American White Pelican, California Gull Caspian Tern, Double-crested Cormorant Great Blue Heron and Ring-billed Gull Colony Surveys -- Alberta 1998 Volume 1 -- Report (with 1999 update)

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North American Waterfowl Management Plan

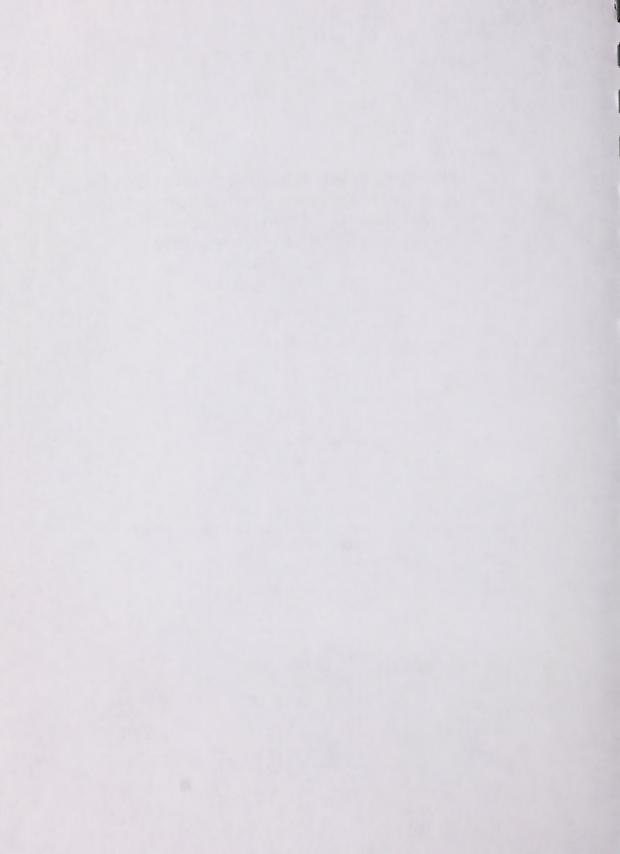








Alberta Conservation Association



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This document is the first volume of a two-volume report. Volume 2 contains the colony location maps. Due to the sensitive nature of colonial nesters to disturbance, these maps will be provided to Regional Endangered Species Specialists and Wildlife Biologists in the Natural Resources Service Area offices, and detailed information will be available on demonstrated need.

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Volume 2 - Colony Location Maps

Cottonwood Consultants Ltd:- 1998 Alberta Colonial Waterbird Survey

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1.0 INTRODUCTION

Cottonwood Consultants Ltd. undertook a survey of colonial nesting birds in southern and central Alberta in 1998. This was supplemented by surveys in central and northern Alberta by Alberta Environmental Protection and Elk Island National Park personnel.

The project incorporated an extensive field program. The objectives of the study were:

- 1. to identify historical and recent nesting colonies from interviews with naturalists and wildlife biologists and from a review of published information and government files;
- to survey colonies of priority one species (American White Pelican, Double-crested Cormorant, California Gull, Ring-billed Gull, Caspian Tern and larger (15 or more nests/colony) Great Blue Heron colonies) throughout Alberta to determine breeding populations at each colony and to identify a precise location for each colony;
- to record incidental observations on colonies of priority two species (White-faced Ibis, Common Tern, Forster's Tern, Franklin's Gull, Black Tern, Western Grebe, Clark's Grebe, Black-crowned Night Heron) and other species of concern (e.g. Northern Leopard Frog, Great Plains Toad);
- 4. to compare the 1998 survey results with historical and recent data to identify any significant trends for priority one species.

The final products consist of:

- 1. technical background information and field data in printed and computer database form (UTM format compatible with GIS system);
- 2. a summary report; and
- 3. a volume of page size maps depicting the locations of colonies from Cottonwood Consultants' surveys.

2.0 STUDY METHODS

The study was undertaken in the following stages:

- 1. interviews, review of literature and file information
- 2. aerial surveys
- 3. ground surveys
- 4. analysis of data and priority one species trends
- 5. compile database, maps and final report

2.1 INTERVIEWS AND INFORMATION REVIEW

The principal sources of information were:

- 1. Alberta Wildlife Division database (BSOD) all historical records in section 3.1 unless noted otherwise
- 2. Alberta Breeding Bird Atlas database (BBA)
- 3. numerous published reports and recent survey data provided by Elk Island National Park and Alberta Environmental Protection
- 4. interviews with Alberta Environmental Protection and Ducks Unlimited personnel
- 5. historical scientific and naturalist literature (see 6.0 References)
- 6. Prairie Nest Records Scheme (PNRS) data

2.2 AERIAL SURVEY METHOD

An initial aerial survey was conducted May 29-31, 1998 to relocate historical colonies and, to a lesser degree, to survey for new colonies. This included a survey of priority North American Waterfowl Management Plan lakes where they were close to survey transects. Over 300 sites were surveyed from the air.

Once a colony was located and marked on the 1:50,000 base map, an estimate of its size was made. For Great Blue Herons and tree-nesting Double-crested Cormorants, a count was made by circling the colony several times at slow

speed. Some large tree-nesting Double-crested Cormorant colonies as well as gull, pelican and ground-nesting cormorant colonies were more accurately assessed during ground surveys and only a rough estimate was made or "active" designation given.

While most of these "active" designations were correct, some apparently active colonies were, in fact, only loafing birds. A few colonies were found that were not obviously active from aerial surveys. While aerial counts of Great Blue Herons in deciduous trees proved to be most accurate, ground surveys were essential for accurate counts of most ground nesters, especially for the largest colonies. A combination of aerial and ground surveys was needed to get the best reading on nesting colonies in some coniferous trees.

Aerial still photographs were taken but they proved to be less informative than the ground surveys where much more accurate count data could be obtained.

2.3 GROUND SURVEY METHOD

In all, over 120 sites were investigated on the ground. Exact counts and representative samples were used for the ground-truthed sites. For smaller colonies and to test survey methods for larger colonies, exact counts were taken of all nests.

Following the initial test surveys, representative transects of a measured width and length were sampled at the larger colonies in which exact counts were undertaken. This was done to simplify the surveys and to minimize disturbance to the nesting colonies. Data from these representative transects were then extrapolated to the entire colony using a ratio based on the areal extent of the colony and the area of the representative transect.

Incidental observations of priority two colonial species were also made during the ground surveys.

2.4 DATA ANALYSIS

Summaries of data can be found in 4.0 Analysis and Discussion. The results of the various surveys were compiled by various survey periods based on the amount of survey data available: pre-1970s, 1970s, 1980s/1990s and 1998. Estimates of the maximum probable number of nesting pairs were made for each of the six priority one species (American White Pelican, California Gull, Caspian Tern, Double-crested Cormorant, Great Blue Heron and Ringbilled Gull) within these survey periods.

Assumptions had to be made as the data are not exactly comparable. Some survey data specify a range of values and not an exact number while others provide totals of adults not active nests. There is a high degree of confidence in the 1998 survey data totals (+/- 5%) compared to some of the 1960s and 1970s data which may have values within a +/- 10-25% range. Despite these shortcomings, it is believed that the general trends established using this methodology are reasonably accurate and there are sufficient numbers of accurate counts to act as a cross-check on the overall accuracy of the pre-1998 estimates.

2.5 DATABASE AND MAPS

A database of aerial and ground survey information was prepared in Access 97 format which was subsequently converted to Excel 97 format for compatibility with the BSOD database.

Hand drawn page-size maps of all sites surveyed by Cottonwood Consultants Ltd. in 1998 are provided in a separate volume. These are mostly on 1:50,000 scale National Topographic System maps with the exception of some areas in the Eastern Irrigation District where more recent and accurate County of Newell maps have been used.

3.0 RESULTS

3.1 SUMMARY OF LOCATION DATA

Location: Akasu Lake 1 Map: 73E/5 & 73E/12 Legal: E16-52-13-W4 Section E16 TP 52 RGE 13 MER W4 UTME: 443920 UTMN: 5927887

Description: low water; rocky sandy shore, grass-forb covered island with 12 small aspen; early fledgling stage **Notes:** 1998 Ground Survey; SW island

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/08 **Ground Check:** Yes

Species: American White Pelican Adults: 5

Species: California Gull Nests (Ground Survey): 312 Nests (Aerial Survey): active Adults: 500

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting from aerial survey Nests (Aerial Survey): 30 nests Adults (Ground Survey): 10

Species: Herring Gull Nests (Ground Survey): 1 Adults: 2

Species: Ring-billed Gull Nests (Ground Survey): 1248 Nests (Aerial Survey): active Adults: 2000

Historical Data:

None--new colonies.

Location: Akasu Lake 2 Map: 73E/5 & 73E/12 Legal: W22-52-13-W4 Section W22 TP 52 RGE 13 MER W4 UTME: 444492 UTMN: 5928274

Description: low water; bare dirt with patches of grass-forb, few small shrubs; early fledgling stage Notes: 1998 Ground Survey; centre island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/08 Ground Check: Yes

Species: American White Pelican Adults: 22

Species: California Gull Nests (Ground Survey): 970 Nests (Aerial Survey): active Adults: 600

Species: Herring Gull Nests (Ground Survey): 3 Nests (Aerial Survey): active Adults: 10

Species: Ring-billed Gull Nests (Ground Survey): 5 Nests (Aerial Survey): active Adults: 20

Historical Data:

None--new colonies.

Location: Anderson Creek North Map: 83B/15 Legal: NW18-44-4-W5 Section NW18 TP 44 RGE 4 MER W5 UTME: 663300 UTMN: 5852350

Description: small island in small water body near Wilson Creek Notes: 1998 Aerial Survey

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Anderson Creek	NE5-44-4-W5 (? correct location)	16 nests	1987	4Map 82 B; BSOD (1998) 294-295; Steve Brechtel, NRS Edmonton (1998); beaver pond NW of Bluffton; note different location than 1998
		21 nests	1988	

Location: Antoine Lake Map: 83I/16 Legal: 4-67-14-W4 Section 4 TP 67 RGE 14 MER W4 **UTME: 430265** UTMN: 6069317

Description: normal water level; willow/small shrub at 1; dead birch/poplar at 2; fallen trees at 3; rocky shore at 4; 1100 ground, 20 tree nests; nestling stage

Notes: 1998 Ground Survey; Map 831/16; X138; 5 mi W of Lac La Biche town; no colonies on other islands

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/03 Ground Check: Yes

Species: Black Tern Adults: 1

Species: California Gull Nests (Ground Survey): 2000 Adults: 500

Species: Common Tern Adults: 2

Species: Double-crested Cormorant Nests (Ground Survey): 1120 Adults: 700

Species: Franklin's Gull Adults: 50

Species: Herring Gull Nests (Ground Survey): 3 Adults: 20

Species: Ring-billed Gull Nests (Ground Survey): 200 **Adults: 100**

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Antoine Lake	4-67-14-W4	1 nest	1993	St. Paul NRS (1998); # of nests may be
				incorrect; may indicate presence of colony

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Antoine Lake	4-67-14-W4	60 nests	1988	St. Paul NRS (1998)
		75 nests	1989	St. Paul NRS (1998)
		212 nests	1991	St. Paul NRS (1998)

251 nests	1993	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Antoine Lake	4-67-14-W4	1 nest	1993	St. Paul NRS (1998); # of nests may be incorrect; may indicate presence of colony

Location: Arthur Lake Map: Map 83G/15 Legal: NE22-55-5-W5 Section NE22 TP 55 RGE 5 MER W5 UTME: 654850 UTMN: 5959756

