. Vegetation is sparse in the coastal regions even in sheltered areas. Characteristic vegetation includes lichens, purple saxifrage (Saxifraga oppositifolia) and poppy (Papaver radicum).

The lowlands on the north and east coasts are largely gravel beaches backed by low, eroding bluffs. Extending from the foot of glaciers which have not reached the sea are outwash plains with highly-braided drainage channels.

The southwest lowland, an area of about 1500 sq. km is a deeply eroded outwash plain which rises 60 m above the beach shoreline. Extensive wet and marshy areas occur between the slopes and small ravines. Characteristic wetland meadow vegetation includes sedges (Carex spp.), cotton-grass (Eriophorum spp.) and mosses. Two tundra polygon areas are found where drainage channels from two glaciers flow into Navy Board Inlet. Nine pingos exist in an area of low-center polygons. Sedge marshes occur around ponds on hilltops. On well-drained lowlands, low shrub-herb tundra vegetation covers much of the terrain. Dominant plants are grasses (Alopecurus alpinus, Poa glauca, Arctagrostis

latifolia and Festuca brachyphylla), forbs (Potentilla hyparctica, Pedicularis lanata and P. capitata) and low shrubs (less than 20 cm high) (Salix arctica, Vaccinium uliginosum and Ledum decumbens). Shrub-sedge tundra type vegetation is characterized by relatively tall Salix arctica (up to 50 cm high) in association with sedges and forbs. Polar semi-desert vegetation consists of Dryas Barrens and Saxifraga-Papaver Barrens ground-hugging species with some rushes and forbs.

Several archaeological sites occur around Button Point. Bylot Island Bird Sanctuary is a proposed IBP site.

6. Public Use:

Inuit residents of Pond Inlet regularly collect eggs of the Thick-billed Murre and Greater Snow Goose at Cape Graham Moore and in the southwest lowland area, respectively.

The Inuit also trap Arctic fox and hunt polar bears within the Sanctuary.

Recently, a few tourists have backpacked, skied, mountaineered on the glaciers, hiked and camped along the southern coast.

7. Importance to the Resource:

Greater Snow Geese nest on the southwest lowland in colonies of 25 to 300 pairs. Surveys in 1982 showed that this area supported 37,500 breeding adults, 39,000 goslings and 7,000 non-breeding adults. This is the equivalent of 35 percent of the total population of the subspecies.

Thick-billed Murres breed on the limestone cliffs along the northwest (near Cape Hay) and southeast coast (near Cape Graham Moore). Since 1957, the Murre population in the larger colony near Cape Hay declined from over 400,000 breeding pairs to 140,000 pairs in 1975.

Black-legged Kittiwakes also nest on the limestone cliffs. In 1957 the Cape Hay colony was estimated to be 50,000 breeding pairs. Surveys since then indicate 20,000 pairs at Cape Hay and 2,000 pairs at Cape Graham Moore.

Other migratory birds which are common breeders are Oldsquaw, King Eider, Red-throated Loon, Black-bellied Plover, White-rumped Sandpiper, Glaucous Gull, Thayer's Gull, Sabine's Gull, Arctic Tern, Parasitic Jaeger, Long-tailed Jaeger, Horned Lark, Lapland Longspur and Snow Bunting. Less common breeders within the Sanctuary are Black Brant, Sandhill Crane, Ringed Plover, American Plover, Purple Sandpiper, Pomarine Jaeger and Water Pipit. Although rarely occurring on the island, Sanderling and Wheatear are known to breed there. Rarely

observed species on the island are Common Loon, Yellow-billed Loon, Arctic Loon, Canada Goose, Red-breasted Merganser, Peregrine Falcon, Pectoral Sandpiper, Least Sandpiper, Great Black-backed Gull, Ross' Gull, and Common Puffin.

Polar bears in the Lancaster Sound area use Bylot Island as a major summer retreat.

8. Historical Notes and Land-Use Conflicts:

Studies in the late 1950s emphasized the importance of the area for Thick-billed Murres and Greater Snow Geese. In 1965, Bylot Island Bird Sanctuary was established by Order-In-Council P.C. 1965-405.

Activities that have occurred within the Sanctuary have been primarily geological and biological studies. No mineral concentrations or hydrocarbon reserves of economic interest have been recognized. However, further hydrocarbon exploration activities and possible development in Lancaster Sound and the entrance to Pond inlet are a potential threat to migratory birds on Bylot Island. Several navigational transmitter stations previously erected on the island for past exploration activities have been dismantled.

Increased tourist-related activities are a potential disturbance. The area is a preferred site for a national park.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Drury, W.H., Jr. 1962. Patterned ground and vegetation on southern Bylot Island, Northwest Territories, Canada. Contrib. Gray Herbarium, Harvard Univ., Cambridge, Mass. No. CX. 111 pp.

Drury, W.H., Jr. 1961. Observations on some breeding water birds on Bylot Island. Can. Field-Nat. 75: 84-101.

Jackson, G.D. and A. Davidson. 1975. Bylot Island map-area, District of Franklin. Paper 74-29, Geol. Survey Can., Ottawa. 12 pp.

Lemieux, L. 1959. The breeding biology of the Greater Snow Goose on Bylot Island, Northwest Territories. Can. Field-Nat. 73: 117-128.

Marshall Macklin Monaghan Ltd. 1982. Community tourism development plan - Pond Inlet. Unpubl. report for Govt. NWT Econ. Dev. Tour., Yellowknife. 79 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Miller, R.S. 1955. A survey of the mammals of Bylot Island, Northwest Territories. Arctic 8(3): 167-176.

Nettleship, D.N. and P.A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Reed, A. 1983. Report on Canadian Wildlife Service's studies on wild geese in the eastern Canadian Arctic, July and August, 1983. Unpubl. report, Can. Wildl. Serv., Ste-Foy. 7 pp.

Renaud, W.E., W.G. Johnston and K.J. Finley. 1981. The avifauna of the Pond Inlet region, NWT. Amer. Birds 35(2): 119-129.

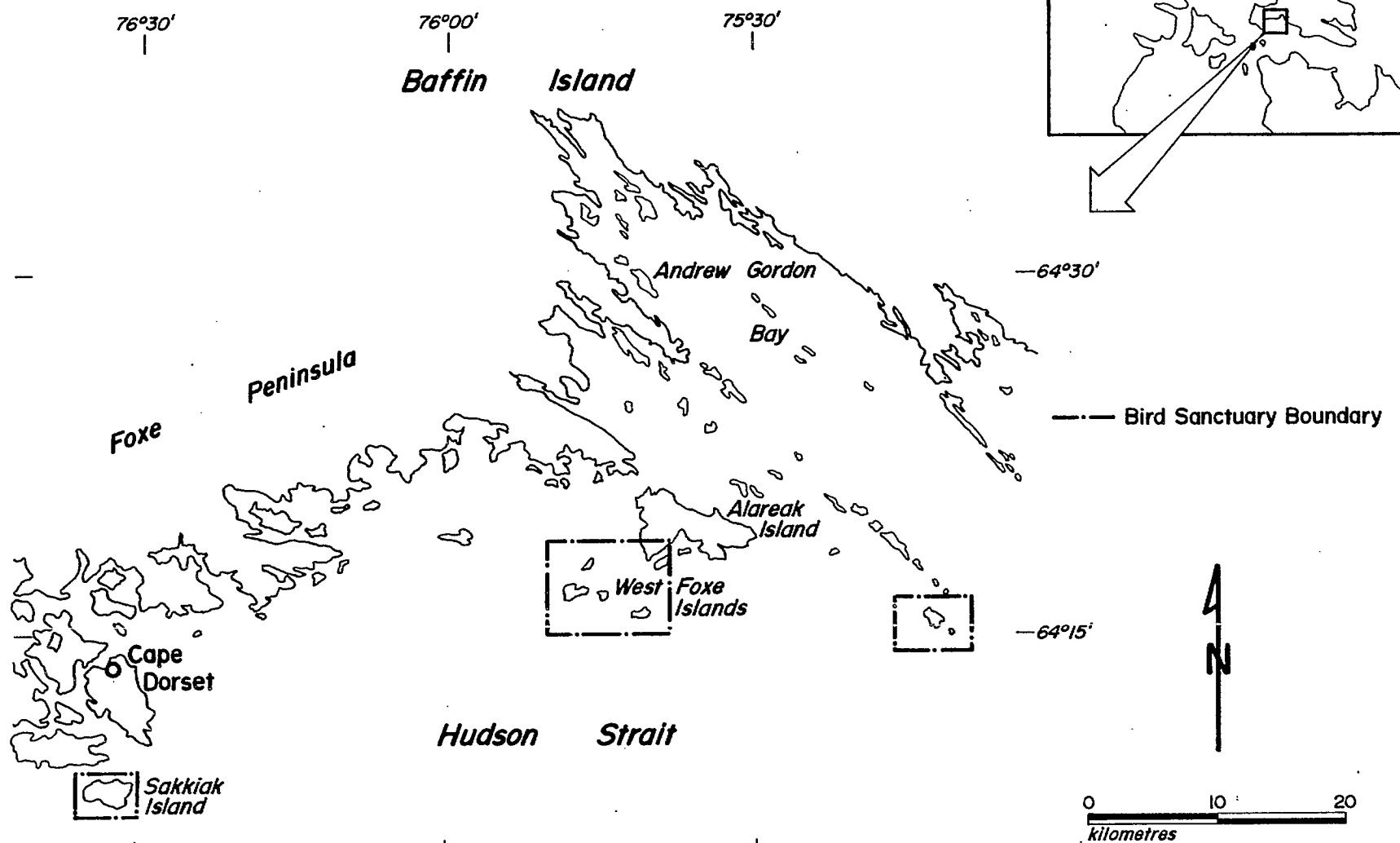
Stephenson, C.J. and K.J. McCormick. (In Prep.). Bylot Island Bird Sanctuary management plan. Can. Wildl. Serv., Yellowknife.

Van Tyne, J. and W.H. Drury, Jr. 1959. The birds of southern Bylot Island, 1954. Occasional paper No. 615, Museum of Zoology, Univ. of Michigan, Ann Arbor. 37 pp.

Zoltai, S.C., K.J. McCormick and G.W. Scotter. 1983. A natural resource survey of Bylot Island and adjacent Baffin Island, Northwest Territories. Unpubl. report for Parks Canada, Can. For. Serv., and Can. Wildl. Serv., Edmonton. 176 pp.

CAPE DORSET
BIRD SANCTUARY

CAPE DORSET BIRD SANCTUARY



CAPE DORSET BIRD SANCTUARY

1. Location: Near the settlement of Cape Dorset on the southern tip of Foxe Peninsula, Baffin Island, in the District of Franklin, Northwest Territories
 Lat. 64°15'N Long. 76°00'W
 NTS 1:500,000 Sheet No. 36SW and 36SE
 Legal Description: See Appendix 1

2. Area: 25,900 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Open water	90%
Rock ridges and faults	Data not
Freshwater lakes and ponds	available

5. Description of the Area:

The Sanctuary consists of three separate groups of islands - West Foxe Islands, South Andrew Gordon Bay Islands and Sakkiak Island. For the most part the islands are characterized by a rocky substrate with many faults, crevasses and ridges. Granite boulders cover the surface in many locations. Pockets of soil at the base of the ridges support luxuriant vegetation including grasses (Trisetum spp.), moss-campion (Silene acaulis), and saxifrage (Saxifraga spp.). A common feature of the larger islands is an outer rim of high land. Mud, sand and boulder flats are exposed in the bays at low tide. Central portions of the islands are flatter, open grass areas characterized by associations of fescue (Festuca baffinensis), Eutrema spp., blue grass (Poa arctica) and saxifrage.

Several islands have low-shored freshwater lakes and many freshwater ponds in rock catch basins. The lake shores, pond margins and adjacent low-lying areas are vegetated by cotton grass (Eriophorum scheuchzeri), goose grass (Puccinellia phryganodes), foxtail (Alopecurus alpinus), buttercup (Ranunculus spp.) and mosses.

Tides up to 7 m create whirlpools and swift-moving riptide areas which remain ice-free until late November.

6. Public Use:

In 1955 and 1956, the Inuit of Cape Dorset heavily exploited the Common Eider in the area for eggs, meat and down. Since the establishment of the Sanctuary, the Inuit have continued to hunt the Common Eider and collect its eggs.

7. Importance to the Resource:

The fractured rocky substrate of the Sanctuary has provided sheltered nesting habitat for approximately 5,000 Common Eiders. Heavy hunting pressure by local Inuit in recent years has greatly reduced the number of nests on several of the islands. Many early migrant ducks (King Eider) and geese (Brant and Lesser Snow) are attracted to the coastal areas which are ice-free in early May as a result of the swift-moving riptides.

Tallus slopes and badly fractured, high, rocky cliffs on a few of the islands provide excellent nesting habitat for Black Guillemots.

Herring, Glaucous and Kumlien's gulls also nest on the islands. Parasitic Jaegers and Ravens, believed to nest in the Cape Dorset area, use the islands as hunting areas. Other birds known to nest in the area include the Red-throated Loon, Semipalmated Sandpiper, Semipalmated Plover and Snow Bunting.

8. Historical Notes and Land-Use Conflicts:

From 1939 to 1943, the Hudson's Bay Company undertook the large scale collection of eiderdown. Lack of adequate cleaning facilities and little supervision of the Eskimos who collected the down were the primary reasons for the failure of the project.

In 1954, there was renewed interest in the potential value of an eiderdown industry. A four-year research and development program was implemented by the Department of Northern Affairs and National Resources to determine the feasibility of an eider "farm" in the Cape Dorset area with minimal disturbances on the nesting areas. Biological investigations were carried out by CWS staff in 1955 and 1956. It was recommended that certain islands in the area be given sanctuary status to encourage the development of an eiderdown collection industry. Local Inuit agreed not to hunt within the proposed sanctuary. On February 7, 1958, the Cape Dorset Bird Sanctuary was established by Order-In-Council P.C. 1958-208.

The anticipated eider "farm" project did not materialize. Cape Dorset Inuit regularly visit many of the islands within the Sanctuary to egg and hunt. This has resulted in the decimation of the Common Eider population. On islands where the Inuit do not hunt, the eider population has apparently expanded.

Although oil and mineral exploration activities have not occurred within the Sanctuary, exploration for oil and uranium has occurred in the general area.

9. Protective Status and Enforcement:

Migratory Bird Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

CWS has recommended that the Sanctuary be delisted because it no longer serves the original purpose for establishment.

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Cooch, F.G. 1976. Two cultures - two settlements - Cape Dorset 1956-1976. Unpubl. report. Can. Wildl. Serv., Ottawa. 12 pp.

Cooch, F.G. 1965. The breeding biology and management of the Northern Eider (Somateria mollissima borealis) in the Cape Dorset Area, Northwest Territories. Wildlife Management Bulletin, No. 10, Series 2, Can. Wildl. Serv., Ottawa. 68 pp.

Cooch, F.G. 1956. Birds observed in the vicinity of Cape Dorset, Baffin Island, Summer 1955, 1956. Unpubl. report, Can. Wildl. Serv., Ottawa. 13 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

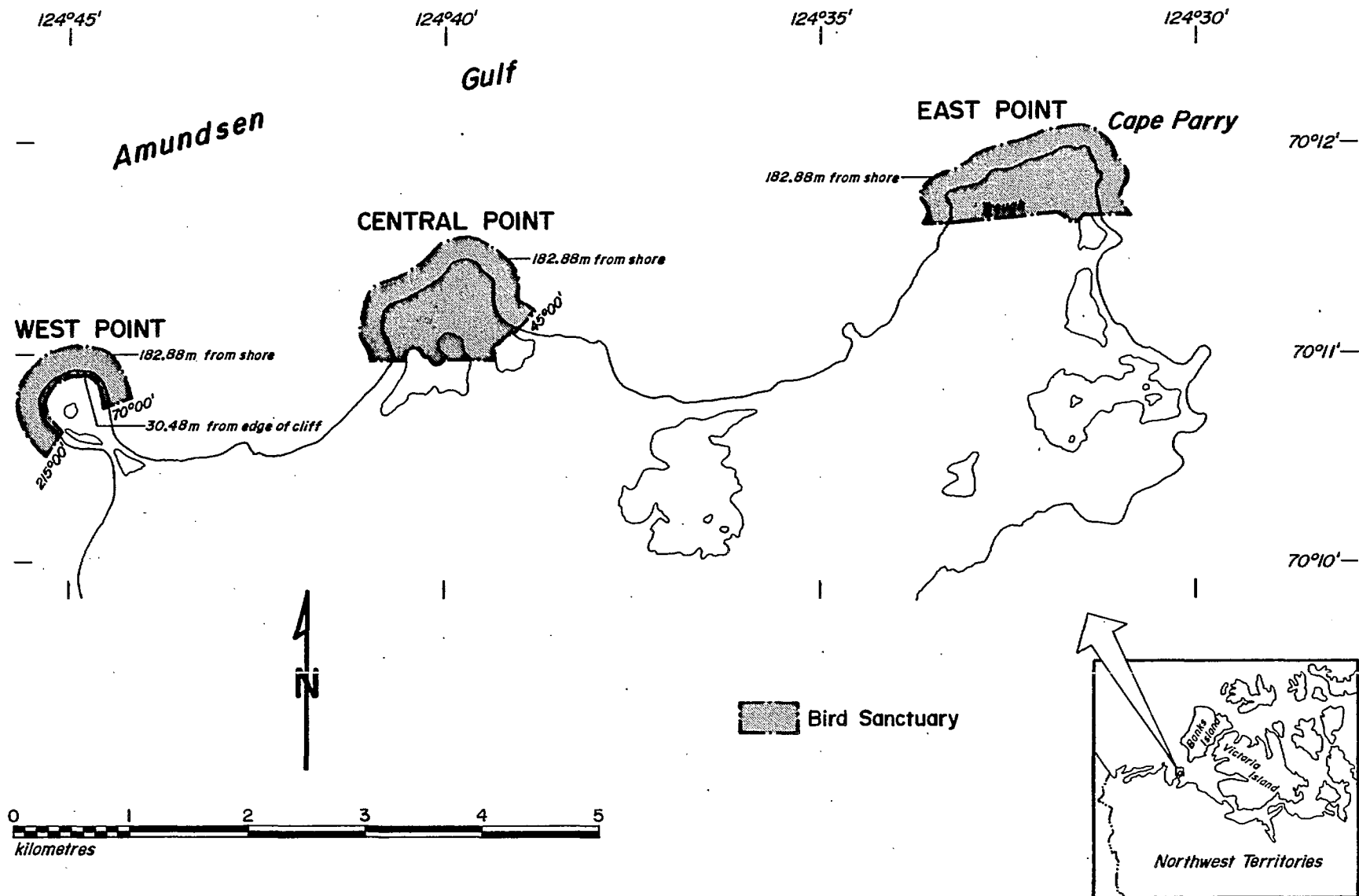
MacPherson, A.H. and I.A. MacLaren. 1959. Notes on the birds of Southern Foxe Peninsula, Baffin Island, N.W.T. Can. Field-Nat. 73(2): 63-81.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Soper, J.D. 1946. Ornithological results of the Baffin Island expeditions of 1928-1929 and 1930-1931, together with more recent records. Auk 63: 1-24, 224-239, 418-427.

**CAPE PARRY
BIRD SANCTUARY**

CAPE PARRY BIRD SANCTUARY



CAPE PARRY BIRD SANCTUARY

1. Location: Approximately 100 km north of Paulatuk at the northern extremity of the Parry Peninsula in the District of Mackenzie, Northwest Territories
 Lat. 70°12'N Long. 124°40'W
 NTS 1:500,000 Sheet No. 97NW and 97NE
 Legal Description: See Appendix 1

2. Area: 300 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Open water	50%
Limestone cliffs	Data not
Freshwater lakes and ponds	available

5. Description of the Area:

The predominant feature of the Sanctuary is three coastal limestone cliffs which rise in elevation from 15 m on the seaward side to 45 m inland. Vegetation is sparse and plants believed to be present are saxifrage (Saxifraga spp.), knotweed (Polygonum spp.) and mouse-ear chickweed (Cerastium alpinum). Several freshwater lakes and ponds are found inland.

A polynya, caused by the currents in Amundsen Gulf, has persisted in the area for a number of years, but was more regular prior to 1970 and was located closer to the cliffs. The upwelling marine currents have resulted in a rich marine environment.

The Cape Parry Bird Sanctuary is included within a proposed IBP site.

6. Public Use:

Little use of the Sanctuary is made by the Inuit residents at Paulatuk. Before the establishment of the Sanctuary a number of Inuit families who lived and worked at the nearby DEW-Line (District Early Warning Radar) site took murre and their eggs.

7. Importance to the Resource:

The only Thick-billed Murre nesting colony in the western Canadian Arctic is found in this Sanctuary. It is the only known breeding colony of the subspecies Uria lomvia arra in Canada. Although all three limestone cliffs appear similar,

the murres (approximately 800 birds) nest only on the westerly one known as Police Point. Black Guillemots also nest on the cliffs and nearby Fiji Islands but only a few nesting pairs have been observed.

An estimated 20,000 King and Common eiders and large numbers of Oldsquaw, Glaucous Gulls, and Arctic and Red-throated loons use the offshore area during spring migration.

8. Historical Notes and Land-Use Conflicts:

A DEW-Line site was established on the west end of Cape Parry in 1955. The main buildings are located 1.4 km from the Thick-billed Murre colony and a storage area is within 200 m of the nests.

DEW-Line activities combined with hunting and egging by Inuit were considered major threats to the colony. In 1958, CWS staff visited the area and estimated 250 birds in the colony which appeared to be relatively undisturbed by DEW-Line activities. However, a follow-up visit in 1960 showed that considerable disturbance had occurred. Debris had been bulldozed over the cliffs above the murre nests and the harbour was littered with gas and oil drums. At the time, only 125 murres were observed in the colony. In 1961, CWS proposed that the area be given sanctuary status to protect the murres from DEW-Line activities as well as egging and hunting by the Inuit. On November 9, 1961, the Cape Parry Bird Sanctuary was established by Order-In-Council P.C. 1961-1617.

Since 1961, DEW-Line dumping of debris over the cliffs has been curtailed. Some of the dumped debris has been removed, however, it has been pointed out that further clean-up attempts may only cause more damage. Inuit at Paulatuk consider the area too distant for egging trips to be worthwhile.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Barry, T.W. 1982. Significant wildlife resource areas in the Beaufort Sea, Amundsen Gulf, and Prince of Wales Strait.

Unpubl report., Can. Wildl. Serv., Edmonton. 71 pp.

Barry, T.W. 1975. Birdlife in the subsistence of natives in the Mackenzie Delta region with an appendix by Mary Carpenter Lyons. Unpubl. report, Can. Wildl. Serv., Ottawa. 71 pp.

Barry, T.W. 1961. Proposed migratory bird sanctuary at Cape Parry, Parry Peninsula, Amundsen Gulf, N.W.T. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 pp.