Description: normal water level; willow-poplar-birch island, most nests in poplar and birch, ring of cattail; late nestling stage; surveyed from west shore

Notes: 1998 Ground Survey; Map 83G/15, 8 miles NW of Lac St. Anne, Great Blue Heron=XH3; Double-crested Cormorant=XH2; access from well at SW corner

Observers (Ground Survey): Cliff Wallis Ground Survey Date: 1998/07/02 Ground Check: Yes

Species: Double-crested Cormorant Nests (Ground Survey): 78 Nests (Aerial Survey): 85 nests Adults: 60

Species: Great Blue Heron Nests (Ground Survey): 12 Nests (Aerial Survey): 10 nests Adults: 10

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Arthur Lake	NE22-55-5-W5	27 nests	1990	St. Paul NRS (1998)
		67 nests	1992	St. Paul NRS (1998)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Arthur Lake	NE22-55-5-W5	44 nests	1967	Vermeer (1969b); Brechtel (1981)
		32 nests	1976	St. Paul NRS (1998); Brechtel (1981)
		20 nests	1977	St. Paul NRS (1998); Brechtel (1981)
		18 nests	1978	St. Paul NRS (1998); Brechtel (1981)
		40 nests	1979	St. Paul NRS (1998); Brechtel (1981)
		30 nests	1980	St. Paul NRS (1998); Brechtel (1981)
		25 nests	1990	St. Paul NRS (1998); Brechtel (1981)

19 nests	1992	St. Paul NRS (1998); Brechtel (1981)
0 nests	1995	Wollis (1999)

Location: Astotin Lake Map: 83H/10 Legal: NW23-54-20-W4 Section NW23 TP 54 RGE 20 MER W4 UTME: 377600 UTMN: 5948750

Description: normal water level; spruce island; nestling stage (13 young seen); Elk Island National Park's survey Notes: 1998 Elk Island National Park Survey; Map 83H/10; X140 = XH3; Lamont Island; Elk Island NP

Observers (Ground Survey): R. Kaye, R. Larsen Ground Survey Date: 1998/06/17 Ground Check: 1998 Elk Island National Park Survey

Species: Double-crested Cormorant Nests (Ground Survey): 63 Nests (Aerial Survey): >15 nests Adults: 88

Species: Great Blue Heron Nests (Ground Survey): 11 Nests (Aerial Survey): 11 Adults: 7

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Astotin Lake	NW23-54-20-W4	0 nests	1979	St. Paul NRS (1998); Lamont Is.
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Astotin Lake		7 nests	1980	St. Paul NRS (1998); Lamont Is.
(continued)		0 nests	1987-1990	St. Paul NRS (1998); Lamont Is.
		32 nests	1992	St. Paul NRS (1998); Lamont Is.
		34 nests	1993	St. Paul NRS (1998); Lamont Is.
		36 nests	1994	St. Paul NRS (1998); Lamont Is.
		33-37 nests	1995	St. Paul NRS (1998); Lamont Is.
		29 nests	1996	St. Paul NRS (1998); Lamont Is.
		52 nests	1997	St. Paul NRS (1998); Lamont Is.

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Astotin Lake	NW23-54-20-W4	1 nest	1984	St. Paul NRS (1998); Lamont Is.
		1 nest	1992	St. Paul NRS (1998); Lamont Is.
		2 nests	1993	St. Paul NRS (1998); Lamont Is.
		0 nests	1994	St. Paul NRS (1998); Lamont Is.
		3 nests	1995	St. Paul NRS (1998); Lamont Is.
		3 nests	1996	St. Paul NRS (1998); Lamont Is.

Location: Badger Reservoir Map: 82I/8 Legal: NE36-16-19-W4 Section NE36 TP 16 RGE 19 MER W4 UTME: 394500 UTMN: 5583400

Description: high water; grassy-low willow island; no nests, loafing only; scoped from shore Notes: 1998 Ground Survey; small islands at NW end; UTM 394863 5583735

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: American White Pelican Adults: 7

Species: California Gull Nests (Ground Survey): 0 Nests (Aerial Survey): apparently <15 nests (not found on ground survey) Adults: 14

Species: Caspian Tern Adults: 2

Species: Common Tern Adults: 2

Species: Double-crested Cormorant Adults: 3

Species: Franklin's Gull Adults: 5

Historical Data:

- none; new survey location; gulls that appeared to be nesting from aerial surveys were not nesting

Location: Bang's Lake Map: 73L/3 Legal: 12-60-8-W4 Section 12 TP 60 RGE 8 MER W4 UTME: 496000 UTMN: 6002000

Description: aspen woods with some spruce

Notes: 1998 Ground Survey (from highway); Map 73L/3; 8 mi SW of Moose L. PP, XH5; behind tall spruce; off NW end of lake

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/06

Ground Check: Yes

Species: Great Blue Heron Nests (Ground Survey): 24 Nests (Aerial Survey): not found Adults: 15

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Bangs Lake	NW6-60-7-W4	19 nests	1980	St. Paul NRS (1998); Brechtel
				(1981); ?same as next site
Bangs Lake	12-60-8-W4	19 nests	1981	St. Paul NRS (1998); Brechtel (1981)
		33 nests	1985	St. Paul NRS (1998); Brechtel (1981)
		30 nests	1988	St. Paul NRS (1998); Brechtel (1981)
		16 nests	1990	St. Paul NRS (1998); Brechtel (1981)
		25 nests	1992	St. Paul NRS (1998); Brechtel (1981)
		surveyed (? colony)	1994	St. Paul NRS (1998); Brechtel (1981)

Location: Battle River - Battle Bend E Map: 73D/6 Legal: 24-40-10-W4 Section 24 TP 40 RGE 10 MER W4 UTME: 478700 UTMN: 5811500

Description: poplars, north side of Battle River Notes: 1998 Aerial Survey; BSOD (1998) 8822; 5 miles NE of Battle Bend

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 4 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Battle River-	24-40-10-W4	9 nests	1998	BSOD (1998); found on winter survey
Battle Bend E				

Location: Battle River- Battle Bend S Map: 73D/6 Legal: SW36-39-11-W4 Section SW36 TP 39 RGE 11 MER W4 UTME: 468800 UTMN: 5804650

Description: poplars, in loop of Battle River Notes: 1998 Aerial Survey; west of BSOD 309; 468415 5805149 APPROX.

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): <15 nests

Historical Data:

Great Blue Heron -- new location found in 1998 Aerial Survey

Location: Battle River-Big Knife Map: 83A/9 Legal: NE7-41-16-W4 Section NE7 TP 41 RGE 16 MER W4 UTME: 412311 UTMN: 5819100

Description: balsam poplar "island" formed by oxbow lake; some snag nest trees; 28 nests, 19 occupied; late nestling stage

Notes: 1998 Ground Survey; BSOD (1998) 305-306; Bigknife Creek, 3 miles W of Bigknife PP.; access from Buck for Wildlife area

Observers (Ground Survey): Cliff Wallis Ground Survey Date: 1998/07/03 Ground Check: Yes

Species: Great Blue Heron Nests (Ground Survey): 19 Nests (Aerial Survey): active Adults: 5

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Battle River-Big Knife	x-41-17-W4	12 nests	1967	Vermeer (1969b); probably same as next
				site
	SE7-41-16-W4	11 nests	1978	BSOD (1998)
		occupied	1979	BSOD (1998)
		14 nests	1982	BSOD (1998)

Location: Battle River - Castor Creek Map: 73D/5 Legal: SE2-39-12-W4 Section SE2 TP 39 RGE 12 MER W4 UTME: 457900 UTMN: 5797250

Description: poplars, south side of Battle River in meander loop Notes: 1998 Aerial Survey; BSOD (1998) 310, 827; near creek, 8 miles SE of Alliance; note new location

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 20 nests

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Battle River	NE3-39-12-W4 or	15 nests	1994	Red Deer NRS (1998); BSOD (1998);
Castor Creek	33-38-12-W4			may have moved from here to new site
	(?wrong location)			
		20 nests	1998	Red Deer NRS (1998); BSOD (1998);
				seen on winter survey

Location: Battle River-Forestburg Map: 83A/8 Legal: 27-40-15-W4 Section 27 TP 40 RGE 15 MER W4 UTME: 426550 UTMN: 5813100

Description: poplars along Battle River Notes: 1998 Aerial Survey; BSOD (1998) 304; 5 miles E of Big Knife Provincial Park

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 4 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Battle River-Forestburg	27-40-15-W4	8 nests	1987	BSOD (1998)

Location: Battle River-Wetaskiwin Map: 83A/14 Legal: E12-45-23-W4 Section E12 TP 45 RGE 23 MER W4 UTME: 351900 UTMN: 5859600

Description: poplars on east side of Battle River Notes: 1998 Aerial Survey; BSOD (1998) 298-303; 7 miles SW of Wetaskiwin

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Battle River-Wetaskiwin	E12-45-23-W4	30 nests	1967	Vermeer (1969b)
		30 nests	1973	BSOD (1998)
		51 nests	1974	BSOD (1998)
		53 nests	1975	BSOD (1998)
		17 nests	1978	BSOD (1998)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Battle River-Wetaskiwin		occupied	1979	BSOD (1998)

continued	21 1	nests 1982	BSOD	(1998)	

Location: Beaver Lake 1 Map: 73L/12 Legal: 34-65-12-W4 Section 34 TP 65 RGE 12 MER W4 UTME: 452600 UTMN: 6058150

Description: small island at southeast end of Beaver Lake Notes: 1998 Aerial Survey; Map 73L/12; X146

Observers (Aerial Survey): John Martin, Alberta Fish and Wildlife **Aerial Survey Date:** 1998/07/09 **Ground Check:** No

Species: California Gull Nests (Aerial Survey): part of 500 nests

Species: Ring-billed Gull Nests (Aerial Survey): part of 500 nests

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaver Lake 1	34-65-12-W4	100 nests	1991	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaver Lake 1	34-65-12-W4	100 nests	1991	St. Paul NRS (1998)

Location: Beaver Lake 2 Map: 73L/12 Legal: E21-66-13-W4 Section E21 TP 66 RGE 13 MER W4 UTME: 442300 UTMN: 6064500

Description: wooded peninsula at northeast end of Beaver Lake Notes: Fish and Wildlife 1998 Aerial Survey; Map 73L/12; west of X145/XH10 and XH11

Observers (Aerial Survey): John Martin, Alberta Fish and Wildlife **Aerial Survey Date:** 1998/07/09 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 60

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaver Lake 2	N15-66-13-W4	surveyed (no data)	1996	St. Paul NRS (1998);
				location?, extinct?