Barry, S.J. and T.W. Barry. 1982. Seabird surveys in the Beaufort Sea, Amundsen Gulf, and Prince of Wales Strait, 1981 season. Unpubl. report, Can. Wildl. Serv. for Dome Petroleum Ltd. and Esso Resources Canada Ltd., Calgary. 52 pp.

Barry, T.W., S.J. Barry and B. Jacobson. 1981. Seabird survey in the Beaufort Sea, Amundsen Gulf, Prince of Wales Strait, and Viscount Melville Sound, 1980 season. Unpubl. report, Can. Wildl. Serv., Edmonton. 69 pp.

Hohn, E.O. 1955. Birds and mammals observed on a cruise in Amundsen Gulf, N.W.T., July 29 - August 16, 1953. Can. Field-Nat. 69(2): 41-44.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

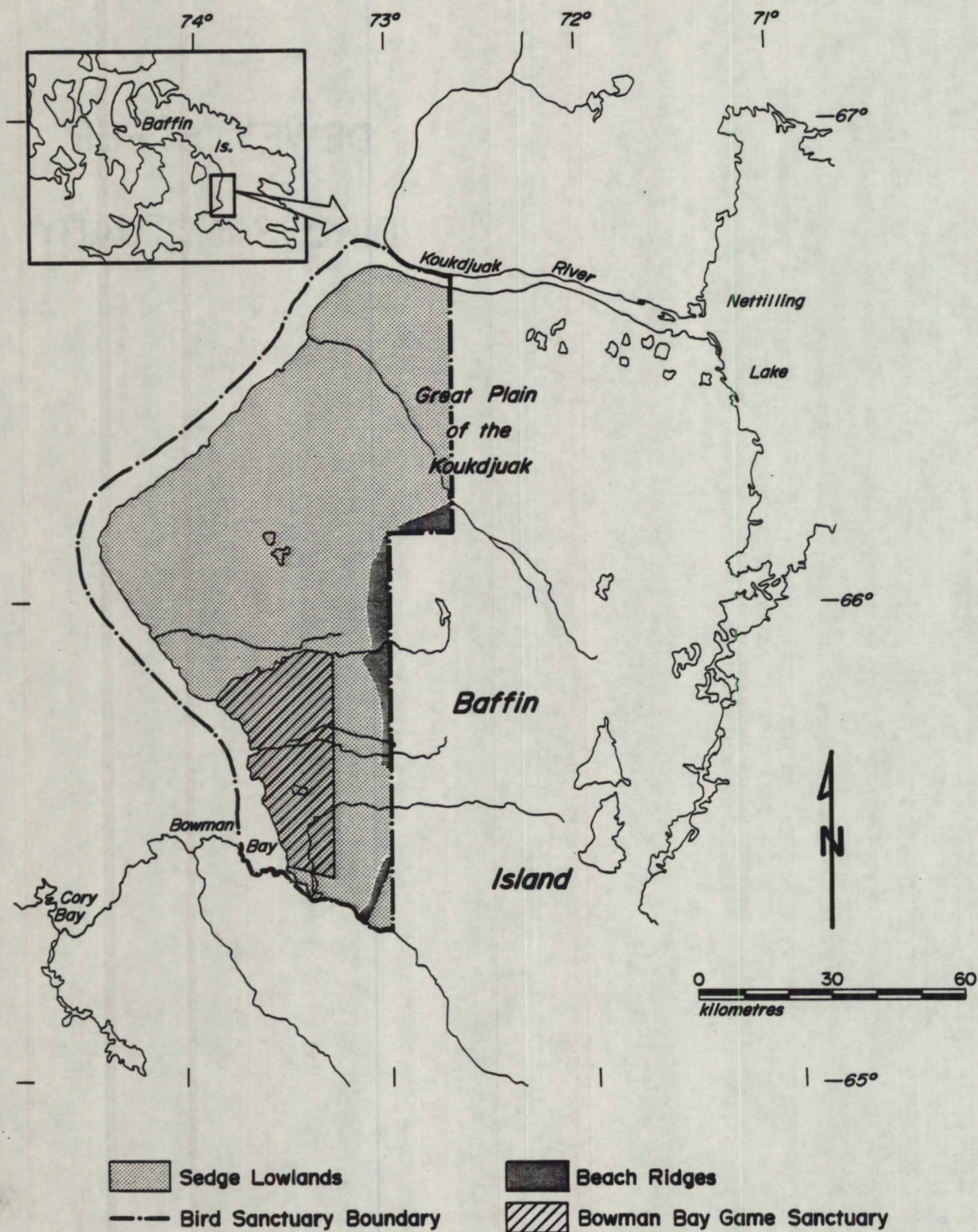
Nettleship, D.N. and P.A. Smith. (Eds.) 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon.

Ward, J.C. 1979. Bird and mammal surveys in the Cape Parry area, Northwest Territories, June-August 1979. Unpubl. report, LGL Ltd. for Dome Petroleum Ltd., Calgary. 40 pp.

DEWEY SOPER
BIRD SANCTUARY

DEWEY SOPER BIRD SANCTUARY



DEWEY SOPER BIRD SANCTUARY

1. Location: West central Baffin Island bordering the southeastern shores of Foxe Basin in the District of Franklin, Northwest Territories
Lat. 66°10'N Long. 73°30'W
NTS 1:500,000 Sheet No. 36SW, 36SE, 36NW and 36NE
Legal Description: See Appendix 1

2. Area: 815,900 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal mudflats and open water	10%
Sedge lowland	85%
Beaches	5%

5. Description of the Area:

The Sanctuary contains the coastal section of the Great Plain of the Koukdjuak, a vast flat and featureless marshy lowland underlain by limestone and shale. Numerous small sluggish streams flow across the plain from old inland beach ridges. The largest of these streams is the Koukdjuak River which drains Nettilling Lake. Innumerable small, circular, shallow (less than 1 m), muddy ponds are interspersed with swamps. High tides of Foxe Basin and the flatness of the terrain result in a tidal zone that extends up to 15 km inland. Scattered granite outcrops which occur at the southern end of the plain include a low scarp (Eswituk Ridge) east of Bowman Bay. Raised beach ridges define the boundary between the marshy coastal plain and the drier limestone plateau to the east.

For the most part, the Koukdjuak Plain is vegetated with a mat of sedges (Carex spp.), and grasses, mosses and lichens. Other common plants include foxtail (Alopecurus alpinus), scurvy grass (Cochlearia officinalis), tufted saxifrage (Saxifraga caespitosa) and willow (Salix spp.). On drier granitic sites, commonly found species include broad-leaved willow herb (Epilobium latifolium), large-flowered wintergreen (Pyrola grandiflora), Labrador-tea (Ledum decumbens), arctic white heather (Cassiope tetragona), alpine bearberry (Arctostaphylos alpina) and mountain cranberry (Vaccinium vitis-idaea).

Dewey Soper Bird Sanctuary is contained within a proposed IBP site. The Sanctuary has also been designated a RAMSAR site (a wetland of international importance).

6. Public Use:

Inuit of Frobisher Bay and Cape Dorset hunt caribou near the area. No permits have been issued for mineral or hydrocarbon exploration in the Sanctuary.

7. Importance to the Resource:

In 1979, approximately 33 percent of the Canadian Lesser Snow Goose population (227,500 breeding pairs) used the Sanctuary and adjacent areas. During the summer over one million geese, mainly Lesser Snow Geese, are scattered across the plain. This is the largest known Lesser Snow Goose colony in the world. The geese nest on the marshy plain. After the hatch, adults and young disperse throughout the sedge lowlands to feeding areas. Non-breeding Snow Geese use the area along the south shore of the Koukdjuak River as a molting area. By mid-September, the geese begin to leave the area.

An estimated 50,000 Canada Geese, 1600 Atlantic Brant and high numbers of Oldsquaw and Eiders (Common and King) nest in the area. Other recorded breeding migratory species include Sabine's Gull, Black-bellied Plover, Semipalmated Plover, White-rumped Sandpiper, Pacific Loon, Red Phalarope, Parasitic Jaeger, American Pipit, Lapland Longspur and Snow Bunting. Over 30 other bird species have been observed in the Sanctuary.

Barren-ground caribou migrate through the Dewey Soper Bird Sanctuary.

8. Historical Notes and Land-Use Conflicts:

The Dewey Soper Bird Sanctuary, the first Arctic sanctuary to be created, was established by Order-In-Council P.C. 1957-862 on June 20, 1957 to protect the Lesser Snow Geese and their nesting and feeding habitat.

There are no known land-use conflicts. Although no mineral or hydrocarbon exploration has occurred within the Sanctuary, Foxe Basin has been considered a potential petroleum-bearing area.

9. Protective Status and Enforcement:

Migratory Bird Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

The Bowman Game Sanctuary is contained within the Bird Sanctuary.

CWS has recommended the protection of additional Lesser Snow Goose nesting, feeding and molting habitat which

exists outside the present Sanctuary boundaries.

10. References:

- Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.
- Anonymous. 1982. Canadian sites designated as Wetlands of International Importance. Unpubl. report, Can. Wildl. Serv., Ottawa. 89 pp.
- Hanson, H.C. and R. L. Jones. 1976. The biogeochemistry of Blue, Snow, and Ross' geese. Special Pub. No. 1, Illinois Natural History Survey, Urbana. 281 pp.
- Freeman, M. (Ed.) 1976. Inuit land use and occupancy project. Dept. Indian and Northern Affairs, Ottawa. 3 Vols. 713 pp.
- Kerbes, R.H. 1975. The nesting population of Lesser Snow Geese in the eastern Canadian Arctic. Report Series No. 35, Can. Wildl. Serv., Ottawa. 46 pp.
- Kerbes, R.H. 1973. The Blue/Snow complex of Baffin Island. Unpubl. report, Can. Wildl. Serv., Saskatoon. 34 pp.
- Kerbes, R.H. 1969. Biology and distribution of nesting Blue Geese on Koukdjuak Plain, Baffin Island, N.W.T. Unpubl. M.Sc. Thesis, Univ. Western Ontario, London. 122 pp.
- Kerbes, R.H. 1967. Investigations of waterfowl populations - Eastern Arctic, Progress report 1966-67. Unpubl. report, Can. Wildl. Serv., Ottawa. 68 pp.
- Lemieux, L. and J. M. Heyland. 1967. Fall migration of Blue Geese (Chen caerulescens) and Lesser Snow Geese (Chen hyperborea hyperborea) from the Koukdjuak River, Baffin Island, Northwest Territories. Naturaliste Canadien 94: 677-694.
- McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.
- Nettleship, D.N. and P.A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.
- Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Reed, A., P. Dupuis, K. Fischer and J. Moser. 1980. An aerial survey of breeding geese and other wildlife in Foxe basin and northern Baffin Island, NWT, July 1979. Prog. Note No. 114, Can. Wildl. Serv., Ottawa. 21 pp.

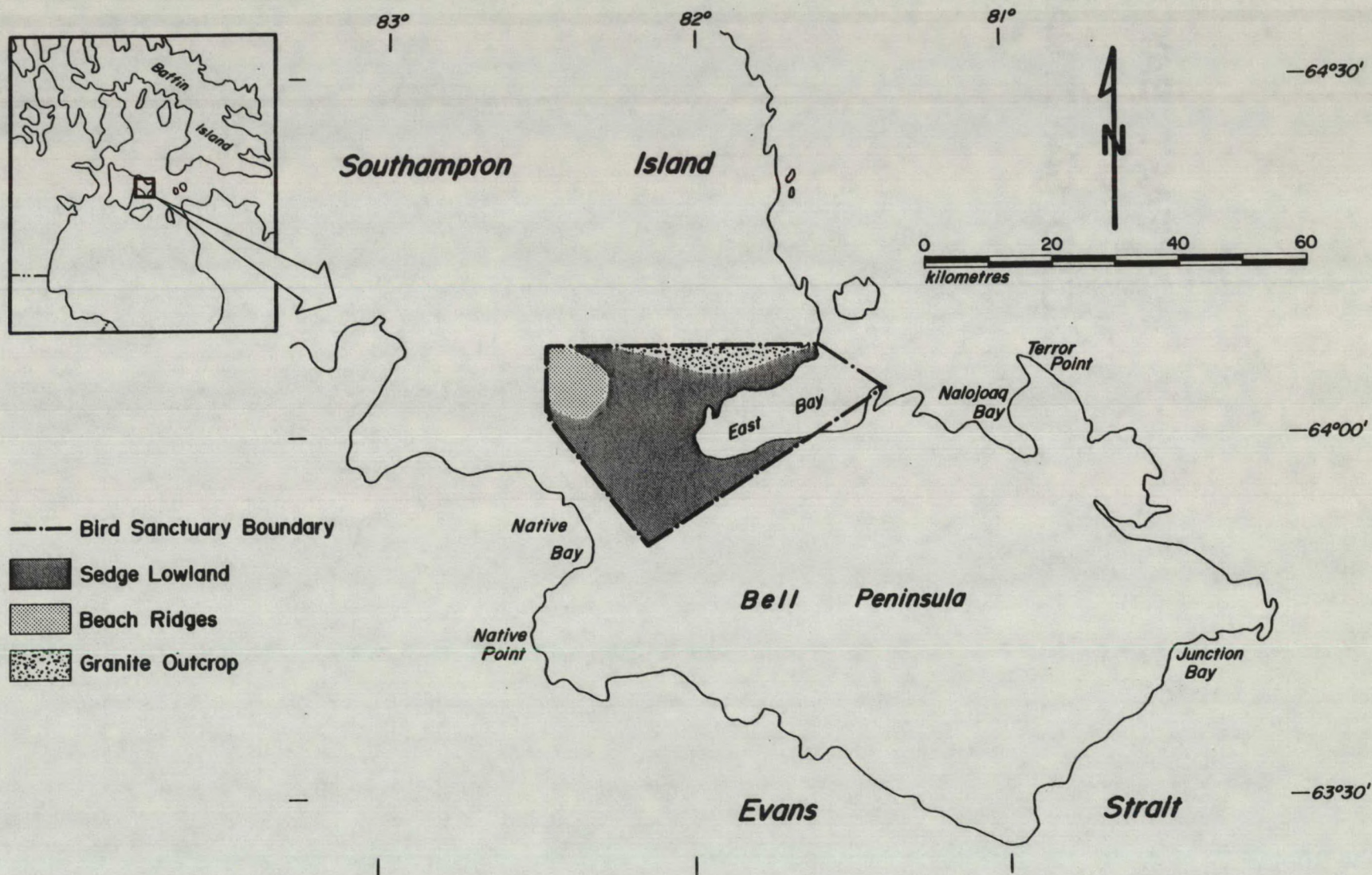
Reed, A., P. Dupuis and G.E.J. Smith. 1983. Lesser Snow Geese on Southampton and Baffin islands, Northwest Territories, 1979. Unpubl. report, Can. Wildl. Serv., Ste-Foy. 19 pp.

Soper, J.D. 1946. Ornithological results of the Baffin Island expeditions of 1928-1929 and 1930-1931, together with more recent records. Auk 63: 1-24, 224-239, 418-427.

Stephenson, S. M. and K. J. McCormick. (In Prep.). Dewey Soper Bird Sanctuary Management Plan (Draft). Can. Wildl. Serv., Yellowknife.

EAST BAY
BIRD SANCTUARY

EAST BAY BIRD SANCTUARY



EAST BAY BIRD SANCTUARY

1. Location: 35 km east of Coral Harbour on the southeast coast of Southampton Island in the District of Franklin, Northwest Territories
Lat. 64°00'N Long. 82°00'W
NTS 1:500,000 Sheet No. 45NW, 45NE, 46SW and 46SE
Legal Description: See Appendix 1

2. Area: 116,600 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal mudflats and open water	25%
Sedge meadow lowland	60%
Raised beaches	10%
Granite outcrop	5%

5. Description of the Area:

Located in the southeast portion of Southampton Island, the Sanctuary, underlain by limestone, is part of the Hudson Bay lowlands. Poorly drained flat sedge meadow lowlands with irregularly shaped shallow lakes and raised beaches surround East Bay, a 50 km-long inlet. Dominant vegetation of the sedge meadows consists of sedge (Carex spp.), cotton-grass (Eriophorum spp.) and a variety of mosses. Lake edges are bordered by sedge-willow meadows characterized by sedge, cotton-grass, bog-rush (Juncus albens) and willows (Salix richardsonii, S. alaxensis, and S. reticulata). Disintegrated limestone outcrops break up the sedge lowland as the elevation increases towards Native Bay. Granite outcrops occur on the northern portion of the Sanctuary.

A small rocky island is located in East Bay about 5 km from the south shore.

6. Public Use:

Coral Harbour residents trap Arctic fox and hunt ringed seals and polar bears within the Sanctuary.

7. Importance to the Resource:

The prime nesting, feeding and brood-rearing habitat of the Sanctuary supports a breeding population of 21,300 pairs of Lesser Snow Geese, the equivalent of over 3 percent of the Canadian breeding population. Lowlands between East Bay and the eastern shore of Native Bay support an additional 1,000

pairs of Lesser Snow Geese. The area is also used by an estimated nesting population of 5,000 to 6,000 Atlantic Brant and over 600 Canada Geese. Common Eiders nest primarily on the small islands in the middle of East Bay. King Eiders, Oldsquaw and Tundra Swans also nest in the Sanctuary.

Other aquatic species known to breed within the Sanctuary are Sabine's and Herring gulls, White-rumped and Semipalmated sandpipers, Red Phalarope, Red-throated and Arctic loons, Arctic Tern, Parasitic and Long-tailed jaegers, and Ruddy Turnstone.

A denning area for polar bears is located on the northeast side of Southampton Island. In summer, polar bears have been observed between East Bay and Native Bay. An estimated 500 beluga whales use East Bay during the summer.

8. Historical Notes and Land-Use Conflicts:

In 1957, CWS proposed the establishment of a sanctuary at East Bay (and at the Boas River) to protect nesting areas of two separate populations of Lesser Snow Geese from disturbance from potential prospecting and tourist activities.

On May 21, 1959, the East Bay Bird Sanctuary was established by Order-In-Council P.C. 1959-629.

At present there are no known land-use conflicts in the Sanctuary. No tourist, prospecting or oil exploration impact has been recorded as having occurred in the Sanctuary.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

CWS has recommended that the Sanctuary be expanded to include Lesser Snow Goose nesting habitat outside the protected area.

10. References:

Abraham, K.F. and C.D. Ankey. 1980. Brant research on Southampton Island, NWT: a report of research completed during the summer of 1980. Unpubl. report, Univ. Western Ontario, London. 24 pp.

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Bray, R. 1943. Notes on birds of Southampton Island, Baffin

Island and Melville Peninsula. Auk 60(4): 505-535.

Cooch, F.G. 1955. Waterfowl reconnaissance of Southampton Island and southwest Baffin Island, July 18, 1955. Unpubl. report, Can. Wildl. Serv., Ottawa. 24 pp.

Cooch, F.G. and T.W. Barry. 1957. Proposed migratory bird sanctuaries, Southampton Island, Keewatin. Unpubl. report, Can. Wildl. Serv., Ottawa. 10 pp.

Gillet, J.M. 1976. Plants of Coates Island, Hudson Bay, Keewatin District, Northwest Territories. Can. Field-Nat. 90(4): 390-396.

Hanson, H.C. and R. L. Jones. 1976. The biogeochemistry of Blue, Snow, and Ross' geese. Special Pub. No. 1, Illinois Natural History Survey, Urbana. 281 pp.

Kerbes, R.H. 1975. The nesting population of Lesser Snow Geese in the eastern Canadian Arctic. Report Series No. 35, Can. Wildl. Serv., Ottawa. 46 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Parker, G.R. 1975. An investigation of caribou range on Southampton Island, Northwest Territories. Report Series No. 33, Can. Wildl. Serv., Ottawa. 83 pp.

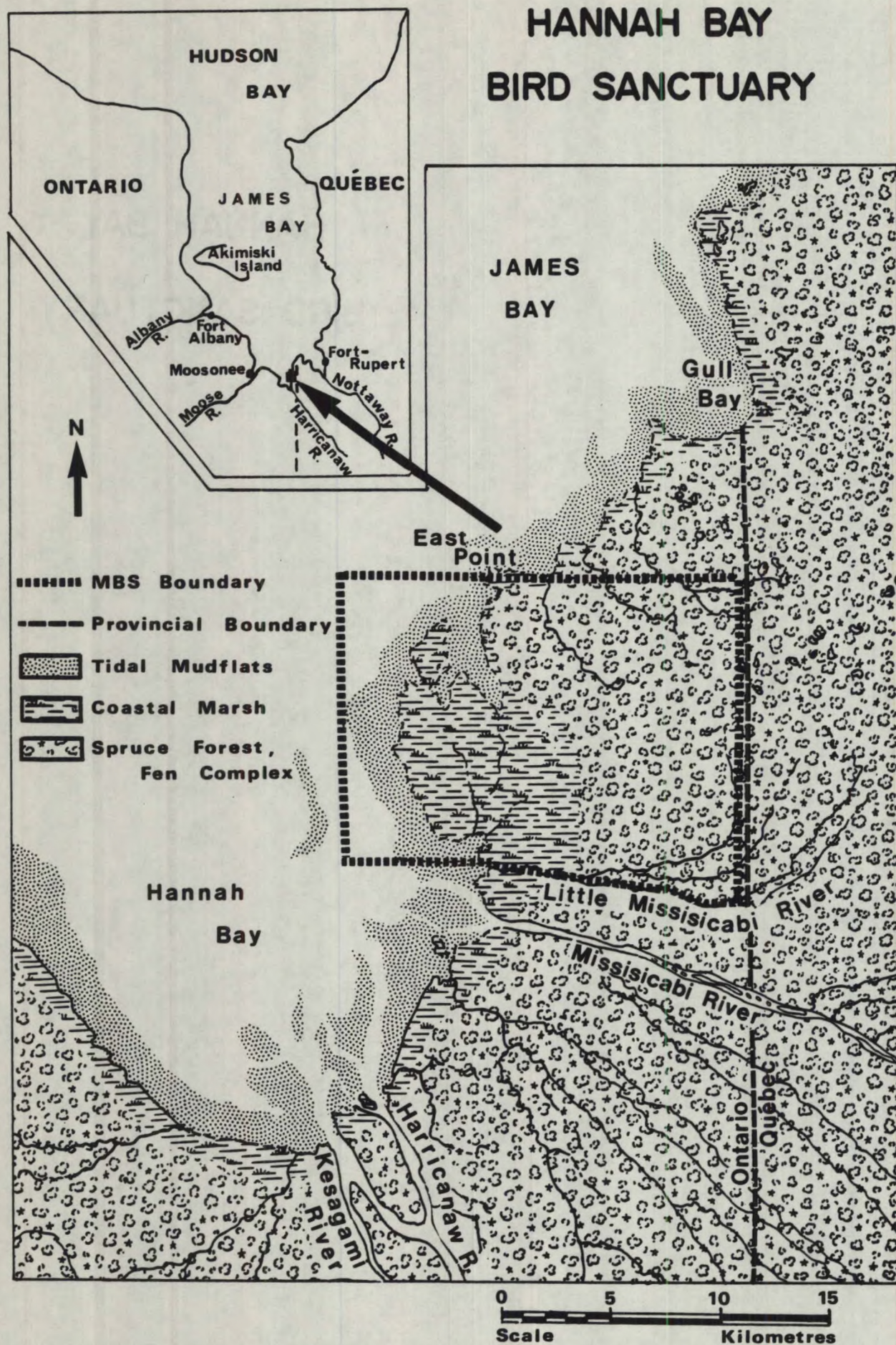
Parker, G.R. and R.K. Ross. 1973. Notes on the birds of Southampton Island, Northwest Territories. Arctic 26(2): 123-129.