Great Blue Heron -- above site is likely new location for these colonies

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaver Lake 2		occupied	1970	St. Paul NRS (1998); 5
				miles from next site
Beaver Lake 2	E21-66-13-W4; erroneously? in	30 nests	1972	Brechtel (1981); St. Paul
	BSOD (1998) as N15-66-13-W4			NRS (1998); ?above
	or 22-66-14-W4			moved to this site in 1972
		30 nests	1972	St. Paul NRS (1998)
		30 nests	1977	St. Paul NRS (1998)
		75 nests	1978	St. Paul NRS (1998)
		35 nests	1979	St. Paul NRS (1998)
		19 nests	1980	St. Paul NRS (1998)
		75 nests	1981	St. Paul NRS (1998)
		75 nests	1988	St. Paul NRS (1998)
		100 nests	1991	St. Paul NRS (1998)
		40 nests	1992	St. Paul NRS (1998)
		surveyed (no data)	1996	St. Paul NRS (1998)

Location: Beaverhill Lake 1 Map: 83H/8 Legal: N8-52-17-W4 Section N8 TP 52 RGE 17 MER W4 UTME: 402496 UTMN: 5926331

Description: low water; gravel island, partly forb covered; egg stage **Notes:** 1998 Ground Survey; X147; N of 2 islands--largest on north, island closest to E-W road allowance

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/08 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 152 Nests (Aerial Survey): 200 + 30 nests Adults: 250 Notes: 1998 Ground Survey; 1998 Elk Island National Park aerial survey

Species: California Gull Nests (Ground Survey): 51 Nests (Aerial Survey): part of 40 nests Adults: 100

Species: Common Tern

Adults: 1

Species: Double-crested Cormorant Nests (Ground Survey): 1 Nests (Aerial Survey): 150 + 30 nests Adults: 0

Species: Forster's Tern Adults: 30

Species: Western Grebe Adults: 40

Historical Data:

- see Beaverhill 2

Location: Beaverhill Lake 2 Map: 83H/8 Legal: SW8-52-17-W4 Section SW8 TP 52 RGE 17 MER W4 UTME: 402210 UTMN: 5925583

Description: low water; low shrub and forb island, rock-grass center; egg stage Notes: 1998 Ground Survey; Map 83H/8,9,10; X147; S of 2 islands

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/08 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 19 Nests (Aerial Survey): 200 + 30 nests Adults: 75

Species: California Gull Nests (Ground Survey): 80 Nests (Aerial Survey): part of 40 nests Adults: 70

Species: Common Tern Adults: 4

Species: Double-crested Cormorant Nests (Ground Survey): 32 Nests (Aerial Survey): 150 + 30 nests Adults: 50

Species: Forster's Tern Adults: 100

Species: Ring-billed Gull Nests (Ground Survey): 40

Nests (Aerial Survey): part of 40 nests Adults: 50

Historical Data (Beaverhill 1 and 2):

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaverhill Lake	8-52-17-W4	81 nests	1959	St. Paul NRS (1998)
		14 nests	1960	St. Paul NRS (1998)
		0 nests	1961, 1962, 1967, 1975	St. Paul NRS (1998)
		14 nests	1976	Weseloh et al. (1977)
		0 nests	1977-1979	St. Paul NRS (1998)
		38 nests	1980	St. Paul NRS (1998)
		10 nests	1981	St. Paul NRS (1998)
		0 nests	1983	St. Paul NRS (1998)
		84 nests	1984	St. Paul NRS (1998)
		33 nests	1985	St. Paul NRS (1998)
		26 nests	1987	St. Paul NRS (1998)
		35 nests	1989	St. Paul NRS (1998)
		171 nests	1991	St. Paul NRS (1998)
		258 nests	1992	St. Paul NRS (1998)
		395 nests	1993	St. Paul NRS (1998)
		80 adults	1994	St. Paul NRS (1998)
		525 adults	1998	St. Paul NRS (1998)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaverhill Lake	8-52-17-W4	100-500	1968	Vermeer (1970a); St. Paul NRS (1998), Brechtel,
		nests		NRS (1998)
		453 nests	1976	St. Paul NRS (1998), Brechtel, NRS (1998)
		50-100 nests	1990	St. Paul NRS (1998), Brechtel, NRS (1998)
		30 nests	1991	St. Paul NRS (1998), Brechtel, NRS (1998)
		150 nests	1992	St. Paul NRS (1998), Brechtel, NRS (1998)
		307 nests	1993	St. Paul NRS (1998), Brechtel, NRS (1998)
		surveyed	1994	St. Paul NRS (1998), Brechtel, NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaverhill Lake	8-52-17-W4	0 nests	1967	St. Paul NRS (1998)
		7 nests	1975	Weseloh et al. (1975)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Beaverhill Lake		30 nests	1976	Weseloh et al. (1977)
continued		0 nests	1977-1979	St. Paul NRS (1998)
		44 nests	1980	St. Paul NRS (1998)
		40 nests	1981	St. Paul NRS (1998)
		34 nests	1983	St. Paul NRS (1998)
		24 nests	1984	St. Paul NRS (1998)
		42 nests	1985	St. Paul NRS (1998)
		29 nests	1987	St. Paul NRS (1998)

100 nests	1990	St. Paul NRS (1998)
207 nests	1991	St. Paul NRS (1998)
240 nests	1992	St. Paul NRS (1998)
248 nests	1993	St. Paul NRS (1998)
surveyed (no data)	1994	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES	
Beaverhill Lake	8-52-17-W4	1000-3000 nests	1968	Vermeer (1970a)	
		1295 nests	1976	Weseloh et al. (1977)	
		active	1977	St. Paul NRS (1998)	

Location: Big Island Lake (Birch Mountains) Map: 84H Legal: 99-16-W4 Section TP 99 RGE 16 MER W4

Description: mixedwood island in northwestern portion of lake with rocky spit **Notes:** Fish and Wildlife 1998 Aerial Survey; Map 84 H; possible nesting, no ground survey

Observers (Aerial Survey): John Martin, Alberta Fish and Wildlife **Aerial Survey Date:** 1998/06/09 **Ground Check:** No

Species: American White Pelican Adults: 20 on island, 15 on lake; no confirmation of nesting

Species: Double-crested Cormorant Adults: 10 on island; no confirmation of nesting

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Big Island Lake		24 nests	1975	Beaver (1980)

Location: Blackfoot Lake Map: 83H/10 Legal: NW30-52-19-W4 Section NW30 TP 52 RGE 19 MER W4 UTME: 380750 UTMN: 5932000

Description: normal water level; birch-spruce island; nestling stage (83 young seen); Elk Island National Park's survey
 Notes: 1998 Elk Island National Park Survey; Map 83H/10; sw corner of Elk Island NP; island in lake; XH17

Observers (Ground Survey): B Romaniuk Ground Survey Date: 1998/06/20 Ground Check: Elk Island National Park

Species: Great Blue Heron Nests (Ground Survey): 32 Nests (Aerial Survey): 30+ nests Adults: 10

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Blackfoot Lake	NW30-52-19-W4	15 nests	1976	St. Paul NRS (1998); Brechtel (1981); Elk
				Island NP; island
		15 nests	1977	St. Paul NRS (1998); Brechtel (1981)
		31 nests	1978	St. Paul NRS (1998); Brechtel (1981)
		30 nests	1979	St. Paul NRS (1998); Brechtel (1981)
		30 nests	1980	St. Paul NRS (1998); Brechtel (1981)
		36 nests	1982	St. Paul NRS (1998)
		80 nests	1984	St. Paul NRS (1998); R. Kaye (1998)
		42 nests	1985	St. Paul NRS (1998); R. Kaye (1998)
		20 nests	1986	St. Paul NRS (1998)
		55 nests	1987	St. Paul NRS (1998)
		18 nests	1988	St. Paul NRS (1998)
		59 nests	1989	St. Paul NRS (1998); R. Kaye (1998)
		50 nests	1990	St. Paul NRS (1998)
		73 nests	1991	St. Paul NRS (1998); R. Kaye (1998)
		72 nests	1992	St. Paul NRS (1998); R. Kaye (1998)
		88 nests	1993	St. Paul NRS (1998); R. Kaye (1998)
		61 nests	1994	St. Paul NRS (1998); R. Kaye (1998)
		50 nests	1995	St. Paul NRS (1998); R. Kaye (1998)
		36 nests	1996	St. Paul NRS (1998); R. Kaye (1998)
		37 nests	1997	St. Paul NRS (1998); R. Kaye (1998)

Location: Boyne Lake Map: 73L/4 Legal: 1-61-12-W4 Section 1 TP 61 RGE 12 MER W4 UTME: 456700 UTMN: 6011200

Description: peninsula of small lake east of Boyne Lake Notes: 1998 Aerial Survey; Map 73L/5; XH23; 4 mi NE of Garner L PP

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 20 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Boyne Lake	1-61-12-W4	16 nests	1985	St. Paul NRS (1998)
		14 nests	1988	St. Paul NRS (1998)
		10 nests	1990	St. Paul NRS (1998)
		15 nests	1991	St. Paul NRS (1998)
		13 nests	1993	St. Paul NRS (1998)

Location: Brazeau Reservoir Map: 83B/14 Legal: NE34-45-11-W5 Section NE34 TP 45 RGE 11 MER W5 UTME: 601000 UTMN: 5865000

Description: dead trees in bay of reservoir Notes: 1998 Aerial Survey; XH24

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Brazeau Reservoir	N34-45-11-W5	18 nests	1975	Brechtel (1981)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Brazeau Reservoir		occupied	1980	Brechtel (1981)

Location: Bruce Lake Map: 82P/4 Legal: E3-26-26-W4 Section E3 TP 26 RGE 26 MER W4 UTME: 322119 UTMN: 5674244

Description: high water; grass island; egg stage Notes: 1998 Ground Survey; Map 82 P; island at S; X151; 5 mi E of Keoma

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/29 **Ground Check:** Yes

Species: American White Pelican Adults: 3

Species: Black Tern Adults: 1

Species: California Gull Nests (Ground Survey): 178 Nests (Aerial Survey): <500 nests Adults: 200

Species: Common Tern Adults: 2

Species: Double-crested Cormorant Nests (Ground Survey): 14 Adults: 20

Species: Ring-billed Gull Nests (Ground Survey): 210 Nests (Aerial Survey): < 500 nests Adults: 250

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Bruce Lake	x-26-26-W4	part of 400 adults	1978	Ealey (1986); island at S end

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Bruce Lake	x-26-26-W4	part of 400 adults	1978	Ealey (1986); island at S end

Location: Buffalo Lake 1

Map: 83A/7 Legal: N26-40-21-W4 Section N26 TP 40 RGE 21 MER W4 UTME: 369593 UTMN: 5815363

Description: aspen forest; large point (technically an island); difficult to see from ground; nestling stage **Notes:** 1998 Ground Survey; BSOD (1998) 336-342 and 8819--large treed island, WNW of Rochon Sands PP.