Reed, A., P. Dupuis, K. Fischer and J. Moser. 1980. An aerial survey of breeding geese and other wildlife in Foxe basin and northern Baffin Island, NWT, July 1979. Prog. Note No. 114, Can. Wildl. Serv., Ottawa. 21 pp.

Reed, A., P. Dupuis and G.E.J. Smith. 1983. Lesser Snow Geese on Southampton and Baffin islands, Northwest Territories, 1979. Unpubl. report, Can. Wildl. Serv., Ste-Foy. 19 pp.

HANNAH BAY
BIRD SANCTUARY

HANNAH BAY BIRD SANCTUARY



HANNAH BAY BIRD SANCTUARY

1. Location: 60 km east of Moosonee, Ontario. All lands, marshes and inland waters are located in the District of Cochrane, Ontario. Offshore areas are located in the District of Keewatin, Northwest Territories.
 Lat. 51°20'N Long. 79°38'W
 NTS 1:50,000 Sheet No. 32M/5
 Legal Description: See Appendix 1
2. Area: 29,785 hectares
3. Land Ownership:
 Provincial Crown Land and Federal Crown Land within Northwest Territories (approximately 20% of the total area of the Sanctuary)

4. Major Habitat Types:

Tidal mudflats and open water	20%
Coastal marsh	25%
Spruce forest, fen complex	55%

5. Description of the Area:

Located on the east side of James Bay, the Sanctuary is characterized by areas of extensive mudflats and well developed sedge marshes interspersed with lakes and streams. The tidal mudflats, which may reach a few km in width, are hard packed silts and clays. Water in this area is brackish and turbid. The sedge (Carex spp.) dominated marshes also contain arrow-grass (Triglochin maritimum), bulrush (Scirpus rufus), and glasswort (Salicornia europea). Spikerush (Eleocharis spp.) and bulrush (Scirpus spp.) occur on the edges, and occasional pool areas are colonized by pondweed (Potamogeton spp.). On higher sites, needlerush (Juncus balticus) and grasses are found, while cattail (Typha spp.) and mare's tail (Hippuris vulgaris) grow in the numerous shallow ponds. The deeper potholes contain a variety of submergents including water milfoil (Myriophyllum spicatum) and pondweed. Farther inland, extensive wet sedge meadows; freshwater swamps, fens and bogs containing moss (Sphagnum spp.), larch (Larix laricina) and birch (Betula pumila); and black spruce (Picea mariana) forest cover the area. Willows (Salix spp.) may be found along the banks of streams such as the Little Missisicabi River.

6. Public Use:

Registered traplines are located within the Migratory Bird Sanctuary and Native people continue to camp and pursue this

traditional activity.

7. Importance to the Resource:

Large numbers of waterfowl use the Sanctuary during fall and spring migrations. In 1971, recorded counts of Lesser Snow Geese were 35,900 during October 4 to 6 and 64,500 during October 15 to 18. In 1972, over 28,500 Lesser Snow Geese were recorded between October 4 and 10. The 1982 goose survey by the Ontario Ministry of Natural Resources showed that one-fifth (over 7,000) of the total number of Lesser Snow Geese counted in James Bay were in the Sanctuary. Lesser numbers of Canada Geese use the Sanctuary as a staging and molting area. Thousands of ducks use the tidal flats, coastal marshes, streams and ponds during the fall migration. The most common fall migrants are Pintail, Black Duck, Mallard, Green-winged Teal and White-winged Scoter. Large numbers of ducks use the coastal marshes of the Sanctuary as a molting area. Severe flood tides restrict the possibility of significant waterfowl production in the Sanctuary.

Many shorebirds including Black-bellied, Golden and Semipalmated plovers, Yellowlegs, Dunlin, Semipalmated Sandpiper, Hudsonian Godwit, Red Knot, and Wilson's Snipe pass through Hannah Bay Bird Sanctuary during migration. The endangered Eskimo Curlew, the migration routes of which remain unknown, has been recorded near Hannah Bay.

8. Historical Notes and Land-Use Conflicts:

On October 21, 1938, the Province of Ontario, in response to concerns regarding the protection of Lesser Snow Geese and other waterfowl, established an Ontario Crown Game Preserve on the east side of Hannah Bay. The inland area from East Point to the Mississicabi River and eastward to the Ontario-Quebec border was to be known as the Hannah Bay Waterfowl Sanctuary. The Province of Ontario requested that a suitable area of open water, tidal mudflats and shoals fronting the Provincial Waterfowl Sanctuary and part of the Northwest Territories be established as a federal migratory bird sanctuary. On February 25, 1939, the tidal waters fronting the western boundary of the Provincial Waterfowl Sanctuary were designated as the Hannah Bay Bird Sanctuary by Order-in-Council P.C. 1939-406. On August 27, 1946, the land covered by the Provincial Waterfowl Sanctuary became part of the Hannah Bay Bird Sanctuary (Order-in-Council P.C. 1946-3635.)

In 1973, the southern boundary of the Sanctuary was altered to accommodate the new Tidewater Goose Camp. The southern boundary was moved northward to the north bank of the south branch of the Little Mississicabi River, thereby positioning the established goose camp outside the Sanctuary. A further boundary alteration request in 1978 by the owner of Tidewater Goose Camp was denied by the Canadian Wildlife Service. A

second hunting camp, the Harricanaw River Goose Camp, exists near the Sanctuary.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1958-15, January 2, 1958; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Because of its remote location, the Hannah Bay Bird Sanctuary is a difficult area, from a practical point of view, to enforce the Regulations. Periodic hunting within the southern portion of the Sanctuary has reportedly occurred. Also, Native people from Fort-Rupert may unknowingly stop and hunt in the Sanctuary.

10. References:

Allison, L. 1977. Migratory Bird Sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Canadian Wildlife Service File No. 9396-6-8 (2 Vols.)

Carriero, J.F. and G.D. Tessier. 1976. Critical and important areas for migratory birds in southern Ontario and James Bay. Unpubl. report, Can. Wildl. Serv., Ottawa. 123 pp.

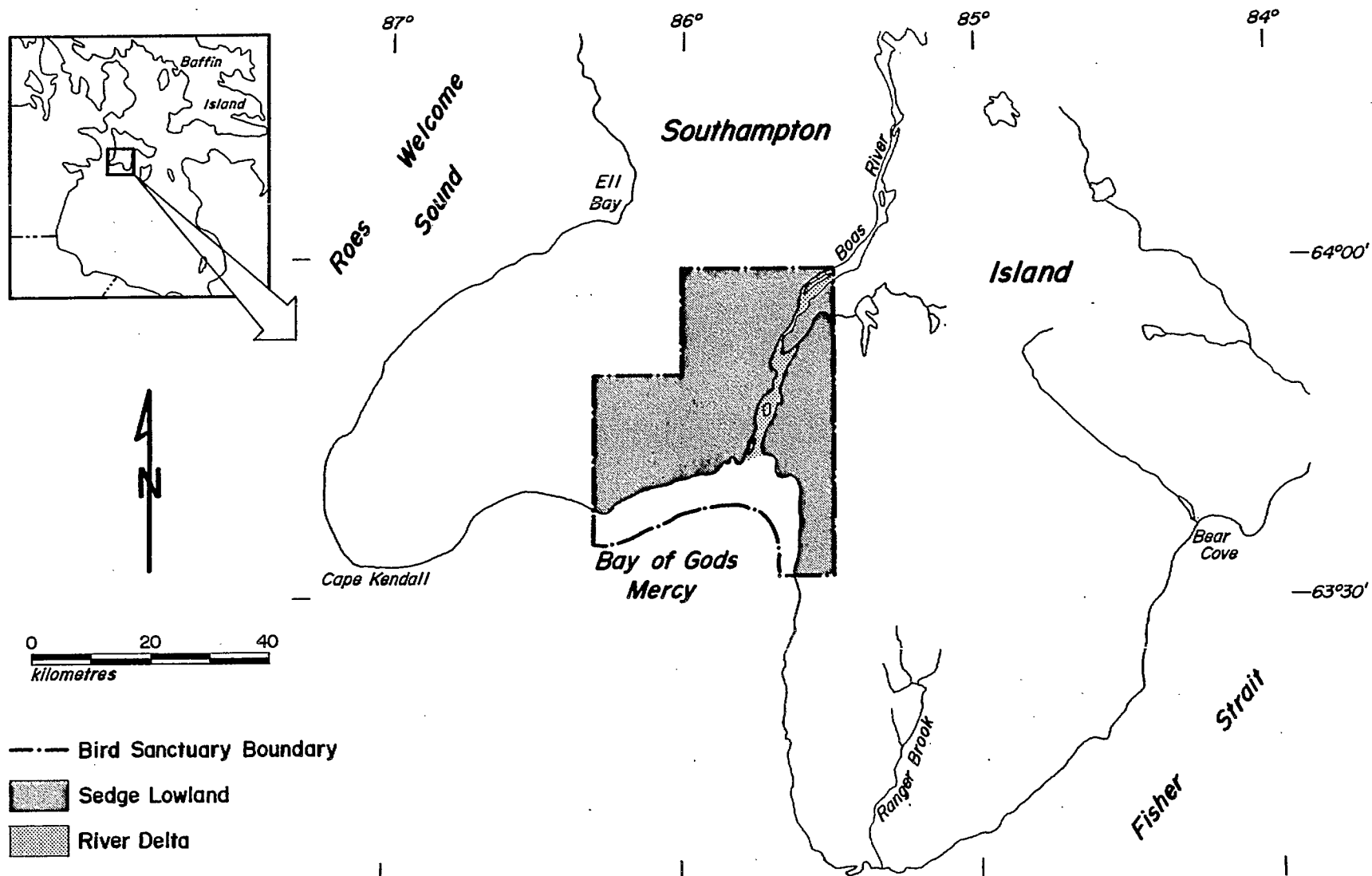
Curtis, S.G. 1973. The movement of geese through James Bay, fall 1972 - a preliminary report. Unpubl. report, James Bay Report Series, Can. Wildl. Serv., Ottawa. 21 pp.

Hagar, J.A. and K.S. Anderson. 1977. Sight record of Eskimo Curlew (Numenius borealis) on west coast of James Bay, Canada. American Birds 31(2): 135-136.

Lumsden, H. 1971. Goose surveys on James Bay, 1971. Unpubl. report, Ontario Dept. Lands and Forests, Ottawa. 20 pp.

HARRY GIBBONS
BIRD SANCTUARY

HARRY GIBBONS BIRD SANCTUARY



HARRY GIBBONS BIRD SANCTUARY

1. Location: 110 km southwest of Coral Harbour on southwestern Southampton Island at the northern extremity of Hudson Bay in the District of Keewatin, Northwest Territories
 Lat. 63°45'N Long. 85°40'W
 NTS 1:500,000 Sheet No. 45NW and 45NE
 Legal Description: See Appendix 1

2. Area: 148,900 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Sedge meadow lowland	75%
River delta	5%
Tidal mudflats and open water	20%

5. Description of the Area:

Located on the southwestern portion of Southampton Island, the Sanctuary is within the drainage basin of the lower Boas River. Underlain by Palaeozoic limestone and covered with glacial drift and beach deposits, much of the area lies below 60 m elevation. Flowing southward through the area, the Boas River cuts across an extensive sedge meadow lowland and forms a braided delta 5 km wide and 13 km long. Extensive tidal flats (at least 13 km wide) occur along the coastline. Scattered throughout the sedge lowlands are numerous lakes bordered by sedge-willow meadows. Dominant vegetation on the sedge lowlands includes sedge (Carex spp.), cotton-grass (Eriophorum spp.), bog-rush (Juncus albens), and a variety of mosses and willows (Salix spp.) Higher elevations are characterized by Dryas, lichens and sedge.

The Sanctuary is contained within a proposed IBP site.

6. Public Use:

Coral Harbour residents have Arctic fox traplines along the coastline and inland to the large bays. They also hunt ringed seals and polar bears within the Sanctuary boundaries.

7. Importance to the Resource:

The Boas River - Ell Bay area supports an estimated 7 percent of the Lesser Snow Goose nesting population in Canada. The greatest concentration occurs around the delta of the Boas River. Numbers of nesting geese in the Boas River delta, Ell Bay and Bear Cove areas has increased from 69,400 pairs in

1973 to 95,200 pairs in 1979. The grassy islands of the braided delta provide an abundance of nesting sites. The sedge lowlands which extend beyond the Sanctuary boundaries provide good feeding and molting habitat. Atlantic Brant, Canada Goose, Ross' Goose, Common Eider, King Eider, Oldsquaw and Tundra Swan also nest in the Sanctuary.

Other avian species which breed in the area are Arctic Loon, Sabine's and Herring gulls, Red-throated Loon, Ruddy Turnstone, Red Phalarope and Parasitic Jaeger.

Barren-ground caribou, which were reintroduced to Southampton Island in 1967, Arctic fox, bearded and ringed seals and polar bears occur in the area.

8. Historical Notes and Land-Use Conflicts:

In 1957, CWS proposed the establishment of a sanctuary at the Boas River (and at East Bay) to protect nesting areas of two separate populations of Lesser Snow Geese from disturbance from potential prospecting and tourist activities.

On May 21, 1959, the Boas River area was established as the Harry Gibbons Bird Sanctuary by Order-In-Council P.C. 1959-629. The Sanctuary was named in honour of a prominent Inuit guide and interpreter who assisted many scientists who worked in the area. By 1957, the Lesser Snow Goose colony at the Boas River was the most intensively studied goose colony in the Canadian Arctic.

At present there are no known land-use conflicts in the Sanctuary.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

CWS has recommended that the Sanctuary be expanded to include Lesser Snow Goose feeding and molting habitat outside the Sanctuary boundaries.

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Bray, R. 1943. Notes on birds of Southampton Island, Baffin Island and Melville Peninsula. Auk 60(4): 505-535.

Cooch, F.G. 1968. Birds. pp. 443-446. In: C.S. Beals

(Ed.). Science, history and Hudson Bay. Vol. 1, Dept. Mines and Resources, Ottawa.

Cooch, F.G. 1958. The breeding biology and management of the blue goose (Chen caerulescens). Unpubl. Ph.D. Thesis, Cornell Univ. 235 pp.

Cooch, F.G. and T.W. Barry. 1957. Proposed migratory bird sanctuaries, Southampton Island, Keewatin. Unpubl. report, Can. Wildl. Serv., Ottawa. 10 pp.

Kerbes, R.H. 1975. The nesting population of Lesser Snow Geese in the eastern Canadian Arctic. Report Series No. 35, Can. Wildl. Serv., Ottawa. 46 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Nettleship, D.N. and P.A. Smith, (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conserv. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Parker, G.R. 1975. An investigation of caribou range on Southampton Island, Northwest Territories. Report Series No. 33, Can. Wildl. Serv., Ottawa. 83 pp.

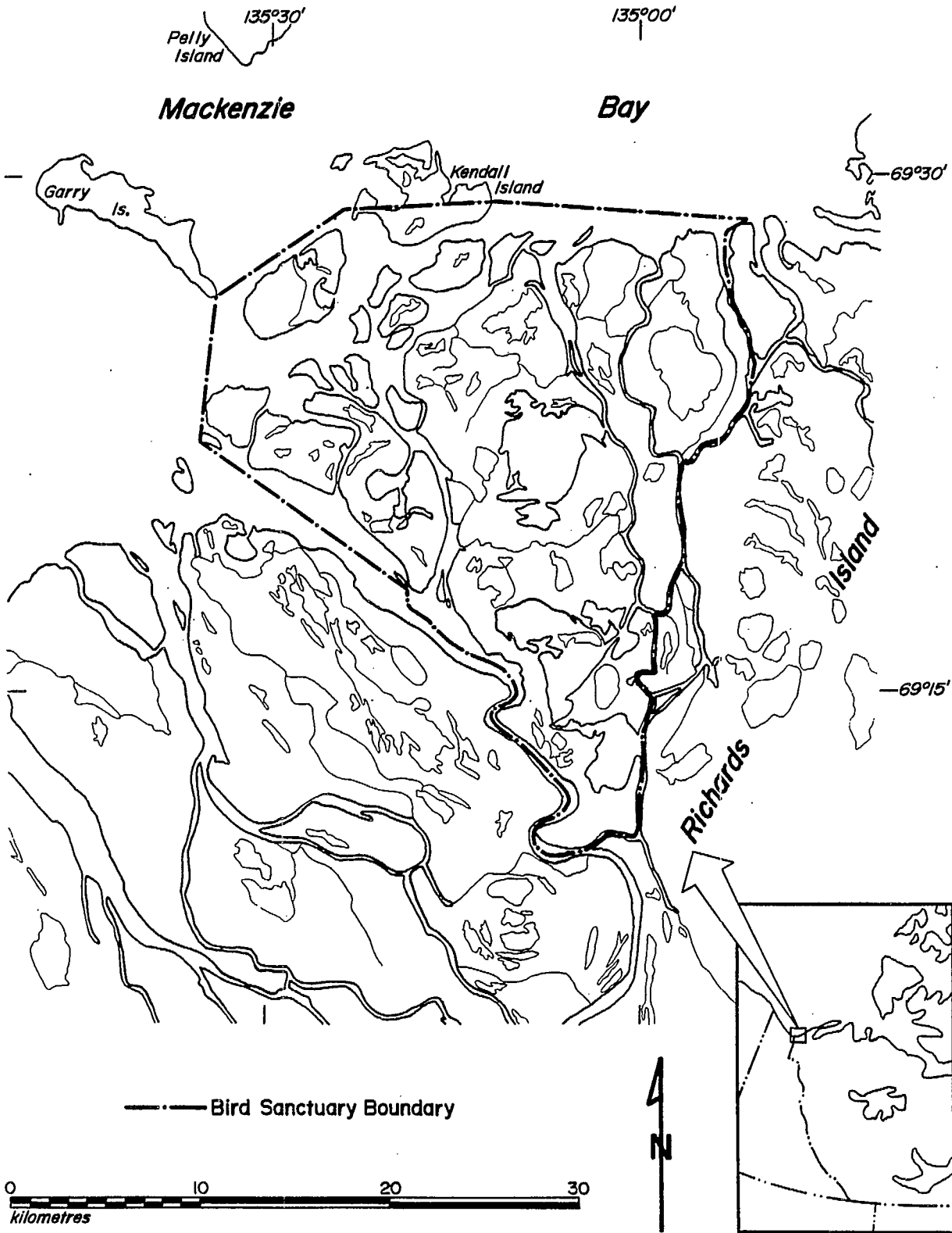
Parker, G.R. and R.K. Ross. 1973. Notes on the birds of Southampton Island, Northwest Territories. Arctic 26(2): 123-129.

Reed, A., P. Dupuis and G.E.J. Smith. 1983. Lesser Snow Geese on Southampton and Baffin islands, Northwest Territories, 1979. Unpubl. report, Can. Wildl. Serv., Ste-Foy. 19 pp.

KENDALL ISLAND

BIRD SANCTUARY

KENDALL ISLAND BIRD SANCTUARY



KENDALL ISLAND BIRD SANCTUARY

1. Location: 130 km west of Tuktoyaktuk on the Mackenzie River Delta in the District of Mackenzie, Northwest Territories
Lat. 69°20'N Long. 135°30'W
NTS 1:250,000 Sheet No. 107C
Legal Description: See Appendix 1

2. Area: 60,600 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal beaches and open water	Data
Tundra sedge lowland	not
Freshwater lakes and ponds	available

5. Description of the Area:

Located in the active part of the Mackenzie Delta the Sanctuary is largely a mosaic of low (approximately one m above sea level), flat, featureless islands separated by meandering shifting channels. Channel waters are shallow and laden with silt. Most of the tundra lowland, covered by fluvial deposits of silt and sand, is vegetated with sedges (Carex spp.), polar grasses, horsetail (Equisetum spp.), a variety of other vascular plants and mosses. Small, stunted willows (Salix spp.) are found in a few places. Several areas have scattered mudflats largely devoid of vegetation. Much of the area is wet and swampy in the spring and early summer, but becomes drier and firmer later in the season. Ice action in the river channels during spring break-up and the entrapment of silt have resulted in the formation of levees along the shores of the islands. Many lakes and shallow ponds are scattered throughout the lowland.

The Beaufort Sea shoreline is shallow with shifting shoals, sandbars, beaches and spits. Although the tidal range is small, variations up to 2 m occur as a result of winds and storms. This may reverse the flow of water along the small channels.

6. Public Use:

Inuit of Aklavik, Inuvik and Tuktoyaktuk hunt from camps in the Mackenzie River Delta in the spring and fall. Although formerly a widespread practice, egg collecting by Inuit has apparently declined within the Sanctuary.

Several traplines (for Arctic Fox) cross the Sanctuary

mainly along the coast. Muskrat are also trapped and hunted.

A number of oil companies have carried out extensive seismic activities and have drilled several wells in the Sanctuary.

7. Importance to the Resource:

An estimated 375,000 Lesser Snow Geese, 23,700 White-fronted Geese, 12,200 Brant, 1,100 Canada Geese and 3,400 Tundra Swans use the islands of the outer delta within the Sanctuary and adjacent areas as staging grounds in the spring and fall. A Lesser Snow Goose colony ranging in size from 200 to 8,800 birds nests on several small islands on the west side of the Sanctuary. White-fronted Geese, Black Brant, Tundra Swans, Sandhill Cranes, dabbling ducks and sea ducks nest and molt throughout the area.

Approximately 4,000 beluga whales use the Mackenzie estuary, part of which is within the Sanctuary. A significant population of barren-ground grizzly bears also use the outer islands of the delta.

8. Historical Notes and Land-Use Conflicts:

In 1961, CWS recommended that the area be protected as a sanctuary because of the threat of disturbance to the Lesser Snow Goose colony. Building and development programs and proposed oil exploration activities in the Mackenzie Delta were expected to attract large numbers of people to the area. On November 9, 1961, the Kendall Island Bird Sanctuary was established by Order-In-Council P.C. 1961-1617.