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/17 **Ground Check:** Yes

Species: Great Blue Heron Nests (Ground Survey): 14 Nests (Aerial Survey): 39 nests Adults: 9

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake 1	NW26-40-21-W4;	7 to 30 nests	1967 to	Vermeer (1969b); BSOD (1998);
	erroneously in BSOD as		1987	large treed island near west shore,
	14-40-21-W4 or elsewhere			almost due W of N tip of Rochon
	as 27-40-21-W4			Sands P.P.
		7 nests	1967	BSOD (1998)
		9 nests	1969	BSOD (1998)
		25 nests	1977	BSOD (1998)
		16 nests	1978	BSOD (1998)
		23 nests	1979	BSOD (1998)
		occupied	1980	BSOD (1998)
		26 nests	1982	BSOD (1998)
		12 nests	1987	BSOD (1998)

Location: Buffalo Lake 2 - Island D Map: 83A/10 Legal: SW10-41-21-W4 Section SW10 TP 41 RGE 21 MER W4 UTME: 367499 UTMN: 5819365

Description: normal water level; bare, rocky island; nestling stage **Notes:** 1998 Ground Survey; NW arm; X152; note wrong location in old database; corrected on map

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/17 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 0; no nests found despite apparent nesting on aerial survey Nests (Aerial Survey): 50 nests

Adults: 2

Species: Double-crested Cormorant Nests (Ground Survey): 80 Nests (Aerial Survey): 75 nests Adults: 113

Species: Western Grebe Adults: 10

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake 2	SE10-41-21-W4	41 nests	1992	Red Deer NRS (1998); 140 adults, 121 young

Location: Buffalo Lake 3 - Island B Map: 83A/7 Legal: W30-40-20-W4 Section W30 TP 40 RGE 20 MER W4 UTME: 372662 UTMN: 5814869

Description: normal water level; half forb/half dirt island; larger fledgling stage Notes: 1998 Ground Survey; small rock east side lake; NE of Rochon Sands PP; X153

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/17 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 282 Nests (Aerial Survey): 100+ nests Adults: 150

Species: California Gull Nests (Ground Survey): 540 Nests (Aerial Survey): active Adults: 500

Species: Common Tern Adults: 1

Species: Double-crested Cormorant Nests (Ground Survey): 126 Nests (Aerial Survey): active (small) Adults: 20

Species: Forster's Tern Adults: 1

Species: Franklin's Gull Adults: 50

Species: Ring-billed Gull Nests (Ground Survey): 80 Nests (Aerial Survey): active Adults: 200

Species: Western Grebe Adults: 10

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake		active	1800s	whole lake; Vermeer (1969a), from Macoun
				and Thompson

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake		7 nests	1959	PNRS (1998)
		300 adults	1967	PNRS (1998)
		100-500 nest	1968	whole lake; Vermeer (1970a); Brechtel, NRS
				Edmonton (1998)
		952 nests	1977	whole lake; Brechtel, NRS Edmonton
				(1998); Weseloh (1978)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake		500-1000 nests	1968	whole lake; Vermeer (1970a); Brechtel, NRS
				Edmonton (1998)
		2000 nests	1977	Brechtel, NRS Edmonton (1998); Weseloh
				(1978); whole lake
Buffalo Lake 3 -	34-40-20-	210 ad, 47 yg	1992	Red Deer NRS (1998); small rock east side
Island B	W4			of lake

Location: Buffalo Lake 4 - Island F Map: 83A/7 Legal: SE26-40-21-W4 Section SE26 TP 40 RGE 21 MER W4 UTME: 370143 UTMN: 5814730

Description: normal water level; bare dirt, few forb island; no colony, no nests Notes: 1998 Ground Survey; due W of Rochon Sands PP; X154

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/17 Ground Check: Yes

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting from aerial survey Nests (Aerial Survey): active (small) Adults: 0

Species: Western Grebe Adults: 10

Historical Data:

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake		500-1000 nest	1968	whole lake; Vermeer (1970a); Brechtel, NRS
				Edmonton (1998)
		2000 nests	1976	Brechtel, NRS Edmonton (1998); whole lake
Buffalo Lake 4	SE26-40-21-W4	50 ad, 15 yg	1992	Red Deer NRS (1998); due W of Rochon
- Island F				Sands PP

Location: Buffalo Lake 5 - Island A Map: 83A/7 Legal: E20-40-21-W4 Section E20 TP 40 RGE 21 MER W4 UTME: 365402 UTMN: 5812969

Description: normal water level; forb covered island; extrapolated from 80 X 5 m transect; fledgling stage Notes: 1998 Ground Survey; X155; larger island SW of Heron colony

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/17 Ground Check: Yes

Species: American White Pelican Adults: 5

Species: California Gull Nests (Ground Survey): 200 Nests (Aerial Survey): active large Adults: 300 Species: Double-crested Cormorant Adults: 14

Species: Ring-billed Gull Nests (Ground Survey): 1145 Nests (Aerial Survey): active large Adults: 1800

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake		7 nests	1959	PNRS (1998)
		300 adults	1967	PNRS (1998)
		100-500 nest	1968	whole lake; Vermeer (1970a); Brechtel,
				NRS Edmonton (1998)
Buffalo Lake	E20-40-21-W4	5000 adults;	1992	Red Deer NRS (1998); off tip of Rochon
		2200 young		Sands PP

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Buffalo Lake		500-1000 nest	1968	whole lake; Vermeer (1970a); Brechtel,
				NRS Edmonton (1998)
		2000 nests	1976	Brechtel, NRS Edmonton (1998); whole
				lake

Location: Burnstick Lake (Birch Lake) Map: 83B/2 Legal: SW18-35-6-W5 Section SW18 TP 35 RGE 6 MER W5 UTME: 647179 UTMN: 5764610

Description: normal water level; pine island; nestling 1/2-2/3 grown; surveyed from N shore
Notes: 1998 Ground Survey; BSOD (1998) 5397; NE of Burnstick Lake at Birch Lake (N end), Watchable Wildlife Area, 6 miles SW of Caroline

Observers (Ground Survey): Cliff Wallis Ground Survey Date: 1998/06/20 Ground Check: Yes

Species: Great Blue Heron Nests (Ground Survey): 35 Nests (Aerial Survey): 35 nests Adults: 20

Historical Data:

Caspian Tern

- 2 adults reported on July 5, 1997 at Burnstick Lake x-35-6-W5 (Sherrington 1997a)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Burnstick Lake (Birch Lake)	18-35-6-W4	10 nests	1976	Brechtel (1981); BSOD (1998)
		11 nests	1978	Brechtel (1981); BSOD (1998)
		active	1979	Brechtel (1981); BSOD (1998)
		31 nests	1997	Bruns (1998); BSOD (1998)

Location: Bushy Head Lake Map: 73D/15 Legal: 35-44-7-W4 Section 35 TP 44 RGE 7 MER W4 UTME: 506620 UTMN: 5854119

Description: normal water level; bare dirt, forb ring, low willow patch, island; late fledgling stage; extrapolated from 85 X 5 m transect; chicks > # nests-washed out?

Notes: 1998 Ground Survey; Map 73D/15; X157; 2 mi W of Wainwright

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/24 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 301 Nests (Aerial Survey): active large Adults: 200

Species: Ring-billed Gull Nests (Ground Survey): 905 Nests (Aerial Survey): active large Adults: 600

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Bushy Head Lake	35-44-7-W4	125 nests	1990	St. Paul NRS (1998)
		175 nests	1991	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Bushy Head Lake	35-44-7-W4	350 nest	1990	St. Paul NRS (1998)
		400 nests	1991	St. Paul NRS (1998)

Location: Campbell = Tilley A Reservoir Map: 72L/12 & 72L/5 Legal: NE6-18-12-W4 Section NE6 TP 18 RGE 12 MER W4 UTME: 454979

UTMN: 5593859

Description: normal water level; weed-grass with bare patches island, low willow patches and Manitoba maple Notes: 1998 Ground Survey; Map 72L; X246; 3 mi NE of Tilley; SW corner of lake

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/10 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 0 Nests (Aerial Survey): not found Adults: 20

Species: California Gull Nests (Ground Survey): 207 Nests (Aerial Survey): active large Adults: 300

Species: Double-crested Cormorant Nests (Ground Survey): 68 Nests (Aerial Survey): 50-100 nests Adults: 25

Species: Forster's Tern Adults: 2

Species: Great Blue Heron Nests (Ground Survey): 4 Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 1242 Nests (Aerial Survey): active large Adults: 700

Species: Western Grebe Adults: 4

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Tilley A Reservoir	NE6-18-12-W4	active	1982-1983	Ealey (1986)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Louisiana Lakes S.	erroneously as 7-17-	colony	1977	Brechtel, NRS Edmonton
Colony (erroneously)	10-W4 in BSOD			(1998); island, Cormorant
				colony; is Campbell Reservoir
Tilley A Reservoir	NE6-18-12-W4	part of 1000	1978	Brechtel, NRS Edmonton
		adults		(1998); island at south end with
				Cormorants

2	2 colonies	1979	BSOD (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Tilley A	NE6-18-12-W4	0 nests	1976	Brechtel (1981)
Louisiana Lakes S. Colony	erroneously as 7-17- 10-W4 in BSOD	64 nests	1977	Brechtel (1981); island, gull colony; is Campbell Reservoir
		26 nests	1978	Brechtel (1981)
		31 nests	1979	Brechtel (1981)
		124 nests	1980	Brechtel (1981)
		40 nests	1989	Lethbridge NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Louisiana Lakes S.		nesting	1977	Canadian Wildlife Service (1979b)
Colony (erroneously)				

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Louisiana Lakes S.	erroneously as 7-17-	colony	1977	Brechtel, NRS Edmonton
Colony (erroneously)	10-W4 in BSOD			(1998); island, Cormorant
				colony; is Campbell Reservoir
Tilley A Reservoir	NE6-18-12-W4	part of 1000	1978	Brechtel, NRS Edmonton
		ads		(1998); Cormorant island S end
		2 colonies	1979	BSOD (1998); same as 1978 +
				small island in NNE

Location: Capt Eyre (SE) Lake Map: 73D/7 Legal: 20-38-5-W4 Section 20 TP 38 RGE 5 MER W4 UTME: 521800 UTMN: 5792150

Description: in aspen, south shore of lake southeast of Capt Eyre Lake **Notes:** 1998 Aerial Survey; Map 73D/7; XH29; 18 mi WSW of Provost

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 5 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Capt Eyre (SE) Lake	20-38-5-W4	surveyed (no data)	1995	St. Paul NRS (1998)

Location: Carvel Lake Map: 83G/9 Legal: 29-52-2-W5 Section 29 TP 52 RGE 2 MER W5 UTME: 682000 UTMN: 5933200

Description: peninsula at south end of lake Notes: 1998 Aerial Survey; Map 83G/9: XH30; 10 mi W of Stony Plain

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 5 nests

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Carvel	29-52-2-W5	surveyed (? colony)	1994	St. Paul NRS (1998)

Location: Chip Lake 1 Map: 83G/11 Legal: NE8-54-10-W5 Section NE8 TP 54 RGE 10 MER W5 UTME: 603894 UTMN: 5946668

Description: normal water level; scattered poplar-birch, some dead spars, dense tall shrub; 60 nests/45 occupied
 Notes: 1998 Ground Survey; XH 31; w side, 4 mi N of Chip Lake town; small island to NW of large horseshoe shaped island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/25 Ground Check: Yes

Species: Double-crested Cormorant Adults: 30

Species: Franklin's Gull Adults: 100

Species: Great Blue Heron Nests (Ground Survey): 45 Nests (Aerial Survey): 25 nests Adults: 8

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Chip Lake 1	SE17-54-10-W5	36 nests	1967	Vermeer (1969b); Brechtel (1981)
		13 nests	1968	Brechtel (1981); Lynch (1968, 1971)
		15 nests	1969	Brechtel (1981); Lynch (1971)
		60 nests	1976	Brechtel (1981)
		48 nests	1977	Brechtel (1981)
		55 nests	1978	Brechtel (1981)
		50 nests	1979	Brechtel (1981)
		67 nests	1980	Brechtel (1981)
		50+ nests	1981	Anderson et al. (1981)
		40 nests	1982-83	MacCallum (1983)
		40 nests	1984	Edmonton NRS (1998)
		46 nests	1989	Edmonton NRS (1998)

Location: Chip Lake 2 Map: 83G/11 Legal: 16-54-10-W5 Section 16 TP 54 RGE 10 MER W5 UTME: 605654 UTMN: 5948040

Description: normal water level; nettle, dense willow, birch, tall shrub; late fledgling stage Notes: 1998 Ground Survey; Map 83 G; X158 = XH31; 4 mi N of Chip Lake town; SE bigger island of 2 at lake center

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/25 **Ground Check:** Yes

Species: American White Pelican Nests (Ground Survey): 23 Adults: 17

Species: California Gull Nests (Ground Survey): 400 Nests (Aerial Survey): part of 500 nests Adults: 600

Species: Double-crested Cormorant Nests (Ground Survey): 13 Adults: 30

Species: Ring-billed Gull Nests (Ground Survey): 300 Nests (Aerial Survey): part of 500 nests Adults: 450

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Chip Lake 2	16-54-10-W4	100-500 nests	1967	Vermeer (1970a)
		active	1968-69	Lynch (1971); part of 3500 adult gulls
		1240 nests	1976	Weseloh (1978)
		colony	1977	Ealey (1986)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Chip Lake 2	SE17-54-10-W4	colony		Poston et al (1990); part of same site
Chip Lake 2	16-54-10-W4	<100 nests	1967	Vermeer (1970a)
		active	1968-69	Lynch (1971); part of 3500 adult gulls
		249 nests	1976	Weseloh (1978)
		colony	1977	Ealey (1986)

Location: Chip Lake 3 Map: 83G/11 Legal: 16-54-10-W5 Section 16 TP 54 RGE 10 MER W5 UTME: 605544 UTMN: 5948264

Description: normal water level; rocky, forb/nettle; late fledgling stage **Notes:** 1998 Ground Survey; new location; NW smaller island of 2 at lake center **Observers (Ground Survey):** Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/25 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 160 Nests (Aerial Survey): active small Adults: 200

Species: Double-crested Cormorant Nests (Ground Survey): 93 Nests (Aerial Survey): 60 nests Adults: 25

Species: Franklin's Gull Adults: 500

Species: Herring Gull Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 40 Nests (Aerial Survey): active small Adults: 50

Historical Data:

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	. NOTES
Chip Lake 2	SE17-54-10-W4	colony		Poston et al (1990); part of same site
Chip Lake 2	16-54-10-W4	100 nests	1967	Vermeer (1970a)
		active	1968-69	Lynch (1971); part of 3500 adult gulls
		colony	1977	Ealey (1986)

Location: Crawling Valley Reservoir 1 =Barkenhouse Lake Map: 821/16 Legal: S24-22-18-W4 Section S24 TP 22 RGE 18 MER W4 UTME: 403863 UTMN: 5637156

Description: high water; forb covered island, small patch of low willow; egg stage Notes: 1998 Ground Survey; Dead Tree Island; X143; 10 mi NE of Bassano; small island at N end of island group

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/15 Ground Check: Yes

Species: American White Pelican Adults: 30

Species: California Gull Nests (Ground Survey): 91 **Adults: 100**

Species: Common Tern Adults: 2

Species: Double-crested Cormorant Adults: 10; no nesting evidence

Historical Data (entire Crawling Valley Reservoir):

- see after Crawling Valley Reservoir 7

Location: Crawling Valley Reservoir 2 =Barkenhouse Lake Map: 82I/16 Legal: E13-22-18-W4 Section E13 TP 22 RGE 18 MER W4 UTME: 403725 UTMN: 5636539

Description: high water level; bare dirt with small patches of low willow Notes: 1998 Ground Survey; island NE center; X143; 10 mi NE of Bassano; big island in center of island group

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/15 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 50 Nests (Aerial Survey): active large Adults: 100

Species: Ring-billed Gull Nests (Ground Survey): 800 Nests (Aerial Survey): active large Adults: 1500

Historical Data (entire Crawling Valley Reservoir):

- see after Crawling Valley Reservoir 7

Location: Crawling Valley Reservoir 3 =Barkenhouse Lake Map: 82I/16 Legal: E13-22-18-W4 Section E13 TP 22 RGE 18 MER W4 UTME: 403807 UTMN: 5636465

Description: high water level; forb cover with bare dirt center island; large fledgling stage Notes: 1998 Ground Survey; island NE center; X143 and X144; 10 mi NE of Bassano; big island SE of #2

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/15 **Ground Check:** Yes Species: California Gull Nests (Ground Survey): 15 Nests (Aerial Survey): active large Adults: 30

Species: Ring-billed Gull Nests (Ground Survey): 350 Nests (Aerial Survey): active large Adults: 1000

Historical Data (entire Crawling Valley Reservoir):

- see after Crawling Valley Reservoir 7

Location: Crawling Valley Reservoir 4 =Barkenhouse Lake Map: 82I/16 Legal: E13-22-18-W4 Section E13 TP 22 RGE 18 MER W4 UTME: 403728 UTMN: 5636384

Description: high water level; forb cover with a few low willows; late fledgling stage Notes: 1998 Ground Survey; island NE center; X143; 10 mi NE of Bassano; small island S of #3

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/15 Ground Check: Yes

Species: Ring-billed Gull Nests (Ground Survey): 47 Nests (Aerial Survey): active large Adults: 150

Historical Data (entire Crawling Valley Reservoir):

- see after Crawling Valley Reservoir 7

Location: Crawling Valley Reservoir 5 =Barkenhouse Lake Map: 821/16 Legal: E13-22-18-W4 Section E13 TP 22 RGE 18 MER W4 UTME: 403679 UTMN: 5636349

Description: high water level; forb and low willow island; late fledgling stage Notes: 1998 Ground Survey; island NE center; X143; 10 mi NE of Bassano; small island SW of #4

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/15 Ground Check: Yes

Species: Ring-billed Gull Nests (Ground Survey): 50 Nests (Aerial Survey): active large Adults: 150

Historical Data (entire Crawling Valley Reservoir):

- see after Crawling Valley Reservoir 7

Location: Crawling Valley Reservoir 6 =Barkenhouse Lake Map: 821/16 Legal: E13-22-18-W4 Section E13 TP 22 RGE 18 MER W4 UTME: 403737 UTMN: 5636244

Description: high water level; forb covered and low willow ringed island; egg stage
 Notes: 1998 Ground Survey; island NE center; X143; 10 mi NE of Bassano; bigger island at south end of group of islands

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/15 Ground Check: Yes

Species: Ring-billed Gull Nests (Ground Survey): 35 Nests (Aerial Survey): active large Adults: 100

Historical Data (entire Crawling Valley Reservoir):

- see after Crawling Valley Reservoir 7

Location: Crawling Valley Reservoir 7 =Barkenhouse Lake Map: 821/16 Legal: SE6-23-17-W4 Section SE6 TP 23 RGE 17 MER W4 UTME: 404600 UTMN: 5642000

Description: high water; low willow and grass island; late fledgling stage; observed from shore **Notes:** 1998 Ground Survey; 2 tiny islands in NW part

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/18 Ground Check: Yes

Species: American White Pelican Adults: 6

Species: California Gull Nests (Ground Survey): 40 Adults: 40 Species: Common Tern Adults: 1

Species: Double-crested Cormorant Adults: 1; no nesting evidence

Historical Data (entire Crawling Valley Reservoir):

California and Ring-billed Gulls

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Barkenhouse Lake	NW30-22-17-W4	colony	1979	Brechtel, NRS Edmonton (1998);
				island NE center (?different location
				than SE6-23-17-W4)
		3 nests	1982	BSOD (1998); California Gulls

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Barkenhouse Lake	31-22-17-W4	active	1982	Ealey (1986); Spare Tire Island
				(?different than SE6-23-17-W4)
Barkenhouse Lake	NW30-22-17-W4	0 nests	1976	Brechtel (1981); Ealey (1986); Dead
				Tree Island
		8 nests	1977	Brechtel (1981)
		18 nests	1978	Brechtel (1981)
		23 nests	1979	Brechtel (1981)
		46 nests	1980	Brechtel (1981)
		84 nests	1982	BSOD (1998)
		65 nests	1989	BSOD (1998)
		active	1990	Brechtel, NRS Edmonton (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Barkenhouse Lake	NW30-22-17-W4	colony	1979	Brechtel, NRS Edmonton (1998); island NE center (different location than those above)

Location: Crimson Lake PP. Map: 83B/6 Legal: SE27-40-8-W5 Section SE27 TP 40 RGE 8 MER W5 UTME: 631300 UTMN: 5814514

Description: normal water level; pine island/peninsula; 1/2-2/3 grown nestlings; surveyed from E shore Notes: 1998 Ground Survey; island in small lake NW of Crimson Lake; XH36

Observers (Ground Survey): Cliff Wallis **Ground Survey Date:** 1998/06/20 **Ground Check:** Yes

Species: Great Blue Heron

Nests (Ground Survey): 25 Nests (Aerial Survey): 25 nests Adults: 15

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Crimson Lake P.P.	SW27-40-8-W5	25 nests	1989	island in small lake NW of Crimson Lake
				(Bruns 1998)

Location: Driedmeat Creek Map: 83A/15 Legal: SW8-45-19-W4 Section SW8 TP 45 RGE 19 MER W4 UTME: 383500 UTMN: 5857800

Description: aspen on slope on north side of inlet/creek Notes: 1998 Aerial Survey; BSOD (1998) 359-360--creek near lake, 8 miles SE of Camrose

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): <15 nests, active

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Driedmeat Creek	SW8-45-19-W4	10 nests	1986	BSOD (1998) files
		10 nests	1987	BSOD (1998) files
		16 nests	1996	Red Deer NRS (1998); winter survey

Location: Erickson Lake Map: 83J/10 Legal: 36-63-6-W5 Section 36 TP 63 RGE 6 MER W5 UTME: 644000 UTMN: 6041100

Description: normal water level; no access (water choked with lilies etc.); ground count from N shore incomplete; black spruce-birch island; 3/4 grown nestlings
 Notes: 1998 Ground Survey; XH 46; 11 mi N of Ft. Assiniboine

Observers (Ground Survey): Cliff Wallis Ground Survey Date: 1998/07/02 Ground Check: Yes

Species: Great Blue Heron Nests (Ground Survey): 11 nests Nests (Aerial Survey): 30 nests Adults: 5

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Erickson Lake	36-63-6-W5	13 nests	1977	Brechtel (1981)
		14 nests	1978	Brechtel (1981)
		9 nests	1979	Brechtel (1981)
		14 nests	1980	Brechtel (1981)

Location: Ferguson Lake Map: 83M/7 Legal: 25-72-6-W6 Section 25 TP 72 RGE 6 MER W6 UTME: 385000 UTMN: 6126000

Description: small islands in marsh Notes: 1998 Aerial Survey

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31, 1998 Ground Check: No

Species: California Gull Nests (Aerial Survey): part of 200 nests

Species: Double-crested Cormorant Nests (Aerial Survey): 60 nests

Species: Ring-billed Gull Nests (Aerial Survey): part of 200 nests

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Ferguson Lake	25-72-6-W6	500 birds	1983	Ealey (1986)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Ferguson Lake	25-72-6-W6	1000 adults at colony	1983	Ealey (1986); Poston et al (1990)

Location: Fincastle Lake 1 Map: 72E/13 Legal: N16-10-15-W4 Section N16 TP 10 RGE 15 MER W4 UTME: 429650 UTMN: 5519554

Description: high water; shrub with 3 tree patches, island; nestling stage; done from shore **Notes:** 1998 Ground Survey; island, 8 mi E of Taber; XH48; small island close to S central side

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/19 Ground Check: Yes

Species: American White Pelican Adults: 2

Species: Common Tern Adults: 40

Species: Franklin's Gull Adults: 100

Species: Great Blue Heron Nests (Ground Survey): 12 Nests (Aerial Survey): 12 nests Adults: 1

Species: Western Grebe Adults: 5

Historical Data:

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Fincastle Lake	16-10-15-W4	18 adults	1996	Sherrington (1996a)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Fincastle Lake	16-10-15-W4	7-11 nests	1995	PNRS (1998)
		10 nests	1996	PNRS (1998)

Location: Fincastle Lake 2 Map: 72E/13 Legal: NW15-10-15-W4 Section NW15 TP 10 RGE 15 MER W4 UTME: 430400 UTMN: 5519950