Since 1972, extensive seismic and exploratory drilling have occurred within the Sanctuary and natural gas fields have been found there. Proposals have been made for developing gas processing plants and a hydrocarbon pipeline network in the area.

Although the Sanctuary is within the boundaries of the Mackenzie Reindeer Grazing Reserve, no apparent conflicts exist.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

Sanctuary boundary changes have been proposed to protect adjacent areas important to waterfowl.

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Barry, T.W. 1976. Seabirds of the southeastern Beaufort Sea: Summary Report. Beaufort Sea Technical Report No. 3a. Dept. Environment, Victoria. 41 pp.

Barry, T.W. 1975. Birdlife in the subsistence of natives in the Mackenzie Delta region, with an appendix by Mary Carpenter Lyons. Unpubl. report, Can. Wildl. Serv., Ottawa. 71 pp.

Barry, T. W. 1961. Proposed migratory bird sanctuaries - Anderson River Delta, Mackenzie District, N.W.T., Kendall Island and vicinity Mackenzie Delta, Mackenzie District, N.W.T. Unpubl. report, Can. Wildl. Serv., Edmonton. 12 pp.

Freeman, M. (Ed.) 1976. Inuit land use and occupancy project. Dept. Indian and Northern Affairs, Ottawa. 3 Vols. 713 pp.

Hanson, H.C. and R.L. Jones. 1976. The biogeochemistry of Blue, Snow, and Ross' geese. Special Pub. No. 1, Illinois Natural History Survey, Urbana. 281 pp.

Kerbes, R.H. 1983. Lesser Snow Goose colonies in the western Canadian Arctic. J. Wildl. Manage. 47(2): 523-526.

Kerbes, R.H. (In Press). Lesser Snow Geese nesting in the western Canadian Arctic in 1981. Can. Field-Nat.

Koski, W.R. 1977. A study of the distribution and movement of snow geese, other geese, and whistling swans on the Mackenzie Delta, Yukon north slope, and Alaskan north slope in August and September 1975. Chpt. II: 1-54. In: W.W.H. Gunn, C.E. Tull, and T.D. Wright (Eds.). Ornithological studies conducted in the area of the proposed gas pipeline route: Northwest Territories, Yukon Territory and Alaska, 1974. Arctic Gas Biol. Rept. Series. Vol. 35.

Koski, W.R. 1975. A study of the distribution and movement of snow geese, other geese, and whistling swans on the Mackenzie Delta, Yukon north slope, and Alaskan north slope in August and September, 1974, including a comparison with similar data from 1973. Chpt. I: 1-58. In: W.W.H. Gunn, R.E. Schweinsburg, C.E. Tull, and T.D. Wright (Eds.). Ornithological studies conducted in the area of the proposed gas pipeline route: Northwest Territories, Yukon Territory and Alaska, 1974. Arctic Gas Biol. Rept. Series. Vol. 30.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman.

1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Porsild, A.E. 1943. Birds of the Mackenzie Delta. Can. Field-Nat. 57: 19-35.

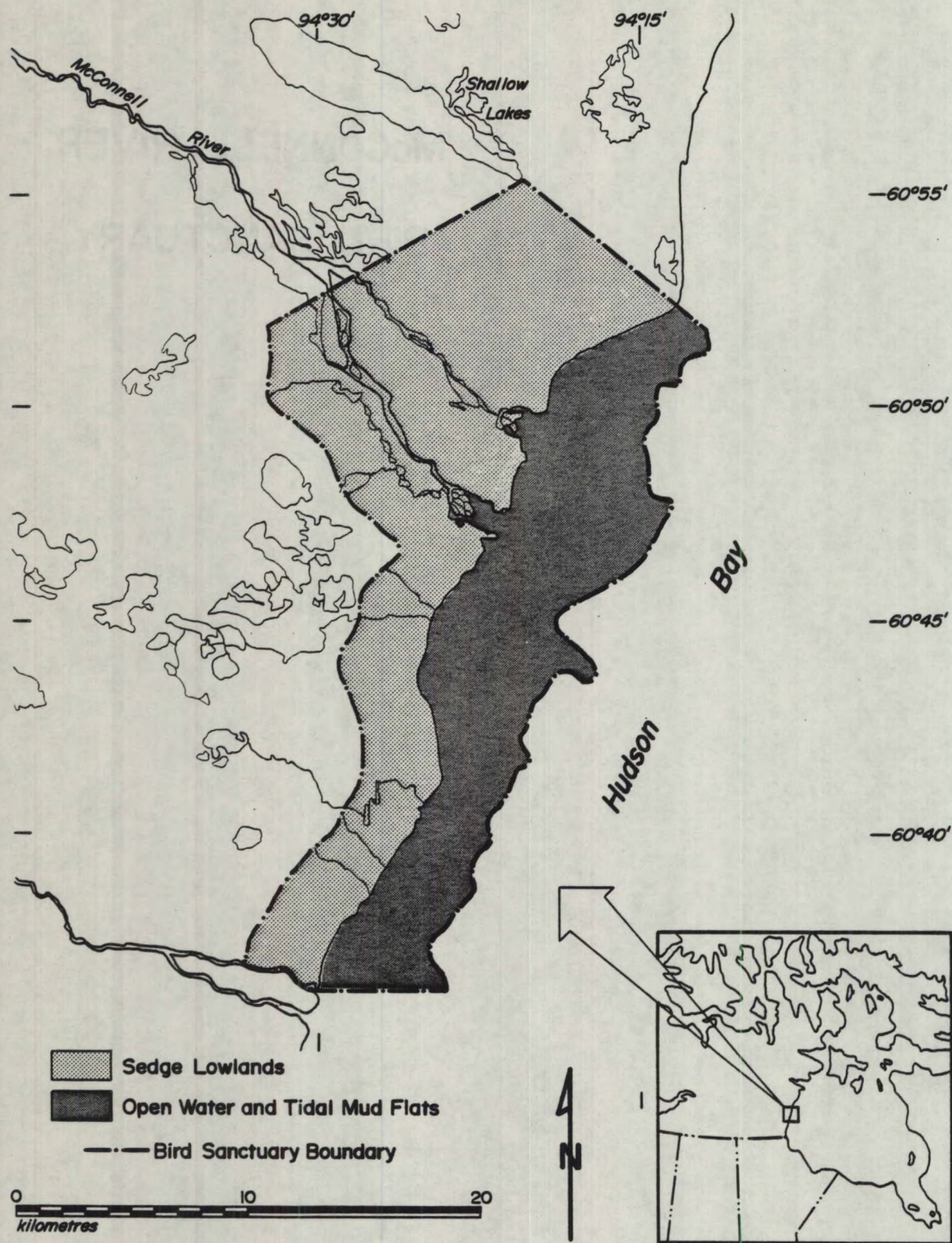
Slaney, F.F. and Co. Ltd. 1974. Birds. Vol. 4. Environmental program, Mackenzie Delta, N.W.T. Unpubl. report for Imperial Oil Ltd., Gulf Oil Can. Ltd., Shell Can. Ltd., and Can. Arctic Gas Study Ltd. 104 pp.

Wiseley, A.N., L.D. Roy, and C.E. Tull. 1977. Aerial sureys of bird populations along the proposed cross-delta pipeline route, Yukon Territory and Northwest Territories, June-August 1973. Chpt. III: 1-45. In: W.W.H. Gunn, C.E. Tull, and T.D. Wright (Eds.). Ornithological studies conducted in the area of the proposed gas pipeline route: Northern Alberta, Northwest Territories, Yukon Territory, and Alaska, 1975. Arctic Gas Biol. Rept. Series. Vol. 35.

McCONNELL RIVER

BIRD SANCTUARY

McCONNELL RIVER BIRD SANCTUARY



MCCONNELL RIVER BIRD SANCTUARY

1. Location: 30 km south of Eskimo Point on the west coast of Hudson Bay in the District of Keewatin, Northwest Territories
Lat. 60°40'N Long. 94°20'W
NTS 1:500,000 Sheet No. 55SW
Legal Description: See Appendix 1

2. Area: 32,900 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Tidal flats and open water	25%
Sedge lowland	75%

5. Description of the Area:

The Sanctuary is situated within the coastal plain along the west side of Hudson Bay. Underlain by Precambrian rock and overlain with glacial till and marine sediments, the poorly drained coastal plain is largely sedge lowland interspersed with tundra hummocks or ridges and shallow ponds and lakes. The north and south branches of the McConnell River cut through the lowland in wide braided channels. Unlike the coast further north, very few rock outcrops occur within the Sanctuary. Beyond the sedge lowland, which extends 3 to 8 km inland, the landscape begins to increase in relief and is characterized by low hills and numerous lakes.

Vegetation on the sedge lowland consists primarily of three cover types -- sedge meadow, tussock tundra, and dwarf shrub-sedge tundra. Dominant species include sedges (Carex spp.), cotton grass (Eriophorum angustifolium, E. scheuchzeri), marsh grass (Dupontia fisheri), bentgrass (Agrostis borealis), foxtail (Alopecurus alpinus), fescue (Festuca brachyphylla), bluegrass (Poa arctica, P. glauca), rushes (Luzula confusa, L. nivalis, Juncus albescens, J. arcticus), dwarf birch (Betula glandulosa), and willow (Salix spp.). During the rapid increase of the Lesser Snow Goose colony, notable vegetation changes have occurred. Some heavily grazed lush meadows of flowering cotton grass and sedges have changed to a solid moss cover.

A research field station established by the University of Western Ontario (and owned by the CWS since 1975) is located at the mouth of the south branch of the McConnell River. Three archaeological sites are located in the Sanctuary.

The McConnell River Bird Sanctuary and adjacent area (1,060 sq. km) is a proposed IBP site. The Sanctuary is also a RAMSAR site (a wetland of international importance).

6. Public Use:

Local Inuit have traplines along the coast and hunt ringed seals and polar bear offshore in the winter, hunt waterfowl along the coast in the spring and hunt white whales offshore in the summer. The Inuit have also set up fishing camps on the shoreline near the Sanctuary.

The McConnell River Lesser Snow Geese as well as other birds and plants have been well studied since the mid-1960s.

7. Importance to the Resource:

An estimated 130,000 pairs, about 19 percent, of the Canadian Lesser Snow Goose population nests in and near the Sanctuary. In 1973, approximately 195,000 breeding pairs were found in the area. Although the numbers have decreased, the total nesting area of the colonies has expanded. Low tundra hummocks on the coastal marsh flats are the nesting sites. The sedge lowlands, ponds, lakes and inland areas provide feeding and molting habitat.

The area is also used by small Canada Geese which nest in loose associations generally inland of the Snow Geese. Other species nesting in the Sanctuary include Oldsquaw, Common Eider, King Eider, Greater Scaup, Pintail, Sandhill Crane, Common Loon, Red-throated Loon, Semi-palmated Plover, Pectoral Sandpiper, Northern Phalarope, Red Phalarope, Parasitic Jaeger, Long-tailed Jaeger, Rough-legged Hawk, Willow Ptarmigan, Herring Gull, Arctic Tern, Short-eared Owl, Horned Lark, Savannah Sparrow, Tree Sparrow and Lapland Longspur. Over 100 bird species have been sighted using the Sanctuary and adjacent area.

Ringed seals, white whales and polar bears are found along the coast and offshore waters. Barren ground caribou of the Kaminuriak herd winter along the coast from the Manitoba border to Eskimo Point.

8. Historical Notes and Land-Use Conflicts:

Sanctuary status for the area was proposed to protect the area from disturbance by mining companies and the proposed development of a tourist camp. It was suggested that sanctuary status would help ensure continued access to the geese there by Inuit in James and Hudson bays. On August 24, 1960, the McConnell River Bird Sanctuary was established by Order-In-Council P.C. 1960-1164.

During the past twenty years, the McConnell River goose colony

has been intensively studied by researchers including CWS staff. Researchers have suggested that over-grazing of summer feeding habitat may have been the major cause of the decline in the goose colony.

Potential land-use conflicts are pipeline construction and tourism. A proposed hydrocarbon pipeline route is located about 100 km inland from the area. Increased numbers of tourists to Eskimo Point could be a major disturbance factor to the geese in the area.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

CWS has recommended the expansion of the present Sanctuary to protect additional Lesser Snow Goose nesting, feeding and molting habitat in the area.

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Anonymous. 1982. Canadian sites designated as Wetlands of International Importance. Unpubl. report, Can. Wildl. Serv., Ottawa. 89 pp.

Freeman, M. (Ed.) 1976. Inuit land use and occupancy project. Dept. Indian and Northern Affairs, Ottawa. 3 Vols. 713 pp.

Hanson, H.C. and R. L. Jones. 1976. The biogeochemistry of Blue, Snow, and Ross' geese. Special Pub. No. 1, Illinois Natural History Survey, Urbana. 281 pp.

Kerbes, R.H. 1982. Lesser Snow Geese and their habitat on West Hudson Bay. Naturaliste Canadien 109: 905-911.

Kerbes, R.H. 1979. Lesser Snow Goose population surveys west Hudson Bay, 1977-1978. Unpubl. report, Can. Wildl. Serv., Saskatoon. 40 pp.

Kerbes, R.H. 1975. The nesting population of Lesser Snow Geese in the eastern Canadian Arctic. Report Series No. 35, Can. Wildl. Serv., Ottawa. 46 pp.

Kerbes, R.H. 1975. The west Hudson Bay Snow Goose area: A proposal for an enlarged migratory bird sanctuary and a new national wildlife area. Unpubl. report, Can. Wildl. Serv.,

Saskatoon. 9 pp.

Lieff, B.C. 1973. The summer feeding ecology of blue and Canada geese at the McConnell River, N.W.T. Unpubl. Ph.D. Thesis, Univ. Western Ontario, London. 203 pp.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

McInnes, C.D. 1962. Nesting of small Canada Geese near Eskimo Point, Northwest Territories. J. Wildl. Manage. 26(3): 247-256.

McInnes, C.D. 1960. The Canada Goose (Branta canadensis) of the McConnell River. Unpubl. M.Sc. Thesis, Cornell Univ. 77 pp.

McInnes, K.L. 1976. A check-list of vascular flora of the McConnell River Bird Sanctuary. Unpubl. report, Dept. Botany, Univ. Western Ontario, London. 6 pp.

McInnes, C.D. and R.H. Kerbes. 1984. Growth and decline of the Snow Goose colony at McConnell River, N.W.T.: 1940-1980. Unpubl. report, Can. Wildl. Serv., Saskatoon. 16 pp.

Nettleship, D.N. and P.A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conser. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

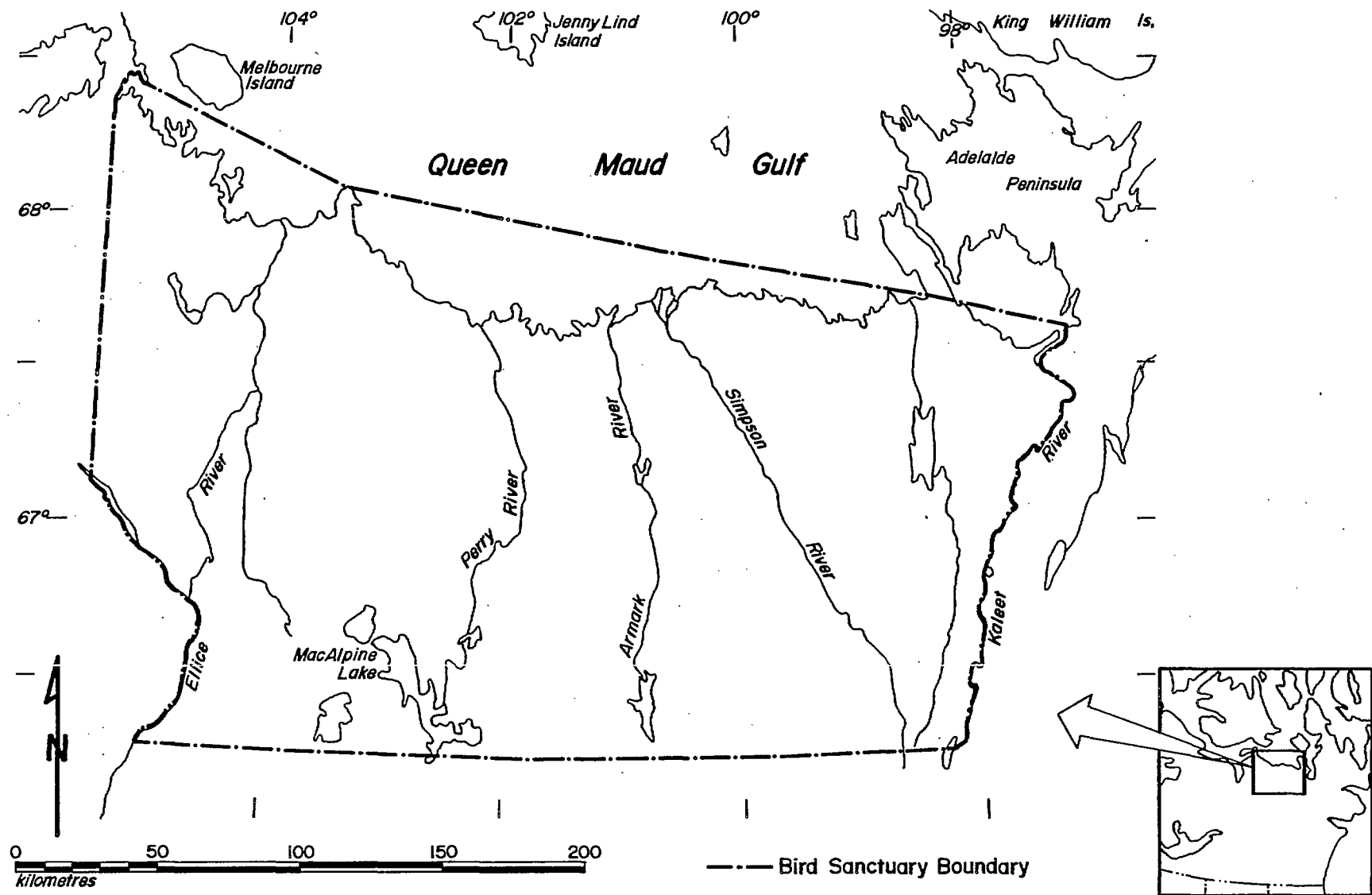
Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Thompson, D.C., G.H. Klassen and J. Cihlar. 1980. Caribou habitat mapping in the southern District of Keewatin, N.W.T.: An application of digital LANDSAT data. J. Applied Ecology 17: 125-138.

QUEEN MAUD GULF

BIRD SANCTUARY

QUEEN MAUD GULF BIRD SANCTUARY



QUEEN MAUD GULF BIRD SANCTUARY

1. Location: Approximately 75 km south of Cambridge Bay,
Victoria Island, in the Districts of Mackenzie,
Keewatin and Franklin, Northwest Territories
Lat. 67°00'N Long. 100°30'W
NTS 1:500,000 Sheet No. 66NW and 66NE
Legal Description: See Appendix 1

2. Area: 6,278,200 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Open water	10%
Wet meadow and marsh tundra	Data
Lakes and rivers	
Dry tundra	not
Heath tundra	
Rocks/boulder fields	available

5. Description of the Area:

The Queen Maud Gulf Bird Sanctuary is part of the vast continental Arctic terrain commonly referred to as the "Barrenlands". A generally flat plain of post-glacial marine emergence, extending 135 km inland from the coast, dominates the landscape. The western upland, which rises from 300 to 600 m above sea level, is characterized by rock outcrops, drumlins and boulder fields. The slopes of hills show prominent old beach ridges. Relief on the central lowland, a vast expanse of tundra meadows and marshes, is provided by rock outcrops, drumlins, streams and shallow lakes. The eastern upland, ranging in elevation from 60 to 90 m above sea level, is characterized by abrupt hills, ridges and boulder fields.

Wet meadow and marsh tundra of the central lowlands consist largely of well vegetated hummocky (frost-heaved) tussocks of cotton grass (Eriophorum vaginatum), sedge (Carex spp.), dwarf birch (Betula glandulosa), Labrador tea (Ledum decumbens) and cloudberry (Rubus chamaemorus). A variety of mosses cover the ground between the hummocks. On elevated well-drained areas, dry tundra vegetation consists of holy grass (Hierochloa alpina), poppy (Papaver radicum), willow (Salix spp.), dwarf birch, woodrush (Luzula confusa), bearberry (Arctostaphylos alpina), cranberry (Vaccinium vitis-idaea), mountain avens (Dryas integrifolia) and a variety of lichens. Lower slopes of drumlins are covered with heath-tundra type vegetation. Dominant species include white heather (Cassiope

tetratgona), sedge (Carex spp.), bearberry, cranberry, crowberry (Empetrum nigrum) and willow. Rock habitat (dry rock, boulder fields and gravel areas) supports sparse vegetation, primarily lichens.

Numerous lakes varying in size and shape occur on the hilly plains. Where prominent and elongated ridges of moraine occur, the lakes are large and elongated on a northwesterly axis. On low hilly plains, lakes are small and are bedrock controlled. Karrak Lake (the site of the largest Ross' goose colony), which has an area of about 30 km², contains more than 47 islands some of which resemble drumlins. Vegetated islands have mosses on the lower portions and variety of vascular plants including crowberry, Labrador tea, cinquefoil (Potentilla hyparctica), white heather, fernweed (Pedicularis sudetica), mare's tail (Hippuris vulgaris), dwarf birch and willow.

The Sanctuary is contained within a proposed IBP site and is also a designated RAMSAR site (a wetland of international importance).

6. Public Use:

Inuit from Cambridge Bay and Gjoa Haven have traplines for Arctic fox, wolves and wolverine primarily on the coastal areas, but also trap on inland locations along the major rivers. The Natives hunt muskoxen and caribou along the coastal areas and inland. Seals are harvested offshore in the gulf. During the summer, the Natives have fish camps at the mouths of the major rivers. Arctic char, lake trout and whitefish are the main species taken.

Hunting of waterfowl by Inuit is largely opportunistic as most of the Ross' Goose colonies are more than 50 km inland.

Several geological investigations (prospecting and drilling) have occurred within the Sanctuary.

One tourist-adventurer party is known to have canoed some of the rivers.

7. Importance to the Resource:

Over 90 percent of the world's population of Ross' Geese and 8 percent of the Canadian population of Lesser Snow Geese nest within the Sanctuary. As well, the area supports smaller populations of nesting and molting Canada Geese, White-fronted Geese, Atlantic and Black brant and Tundra Swans. Most of the geese, which arrive in the area in late May, molt on the inland lakes and rivers, and leave the area in late August and early September.