Description: high water; grass with bare patches, island; nestling stage; done from shore Notes: 1998 Ground Survey; Taber area; X164; 500 m NW 1

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/19 Ground Check: Yes

Species: Double-crested Cormorant Nests (Ground Survey): 6 Nests (Aerial Survey): 6 nests Adults: 4

Historical Data:

- none; new site

Location: Fort Island Map: 73E/14 Legal: 17-55-8-W4 Section 17 TP 55 RGE 8 MER W4 UTME: 490300 UTMN: 5956000

Description: poplars at east end of island Notes: 1998 Aerial Survey; Map 73E/14; XH 49; N. Saskatchewan R 7 mi NNE of Myrnam

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 4 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Fort Island	17-55-8-W4	20 nests	1989	St. Paul NRS (1998)
		6 nests	1991	St. Paul NRS (1998)

Location: Frenchman Lake Map: 73L/11 Legal: E16-64-10-W4 Section E16 TP 64 RGE 10 MER W4 UTME: 471365 UTMN: 6043043 Description: normal water, spruce in spruce-poplar woods; nestling stage; count lower than actual by 10-15%(nests in spruce are hard to see); back from shore

Notes: 1998 Ground Survey; Map 73L/11; XH50; Lauretta Island; 4 mi NNE of Helina

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/05 **Ground Check:** Yes

Species: Black Tern Adults: 2

Species: Forster's Tern Adults: 12

Species: Franklin's Gull Adults: 10

Species: Great Blue Heron Nests (Ground Survey): 30 nests Nests (Aerial Survey): 50 nests Adults: 40

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Frenchman Lake	E16-64-10-W4	7 nests	1967	Vermeer (1969b); Brechtel (1981)
		45 nests	1976	St. Paul NRS (1998); Brechtel (1981)
		20 nests	1977	St. Paul NRS (1998); Brechtel (1981)
		26 nests	1978	St. Paul NRS (1998); Brechtel (1981)
		20 nests	1979	St. Paul NRS (1998); Brechtel (1981)
		50 nests	1980	St. Paul NRS (1998); Brechtel (1981)
		26 nests	1981	St. Paul NRS (1998); Brechtel (1981)
		45 nests	1983	St. Paul NRS (1998)
		46 nests	1985	St. Paul NRS (1998)
		47 nests	1988	St. Paul NRS (1998)
		48 nests	1989	St. Paul NRS (1998)
		36 nests	1992	St. Paul NRS (1998)
		39 nests	1993	St. Paul NRS (1998)

Location: Frog Lake 1 Map: 73E/16 Legal: 26-57-3-W4 Section 26 TP 57 RGE 3 MER W4 UTME: 543102 UTMN: 5978760

Description: low water; gravel sand shore, rest is forb grass + 24 small willow; egg stage Notes: 1998 Ground Survey; Map 73E/16, new location at north end; 2 islands: NE most

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/06 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 120 Nests (Aerial Survey): part of 750 nests Adults: 150

Species: Double-crested Cormorant Nests (Ground Survey): 110 Adults: 200

Species: Herring Gull Nests (Ground Survey): 60 Nests (Aerial Survey): part of 750 nests Adults: 100

Species: Ring-billed Gull Nests (Ground Survey): 2 Nests (Aerial Survey): part of 750 nests Adults: 1

Historical Data:

- see Frog Lake 2

Location: Frog Lake 2 Map: 73E/16 Legal: 26-57-3-W4 Section 26 TP 57 RGE 3 MER W4 UTME: 543367 UTMN: 5978337

Description: low water; bare rocky island; early nestling stage Notes: 1998 Ground Survey; Map 73E/16, new location at north end; 2 islands; SE most

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/06 Ground Check: Yes

Species: American White Pelican Adults: 12

Species: Common Tern Adults: 5

Species: Double-crested Cormorant Nests (Ground Survey): 1035 Adults: 300

Historical Data (whole lake):

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Frog Lake	2-57-3-W4	1500 nests	1981	St. Paul NRS (1998); different than 1998
		150 nests	1987	St. Paul NRS (1998)
		200 nests	1990	St. Paul NRS (1998)
		300 nests	1991	St. Paul NRS (1998)
		0 nests	1992	St. Paul NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Frog Lake	2 or NW1-57-3-W4	2 nests	1967	Vermeer (1969a); different than 1998
		92 nests	1976	St. Paul NRS (1998)
		152 nests	1977	St. Paul NRS (1998)
		212 nests	1978	St. Paul NRS (1998)
		277 nests	1979	St. Paul NRS (1998)
		285 nests	1980	St. Paul NRS (1998)
		650 nests	1984	St. Paul NRS (1998)
		800 nests	1985	St. Paul NRS (1998)
		2000 nests	1987	St. Paul NRS (1998)
		1125 nests	1990	St. Paul NRS (1998)
		1200 nests	1991	St. Paul NRS (1998)
		0 nests	1992	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES	
Frog Lake	1-57-3-W4	200 nests	1990	St. Paul NRS (1998); Cormorant island	
				(different than 1998)	
		300 nests	1991	St. Paul NRS (1998)	
		0 nests	1992	St. Paul NRS (1998)	
Frog Lake	near 1-57-3-W4	major colony	1977	St. Paul NRS (1998); islands near	
				Cormorant island (different than 1998)	

Location: Frog Lake 3 Map: 73E/16 Legal: 26-57-3-W4 Section 26 TP 57 RGE 3 MER W4 UTME: 542726 UTMN: 5978991

Description: open birch-spruce woods; nestling stage Notes: 1998 Ground Survey; Map 73E/16; XH51

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/06 Ground Check: Yes

Species: Great Blue Heron Nests (Ground Survey): 56 nests Nests (Aerial Survey): 50+ nests Adults: 40

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Frog Lake	27-57-3-W4	45 nests	1967	Brechtel (1981); Vermeer (1969b)
		100-120 nests	1978	Brechtel (1981); St. Paul NRS (1998)
		100-200 nests	1979	Brechtel (1981); St. Paul NRS (1998)
		30 nests	1980	Brechtel (1981); St. Paul NRS (1998)
		100 nests	1981	Brechtel (1981); St. Paul NRS (1998)
		50 nests	1990	St. Paul NRS (1998)
		surveyed (no data)	1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Location: Gambling Lake Map: 83H/7 Legal: 20-50-20-W4 Section 20 TP 50 RGE 20 MER W4 UTME: 374750 UTMN: 5910200

Description: wooded island in west part of lake Notes: 1998 Aerial Survey; Map 83H/7; XH52; 9 mi SW of Tofield

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): <10 active nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Gambling Lake	20-50-20-W4	surveyed (no data)	1994	St. Paul NRS (1998)

Location: Gardiner Lake (North) Map: 84H Legal: 99-16-W4 Section TP 99 RGE 16 MER W4

Description: none provided Notes: Fish and Wildlife 1998 Aerial Survey; Map 84 H; 3 mi NE of Namur Lake; X169

Observers (Ground Survey): John Martin Ground Survey Date: 1998/06/09 Ground Check: Alberta Fish and Wildlife

Species: American White Pelican Nests (Aerial Survey): no confirmation of nesting Adults: 60 on lake

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Gardiner Lake (North)	x-98-16-W4	24 nests	1975	Ealey (1986)

Location: Gordon Lake (Irma Island) Map: 74D Legal: 87-4-W4 Section TP 87 RGE 4 MER W4

Description: Irma Island Notes: Fish and Wildlife 1998 Aerial Survey; possible nesting, no ground survey

Observers (Aerial Survey): John Martin, Alberta Fish and Wildlife Aerial Survey Date: 1998/06/09 Ground Check: No

Species: American White Pelican Nests (Aerial Survey): no confirmation of nesting Adults: 50 on island

Species: Double-crested Cormorant Nests (Aerial Survey): no confirmation of nesting Adults: 30 on island

Historical Data:

- no historical records of colonial nesting birds

Location: Grantham Map: 72L/4 Legal: S25-13-15-W4 Section S25 TP 13 RGE 15 MER W4 UTME: 433700 UTMN: 5550900

Description: very small islands in middle of marsh at north end Notes: 1998 Aerial Survey

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Double-crested Cormorant Nests (Aerial Survey): <10 nests (apparently nesting, not confirmed)

Historical Data:

- new survey site

Location: Grassy Lake 1 Map: 72E/13 Legal: 9-10-12-W4 Section 9 TP 10 RGE 12 MER W4 UTME: 458901 UTMN: 5517414

Description: normal water level; rocky-forb island Notes: 1998 Ground Survey; W of 2 islands, tiny

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/19 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 0; no nests found despite apparent nesting from aerial survey Nests (Aerial Survey): 8 nests Adults: 8

Species: California Gull Adults: 1

Species: Common Tern Nests (Ground Survey): 15 Adults: 15

Species: Double-crested Cormorant Nests (Ground Survey): 14 Nests (Aerial Survey): 15 nests Adults: 18

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Grassy Lake		less than 10 nests	1990	Federation of Alberta Naturalists (1998);
				whole lake
		11-50 nests (BBA	1991	Federation of Alberta Naturalists (1998);
		range; not exact)		whole lake

Location: Grassy Lake 2 Map: 72E/13 Legal: E34-9-12-W4 Section E3 TP 9 RGE 12 MER W4 UTME: 460782 UTMN: 5513464

Description: normal water level; weed-forb island; egg stage **Notes:** 1998 Ground Survey; SE and largest of 2 islands

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/19 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 2 Adults: 5

Species: California Gull Nests (Ground Survey): 1548 Nests (Aerial Survey): 2000-3000 nests Adults: 2000

Species: Common Tern Nests (Ground Survey): 40 Adults: 40

Species: Double-crested Cormorant Nests (Ground Survey): 78 Nests (Aerial Survey): 100+ nests Adults: 30

Species: Ring-billed Gull Nests (Ground Survey): 3726 Nests (Aerial Survey): 2000-3000 nests Adults: 3000

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Grassy Lake		less than 10 nests	1990	Federation of Alberta Naturalists (1998); whole lake
		11-50 nests (BBA	1991	Federation of Alberta Naturalists (1998); whole lake
		range; not exact)		

Location: Hastings Lake Map: 83H/7 Legal: 18-51-20-W4 Section 18 TP 51 RGE 20 MER W4 UTME: 370570 UTMN: 5919319

 Description: low water; aspen with dirt fringe; tree nests; egg stage
 Notes: 1998 Ground Survey; X174; 8 mi E of Cooking Lake town; Double-crested Cormorant and Great Blue Heron tree nesting on north island; no colony at 370541 5919194 (S most)

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/08 **Ground Check:** Yes

Species: American White Pelican

Adults: 150 on ground survey; 620 on Elk Island National Park aerial survey

Notes: 1998 Ground Survey; 1998 Elk Island National Park Aerial Survey; 8 mi E of Cooking Lake town, S most island, not nesting; adult count has ranged from 2 in 1995 to 470 and 620 in 1997 and 1998 respectively

Species: Black Tern Adults: 1

Species: Double-crested Cormorant Nests (Ground Survey): 65 Nests (Aerial Survey): active Adults: 70

Species: Franklin's Gull Adults: 120

Species: Great Blue Heron Nests (Ground Survey): 9 Adults: 5

Species: Western Grebe Adults: 25

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Hastings Lake	18-51-20-W4	10 nests	1989	St. Paul NRS (1998); Edmonton NRS (1998)
		0 nests	1990, 1992	St. Paul NRS (1998)
		50 nests?	1997 (100 unhatched eggs found)	Edmonton NRS (1998)