Other bird species which breed in the Sanctuary are Oldsquaw;

King Eider; Golden, Black-bellied and Semipalmated plovers; Baird's, Pectoral and Semipalmated sandpipers, Glaucous and Herring gulls; Arctic Tern; Arctic and Red-throated loons; Red and Northern phalaropes; Parasitic and Long-tailed jaegers; Common Redpoll; Lapland Longspur; Savannah Sparrow and Peregrine Falcon. Reported migrants in the area include Ruddy Turnstone, Red Knot, White-rumped and Stilt sandpipers, Sabine's Gull, Ringed Plover, Dunlin, Yellow-billed Loon, Barnswallow, Brown Thrasher, and Hoary Redpoll. The tundrius subspecies of the Peregrine Falcon is considered the third most common raptor in the Perry River area.

The Sanctuary also serves as the calving grounds for part of the Bathurst caribou herd and supports an estimated 6,000 muskoxen. Offshore waters are used by ringed seals, the most abundant marine animal in the area.

8. Historical Notes and Land-Use Conflicts:

CWS recommended that the Queen Maud Gulf lowlands be given Sanctuary status to protect the "largest variety of geese of any nesting area in North America". On November 9, 1961, the Queen Maud Gulf Bird Sanctuary was established by Order-In-Council P.C. 1961-1617.

There are no known land-use conflicts in the Sanctuary at present. Several mining companies have staked claims there, but the claims are no longer valid. Apparently the Sanctuary lies within an area of high mineral potential. In addition, tourist options such as native outfitting of sport hunters have been considered for the area.

9. Protective Status and Enforcement of the Regulations:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

CWS has recommended the expansion of the present Sanctuary to protect additional nesting, feeding and molting habitat in the area.

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Anonymous. 1982. Canadian sites designated as Wetlands of International Importance. Unpubl. report, Can. Wildl. Serv., Ottawa. 89 pp.

Barry, T.W. 1961. Proposed migratory bird sanctuary at South

coast, Queen Maud Gulf, N.W.T. Unpubl. report, Can. Wildl. Serv., Edmonton. 4 pp.

Barry, T.W. 1960. Waterfowl reconnaissance in the western Arctic. Arctic Circ. 13(4): 51-58.

Edlund, S.A. 1982. Plant communities on the surficial material of the north central district of Keewatin, Northwest Territories. Paper 80-83, Geol. Survey of Canada. Ottawa. 20 pp.

Findlay, B.J. and K.J. McCormick. (In Prep.). Queen Maud Gulf Bird Sanctuary Management Plan (Draft). Can. Wildl. Serv., Yellowknife.

Freeman, M. (Ed.) 1976. Inuit land use and occupancy project. Dept. Indian and Northern Affairs, Ottawa. 3 Vols. 713 pp.

Kerbes, R.H. 1984. Inventory of Ross' and Lesser Snow Geese nesting in the central Arctic, June 1982. Unpubl. report, Can. Wildl. Serv., Saskatoon. 27 pp.

Kerbes, R.H., M.R. McLandress, G.E.J. Smith, G.W. Beyersbergen and B. Godwin. 1983. Ross' Goose and Lesser Snow Goose colonies in the central Canadian Arctic. Can. J. Zool. 61(1): 168-173.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

Olynyk, J. 1978. Summaries of Western and Northern Region migratory bird sanctuaries. Unpubl. report, Can. Wildl. Serv., Saskatoon. 133 pp.

Ryder, J.P. 1969. Nesting colonies of Ross' Geese. Auk 86: 282-292.

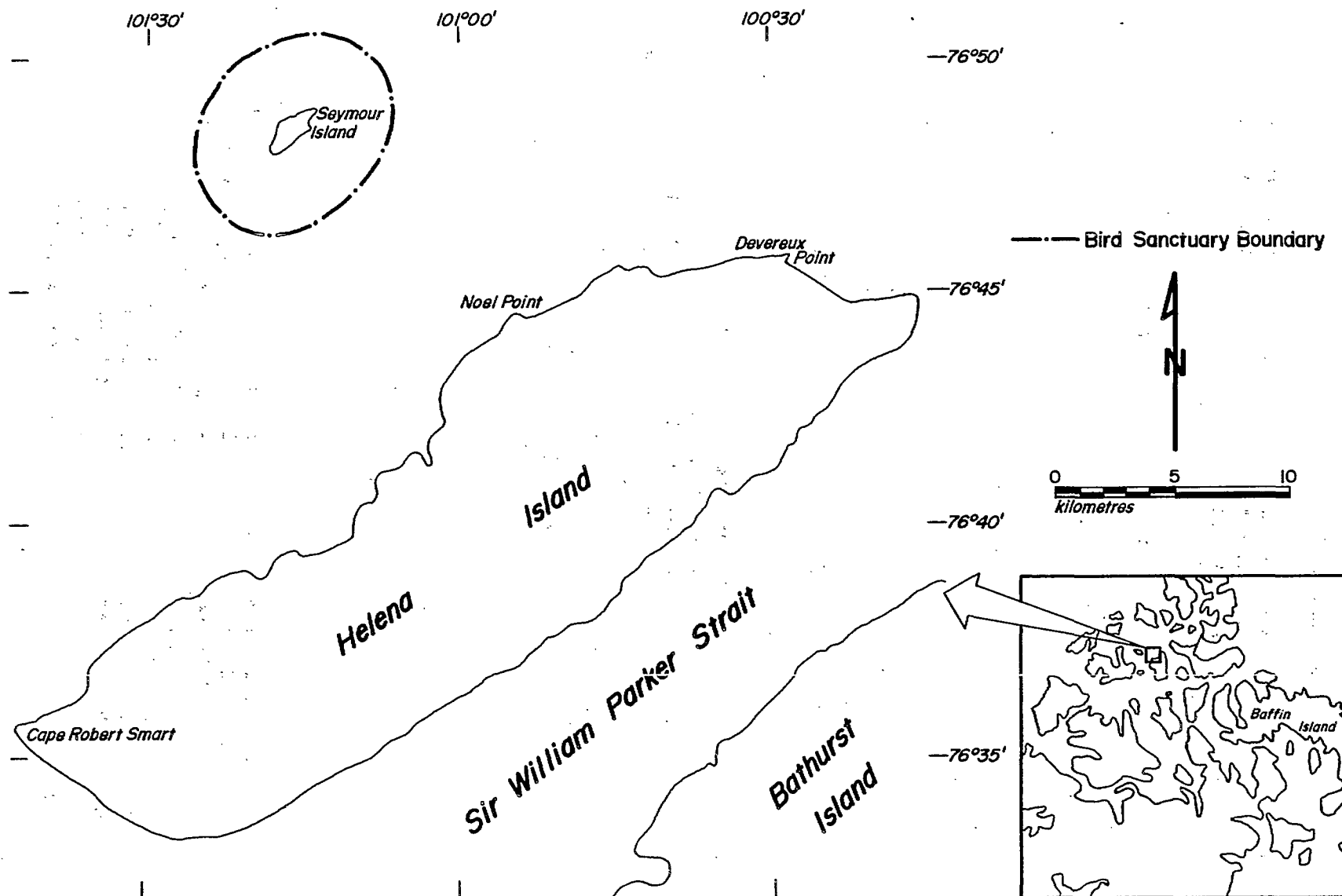
Ryder, J.P. 1967. The breeding biology of Ross' Goose in the Perry River region, Northwest Territories. Report Series No. 3. Can. Wildl. Serv., Ottawa. 56 pp.

Urquhart, D.R. 1982. Muskox. Life history and current status of muskoxen in the NWT. Unpubl. report, NWT Wildl. Serv., Yellowknife. 39 pp.

SEYMOUR ISLAND

BIRD SANCTUARY

SEYMOUR ISLAND BIRD SANCTUARY



SEYMOUR ISLAND BIRD SANCTUARY

1. Location: 30 km north of Bathurst Island in the Berkley Group of islands in the District of Franklin, Northwest Territories
 Lat. 76°48'N Long. 101°16'W
 NTS 1:500,000 Sheet No. 69SW and 69SE
 Legal Description: See Appendix 1

2. Area: 800 hectares

3. Land Ownership:

Federal Crown Land

4. Major Habitat Types:

Open water	95%
Cobble beaches	Data
Fractured rock	not
Freshwater ponds	available

5. Description of the Area:

Seymour Island, a tiny reef-like projection among the ice pack in the Berkley Group of islands, is less than 3 km long and has a maximum elevation of 28 m. The barren island consists of a series of raised cobble beaches covered by or adjacent to fractured rock. The sparse vegetation, largely lichens and mosses, covers less than one percent of the island. Only nine species of vascular plants have been recorded. Several freshwater ponds occur in the southwest portion. In the winter, high ice ridges form on the north, south and parts of the west coast.

6. Public Use:

Other than Inuit hunters who occasionally hunt polar bears in the Seymour Island area, little public use is made of the Sanctuary.

7. Importance to the Resource:

Seymour Island supports the most important and largest known colony (150 breeding pairs in 1976) of the rare Ivory Gull in Canada. This represents over 12 percent of the known breeding population in the Canadian Arctic. Other smaller breeding colonies are found along the coasts of Ellesmere and Devon islands. The gulls, present on Seymour Island from the end of May to September, nest in groups on the raised beaches where fractured rubble shelters the downy young from wind and predators. The sheltered bays and freshwater ponds on the island are used as feeding areas.

More than 30 species of other birds have been observed using the island. Other recorded nesters are Glaucous Gull, Snow Bunting, King Eider and Atlantic Brant. Nesting brant which are closely associated with the Ivory Gulls help to keep predators away from the gulls. Predators include the Arctic fox, polar bear, Long-tailed Jaeger, Snowy Owl and Thayer's Gull.

8. Historical Notes and Land-Use Conflicts:

Seymour Island Bird Sanctuary was established in 1975 after a twenty-year Arctic search for an Ivory Gull nesting area in Canada.

Seismic activities have occurred on the island. Further hydrocarbon exploration in the area during the breeding season could jeopardize the success of the colony.

9. Protective Status and Enforcement:

Migratory Bird Sanctuary Regulations under the Migratory Birds Convention Act (P.C. 1954-1804, November 23, 1954; P.C. 1974-1989, September 10, 1974; P.C. 1980-2435, September 12, 1980).

10. References:

Allison, L. 1977. Migratory bird sanctuaries in the Northwest Territories - a background paper. Unpubl. report, Can. Wildl. Serv., Edmonton. 3 Vols. 370 pp.

Frisch, T. 1983. Ivory Gull colonies on the Devon Ice Cap, arctic Canada. Arctic 36(4): 370-371.

Frisch, T. and W.C. Morgan. 1979. Ivory Gull colonies in southeastern Ellesmere Island, arctic Canada. Can. Field-Nat. 93(2): 173-174.

McCormick, K.J., M.E. Adams, C.J. Stephenson and A.S. Goodman. 1984. Key migratory bird terrestrial habitat sites in the Northwest Territories. Unpubl. Tech. Report No. 84-6, Can. Wildl. Serv., Yellowknife. 175 pp.

MacDonald, S.D. 1978. Status report on the Ivory Gull Pagophila eburnea in Canada. Unpubl. report, Com. Stat. End. Wildl. Can., Ottawa. 16 pp. and maps.

MacDonald, S.D. 1976. Phantoms of the polar ice pack. Audubon 73(3): 2-19.

Nettleship, D.N., and P.A. Smith (Eds.). 1975. Ecological sites in northern Canada. Can. Comm. Inter. Biol. Prog., Conser. Terr. Panel 9, Can. Wildl. Serv., Ottawa. 330 pp.

Nettleship, D.N. 1980. A guide to the major seabird colonies of eastern Canada: identity, distribution and abundance. Unpubl. report, Can. Wildl. Serv., Ottawa. 133 pp.

Thomas, V. 1984. Report on research on Ivory Gulls in the Arctic, 1983. Unpubl. report to Can. Wildl. Serv., Edmonton. 10 pp.

Thomas, V. 1983. Ivory Gull studies at southeast Ellesmere Island, 1982. Unpubl. report to Can. Wildl. Serv., Edmonton. 17 pp.



Environment Canada Environnement Canada

MIGRATORY BIRD
SANCTUARY REGULATIONSRÈGLEMENT SUR LES REFUGES
D'OISEAUX MIGRATEURS

made under the

en vertu de la

MIGRATORY BIRDS CONVENTION
ACTLOI SUR LA CONVENTION CONCERNANT
LES OISEAUX MIGRATEURS

C.R.C., 1978 c. 1036

C.R.C., 1978 c. 1036

as amended by/modifié par

P.C./C.P. 1980-2435 (SOR/DORS/80-738, p. 3192)

Published under the authority of the Minister/Publication autorisée par le Ministre

NOTE

All persons making use of this consolidation are reminded that it has no official sanction; that the amendments have been embodied only for convenience of reference, and that the original regulations and amendments thereto, as published in Part II of the Canada Gazette, should be consulted for all purposes of interpreting and applying the regulations.

REMARQUE

On rappelle aux lecteurs que la présente codification n'est pas officielle, que les modifications ont été incorporées au règlement aux seules fins d'en faciliter la consultation et que lorsqu'il s'agit d'interpréter et d'appliquer le règlement, c'est au règlement même et aux amendements d'icelui publié dans la Partie II de la Gazette du Canada qu'il faut se reporter.

REGULATIONS PRESCRIBING MIGRATORY BIRD
SANCTUARIES AND PROVIDING FOR THEIR
CONTROL AND MANAGEMENT

Short Title

1. These Regulations may be cited as the Migratory Bird Sanctuary Regulations.

Interpretation

2. (1) In these Regulations,
"Act" means the Migratory Birds Convention Act;
(Loi)
"eggs" means the eggs of migratory birds and includes parts of such eggs; (oeufs)
"hunt" means to chase, pursue, worry, follow after or on the trail of, stalk, lie in wait for the purpose of taking, trap or attempt to trap or shoot at a migratory bird whether or not the migratory bird is then or subsequently captured, killed or injured; (chasser)
"migratory bird sanctuary" means an area referred to in subsection 3(1); (refuge d'oiseaux migrants)
"migratory birds" means migratory game birds, migratory insectivorous birds and migratory non game birds; (oiseaux migrants)
"Minister" means the Minister of the Environment; (Ministre)
"nest" means the nest of a migratory bird or any portion thereof; (nid)
"permit" means a permit issued under these Regulations; (permis)
"permit holder" means a person to whom a permit is issued. (titulaire d'un permis)

Migratory Bird Sanctuaries

3. (1) The areas set out in the schedule are hereby prescribed as migratory bird sanctuaries.

(2) No person shall, in a migratory bird sanctuary,

(a) hunt migratory birds,

(b) disturb, destroy or take the nests of migratory birds, or

RÈGLEMENT ÉTABLISSANT LES REFUGES
D'OISEAUX MIGRATEURS ET PRÉVOYANT LEUR
SURVEILLANCE ET LEUR GESTION

Titre abrégé

1. Le présent règlement peut être cité sous le titre: Règlement sur les refuges d'oiseaux migrants.

Interprétation

2. (1) Dans le présent règlement,
"chasser" signifie pourchasser, poursuivre, harceler, suivre un oiseau migrant ou suivre la piste, le traquer, se mettre à l'affût en vue de le prendre, le piéger, tenter de le piéger ou le tirer, que l'oiseau soit ou non capturé, abattu ou blessé, à l'instant même ou plus tard; (hunt)
"Loi" désigne la Loi sur la Convention concernant les oiseaux migrants; (Act)
"Ministre" désigne le ministre de l'Environnement; (Minister)
"nid" désigne le nid d'un oiseau migrant ou une partie de ce nid; (nest)
"oeufs" désigne des oeufs d'oiseaux migrants, y compris les parties de ces oeufs; (eggs)
"oiseaux migrants" désigne des oiseaux migrants considérés comme gibier, des oiseaux insectivores migrants et des oiseaux migrants non considérés comme gibier; (migratory birds)
"permis" désigne un permis délivré en vertu du présent règlement; (permit)
"refuge d'oiseaux migrants" désigne une zone dont il est question au paragraphe 3(1); (migratory birds sanctuary)
"titulaire d'un permis" désigne une personne à qui un permis est délivré. (permit holder)

Refuges d'oiseaux migrants

3. (1) Les zones décrites à l'annexe sont établies comme refuges d'oiseaux migrants.

(2) Dans un refuge d'oiseaux migrants, il est interdit

a) de chasser des oiseaux migrants,

b) de déranger, de détruire ou de prendre des nids d'oiseaux migrants, ou

(c) have in his possession a live migratory bird, or a carcass, skin, nest or egg of a migratory bird,

except under authority of a permit thereof.

(3) Notwithstanding paragraph (1)(c), a resident of or a person domiciled in a migratory bird sanctuary may have in his possession migratory game birds lawfully killed outside a migratory bird sanctuary.

4. (1) No person shall have in his possession in a migratory bird sanctuary

(a) any firearm; or

(b) any hunting appliance except as otherwise provided in these regulations.

(2) Subsection (1) does not apply to any resident or person actually domiciled in a migratory bird sanctuary while that resident or person is in his residence or transporting any firearms or a hunting appliance to or from his residence.

(3) Subject to the Act and the Migratory Birds Regulations, the Minister may issue a permit authorizing any person to have firearms in his possession and to shoot and have in his possession migratory game birds in such portion of a migratory bird sanctuary and during such time as are specified in the permit.

5. (1) No person who owns a dog or cat shall permit the dog or cat to run at large in a migratory bird sanctuary.

(2) A game officer may destroy any dog or cat found chasing or molesting migratory birds in a migratory bird sanctuary.

6. No person shall, from May 1st to August 31st in any year, climb or attempt to climb the cliffs on the north and east sides of Bonaventure Island or Percé Rock.

c) d'avoir en sa possession un oiseau migrateur vivant, ou le cadavre, la peau, le nid ou l'oeuf d'un oiseau migrateur,

si ce n'est en vertu d'un permis délivré à cette fin.

(3) Nonobstant l'alinéa (1)c), une personne qui réside ou qui est domiciliée dans un refuge d'oiseaux migrateurs peut avoir en sa possession des oiseaux migrateurs considérés comme gibier, tués légalement à l'extérieur d'un refuge d'oiseaux migrateurs.

4. (1) Dans un refuge d'oiseaux migrateurs, il est interdit d'avoir en sa possession

a) une arme à feu; ou

b) un engin de chasse, si ce n'est prévu au présent règlement.

(2) Le paragraphe (1) ne s'applique pas aux personnes qui résident ou qui sont domiciliées dans un refuge d'oiseaux migrateurs, lorsque ces personnes sont dans leur maison ou qu'elles transportent une arme à feu ou un engin de chasse à leur maison, ou de cette dernière.

(3) Sous réserve de la Loi et du Règlement sur les oiseaux migrateurs, le Ministre peut délivrer un permis autorisant une personne à avoir en sa possession des armes à feu, à tirer et à avoir en sa possession des oiseaux migrateurs considérés comme gibier, dans une partie d'un refuge d'oiseaux migrateurs à une époque spécifiée dans le permis.

5. (1) Il est interdit à tout propriétaire de chien ou de chat de laisser son chien ou son chat circuler librement dans un refuge d'oiseaux migrateurs.

(2) Un garde-chasse peut supprimer tout chien ou chat pris à pourchasser ou à molester des oiseaux migrateurs dans un refuge d'oiseaux migrateurs.

6. Chaque année, du 1^{er} mai au 31 août, il est interdit, d'escalader ou de tenter d'escalader la falaise des côtés nord et est de l'île Bonaventure ou le rocher Percé.

(a) 7. Revoked P.C. 1980-2435 September 12, 1980

8. No person shall, in Vaseux Lake Bird Sanctuary, use a boat or other floating device that is equipped with any means of propulsion other than sails or oars except under authority of a permit.

Permits

9. (1) The Minister may issue, or authorize any person to issue, any permit referred to in these Regulations.

(2) Every person who applies for a permit shall, if requested by the Minister, furnish such information in respect of the purpose for which the permit is requested as the Minister may require.

(3) Every permit shall be subject to such conditions as in the opinion of the Minister are necessary to protect migratory birds or the eggs, nests or habitat of migratory birds within a migratory bird sanctuary.

(4) The Minister may

(a) refuse to issue a permit to any person; or

(b) cancel any permit that has been issued to any person,

if, in his opinion, that person has failed to comply with the conditions set out in the permit or the activities being carried on by that person are likely to be harmful to migratory birds or the eggs, nests or habitat of migratory birds within a migratory bird sanctuary.

(5) Every permit expires on the expiry date set out therein or, where the permit does not contain an expiry date, on December 31st next following the day on which it was issued.

10. (1) No person shall, in a migratory bird sanctuary, carry on any activity that is harmful to migratory birds or the eggs, nests or habitat of migratory birds, except under authority of a permit

(2) A permit referred to in subsection (1) may be issued

(a) P.C. 1980-2435 September 12, 1980
Amendment List February 26, 1981

7. Abrogé C.P. 1980-2435, 12 septembre 1980

(a)

8. Il est interdit, dans le refuge d'oiseaux migrateurs du lac Vaseux, d'utiliser un bateau ou un autre engin flottant qui se déplace autrement qu'au moyen de voiles ou de rames, si ce n'est en vertu d'un permis.

Permis

9. (1) Le Ministre peut délivrer, ou donner l'autorisation de délivrer le permis dont il est question au présent règlement.

(2) Quiconque demande un permis doit, à la demande du Ministre, fournir tous les renseignements que ce dernier peut exiger concernant l'usage auquel doit servir le permis.

(3) Tout permis est accordé aux conditions que le Ministre juge nécessaire pour protéger les oiseaux migrateurs, leurs oeufs, leurs nids ou leur habitat dans un refuge d'oiseaux migrateurs.

(4) Le Ministre peut

a) refuser de délivrer un permis à une personne, ou

b) annuler un permis délivré à une personne,

si, à son avis, le titulaire n'a pas observé les conditions énoncées dans le permis ou si ses activités sont de nature à nuire aux oiseaux migrateurs, à leurs oeufs, à leurs nids ou à leur habitat, dans un refuge d'oiseaux migrateurs.

(5) Le permis expire à la date mentionnée dans le permis ou, si le permis ne porte aucune date d'expiration, le 31 décembre qui suit la date de délivrance.

10. (1) Dans un refuge d'oiseaux migrateurs, il est interdit d'exercer une activité nuisible aux oiseaux migrateurs, à leurs oeufs, à leurs nids ou à leur habitat, si ce n'est en vertu d'un permis.

(2) Le permis mentionné au paragraphe (1) peut être délivré

a) C.P. 1980-2435, 12 septembre 1980
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(a) by the Minister, where the sanctuary is situated on land owned by Her Majesty in right of Canada; or

(b) by the chief game officer of a province, where the sanctuary is situated on land owned by Her Majesty in right of the province.

(3) For the purposes of subsection (2), "chief game officer of a province" means the chief or director of an agency of the province concerned with the administration of a wildlife Act of the province.

11. Notwithstanding anything in these Regulations,

(a) any waterfowl hunter may transport his unloaded firearm through the Grand Manan Bird Sanctuary by means of the secondary road that leaves the main highway at Mark Hill and runs across Lot No. 76;

(b) any waterfowl hunter may transport unloaded firearms and other hunting appliances through Île-au-Héron Bird Sanctuary when hunting for waterfowl is lawful in the district within which that Sanctuary is located;

(c) any waterfowl hunter may transport unloaded firearms and other hunting appliances through the Wavy Creek section of the Moose River Migratory Bird Sanctuary adjacent to Shipsands Island;

(d) any person who is the holder of, or eligible for, a general hunting licence for the Northwest Territories may carry a firearm within any migratory bird sanctuary lying north of the 60th parallel of north latitude for the purpose of taking fur-bearing animals, big game or sea mammals in accordance with that licence;

(e) any person herding reindeer may use dogs for the purpose of retrieving any reindeer that stray into the Kendall Island Bird Sanctuary or the Anderson River Delta Bird Sanctuary; or

a) par le Ministre, lorsque le refuge est situé dans des terres qui appartiennent à Sa Majesté du chef du Canada; ou

b) par le garde-chasse en chef d'une province, lorsque le refuge est situé dans des terres qui appartiennent à Sa Majesté du chef de la province.

(3) Aux fins du paragraphe (2), "garde-chasse en chef d'une province" désigne le chef ou le directeur de l'organisme provincial chargé de l'application d'une loi provinciale sur la faune.

11. Nonobstant toute disposition du présent règlement,

a) le chasseur d'oiseaux aquatiques peut transporter son arme à feu non chargée à travers le refuge d'oiseaux de Grand Manan en passant par la route secondaire qui part de la route principale à Mark Hill et qui traverse le lot n° 76;

b) le chasseur d'oiseaux aquatiques peut transporter des armes à feu non chargées et d'autres engins de chasse à travers le refuge d'oiseaux de l'île au Héron pendant la saison de chasse aux oiseaux aquatiques dans le district où est situé ce refuge;

c) le chasseur d'oiseaux aquatiques peut transporter des armes à feu non chargées et d'autres engins de chasse à travers la partie du refuge d'oiseaux migrateurs de Moose River où se trouve le ruisseau Wavy et adjacente à l'île Shipsands;

d) le titulaire d'un permis de chasse général pour les territoires du Nord-Ouest, ou quiconque est apte à le devenir, peut transporter une arme à feu dans un refuge d'oiseaux migrateurs situé au nord du 60° parallèle de latitude nord, en vue de prendre en vertu de ce permis des animaux à fourrure, du gros gibier ou des mammifères marins;

e) quiconque rassemble un troupeau de rennes peut se servir de chiens pour retrouver les rennes égarés dans le refuge d'oiseaux de l'île Kendall ou dans le refuge du delta de la rivière Anderson; ou

f) any person herding reindeer may allow those reindeer to pass through the Anderson River Delta Bird Sanctuary to and from the Nicholson Peninsula at 65°55' north latitude and 129° west longitude.

f) quiconque rassemble un troupeau de rennes peut lui faire traverser le refuge d'oiseaux du delta de la rivière Anderson en direction ou en provenance de la péninsule Nicholson située par 65°55' de latitude nord et 129° de longitude ouest.

SCHEDULE

ANNEXE

(s.3)

(art. 3)

PART I

PARTIE I

NEWFOUNDLAND

TERRE-NEUVE

(a) 1. Revoked P.C. 1980-2435 September 12, 1980

1. Abrogé C.P. 1980-2435, 12 septembre 1980

2. Terra Nova Bird Sanctuary

2. Refuge d'oiseaux de Terra-Nova

In the Province of Newfoundland those parcels of land adjacent to Terra Nova National Park being more particularly described as

Dans la province de Terre-Neuve, les étendues de terrain contiguës au parc national de Terra-Nova, plus particulièrement décrites ainsi qu'il suit:

(a) all of the Southwest Arm and that portion of Broad Cove lying southwesterly of the Causeway and Bridge at the northerly end of the Cove, and

a) toute l'étendue du bras sud-ouest et la partie de l'anse Broad qui est située au sud-ouest de la chaussée et du pont, à l'extrême nord de l'anse, et

(b) all that portion of Newman Sound lying westerly of a line across The Narrows drawn from the most southerly part of Buckley Point on an azimuth of about two hundred and six degrees, to the northerly extremity of a prominent point located about four hundred and fifty feet south-erly from the southerly tip of the large island in The Narrows,

b) toute la partie du détroit de Newman qui est située à l'ouest d'une ligne tracée de part et d'autre du chenal appelé The Narrows, à partir de l'extrémité sud de la pointe Buckley le long de l'azimuth de 206 degrés, environ, jusqu'à l'extrême nord d'une pointe bien en vue située à quelque 450 pieds au sud de la pointe sud d'une grande île sise dans le chenal The Narrows,

and shown on a map of Terra Nova National Park, produced and printed in 1958 by the Department of Energy, Mines and Resources (formerly Department of Mines and Technical Surveys) at Ottawa.

d'après la carte du parc national de Terra-Nova, dressée et publiée en 1958 par le ministère de l'Énergie, des Mines et des Ressources, (autrefois le ministère des Mines et Relevés techniques), à Ottawa.

PART II

PARTIE II

PRINCE EDWARD ISLAND

ÎLE-DU-PRINCE-ÉDOUARD

1. Black Pond Bird Sanctuary

1. Refuge d'oiseaux de Black-Pond

All that parcel or tract of land and water being part of Lot or Township forty-six (46) in the County

Toute la partie de terrain formant partie du lot ou du township numéro 46 dans le comté de Kings et

(a) P.C. 1980-2435 September 12, 1980
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a) C.P. 1980-2435, 12 septembre 1980
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to Registered Plan No. 45 in the Registry Office at Morrisburg, and in said township of Osnabruck Lots 19 to 66 inclusive and Blocks "C" and "F" according to Registered Plan No. 259 in the Registry Office at Cornwall.

Secondly: In said Township of Williamsburgh the whole of Block "B" according to Registered Plan No. 58 in the Registry Office at Morrisburg, and in said township of Osnabruck all that part of Lot 38, Concession 1, lying north of said Highway No. 2.

12. Young Lake Bird Sanctuary

In the Province of Ontario, on Manitoulin Island, in the Township of Dawson, all that tract bounded, on the north by the south limit of the road allowance between concessions 9 and 10; on the south by the north limit of the road allowance between concessions 7 and 8; on the west by the west boundaries of lot 31 of concession 8 and lot 31 of concession 9; on the east by a straight line joining a point on said south limit 660 feet east of the northwest corner of lot 25 of concession 9 and a point on said north limit 660 feet east of the southwest corner of lot 25 of concession 8; said tract including all road allowances, lakes and creeks within the boundaries hereinbefore described and containing 1,320 acres, more or less.

PART VII

SASKATCHEWAN

1. Basin and Middle Lakes Bird Sanctuary

Comprising the lands covered by the waters from day to day of Basin and Middle Lakes, together with the islands therein, in Township 41, Range 22; Townships 41 and 42, Range 23; Township 42, Range 24, all west of the 2nd Meridian.

2. Duncairn Reservoir Bird Sanctuary

Comprising the following areas: all West of the Third Meridian.

sur le plan enregistré n° 45 qui se trouve au bureau d'enregistrement de Morrisburg, et dans ledit township d'Osnabruck, des lots 19 à 66 inclusivement et des blocs "C" et "F" indiqués sur le plan enregistré n° 259 qui se trouve au bureau d'enregistrement de Cornwall.

Deuxièmement, dans ledit township de Williamsburgh, la totalité du bloc "B" indiqué sur le plan enregistré n° 58 qui se trouve au bureau d'enregistrement de Morrisburg et, dans ledit township d'Osnabruck, toute la partie du lot 38, 1^{ère} concession qui se trouve au nord de ladite route n° 2.

12. Refuge d'oiseaux de Young Lake

Dans la province d'Ontario, sur l'île Manitoulin, township de Dawson, toute l'étendue bornée au nord par la limite sud de l'emprise routière entre les concessions 9 et 10; au sud, par la limite nord de l'emprise de la route entre les concessions 7 et 8; à l'ouest, par les limites ouest du lot 31 de la concession 8 et du lot 31 de la concession 9; à l'est, par une ligne droite joignant un point sur ladite limite sud situé à 660 pieds à l'est de l'angle nord-ouest du lot 25 de la concession 9 et un point sur ladite limite nord situé à 660 pieds à l'est de l'angle sud-ouest du lot 25 de la concession 8 ladite étendue comprenant toutes les emprises routières, tous les lacs et tous les ruisseaux se trouvant dans les limites décrites ci-dessus et ayant une superficie d'environ 1,320 acres.

PARTIE VII

SASKATCHEWAN

1. Refuge d'oiseaux des lacs Basin et Middle

Comprenant les terres submergées par les eaux normales des lacs Basin et Middle, y compris les îles qui s'y trouvent, dans le township 41, rang 22; dans les townships 41 et 42, rang 23; dans le township 42, rang 24; le tout à l'ouest du 2^e méridien.

2. Refuge d'oiseaux de Duncairn Reservoir

Comprenant les étendues suivantes: toutes à l'ouest du troisième méridien.

In Twp. 13, Range 15, that part of sections 6, 7 and 18; in Twp. 13, Range 16, that part of section 1 and 12; in Twp. 12, Range 16, that part of sections 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 20, 21, 22, 25, 26, 27, 28, 29, 35 and 36; in Twp. 12, Range 17, part of sections 13, 14, 23, 24, 26 and 35; in Twp. 11, Range 16, that part of sections 32 and 33 taken for the right-of-way of the Duncairn Reservoir as said reservoir is shown on a plan of survey by J. D. Shepley, dated 1942 and on file in the office of the Controller of Surveys, Department of Natural Resources, as number F. 793.

3. Indian Head Bird Sanctuary

The North half of the Southwest quarter of Section 11, Township 18, Range 13, West of the 2nd Meridian.

4. Last Mountain Lake Bird Sanctuary

In Township 27, Range 23, West of the 2nd Meridian: the west half of Section 18, all of Sections 19, 30 and 31.

In Township 27, Range 24, West of the 2nd Meridian: all of Sections 13, 14, 23, 24, 25, the east half of Section 26 and all of Section 36.

In Township 28, Range 23, West of the 2nd Meridian: the west half of Section 5, all of Sections 6, 7 and 8, the west half of Section 16, and all of Sections 17 and 18.

In Township 28, Range 24, West of the 2nd Meridian: all of Sections 1 and 12, and the east half of Section 13.

Together with all the intervening statutory road allowances.

5. Lenore Lake Bird Sanctuary

Comprising the lands covered by the waters from day to day of Lenore Lake, together with the unpatented islands therein, in Townships 40, 41 and 42, Range 21 and in townships 40 and 41, Range 22, all west of the 2nd Meridian.

Dans le township 13, rang 15, cette partie des sections 6, 7 et 18; dans le township 13, rang 16, cette partie des sections 1 et 12; dans le township 12, rang 16, cette partie des sections 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 20, 21, 22, 25, 26, 27, 28, 29, 35 et 36; dans le township 12, rang 17, cette partie des sections 13, 14, 23, 24, 26 et 35; dans le township 11, rang 16, cette partie des sections 32 et 33 prise pour le droit de passage de Duncairn Reservoir, ainsi que ledit réservoir est indiqué sur le plan d'arpentage tracé par M. J. D. Shepley, en 1942 et déposé dans les Archives du Contrôleur des arpentages, ministère des Ressources naturelles, sous le numéro F793.

3. Refuge d'oiseaux d'Indian-Head

La moitié nord et le quart sud-ouest de la section 11, township 18, rang 13, à l'ouest du 2^e méridien.

4. Refuge d'oiseaux du lac de la Dernière-Montagne

Dans le township 27, rang 23, à l'ouest du 2^e méridien; la moitié ouest de la section 18 et l'ensemble des sections 19, 30 et 31.

Dans le township 27, rang 24, à l'ouest du 2^e méridien: l'ensemble des sections 13, 14, 23, 24, 25, la moitié est de la section 26 et l'ensemble de la section 36.

Dans le township 28, rang 23, à l'ouest du 2^e méridien: la moitié ouest de la section 5, l'ensemble des sections 6, 7 et 8, la moitié ouest de la section 16 et l'ensemble des sections 17 et 18.

Dans le township 28, rang 24, à l'ouest du 2^e méridien: l'ensemble des sections 1 et 12 et la moitié est de la section 13.

Y compris toutes les emprises routières intermédiaires, prévues par la loi.

5. Refuge d'oiseaux du lac Lenore

Comprenant les terres submergées par les eaux normales du lac Lenore, y compris les îles non cédées, dans les townships 40, 41 et 42, rang 21, et dans les townships 40 et 41, rang 22, le tout à l'ouest du 2^e méridien.

6. Murray Lake Bird Sanctusry

The following areas in Range 16, West of the Third Meridian.

In Twp. 46, all that portion covered by the waters of Murray Lake, as said lake is shown on a plan of survey approved and confirmed by F. H. Peters, Surveyor General at Ottawa, the 5th of January 1928.

And in Twp. 47, all that portion covered by the waters of Murray Lake, as said lake is shown on a plan of survey approved and confirmed by E. Deville, Surveyor General at Ottawa the 28th of September 1918.

In Twp. 46, Range 17, West of the 3rd Meridian, that portion covered by the waters of Murray Lake, as said lake is shown on a plan of survey, approved and confirmed by E. Deville, Surveyor General at Ottawa, the 19th of December 1916.

7. Neely Lake Bird Sanctuary

Comprising the lands covered by the waters from day to day of Neely Lake, together with the islands therein, in Township 43, Range 6, west of the 2nd Meridian.

8. Old Wives Lake Bird Sanctusry

Comprising the lands covered by the waters from day to day of Old Wives Lake, formerly known as Johnstone Lake, together with the islands therein, in Townships 12 and 13, Range 28; Townships 12, 13 and 14, Range 29; Townships 12, 13 and 14, Range 30, all west of the 2nd Meridian; Townships 12, 13 and 14, Range 1 and Townships 13 and 14, Range 2, all west of the 3rd Meridian.

9. Opuntia Lake Bird Sanctusry

Comprising the lands covered by the waters from day to day of Opuntia Lake, together with the islands therein, in Townships 32 and 33, range 18, and Townships 32 and 33, Range 19, all West of the 3rd Meridian.

6. Refuge d'oiseaux du lac Murray

Les étendues suivantes dans le rang 16, à l'ouest du 3^e méridien.

Dans le township 46, toute la partie submergée par les eaux du lac Murray, ainsi que ledit lac est décrit sur le plan d'arpentage, approuvé et ratifié par M. F. H. Peters, arpenteur général à Ottawa, le 5 janvier 1928.

Et dans le township 47, toute la partie submergée par les eaux du lac Murray, ainsi que ledit lac est décrit sur le plan d'arpentage, approuvé et ratifié par M. E. Deville, arpenteur général à Ottawa, le 28 septembre 1918.

Dans le township 46, rang 17, à l'ouest du 3^e méridien, la partie submergée par les eaux du lac Murray, ainsi que ledit lac est décrit sur le plan d'arpentage, approuvé et ratifié par M. E. Deville, arpenteur général à Ottawa, le 19 décembre 1916.

7. Refuge d'oiseaux du lac Neely

Comprenant les terres submergées par les eaux normales du lac Neely, y compris les îles que s'y trouvent, dans le township 43, rang 6 à l'ouest du 2^e méridien.

8. Refuge d'oiseaux du lac Old Wives

Comprenant les terres submergées par les eaux normales du lac Old Wives, auparavant connu sous le nom de lac Johnstone, y compris les îles qui s'y trouvent, dans les townships 12 et 13, rang 28; dans les townships 12, 13 et 14, rang 29; dans les townships 12, 13 et 14, rang 30, le tout à l'ouest du 2^e méridien; dans les townships 12, 13 et 14, rang 1 et dans les townships 13 et 14, rang 2, le tout à l'ouest du 3^e méridien.

9. Refuge d'oiseaux du lac Opuntia

Comprenant les terres submergées par les eaux normales du lac Opuntia, y compris les îles qui s'y trouvent, dans les townships 32 et 33, rang 18, et les townships 32 et 33, rang 19, le tout à l'ouest du 3^e méridien.

10. Redberry Lake Bird Sanctuary

Comprising the lands covered by the waters from day to day of Redberry Lake, together with the islands therein, in Townships 42, 43 and 44, Range 8, and in Townships 42 and 43, Range 9, all west of the 3rd Meridian.

11. Scent Grass Lake Bird Sanctuary

The following areas in Twp. 46, West of the 3rd Meridian:

In Range 15, all that portion of Sections 7, 8, 9, 16, 17 and 18 covered by the waters of Scent Grass Lake as said lake is shown on a plan of survey of said Twp. approved and confirmed by F.H. Peters, Surveyor General at Ottawa, the 10th of December 1927. In Range 16, all that portion of Sections 12 and 13, covered by the waters of Scent Grass Lake, as said lake is shown on a plan of survey of said Twp. approved and confirmed by F.H. Peters, Surveyor General at Ottawa, the 5th of January 1928.

Area 1,564.1 acres more or less.

12. Sutherland Bird Sanctuary

The southeast quarter of Section 12 and the northeast quarter of Section 1, Township 37, Range 5, west of the 3rd Meridian.

13. Upper Rousay Lake Bird Sanctuary

In Twp. 25, range 5, west of the 2nd Meridian and being all that portion of Sections 22, 23, 24, 25, 26, 34, 35 and 36, covered by the waters of Upper Rousay Lake.

14. Val Marie Reservoir Bird Sanctuary

In Twp. 4, Range 14, west of the 3rd Meridian and being all that portion of Sections 15, 20, 21, 22, 28, 29, 33 and 34 covered by the waters of the Val Marie Reservoir.

15. Wascana Lake Bird Sanctuary

Firstly: All that portion of the southwest quarter of section 17 in Township 17, Range 19, lying

10. Refuge d'oiseaux du lac Redberry

Comprenant les terres submergées par les eaux normales du lac Redberry, y compris les îles qui s'y trouvent, dans les townships 42, 43 et 44, rang 8, et les townships 42 et 43, rang 9, le tout à l'ouest du 3^e méridien.

11. Refuge d'oiseaux du lac Scent-Grass

Les étendues suivantes dans le township 46, à l'ouest du 3^e méridien:

Dans le rang 15, toute la partie des sections 7, 8, 9, 16, 17 et 18 submergée par les eaux du lac Scent-Grass, ainsi que ledit lac est décrit sur le plan d'arpentage dudit township, approuvé et ratifié par M. F.H. Peters, arpenteur général à Ottawa, le 10 décembre 1927. Dans le rang 16, toute la partie des sections 12 et 13, submergée par les eaux du lac Scent-Grass, ainsi que ledit lac est indiqué sur le plan d'arpentage dudit township, approuvé et ratifié par M. F.H. Peters, arpenteur général à Ottawa, le 5 janvier 1928.

Superficie d'environ 1,564.1 acres.

12. Refuge d'oiseaux de Sutherland

Le quart sud-est de la section 12 et le quart nord-est de la section 1, township 37, rang 5, à l'ouest du 3^e méridien.

13. Refuge d'oiseaux de lac Upper-Rousay

Dans le township 25, rang 5, à l'ouest du 2^e méridien, toute la partie des sections 22, 23, 24, 25, 26, 34, 35 et 36 submergée par les eaux du lac Upper-Rousay.

14. Refuge d'oiseaux du réservoir Val-Marie

Dans le township 4, rang 14, à l'ouest du 3^e méridien, toute la partie des sections 15, 20, 21, 22, 28, 29, 33 et 34, submergée par les eaux du réservoir Val-Marie.

15. Refuge d'oiseaux du lac Wascana

Premièrement: Toute la partie du quart sud-ouest de la section 17 dans le township 17, rang 19, à

west of the 2nd Meridian in the Province of Saskatchewan, lying south and west on the southerly and westerly limits of Douglas Park as shown on plan of Record in the Land Titles Office for the Regina Land Registration District as No. F 3256 and Q 3743 respectively.

Secondly: All that portion of the original road allowance lying between sections 8 and 17 in the said Township and Range and west of the westerly limit of said plan Q 3743.

Thirdly: All that portion of the north one half of said section 8, lying west of the westerly limit of the surveyed roadway, known as Number 1 Highway bypass, as shown in the plan of Record in the said Land Titles Office as F U 741 excepting therefrom the portions included for registration on plans of Record in said Land Titles Office as No. F L 1542 and E R 3825 and also excepting that portion lying between said plans F L 1542 and E R 3825.

PART VIII

ALBERTA

1. Inglewood Bird Sanctuary

Parcel 1

The unsubdivided portion of the southeast quarter section 12, township 24, range 1, west of the 5th meridian lying between the right-of-way of the Canadian National Railways and the main channel of the Bow River.

Parcel 2

All and singular that parcel or tract of land and premises situate, lying and being in sections sixteen (16) and nine (9) of township twenty-four (24), range twenty-nine (29), west of the fourth (4th) meridian, and sections one (1) and twelve (12) of township twenty-four (24), range one (1), west of the fifth (5th) meridian, which may be more particularly described as follows:

COMMENCING at the intersection of the easterly limit of the right-of-way of the Grand Trunk Pacific Railway with the right bank of the main channel of the Bow River in the southeast quarter of said section one, THENCE, following the said right bank of the said Bow River in a northeasterly direction to

l'ouest du 2^e méridien, dans la province de la Saskatchewan, qui est située au sud et à l'ouest des limites sud et ouest du parc Douglas, et désignée sur un plan enregistré au Bureau des titres fonciers de Regina sous les numéros F 3256 et Q 3743 respectivement.

Deuxièmement: Toute la partie de l'emprise routière située entre les sections 8 et 17 dans ledit township et ledit rang et à l'ouest de la limite ouest dudit plan Q 3743.

Troisièmement: Toute la partie de la moitié nord de ladite section 8, situé à l'ouest de la limite ouest de la chaussée arpentée, appelée chemin d'évitement de la route n^o 1, et désignée sur un plan enregistré audit Bureau sous le numéro F U 741 à l'exception des parties comprises sur des plans enregistrés audit Bureau des titres fonciers sous les numéros F L 1542 et E R 3825 et de la partie située entre lesdits plans F L 1542 et E R 3825.

PARTIE VIII

ALBERTA

1. Refuge d'oiseaux d'Inglewood

Partie 1

La partie non subdivisée du quart sud-est de la section 12, township 24, rang 1, à l'ouest du 5^e méridien, située entre l'emprise du chemin de fer National-Canadien et le chenal principal de la rivière Bow.