Location: Heart Lake Map: 73M/5

Legal: 9-70-10-W4 Section TP RGE MER LONG: 111.4739 = 111° 28' 24" LAT: 54.0442 = 54° 2' 36"

Description: island in NE bay Notes: Fish and Wildlife 1998 Aerial Survey; Map 73M/5

Observers (Aerial Survey): John Martin Ground Survey Date: 1998/07/09 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 40-50 active nests

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Heart Lake	8-70-10-W4	old nests found	1996	St. Paul NRS (1998); different than 1998

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Heart Lake	8-70-10-W4	30 nests	1990	St. Paul NRS (1998); mainland N end;
				different than 1998
		33 nests	1992	St. Paul NRS (1998)

Location: Hubert Lake Map: 83J/9 Legal: NW14-64-2-W5 Section NW14 TP 64 RGE 2 MER W5 UTME: 681500 UTMN: 6047000

Description: spruce island at southwest corner of lake Notes: 1998 Aerial Survey; Map 83J/9; XH57; Bald Eagle nest at this lake

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 3 active nests in 30 nests found

Historical Data:

Great Blue Heron

- 50 active nests in 1990 (Westworth and Associates 1990)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Hubert Lake	NW14-64-2-W5	15 nests	1977	St. Paul NRS (1998); Brechtel (1981)

24 nests	1978	St. Paul NRS (1998); Brechtel (1981)
26 nests	1979	St. Paul NRS (1998); Brechtel (1981)
30 nests	1980	St. Paul NRS (1998); Brechtel (1981)
35 nests	1990	St. Paul NRS (1998)
26 nests	1992	St. Paul NRS (1998)

Location: Irricana (Salt) Lake Map: 82P/5 Legal: NE11-27-26-W4 Section NE11 TP 27 RGE 26 MER W4 UTME: 322037 UTMN: 5685740

 Description: normal water level; grassy peninsula; no sign of nesting
 Notes: 1998 Ground Survey; Cormorant/Gull colony; X180; 4mi SE of Irricana; has been called Craigdhu Reservoir in past

Observers (Ground Survey): Cleve Wershler, Ray Wershler Ground Survey Date: 1998/05/30 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 0 Nests (Aerial Survey): active (but not confirmed on ground survey) Adults: 90

Species: Common Tern Adults: 3

Species: Double-crested Cormorant Nests (Ground Survey): 0 Nests (Aerial Survey): not found Adults: 110

Species: Forster's Tern Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 0 Nests (Aerial Survey): active (but not confirmed on ground survey) Adults: 50

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Irricana Lake	NE11-27-26-W4	1000-3000 nests	1968	Cormorant/Gull colony; Vermeer (1970a)
		1205 nests	1976	Brechtel, Edmonton NRS (1998); Weseloh (1978)
		colony	1977	Brechtel, Edmonton NRS (1998)
		colony	1984	Brechtel, Edmonton NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Irricana Lake	NE11-27-26-W4	0 nests	1967, 1970-1973	Brechtel (1981)
		12 nests	1974	Brechtel (1981)
		14 nests	1976	Brechtel (1981)
		15 nests	1977	Brechtel (1981)
		18 nests	1978	Brechtel (1981)
		93 nests	1980	Brechtel (1981)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Irricana Lake	NE11-27-26-W4	1000 - 3000 nests	1968	Vermeer (1970a); Cormorant/Gull colony
		4812 nests	1976	Brechtel, Edmonton NRS (1998); Weseloh
				(1978)
		colony	1977	Brechtel, Edmonton NRS (1998)
		colony	1984	Brechtel, Edmonton NRS (1998)

Location: Island Lake Map: 83I/13 Legal: NW30-67-23-W4 Section NW30 TP 67 RGE 23 MER W4 UTME: 338570 UTMN: 6078550

Description: normal water level; white spruce-poplar, some birch island; nests mainly in spruce; late nestling stage **Notes:** 1998 Ground Survey; Map 83I/13; XH 59; 10 mi NW of Athabasca

Observers (Ground Survey): Cliff Wallis Ground Survey Date: 1998/07/02 Ground Check: Yes

Species: Black Tern Adults: 2

Species: Great Blue Heron Nests (Ground Survey): 38 Nests (Aerial Survey): 20 nests Adults: 17

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Island Lake	NE25-67-24-W4	10 nests	1965	St. Paul NRS (1998); Brechtel (1981)
		1 nest	1967	Vermeer (1969b); Brechtel (1981)
		15 nests	1977	St. Paul NRS (1998); Brechtel (1981)
		20 nests	1978	St. Paul NRS (1998); Brechtel (1981)
		26 nests	1979	St. Paul NRS (1998); Brechtel (1981)
		50 nests	1980	St. Paul NRS (1998); Brechtel (1981)

18 nests	1981	St. Paul NRS (1998); Brechtel (1981)
35 nests	1983	St. Paul NRS (1998)
24 nests	1985	St. Paul NRS (1998)
28 nests	1986	St. Paul NRS (1998)
25 nests	1990	St. Paul NRS (1998)
35 nests	1993	St. Paul NRS (1998)

Location: Isle Lake Map: 83G/10 Legal: NE21-53-6-W5 Section NE21 TP 53 RGE 6 MER W5 UTME: 644200 UTMN: 5940400

Description: wooded south shore of lake at extreme west end Notes: 1998 Aerial Survey; XH61

Observers (Aerial Survey): Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31, 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 25

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Isle Lake	4-54-5-W5	5 nests	1971	St. Paul NRS (1998)
		extinct	post 1971	St. Paul NRS (1998)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Isle Lake	4-54-5-W5	0 nests	1993	St. Paul NRS (1998)
Isle Lake	21-53-6-W5	22 nests	1993	St. Paul NRS (1998); above Isle Lake
				may have moved to this site

Location: Joseph Lake Map: 83H/6 Legal: SE12-50-22-W4 Section SE12 TP 50 RGE 22 MER W4 UTME: 361309 UTMN: 5906956

Description: normal water level; grass-forb island, some rocky-sandy areas; half egg, half nestling stage Notes: 1998 Ground Survey and 1998 Elk Island National Park aerial survey; Map 83H/6; X182; 3 mi NE of New Sarepta; west-central side

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1996/06/09 Ground Check: Yes Species: American White Pelican
Nests (Ground Survey): 480
Nests (Aerial Survey): active
Adults: 400 (ground survey); 454 (+/- 75) adults counted in Elk Island National Park aerial survey
Notes: 1998 Ground Survey; 1998 Elk Island National Park Aerial Survey; adult count has ranged from 80 in 1994 to 454 in 1998

Species: California Gull Nests (Ground Survey): 1500 Nests (Aerial Survey): active Adults: 1000

Species: Double-crested Cormorant Nests (Ground Survey): 390 Nests (Aerial Survey): active Adults: 80

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Joseph Lake	12-50-22-W4	active	1995	Edmonton NRS (1998); St. Paul NRS (1998)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Joseph Lake	12-50-22-W4	500-1000 nests	1968	Brechtel, NRS Edmonton (1998); Vermeer
				(1970a); with Cormorants
		239 nests	1977	Brechtel, NRS Edmonton (1998); Weseloh (1978)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Joseph Lake		218 nests	1991	St. Paul NRS (1998)
continued		450 nests	1992	St. Paul NRS (1998)
		500 nests	1993	St. Paul NRS (1998)
		surveyed	1995	St. Paul NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Joseph Lake	12-50-22-W4	85 nests	1991	St. Paul NRS (1998)
		142 nests	1992	St. Paul NRS (1998)
		100 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1995	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Joseph Lake	12-50-22-W4	2 adults	1993	Edmonton NRS (1998); with Cormorants

Location: Kerr Lake Map: 83I/9 Legal: 9-64-14-W4 Section 9 TP 64 RGE 14 MER W4 UTME: 430800 UTMN: 6041450

Description: normal water level; shrub cover with dead spruce spars on SE end-burnt last year; 90 tree, 90 ground nests; nestling stage
 Notes: 1998 Ground Survey; Map 83I/9; X184=XH65; 15 mi S of Lac La Biche

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/05 Ground Check: Yes

Species: Black Tern Adults: 25

Species: Double-crested Cormorant Nests (Ground Survey): 180 Nests (Aerial Survey): 25 nests Adults: 100

Species: Great Blue Heron Nests (Ground Survey): 12 Nests (Aerial Survey): not found Adults: 10

Species: Gull sp. (white-headed) Nests (Ground Survey): 2 Adults: 2

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Kerr Lake	9-64-14-W4	98 nests	1991	St. Paul NRS (1998)
		77 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Kerr Lake	9-64-14-W4	15 nests	1978	Brechtel (1981); St. Paul NRS (1998)
		51 nests	1979	Brechtel (1981); St. Paul NRS (1998)
		51 nests	1981	Brechtel (1981); St. Paul NRS (1998)
		55 nests	1985	St. Paul NRS (1998)
		55 nests	1988	St. Paul NRS (1998)
		12 nests	1991	St. Paul NRS (1998)
		11 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Location: Kitsim Reservoir 1 Map: 821/8 Legal: NE19-17-16-W4 Section NE19 TP 17 RGE 16 MER W4 UTME: 425392 UTMN: 5589120

- Description: high water; forb covered, some bare spots, 3 low willow patches; island has potential to become mid size colony; egg stage
- Notes: 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; 1 of 2 small islands E-central side of lake; 20-30 m from #2

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/11 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 3 Nests (Aerial Survey): active small Adults: 10

Historical Data:

- see Kitsim Reservoir 7

Location: Kitsim Reservoir 2 Map: 82I/8 Legal: NE19-17-16-W4 Section NE19 TP 17 RGE 16 MER W4 UTME: 425417 UTMN: 5588761

Description: high water; forb covered, some bare spots, 3 low willow patches; half eggs, half late fledgling stage Notes: 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; 2 of 2 small islands E-central side of lake; 20-30 m from #1

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/11 Ground Check: Yes

Species: Ring-billed Gull Nests (Ground Survey): 326 Nests (Aerial Survey): active small Adults: 350

Species: California Gull Nests (Ground Survey): 5 Nests (Aerial Survey): active small Adults: 30

Historical Data:

- see Kitsim Reservoir 7

Location: Kitsim Reservoir 3 Map: 82I/8 Legal: SE24-17-16-W4 Section SE24 TP 17 RGE 16 MER W4 UTME: 424271 UTMN: 5588594

Description: high water; half bare, half taller forbs; late fledgling stage Notes: 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; SE end of group of islands in centre

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/11 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 178 Nests (Aerial Survey): active small Adults: 1050

Species: Ring-billed Gull Nests (Ground Survey): 118 Nests (Aerial Survey): active small Adults: 650

Historical Data:

- see Kitsim Reservoir 7

Location: Kitsim Reservoir 4 Map: 821/8 Legal: SE24-17-16-W4 Section SE24 TP 17 RGE 16 MER W4 UTME: 423554 UTMN: 5588439

Description: high water; mostly bare, patches of forbs, few low willow patches; late fledgling stage
Notes: 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; photos 34-37; S most of 2 large islands of group in centre

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/11 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 299 Nests (Aerial Survey): active large Adults: 500

Species: Common Tern Adults: 6

Species: Double-crested Cormorant Nests (Ground Survey): 217 Adults: 100

Species: Ring-billed Gull Nests (Ground Survey): 897 Nests (Aerial Survey): active large Adults: 1500

Historical Data:

- see Kitsim Reservoir 7

Location: Kitsim Reservoir 5 Map: 821/8 Legal: SW24-17-16-W4 Section SW24 TP 17 RGE 16 MER W4 UTME: 423503 UTMN: 5588590