Partie 2

L'ensemble et chacun des terrains bâtis ou non bâtis, situés et se trouvant dans les sections seize (16) et neuf (9) du township vingt-quatre (24), rang vingt-neuf (29), à l'ouest du quatrième (4^e) méridien, et les sections un (1) et douze (12) du township vingt-quatre (24), rang un (1), à l'ouest du cinquième (5^e) méridien, terrains que peuvent être plus précisément décrits comme suit:

COMMENÇANT à l'intersection de la limite est de l'emprise du chemin de fer Grand-Tronc-Pacifique et de la rive droite du chenal principal de la rivière Bow dans le quart sud-est de ladite section 1; DE LÀ, suivant ladite rive droite de ladite rivière Bow, vers le nord-est, jusqu'à son intersection avec

its intersection with the production westerly to Eighteenth Avenue (Plan 3577-P) of the southerly limit of the Chestermere-Calgary Highway in the northeast quarter of said section twelve, THENCE, following the southerly limit of the Chestermere-Calgary Highway in an easterly direction to its intersection with the easterly limit of the Canadian Pacific Railway Company's irrigation property, THENCE, following the easterly limit of the Canadian Pacific Railway Company's irrigation property in a southwesterly direction to its intersection with the easterly limit of the right of way of the Grand Trunk Pacific Railway, THENCE, following the easterly limit of the said Grand Trunk Pacific Railway right-of-way in a northwesterly direction to the point of commencement.

2. Red Deer Bird Sanctuary

The west half of Section 22, Township 38, Range 27, West of the Fourth Meridian.

3. Richardson Lake Bird Sanctuary

All and singular that certain parcel of land and water situated in projected townships one hundred and eight and one hundred and nine, ranges six and seven, west of the Fourth meridian, in the Province of Alberta, which said parcel may be more particularly described as follows:

COMMENCING at the right bank of Athabasca river at the east limit of the road allowance between township one hundred and nine, ranges seven and eight, west of the Fourth meridian and township one hundred and eight, ranges seven and eight west of the Fourth meridian; THENCE, south along said east limit to the south boundary of section nineteen, township one hundred and eight, range seven, west of the Fourth meridian; THENCE, east along said south boundary to the bank of Richardson Lake; THENCE, southerly, easterly and northeasterly along the bank of said lake and its most easterly outlet to the right bank of Athabasca river; THENCE, westerly across the mouth of said outlet to the right bank of Athabasca river; THENCE, westerly along said right bank to the point of commencement; all townships, sections and road allowances being projected according to the third system of survey of Dominion lands and the whole being described with reference to

le prolongement vers l'ouest jusqu'à la Dix-huitième avenue (Plan 3577-P) de la limite sud de la route Chestermere-Calgary dans le quart nord-est de ladite section douze; DE LÀ, suivant la limite sud de la route Chestermere-Calgary, vers l'est, jusqu'à son intersection avec la limite est des terres irriguées appartenant à la compagnie de chemin de fer Pacifique-Canadien; DE LÀ, suivant la limite est des terres irriguées de la compagnie de chemin de fer Pacifique-Canadien, vers le sud-ouest jusqu'à son intersection avec la limite est de l'emprise du chemin de fer Grand-Tronc-Pacifique; DE LÀ, suivant la limite est de ladite emprise du chemin de fer Grand-Tronc-Pacifique, vers le nord-ouest jusqu'au point de départ.

2. Refuge d'oiseaux de Red-Deer

La moitié ouest de la section 22, township 38, rang 27, à l'ouest du quatrième méridien.

3. Refuge d'oiseaux du lac Richardson

L'ensemble et chacun des terrains, submergés ou non et qui sont situés dans les townships cent huit et cent neuf projetés, ranges six et sept, à l'ouest du quatrième méridien, dans la province d'Alberta, et qui peuvent être plus précisément décrits comme suit:

COMMENÇANT à la rive droite de la rivière Athabasca à la limite est de l'emprise routière entre le township cent neuf, ranges sept et huit, à l'ouest du quatrième méridien, et le township cent huit, ranges sept et huit, à l'ouest du quatrième méridien, DE LÀ, vers le sud, le long de ladite limite est jusqu'à la limite sud de la section dix-neuf, township cent huit, rang sept, à l'ouest du quatrième méridien; DE LÀ, vers l'est, le long de ladite limite sud jusqu'à la rive du lac Richardson; DE LÀ, vers le sud, l'est et le nord-est, le long de la rive dudit lac et sa décharge à l'extrême est jusqu'à la rive droite de la rivière Athabasca; DE LÀ, vers l'ouest, à travers l'embouchure de ladite décharge jusqu'à la rive droite de la rivière Athabasca; DE LÀ, vers l'ouest, le long de ladite rive droite jusqu'au point de départ; tous les townships, sections et emprises routières étant projetés d'après le troisième système d'arpentage des terres fédérales,

Chipewyan map sheet number seventy-four L published by the Department of Energy, Mines and Resources (formerly Department of the Interior) at Ottawa.

4. Saskatoon Lake Bird Sanctuary

Parcel 1

All that area and extent of land situate in the 71st Township, in the 7th Range, west of the 6th Meridian, in the Province of Alberta, and being composed of all that portion of the North half of Section 31 shown to be covered by the waters of Saskatoon Lake of the said Township, as shown upon a map or plan of survey of the said Township approved and confirmed at Ottawa on the 24th day of July 1915, by Edouard Deville, Surveyor General of Dominion Lands, and on file in the Department of Lands and Forests at Edmonton.

Parcel 2

All that area and extent of land situate in the 72nd Township, in the 7th Range, west of the 6th Meridian, in the Province of Alberta, and being composed of the West half of Section 6 and all those portions of the East half of the said Section 6 and all of Section 7 shown to be covered by the waters of Saskatoon Lake of the said Township, as shown upon a map or plan of survey of the said Township approved and confirmed at Ottawa, on the 31st day of August 1916, by Edouard Deville, Surveyor General of Dominion Lands, and on file in the Department of Lands and Forests at Edmonton.

Parcel 3

All that area and extent of land situate in the 71st Township, in the 8th Range, West of the 6th Meridian, in the Province of Alberta, and being composed of the Northeast quarter of Legal Subdivision 13, the North halves of Legal Subdivisions 14 and 15 and the whole of Legal Subdivision 16 of Section 36 of the said Township, as shown upon a map or plan of survey of the said Township approved and confirmed at Ottawa, on the 14th day of February 1915, by Edouard Deville, Surveyor General of Dominion Lands, and on file in the Department of Lands and Forests at Edmonton.

le tout décrit selon la carte de Chipewyan numéro soixante-quatorze L, publiée par le ministère de l'Énergie, des Mines et des Ressources (autrefois le ministère de l'Intérieur) à Ottawa.

4. Refuge d'oiseaux du lac Saskatoon

Partie 1

Toute l'étendue de terrain située dans le 71^e township, 7^e rang, à l'ouest du 6^e méridien, dans la province d'Alberta, et composée de toute la partie de la moitié nord de la section 31 qui est indiquée comme étant submergée par les eaux du lac Saskatoon dudit township, le tout selon une carte ou un plan d'arpentage dudit township, approuvé et ratifié à Ottawa le 24 juillet 1915 par M. Édouard Deville, arpenteur général des terres fédérales, et déposé aux archives du ministère des Terres et Forêts, à Edmonton;

Partie 2

Toute l'étendue de terrain située dans le 72^e township, 7^e rang, à l'ouest du 6^e méridien, dans la province d'Alberta, et composée de la moitié ouest de la section 6 et de toutes les parties de la moitié est de ladite section 6 et de toute la section 7 qui sont indiquées comme étant submergées par les eaux du lac Saskatoon dudit township, le tout selon une carte ou un plan d'arpentage dudit township, approuvé et ratifié à Ottawa le 31 août 1916 par M. Édouard Deville, arpenteur général des terres fédérales, et déposé aux archives du ministère des Terres et Forêts, à Edmonton;

Partie 3

Toute l'étendue de terrain située dans le 71^e township, 8^e rang, à l'ouest du 6^e méridien, dans la province d'Alberta, et composée du quart nord-est de la subdivision officielle 13, des moitiés nord des subdivisions officielles 14 et 15 et de toute la subdivision officielle 16 de la section 36 dudit township, le tout selon une carte ou un plan d'arpentage dudit township, approuvé et ratifié à Ottawa le 14 février 1915 par M. Édouard Deville, arpenteur général des terres fédérales, et déposé aux archives du ministère des Terres et Forêts, à Edmonton;

Parcel 4

All that area and extent of land situate in the 72nd Township in the 8th Range, West of the 6th Meridian, in the Province of Alberta, and being composed of the whole of Section 1, and all those portions of the North half of Section 2, Sections 11 and 12, and the South half of Section 13 shown to be covered by the waters of Saskatoon Lake of the said Township, as shown upon a map or plan of survey of the said Township approved and confirmed at Ottawa, on the 15th day of June 1915, by Edouard Deville, Surveyor General of Dominion Lands, and on file in the Department of Lands and Forests at Edmonton;

The lands herein described containing by admeasurement 2,806.20 acres, more or less.

PART IX

BRITISH COLUMBIA

1. Christie Islet Bird Sanctuary

The whole of Christie Islet in Howe Sound approximately seven-tenths of a mile southerly from Irby Point of Anvil Island, in the New Westminster District of British Columbia, together with the foreshore adjacent to the said Christie Islet, according to chart number 3586 of the Canadian Hydrographic Service at Ottawa, scale 1:37,500, dated the 25th day of February 1960; the said Islet and foreshore containing together about two acres.

2. Esquimalt Lagoon Bird Sanctuary

All and singular, that certain parcel or tract of land, and lands covered by water, situated in Esquimalt District, Province of British Columbia, which lands may be more particularly described as follows:

Salt Lagoon, known locally as Esquimalt Lagoon, Cobourg Peninsula, known locally as the Lagoon Sand Spit, also a strip of land three hundred feet in width extending inland from high-water mark of the said Lagoon, all as shown on the map of Esquimalt Harbour, Vancouver Island, Province of British Columbia, issued in A.D. 1918-1919, under the orders of the Minister of the Naval Service of Canada (now Department of National Defence).

Partie 4

Toute l'étendue de terrain située dans le 72^e township, 8^e rang, à l'ouest du 6^e méridien, dans la province d'Alberta, et composée de toute la section 1 et des parties de la moitié nord de la section 2, des sections 11 et 12, et de la moitié sud de la section 13 qui est indiquée comme étant submergée par les eaux du lac Saskatoon dudit township, le tout selon une carte ou un plan d'arpentage dudit township approuvé et ratifié à Ottawa le 15 juin 1915 par M. Édouard Deville, arpenteur général des terres fédérales, et déposé aux archives du ministère des Terres et Forêts, à Edmonton;

Les terrains décrits ci-dessus ayant une superficie globale d'environ 2,806.20 acres.

PARTIE IX

COLOMBIE-BRITANNIQUE

1. Refuge d'oiseaux de l'îlot Christie

La totalité de l'îlot Christie dans la baie Howe, environ sept dixièmes de milles au sud de la pointe Irby de l'île Anvil, dans le district de New Westminster en Colombie-Britannique, ainsi que la laisse de mer adjacente à l'îlot Christie, d'après la carte n^o 3586 du Service hydrographique du Canada, à Ottawa, établie à l'échelle de 1:37,500 et datée du 25 février 1960, ledit îlot et ladite laisse de mer ayant une superficie globale d'environ deux acres.

2. Refuge d'oiseaux d'Esquimalt-Lagoon

L'ensemble et chacun des terrains, submergés ou non, qui sont situés dans le district d'Esquimalt, province de la Colombie-Britannique, et qui peuvent être plus précisément décrits comme suit:

Salt Lagoon, connu à cet endroit sous le nom d'Esquimalt-Lagoon, Cobourg Peninsula, connu à cet endroit sous le nom de Lagoon-Sand-Spit, ainsi qu'une bande de terrain d'une largeur de trois cents pieds se prolongeant dans les terres à partir de la ligne des hautes eaux dudit Lagoon, le tout selon une carte d'Esquimalt Harbour, île Vancouver, province de la Colombie-Britannique, publiée en 1918-1919, d'ordre du ministre du Service naval du Canada (maintenant le ministère de la Défense nationale).

7. Victoria Harbour Bird Sanctuary

COMMENCING at high-water mark on Cadboro Point (commonly called Ten-mile Point), near the City of Victoria, British Columbia; THENCE, in a south-westerly direction to the most southerly point of Trial Island; THENCE, westerly to Brothie Ledge; THENCE, to high-water mark on Macsuley Point; THENCE, along high-water mark on the shores of Vancouver Island to point of commencement; including all areas below high-water mark in Victoria Harbour, Selkirk Water, Victoria Arm and Portage Inlet.

PART X

NORTHWEST TERRITORIES

1. Akimiski Island Bird Sanctuary

All that parcel of land and land covered with water, crossed by the parallel of 53 degrees North latitude, situated in James Bay in the District of Keewatin in the Northwest Territories, and comprising that part of Akimiski Island lying to the east of the Meridian 81°30' west Longitude, together with the foreshore, islands, shoals or rocks and the waters of James Bay lying within five miles of the line of ordinary high water of the said Akimiski Island and to the east of the said Meridian of west Longitude.

2. Anderson River Delta Bird Sanctuary

In the Northwest Territories, in the District of Mackenzie, in the vicinity of the Anderson River; all that tract more particularly described as follows:

COMMENCING at the southwestern end of certain high bluffs on the southeasterly shore of Wood Bay at latitude 69°46', longitude 128°48', approximately; THENCE, northwesterly in a straight line to the southeasternmost point in the shore of Nicholson Peninsula; THENCE, northerly along the easterly shore of said peninsula to the westernmost point in said easterly shore; THENCE, west to the west shore of said peninsula; THENCE, southwesterly and westerly along the west shore of said peninsula and the southeasterly shore of Liverpool Bay to longitude

7. Refuge d'oiseaux du havre de Victoria

COMMENÇANT à la laisse de haute mer à la pointe Cadboro (communément appelée Ten-mile-Point), près de la ville de Victoria (Colombie-Britannique); DE LÀ, en direction sud-ouest jusqu'au point extrême sud de l'île Trial; DE LÀ, vers l'ouest jusqu'au récif Brothie; DE LÀ, jusqu'à la laisse de haute mer à la pointe Macsuley; DE LÀ, suivant la laisse de haute mer sur les rives de l'île Vancouver jusqu'au point de départ; y compris toutes les étendues situées au-dessous de la laisse de haute mer au havre de Victoria, l'anse Selkirk, le chenal Gorge et la baie Portage.

PARTIE X

TERRITOIRES DU NORD-OUEST

1. Refuge d'oiseaux de l'île Akimiski

Toute la partie de terrain et tous les terrains submergés, traversés par le 53^e parallèle de latitude nord, situés dans la baie James, district du Keewatin (territoires du Nord-Ouest), et comprenant la partie de l'île Akimiski sise à l'est du méridien de 81°30' de longitude ouest, ainsi que la laisse, les îles, les hauts-fonds ou les rochers et les eaux de la baie James situés en deçà de cinq milles de la laisse normale de haute mer de ladite île Akimiski et à l'est dudit méridien de longitude ouest.

2. Refuge d'oiseaux du delta de la rivière Anderson

Dans les territoires du Nord-Ouest, dans le district de Mackenzie, aux environs de la rivière Anderson, toute l'étendue de terrain décrite plus précisément comme suit:

COMMENÇANT à l'extrémité sud-ouest de certaines hautes falaises sur le rivage sud-est de la baie Wood, situées par environ 69°46' de latitude et 128°48' de longitude; DE LÀ, vers le nord-ouest en ligne droite jusqu'à l'extrémité sud-est du rivage de la péninsule Nicholson; DE LÀ, vers le nord le long du rivage est de ladite péninsule jusqu'à l'extrémité ouest dudit rivage est; DE LÀ, vers l'ouest jusqu'au rivage ouest de ladite péninsule; DE LÀ, vers le sud-ouest puis vers l'ouest le long du rivage ouest de ladite péninsule, puis le long du

129°20'; THENCE, southerly in a straight line to the westernmost extremity of an unnamed lake at latitude 69°38', longitude 129°20', approximately; THENCE, southeasterly in a straight line to the southernmost extremity of an unnamed lake at latitude 69°24', longitude 128°22', approximately; THENCE, east to the right bank of Anderson River; THENCE, northeasterly along said right bank to the easternmost point in the right bank of said River at Husky Bend, at latitude 69°25', longitude 128°10', approximately; THENCE, northwesterly in a straight line to the point of commencement; said tract being described with reference to the latest available edition of sheet 107 SW and 107 SE of the National Topographic Series, scale 8 miles to 1 inch, and containing 418 square miles, approximately.

3. Banks Island Bird Sanctuary No. 1

In the Northwest Territories, in the District of Franklin and the waters of Beaufort Sea, the whole of Banks Island Bird Sanctuary No. 1 according to an explanatory plan prepared in the office of the Surveyor General of Canada Lands and of record number 50810 in the Canada Lands Surveys Records at Ottawa, the bearings of said plan being referred to the meridian 124°00' West; said Sanctuary containing about 7,922 square miles.

4. Banks Island Bird Sanctuary No. 2

In the Northwest Territories, in the District of Franklin and the waters of McClure Strait, the whole of Banks Island Bird Sanctuary No. 2 more particularly described as follows:

All that part of the valley of the Thomsen River lying northerly of the widening of said River at approximate latitude 73°36' North and all that part of Castel Bay lying southerly of the northerly extremity of Mahogany Point, all according to map sheets 98 N.E., 88 N.W. and 88 N.E. dated 1956 and 88 S.W. and 88 S.E. dated 1957, of the National Topographic Series, scale 8 miles to 1 inch, and map sheet 98 S.W. and 98 S.E. dated 1957, of said

rivage sud-est de la baie Liverpool jusqu'à 129°20' de longitude; DE LÀ, vers le sud en ligne droite jusqu'à l'extrémité ouest d'un lac sans nom situé par environ 69°38' de latitude et 129°20' de longitude; DE LÀ, vers le sud-est en ligne droite jusqu'à l'extrémité sud d'un lac sans nom situé par environ 69°24' de latitude et 128°22' de longitude; DE LÀ, vers l'est jusqu'à la rive droite de la rivière Anderson; DE LÀ, vers le nord-est le long de ladite rive droite jusqu'à l'extrémité est de la rive droite de ladite rivière à Husky Bend, à environ 69°25' de latitude et 128°10' de longitude; DE LÀ, vers le nord-ouest en ligne droite jusqu'au point de départ; ladite étendue de terrain étant décrite d'après les feuilles les plus récentes 107 S.W. et 107 S.E. du Système national de référence cartographique, à l'échelle de 8 milles au pouce, et ayant une superficie d'environ 418 milles carrés.

3. Refuge d'oiseaux n° 1 de l'île Banks

Dans les territoires du Nord-Ouest, dans le district de Franklin et les eaux de la mer de Beaufort, toute l'étendue du refuge d'oiseaux n° 1 de l'île Banks, d'après un plan explicatif dressé au bureau de l'Arpenteur général des terres du Canada et portant le numéro 50810 aux Archives d'arpentage des terres du Canada, à Ottawa, les relèvements, dudit plan se rapportant au méridien 124°00' ouest; ledit refuge ayant une superficie d'environ 7,922 milles carrés.

4. Refuge d'oiseaux n° 2 de l'île Banks

Dans les territoires du Nord-Ouest, dans le district de Franklin et les eaux du détroit de McClure, toute l'étendue du refuge d'oiseaux n° 2 de l'île Banks, plus précisément décrite comme suit:

Toute la partie de la vallée de la rivière Thomsen située au nord de l'élargissement de ladite rivière par environ 73°36' de latitude nord et toute la partie de la baie Castel située au sud de l'extrémité nord de la pointe Mahogany, d'après les feuilles cartographiques 98 N.E., 88 N.W. et 88 N.E. de 1956, et 88 S.W. et 88 S.E. de 1957 du Système national de référence cartographique, à l'échelle de 8 milles au pouce et d'après la feuille

Series. scale 1:500,000; said Sanctuary containing about 35,200 acres.

5. Bylot Island Bird Sanctuary

In the Northwest Territories, in the District of Franklin, the whole of Bylot Island and all waters and islands or parts of islands within two miles of the seaward ordinary highwater mark of Bylot Island.

6. Cape Dorset Bird Sanctuary

All those portions of the Northwest Territories, being more particularly described as follows under firstly, secondly and thirdly:

Firstly, Sakkiak Island

The whole of Sakkiak Island together with any small islands and the waters of Hudson Strait lying within the white outline in a print of an aerial photograph, said print being of record number 43111 in the Canada Lands Surveys Records at Ottawa.

Secondly, West Foxe Islands

The whole of the West Foxe Islands together with all those portions of Alareak Island, any small islands and the waters of Hudson Strait lying within the white outline in a print of an aerial photograph, the last aforesaid print being of record number 43112 in said Records.

Thirdly, South Andrew Gordon Bay

All those islands in Andrew Gordon Bay together with the waters of Hudson Strait lying within the white outline in a print of an aerial photograph, the last aforesaid print being of record number 43113 in said Records.

The bearings shown on said prints being astro-nomic and referred to the meridian at longitude seventy-six degrees and the distances shown on said prints being perpendicular to said white outlines; said portions containing approximately thirteen

cartographique 98 S.W. et 98 S.E. de 1957 faisant partie dudit système, à l'échelle de 1:500,000; ledit refuge ayant une superficie d'environ 35,200 acres.

5. Refuge d'oiseaux de l'île Bylot

Dans les territoires du Nord-Ouest, dans le district de Franklin, la totalité de l'île Bylot et toutes les eaux et îles ou parties d'îles en-deçà de deux milles vers la mer de la laisse normale de haute mer de l'île Bylot.

6. Refuge d'oiseaux de Cape Dorset

Toutes les parties des territoires du Nord-Ouest, qui peuvent être plus précisément décrites comme suit:

Premièrement, l'île Sakkiak

Toute l'île Sakkiak, ainsi que les petites îles et les eaux du détroit d'Hudson situées à l'intérieur du pourtour en blanc sur une copie d'une photographie aérienne, ladite copie portant le numéro de dossier 43111 aux Archives d'arpentage des terres du Canada, à Ottawa.

Deuxièmement, les îles West Foxe

Toutes les îles West Foxe, ainsi que toutes les parties de l'île Alareak, les petites îles et les eaux du détroit d'Hudson situées à l'intérieur du pourtour en blanc sur une copie d'une photographie aérienne, ladite copie portant le numéro de dossier 43112 de ces archives.

Troisièmement, la baie Andrew Gordon (sud)

Toutes les îles de la baie Andrew Gordon, ainsi que les eaux du détroit d'Hudson situées à l'intérieur du pourtour en blanc sur une copie d'une photographie aérienne, ladite copie portant le numéro de dossier 43113 de ces archives.

Les relèvements indiqués sur les dites copies sont astronomiques et se rapportent au méridien à soixante-seize degrés de longitude, et les distances indiquées sur lesdites copies sont perpendiculaires auxdits pourtours en blanc; leadites parties ont une

square miles, fifty-five square miles and thirty-two square miles, respectively.

7. Cape Parry Bird Sanctuary

In the Northwest Territories, in the District of Mackenzie and the waters of Amundsen Gulf, the whole of the Cape Parry Bird Sanctuary, designated East Point, Central Point and West Point, according to an explanatory plan prepared in the office of the Surveyor General of Canada Lands and of record number 50646 in the Canada Lands Surveys Records at Ottawa, the bearings of said plan being referred to the meridian 124°40' West, said Sanctuary containing together about 574 acres.

8. Dewey Soper Bird Sanctuary

All that portion of Baffin Island, in the Northwest Territories, more particularly described as follows:

COMMENCING at an astronomical observation monument placed on the brink of a cliff and located at approximate latitude sixty-five degrees and thirty-one minutes and approximate longitude seventy-three degrees and forty-eight minutes; THENCE, southerly and easterly along said brink of cliff to a point of latitude sixty-five degrees and nineteen minutes and of approximate longitude seventy-three degrees and two minutes; THENCE, due east to longitude seventy-three degrees; THENCE, due north to latitude sixty-six degrees and ten minutes; THENCE, due east to longitude seventy-two degrees and forty minutes; THENCE, due north to the middle thread of the Koukdjuak River; THENCE, westerly along said middle thread to longitude seventy-three degrees; THENCE, on an azimuth of three hundred and fifteen degrees to a point on a line on the seaward side of, conforming to the sinuosities of and five miles distant from the mean high tide water mark of Foxe Basin; THENCE, southwesterly, southeasterly and southwesterly along said line to the meridian passing through the point of commencement; THENCE, south along said meridian to the point of commencement; said portion containing by admeasurement thirty-one hundred and fifty square miles; approximately; all being described with reference to the latest appropriate map sheets of the National Topographic Series

superficie d'environ treize milles carrés, cinquante-cinq milles carrés et trente-deux milles carrés, respectivement.

7. Refuge d'oiseaux du cap Parry

Dans les territoires du Nord-Ouest, dans le district de Mackenzie et les eaux du golfe Amundsen, toute l'étendue du refuge d'oiseaux du cap Parry, dont les pointes est, centrale et ouest sont désignées d'après un plan explicatif dressé au bureau de l'Arpenteur général des terres du Canada et portant le numéro de dossier 50646 aux Archives d'arpentage des terres du Canada, à Ottawa, les relèvements dudit plan se rapportant au méridien 124°40' ouest, ledit refuge ayant une superficie d'environ 574 acres.

8. Refuge d'oiseaux de Dewey Soper

Toute la partie de l'île Baffin, dans les territoires du Nord-Ouest, plus précisément décrite comme suit:

COMMENÇANT à une borne-repère astronomique placée au bord d'un escarpement et située par environ soixante-cinq degrés trente et une minute de latitude et soixante-treize degrés quarante-huit minutes de longitude; DE LÀ, vers le sud et l'est le long dudit bord de l'escarpement jusqu'à un point situé par soixante-cinq degrés dix-neuf minutes de latitude et environ soixante-treize degrés deux minutes de longitude; DE LÀ, droit vers l'est jusqu'à soixante-treizième degré de longitude; DE LÀ, droit vers le nord jusqu'à un point situé par soixante-six degrés dix minutes de latitude; DE LÀ, droit vers l'est jusqu'à un point situé par soixante-douze degrés quarante minutes de longitude; DE LÀ, droit vers le nord jusqu'au milieu de la rivière Koukdjuak; DE LÀ, vers l'ouest en suivant le milieu de ladite rivière jusqu'à un point situé par soixante-treize degrés de longitude; DE LÀ, sur un azimuth de trois cent quinze degrés jusqu'à un point sur une ligne se prolongeant du côté de la mer, suivant les sinuosités, et à une distance de cinq milles à partir de la laisse moyenne de haute mer du bassin Foxe; DE LÀ, vers le sud-ouest, le sud-est puis le sud-ouest le long de ladite laisse jusqu'au méridien qui passe par le point de départ; DE LÀ, vers le sud le long dudit méridien jusqu'au point de départ; ladite partie ayant une superficie officiel-

on a scale of eight miles to one inch, available on the 4th day of January 1957.

9. East Bay Bird Sanctuary

All those portions of Southampton Island and the waters of Hudson Bay, in the District of Keewatin, in the Northwest Territories, said portions being more particularly described as follows:

COMMENCING at the centre of the observation monument on Gore Point, said monument being a fifteen foot triangular wood beacon; THENCE, north-westerly in a straight line to the most southerly extremity of a small unnamed island at latitude sixty-four degrees eight minutes and longitude eighty-one degrees thirty-four and one-half minutes; THENCE, due west to longitude eighty-two degrees thirty minutes; THENCE, due south to latitude sixty-four degrees four minutes; THENCE, southeasterly in a straight line to a point at latitude sixty-three degrees fifty minutes and longitude eighty-two degrees ten minutes; THENCE, northeasterly in a straight line to the point of commencement said portions containing together four hundred and fifty square miles, approximately.

All being described with reference to the latest appropriate map sheets of the National Topographic Series on a scale of eight miles to one inch, available on the 2nd day of March 1959.

10. Harry Gibbons Bird Sanctuary

All those portions of Southampton Island and the waters of Hudson Bay, in the District of Keewatin, in the Northwest Territories, said portions being more particularly described as follows:

COMMENCING at a point at the mean low tide water mark of said Island at Manico Point on a due east-west line passing through the most westerly extremity of said Point; THENCE, due east to longitude eighty-five degrees thirty minutes; THENCE, due north to latitude sixty-four degrees; THENCE, due

lement arpentée d'environ trois mille cent cinquante milles carrés; le tout selon les cartes les plus récentes du Système national de référence cartographique, établies à l'échelle de huit milles au pouce et publiées le 4 janvier 1957.

9. Refuge d'oiseaux de la baie Eat

Toutes les parties de l'île Southampton et les eaux de la baie d'Hudson, situées dans le district de Keewatin, territoires du Nord-Ouest, et plus précisément décrites comme suit:

COMMENÇANT au centre de la borne-repère de la pointe Gore, ladite borne étant une pyramide triangulaire de bois de quinze pieds; DE LÀ, vers le nord-ouest, en ligne droite jusqu'à l'extrémité sud d'une petite île sans nom située par soixante-quatre degrés huit minutes de latitude et quatre-vingt-un degrés trente-quatre minutes et demie de longitude; DE LÀ, droit vers l'ouest jusqu'à quatre-vingt-deux degrés trente minutes de longitude; DE LÀ, droit vers le sud jusqu'à soixante-quatre degrés quatre minutes de latitude; DE LÀ, droit vers le sud-est jusqu'à un point situé par soixante-trois degrés cinquante minutes de latitude et quatre-vingt-deux degrés dix minutes de longitude; DE LÀ, vers le nord-est en ligne droite jusqu'au point de départ; lesdites parties ayant une superficie globale d'environ quatre cent cinquante milles carrés.

Le tout décrit selon les feuilles cartographiques appropriées les plus récentes du Système national de référence cartographique, établies à l'échelle de huit milles au pouce et publiées le 2 mars 1959.

10. Refuge d'oiseaux Harry Gibbons

Toutes les parties de l'île Southampton et les eaux de la baie d'Hudson, situées dans le district de Keewatin, territoires du Nord-Ouest, et plus précisément décrites comme suit:

COMMENÇANT à un point de ladite île situé à la laisse moyenne de basse mer, à la pointe Manico, et suivant une ligne orientée dans la direction est-ouest et passant par l'extrémité ouest de ladite pointe; DE LÀ, droit vers l'est jusqu'à quatre-vingt-cinq degrés trente minutes de longitude; DE

west to longitude eighty-six degrees; THENCE due south to latitude sixty-three degrees fifty minutes; THENCE, due west to longitude eighty-six degrees twenty minutes; THENCE, due south to the mean low tide water mark of said Island; THENCE, easterly and southerly along the last described water mark to the point of commencement, said portions containing together five hundred and seventy-five square miles, approximately.

All being described with reference to the latest appropriate map sheet of the National Topographic Series on a scale of eight miles to one inch, available on the 2nd day of March 1959.

11. Kendall Island Bird Sanctuary

In the Northwest Territories, in the District of Mackenzie and in Mackenzie Bay, all those parts of the Mackenzie River delta and the waters of said Bay more particularly described as follows:

COMMENCING at the easternmost point in the shore of Kendall Island, THENCE, in a straight line to the westernmost point in said shore; THENCE, in a straight line to the easternmost point in the shore of Garry Island; THENCE, in a straight line to the westernmost point in the shore of an island situated at latitude $69^{\circ}22'$, longitude $135^{\circ}35'$, approximately; THENCE, in a straight line to the southernmost point in the shore of an island situated at latitude $69^{\circ}18'$, longitude $135^{\circ}19'$, approximately; THENCE, south to the middle thread of that channel of the Mackenzie River containing the last aforesaid island; THENCE, generally southeasterly along said middle thread to its junction with the middle thread of a northeasterly channel of said River at latitude $69^{\circ}11'$, longitude $135^{\circ}04'$, approximately; THENCE, northeasterly and northerly along the last aforesaid middle thread to the middle thread of a channel at latitude $69^{\circ}15'$, longitude $134^{\circ}59'$, approximately; THENCE, northwesterly, easterly and northerly along the last aforesaid middle thread to the divergence therefrom of the middle thread of a channel at latitude $69^{\circ}22'$, longitude $134^{\circ}57'$, approximately; THENCE, easterly; and northeasterly along the last aforesaid middle thread to the divergence therefrom

LA, droit vers le nord jusqu'à soixante-quatre degrés de latitude; DE LA, droit vers l'ouest jusqu'à quatre-vingt-six degrés de longitude; DE LA, droit vers le sud jusqu'à soixante-trois degrés cinquante minutes de latitude; DE LA, droit vers l'ouest jusqu'à quatre-vingt-six degrés vingt minutes de longitude; DE LA, droit vers le sud jusqu'à la laisse moyenne de basse mer de ladite île; DE LA, vers l'est et vers le sud le long de ladite laisse moyenne jusqu'au point de départ; lesdites parties ayant une superficie globale d'environ cinq cent soixante-quinze milles carrés.

Le tout décrit selon les feuilles cartographiques appropriées les plus récentes du Système national de référence cartographique, établies à l'échelle de huit milles au pouce et publiées le 2 mars 1959.

11. Refuge d'oiseaux de l'île Kendall

Dans les territoires du Nord-Ouest, dans le district de Mackenzie et dans la baie Mackenzie; toutes les parties du delta du fleuve Mackenzie et les eaux de ladite baie plus précisément décrites comme suit:

COMMENÇANT à l'extrémité est du rivage de l'île Kendall; DE LA, en ligne droite jusqu'à l'extrémité ouest dudit rivage, DE LA, en ligne droite jusqu'à l'extrémité est du rivage de l'île Garry; DE LA, en ligne droite jusqu'à l'extrémité ouest du rivage d'une île située par environ $69^{\circ}22'$ de latitude et $135^{\circ}35'$ de longitude; DE LA, en ligne droite jusqu'à l'extrémité sud du rivage d'une île située par environ $69^{\circ}18'$ de latitude et $135^{\circ}19'$ de longitude; DE LA, vers le sud jusqu'au milieu du chenal du fleuve Mackenzie où se trouve la dernière île susmentionnée; DE LA, en direction générale sud-est en suivant le milieu dudit chenal jusqu'à son intersection avec le milieu d'un chenal nord-est dudit fleuve par environ $69^{\circ}11'$ de latitude et $135^{\circ}04'$ de longitude; DE LA, vers le nord-est puis en direction nord en suivant le milieu du dernier chenal susmentionné jusqu'au milieu d'un chenal par environ $69^{\circ}15'$ de latitude et $134^{\circ}59'$ de longitude; DE LA, vers le nord-ouest, puis en direction est puis nord, en suivant le milieu du dernier chenal susmentionné jusqu'au point où il bifurque du milieu d'un chenal par environ $69^{\circ}22'$ de latitude et $134^{\circ}57'$ de longitude; DE LA, vers l'est et le nord-est en suivant le milieu du dernier chenal susmentionné jusqu'au point

of the middle thread of a channel at latitude 69°24'30", longitude 134°50', approximately; THENCE, northwesterly; and northerly along the last aforesaid middle thread to the mouth of said channel at latitude 69°27', longitude 134°52'30", approximately; THENCE, east to the easterly shore of the inlet of Mackenzie Bay entered by the last aforesaid channel; THENCE, northerly along said easterly shore to the northwesternmost point therein at latitude 69°29', longitude 134°52', approximately; THENCE, westerly in a straight line to the point of commencement; as said islands, channels, latitudes and longitudes are shown on sheets 107C/6, 107C/7, 107C/9 and 107C/11 of a Provisional Map produced by the Army Survey Establishment in 1958, scale 1:50,000, said sanctuary containing 234 square miles, approximately.

12. McConnell River Bird Sanctuary

In the Northwest Territories, in the District of Keewatin and the foreshore of Hudson Bay, in the vicinity of Eskimo Point, the whole of McConnell River Bird Sanctuary according to an explanatory plan prepared in the office of the Surveyor General of Canada Lands and of record number 50228 in the Canada Lands Surveys Records at Ottawa, the bearings of said plan being referred to meridian 94° West; said Sanctuary containing about 127 square miles.

13. Queen Maud Gulf Bird Sanctuary

In the Northwest Territories, in the districts of Mackenzie, Keewatin and Franklin, and the waters of Queen Maud Gulf, the whole of Queen Maud Gulf Bird Sanctuary more particularly described as follows:

COMMENCING at a point in the easterly shore of McLaughlin Bay at latitude 69°50'; THENCE, east along parallel of latitude 67°50' to the westerly shore of Sherman Inlet; THENCE, southeasterly in a straight line to the northernmost point in the shore of the promontory east of the mouth of the Kaleet River at Latitude 67°41' and longitude 97°09'; THENCE, southerly along the easterly banks of the

où il bifurque du milieu d'un chenal par environ 69°24'30" de latitude et 134°50' de longitude; DE LÀ, vers le nord-ouest puis vers le nord en suivant le milieu du dernier chenal susmentionné jusqu'à l'embouchure dudit chenal par environ 69°27' de latitude et 134°52'30" de longitude; DE LÀ, vers l'est jusqu'au rivage est d'une anse de la baie Mackenzie accessible par le dernier chenal susmentionné; DE LÀ, vers le nord le long dudit rivage est jusqu'à son extrémité nord-ouest par environ 69°29' de latitude et 134°52' de longitude; DE LÀ, vers l'ouest en ligne droite jusqu'au point de départ; ces îles, chenaux, latitudes et longitudes sont indiquées sur les feuilles 107C/6, 107C/7, 107C/9 et 107C/11 d'une carte provisoire établie par le Service topographique de l'Armée en 1958 à l'échelle de 1:50,000; ledit refuge ayant une superficie d'environ 234 milles carrés.

12. Refuge d'oiseaux de la rivière McConnell

Dans les territoires du Nord-Ouest, dans le district de Keewatin et la laisse de mer de la baie d'Hudson, dans le voisinage de la pointe aux Esquimaux; la totalité du refuge d'oiseaux de la rivière McConnell, d'après un plan explicatif dressé au bureau de l'Arpenteur général des terres du Canada et portant le numéro de dossier 50228 aux Archives d'arpentage des terres du Canada, à Ottawa, les relèvements dudit plan se rapportant au méridien 94° ouest et ledit refuge ayant une superficie d'environ 127 milles carrés.

13. Refuge d'oiseaux du golfe Reine-Maud

Dans les territoires du Nord-Ouest, dans les districts de Mackenzie, Keewatin et Franklin, et les eaux du golfe Reine-Maud, toute l'étendue du refuge d'oiseaux du golfe Reine-Maud, plus précisément décrite comme suit:

COMMENÇANT à un point du rivage est de la baie McLaughlin situé par 69°50' de latitude; DE LÀ, vers l'est le long du parallèle de 67°50' de latitude jusqu'au rivage ouest de l'anse Sherman; DE LÀ, vers le sud-est en ligne droite jusqu'à l'extrémité nord du rivage du promontoire situé à l'est de l'embouchure de la rivière Kaleet par 67°41' de latitude et 97°09' de longitude; DE LÀ, vers le sud en suivant

Kaleet River and its widenings to latitude 66°20'; THENCE, west along parallel of latitude 66°20' to the westerly bank of the Ellice River; THENCE, northerly along the westerly bank of the Ellice River and westerly bank of that tributary which flows into the Ellice River at latitude 66°48½' and longitude 104°38' to longitude 105°30'; THENCE, due north to the northwesterly shore of Labyrinth Bay; THENCE, northerly and easterly along the shore of Labyrinth Bay to the southeasternmost point in the shore of Cape Roxborough; THENCE, southeasterly in a straight line to the northernmost point in the shore of Whitebear Point; THENCE, southeasterly in a straight line to the point of commencement; all being described with reference to map sheets 66 N.W. and 66 N.E. dated 1953, 76 N.W. and 76 N.E. dated 1954, 77 S.W. and 77 S.E. dated 1958, of the National Topographic Series, scale 8 miles to 1 inch, and map sheet 67 S.W. and 67 S.E. dated 1958, of said series, scale 1:500,000, said sanctuary containing about 24,240 square miles.

14. Seymour Island Bird Sanctuary

In the Northwest Territories, in the District of Franklin, the whole of Seymour Island and all waters and islands or parts of islands within two miles of the normal high tide water mark of Seymour Island.

PART XI

QUEBEC AND NORTHWEST TERRITORIES

Boatswain Bay Bird Sanctuary

All and singular that certain parcel or tract of land and premises covered at high tide by the waters of Boatswain Bay, which is situated on the east side of James Bay between Rupert Bay and the mouth of the East-Main River and is bounded, on the side towards James Bay, by a straight line connecting the western extremity of Neck-of-land Point and the northern extremity of the mainland point at the southwest end of Boatswain Bay and north of Mount Sherrick, all as shown on Canadian Hydrographic Chart Number 5800, together with all waters overlying the area above

la rive est de la rivière Kaleet et de ses élargissements jusqu'à un point situé par 66°20' de latitude; DE LÀ, vers l'ouest en suivant le parallèle 66°20' de latitude jusqu'à la rive ouest de la rivière Ellice; DE LÀ, vers le nord en suivant la rive ouest de la rivière Ellice, puis la rive ouest de l'affluent qui se jette dans la rivière Ellice par 66°48½' de latitude et 104°38' de longitude jusqu'à 105°30' de longitude; DE LÀ, franc nord jusqu'à la rive nord-ouest du rivage de la baie Labyrinth; DE LÀ, vers le nord puis vers l'est le long du rivage de la baie Labyrinth jusqu'à l'extrémité sud-est du rivage du cap Roxborough; DE LÀ, vers le sud-est en ligne droite jusqu'à l'extrémité nord du rivage de la pointe Whitebear; DE LÀ, vers le sud-est en ligne droite jusqu'au point de départ; le tout étant décrit d'après les feuilles cartographiques 66 N.W. et 66 N.E. datées de 1953, 76 N.W. et 76 N.E. de 1954, 77 S.W. et 77 S.E. de 1958, du Système national de référence cartographique, établies à l'échelle de 8 milles au pouce et d'après la feuille cartographique 67 S.W. et S.E. datée de 1958 dudit système, établie à l'échelle de 1:500,000 ledit refuge ayant une superficie d'environ 24,240 milles carrés.

14. Refuge d'oiseaux de l'île Seymour

Dans les territoires du Nord-Ouest, dans le district de Franklin: la totalité de l'île Seymour et toutes les eaux et îles ou parties d'îles en deçà de deux milles de la laisse normale de haute mer de l'île Seymour.

PARTIE XI

QUÉBEC ET TERRITOIRES DU NORD-OUEST

Refuge d'oiseaux de la baie Boatswain

L'ensemble et chacun des terrains bâtis ou non bâtis et submergés à marée haute par les eaux de la baie Boatswain, située sur le côté est de la baie James, entre la baie de Rupert et l'embouchure de la rivière Eastmain et bornée, du côté de la baie James, par une ligne reliant l'extrémité ouest de la pointe Neck-of-land et l'extrémité nord de la pointe de terre ferme à l'extrémité sud-ouest de la baie Boatswain et au nord du mont Sherrick, tels qu'ils sont indiqués sur la carte hydrographique canadienne n° 5800, ainsi que toutes les eaux recouvrant la

described and all islands, shoals, and rocks in Boatswain Bay, and together with all lands, marshes, and inland waters situated in the District of Mistassini, Province of Quebec, within two miles of any part of Boatswain Bay at high tide.

PART XII

ONTARIO AND NORTHWEST TERRITORIES

Hannah Bay Bird Sanctuary

All and singular that certain parcel or tract of land and premises lying and being within a boundary line beginning at the boundary of the Province of Ontario, at the extremity of East Point, at the east side of the mouth of Hannah Bay, at normal high tide, extending thence due westward to a point four miles due west of high tide mark at the extremity of East Point, thence due southward to a point due west of the north bank of the mouth of the Little Mississicabi River at normal high tide, thence easterly following the north bank of said River and continuing easterly on the north bank of the south branch of the Little Mississicabi River to the interprovincial boundary between the Province of Ontario and the Province of Quebec, thence northward along the said interprovincial boundary to a point due east of the extremity of East Point, at the east side of Hannah Bay, at normal high tide, thence due westward to the extremity of East Point, at the boundary of the Province of Ontario, at the east side of the mouth of Hannah Bay, at normal high tide, which is the point of beginning.

région ci-dessus décrite et toutes les îles, tous les hauts-fonds et rochers de la baie Boatswain, ainsi que tous les terrains, marais et eaux intérieures situées dans le district de Mistassini, province de Québec, en deçà de deux milles de toute partie de la baie Boatswain à marée haute.

PARTIE XII

ONTARIO ET TERRITOIRES DU NORD-OUEST

Refuge d'oiseaux de la baie Hannah

L'ensemble et chacun des terrains bâtis et non bâtis en deçà d'une ligne limite commençant à la limite de la province d'Ontario, à l'extrémité de East Point, sur le côté est de l'embouchure de la baie Hannah, à marée haute normale, se prolongeant DE LÀ franc ouest jusqu'à un point à quatre milles franc ouest de la laisse de haute mer à l'extrémité de East Point; DE LÀ, franc sud jusqu'à un point ouest de la rive nord de l'embouchure de la rivière Little Mississicabi à marée haute normale; DE LÀ, vers l'est en suivant la rive nord de ladite rivière et, toujours vers l'est, sur la rive nord du bras sud de la rivière Little Mississicabi jusqu'à la limite interprovinciale entre la province d'Ontario et de la province de Québec; DE LÀ, vers le nord en suivant ladite limite interprovinciale jusqu'à un point franc est de l'extrémité de East Point, du côté est de la baie Hannah, à marée haute normale; DE LÀ, franc ouest jusqu'à l'extrémité de East Point, à la limite de la province d'Ontario, du côté est de l'embouchure de la baie Hannah, à marée haute normale, qui est le point de départ.

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