Description: high water; half bare, half weeds, 1 small low willow patch; late fledgling stage **Notes:** 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; tiny island between 2 large islands in group of islands in centre

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/11 **Ground Check:** Yes Species: California Gull Nests (Ground Survey): 95 Nests (Aerial Survey): active small Adults: 50

Historical Data:

- see Kitsim Reservoir 7

Location: Kitsim Reservoir 6 Map: 82I/8 Legal: SW24-17-16-W4 Section SW24 TP 17 RGE 16 MER W4 UTME: 423504 UTMN: 5588691

Description: high water; mostly bare, patches of forbs, few low willow patches; late fledgling stage Notes: 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; N most of 2 large islands of group in centre

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/11 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 20 Nests (Aerial Survey): active large Adults: 50

Species: Ring-billed Gull Nests (Ground Survey): 1600 Nests (Aerial Survey): active large Adults: 4000

Historical Data:

- see Kitsim Reservoir 7

Location: Kitsim Reservoir 7 Map: 821/8 Legal: SW24-17-16-W4 Section SW24 TP 17 RGE 16 MER W4 UTME: 423300 UTMN: 5588600

Description: high water; mostly bare, late fledgling stage; counted from water Notes: 1998 Ground Survey; Brooks area; 7 mi E of Bow City; X185; N most of 2 large islands of group in centre

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/11 Ground Check: Yes

Species: California Gull

Nests (Ground Survey): 10 Adults: 25

Species: Double-crested Cormorant Nests (Ground Survey): 30 Adults: 40

Historical Data (whole reservoir):

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Kitsim Reservoir		1 adult	1997	Sherrington (1997b); May 22

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Kitsim Reservoir		45 nests	1987	PNRS (1998)

Location: Lac Canard Map: 73E/14 Legal: SW36-56-10-W4 Section SW36 TP 56 RGE 10 MER W4 UTME: 476454 UTMN: 5969752

Description: low water; mostly willow with some spruce spars, bare center; nestling stage; ground nests **Notes:** 1998 Ground Survey; Map 73E/14; island W side of narrows; X187=XH28; 7 mi SSE of St. Paul; burned

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/07 **Ground Check:** Yes

Species: American White Pelican Adults: 40

Species: Double-crested Cormorant Nests (Ground Survey): 583 Nests (Aerial Survey): 250 nests Adults: 400

Species: Great Blue Heron Nests (Ground Survey): 4 Nests (Aerial Survey): not found, burned Adults: 2

Species: Ring-billed Gull Adults: 20

Historical Data:

Double-crested Cormorant

Lac Canard S	W36-56-10-W4	0 nests	1972, 1974 and 1975	St. Paul NRS (19)	98)

100 nests	1977 and 1978	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
74 nests	1980	St. Paul NRS (1998)
50 nests	1981	St. Paul NRS (1998)
125 nests	1982	St. Paul NRS (1998)
103 nests	1983	St. Paul NRS (1998)
50 nests	1987	St. Paul NRS (1998)
146 nests	1990	St. Paul NRS (1998)
293 nests	1992	St. Paul NRS (1998)
332 nests	1993	St. Paul NRS (1998)
surveyed (no data)	1997	St. Paul NRS (1998)

Great Blue Heron

Lac Canard (Canard Lake)	SW36-56-10-W4	40 nests	1972	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998); small island W side of narrows
		60 nests	1974	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
		35 nests	1977	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
		20 nests	1978	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
		20 nests	1979	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
		40 nests	1980	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
		20 nests	1981	Brechtel, NRS Edmonton (1998); St. Paul NRS (1998)
		12 nests	1982	St. Paul NRS (1998)
		45 nests	1983	St. Paul NRS (1998)
		12 nests	1987	St. Paul NRS (1998)
		18 nests	1990	St. Paul NRS (1998)
		16 nests	1992	St. Paul NRS (1998)
		19 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Location: Lac la Biche 1 Map: 73L/12 Legal: 36-67-14-W4 Section 36 TP 67 RGE 14 MER W4 UTME: 436530 UTMN: 6077495

Description: normal water level; bare rocky; egg stage
 Notes: 1998 Ground Survey; Map 83I/16; X189; center; N side Sir Winston Churchill PP, south island of 2; 1 island in low water year

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/03 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 1 Nests (Aerial Survey): active Adults: 10

Species: Double-crested Cormorant Nests (Ground Survey): 62 Nests (Aerial Survey): part of 150+ nests Adults: 250

Species: Herring Gull Nests (Ground Survey): 28 Nests (Aerial Survey): active Adults: 60

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac La Biche		active	1919	Farley (1922)
Lac La Biche 1/2	36-67-14-W4	120 nests	1929	Vermeer (1969a)
		8 nests	1962	Sadler & Myres (1976)
		13 nests	1974	St. Paul NRS (1998)
		1100 nests	1987	St. Paul NRS (1998)
		1500 nests	1988	St. Paul NRS (1998)
		600 nests	1989	St. Paul NRS (1998)
		1044 nests	1990	St. Paul NRS (1998)
		900 nests	1991	St. Paul NRS (1998)
		780 nests	1992	St. Paul NRS (1998)
		900 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Location: Lac la Biche 2 Map: 73L/13 Legal: 36-67-14-W4 Section 36 TP 67 RGE 14 MER W4 UTME: 436503 UTMN: 6077581

Description: normal water level; bare rocky

Notes: 1998 Ground Survey; Map 83I/16; X189; center; N side Sir Winston Churchill PP, north island of 2; 1 island in low water year

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/03 Ground Check: Yes

Species: American White Pelican Adults: 12

Species: Double-crested Cormorant Nests (Ground Survey): 350 Nests (Aerial Survey): part of 150+ nests Adults: 250

Species: Herring Gull Nests (Ground Survey): 22 Nests (Aerial Survey): active Adults: 10

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac la Biche		500-1000 nests	1968	Vermeer (1970a); whole lake
Lac la Biche 1/2	36-67-14-W4	85 nests	1990	St. Paul NRS (1998)
		90 nests	1991	St. Paul NRS (1998)
		150 nests	1992	St. Paul NRS (1998)
		246 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1995	St. Paul NRS (1998)

Location: Lac la Biche 3 Map: 83I/16 Legal: 4-68-14-W4 Section TP RGE MER UTME: 430401 UTMN: 6079297

Description: normal water level; bare rocky S in discrete grassy spot back from shore, egg stage Notes: 1998 Ground Survey; Map 83I/16; X190 (located at X188); smaller island NW of Black Fox Island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/03 Ground Check: Yes Species: American White Pelican Nests (Ground Survey): 0; no nests found despite apparent nesting from aerial survey Nests (Aerial Survey): 40 nests Adults: 30

Species: California Gull Nests (Ground Survey): 145 Nests (Aerial Survey): part of 250+ nests Adults: 100

Species: Double-crested Cormorant Nests (Ground Survey): 1552 Nests (Aerial Survey): 500+ nests Adults: 200

Species: Great Blue Heron Nests (Ground Survey): 25 Adults: 15

Species: Herring Gull Nests (Ground Survey): 7 Nests (Aerial Survey): part of 250+ nests Adults: 100

Species: Ring-billed Gull Nests (Ground Survey): 490 Nests (Aerial Survey): part of 250+ nests Adults: 500

Species: Western Grebe Adults: 3

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac La Biche		active	1919	Farley (1922)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac la Biche		500-1000 nests	1968	Vermeer (1970a); whole lake
Lac la Biche	18-68-14-W4	2000 nests	1981	St. Paul NRS (1998); note
				different location
		surveyed (no data)	1995	St. Paul NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac La Biche		active	1919	Farley (1922)
Lac la Biche	18-68-14-W4	surveyed (no data)	1995	St. Paul NRS (1998); note
				different location

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac La Biche		active	1919	Farley (1922)
Lac la Biche	10-69-14-W4	surveyed (no data)	1991	St. Paul NRS (1998); note
				different location

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac la Biche	4-68-14-W4	surveyed (no data)	1995	St. Paul NRS (1998)

Location: Lac Ste Anne Map: 83G/9 Legal: W15-54-3-W5 Section W15 TP 54 RGE 3 MER W5 UTME: 673643 UTMN: 5952700

Description: normal water level; big rocks, some forbs, *Phalaris & Scirpus*, island **Notes:** 1998 Ground Survey; Map 83G/9,10; new; E end of lake

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/24 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 1 Adults: 0

Species: Black Tern Adults: 2

Species: California Gull Nests (Ground Survey): 400 Nests (Aerial Survey): part of 1000 nests Adults: 500

Species: Common Tern Nests (Ground Survey): 80 Adults: 80

Species: Franklin's Gull Adults: 40

Species: Herring Gull Nests (Ground Survey): 1 Nests (Aerial Survey): part of 1000 nests Adults: 4

Species: Ring-billed Gull Nests (Ground Survey): 450 Nests (Aerial Survey): part of 1000 nests Adults: 600

Species: Western Grebe Adults: 5

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac Ste Anne	x-54-4-W4	500 nests	1991	St. Paul NRS (1998); different than 1998

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lac Ste Anne	x-54-4-W4	500 nests	1991	St. Paul NRS (1998); different than 1998

Location: Lake Newell 1 Map: 72L/5 Legal: NE26-17-15-W4 Section NE26 TP 17 RGE 15 MER W4 UTME: 432091 UTMN: 5591001

Description: colony to the south **Notes:** 1998 Ground Survey; 1 of 2 small islands in NW corner of lake, probably connected in drier periods

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/18 **Ground Check:** Yes

Species: American White Pelican Adults: 35

Species: Caspian Tern Adults: 1

Species: Common Tern Adults: 20

Species: Ring-billed Gull Nests (Ground Survey): 56 Nests (Aerial Survey): active Adults: 250

Historical Data: - see Lake Newell 4

Location: Lake Newell 2 Map: 72L/5 Legal: NE26-17-15-W4 Section NE26 TP 17 RGE 15 MER W4 UTME: 432039

UTMN: 5591187

Description: high water; grass-forb island; late fledgling stage; many dead chicks and flooded areas from recent storms; live chicks > # nests

Notes: 1998 Ground Survey; 2 of 2 small islands in NW corner of lake, probably connected in drier periods

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/18 Ground Check: Yes

Species: Ring-billed Gull Nests (Ground Survey): 44 Nests (Aerial Survey): active Adults: 300

Historical Data: - see Lake Newell 4

Location: Lake Newell 3 - Unnamed Island Map: 72L/5 Legal: NE36-16-15-W4 Section NE36 TP 16 RGE 15 MER W4 UTME: 433695 UTMN: 5582196

Description: high water; weedy island, willows, low trees, grass on S end; late fledgling stage; dead chicks/flooding from storms; extrapolated from 62 X 5 m
 Notes: 1998 Ground Survey; X257, large island, SE corner

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/18 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 50 Nests (Aerial Survey): active Adults: 200

Species: Ring-billed Gull Nests (Ground Survey): 1206 Nests (Aerial Survey): active Adults: 2000

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell 3	NE36-16-15-W4	0 nests	1977	Brechtel (1981)
		55 nests	1978	Brechtel (1981)
		48 nests	1979	Brechtel (1981)
		21 nests	1980	Brechtel (1981)

Location: Lake Newell 4 - Pelican Island Map: 72L/5 Legal: SW2-17-15-W4 Section SW2 TP 17 RGE 15 MER W4 UTME: 431192 UTMN: 5583493

Description: high water; rocky island; egg stage **Notes:** 1998 Ground Survey; island, Cormorant/Gull colony; X195, SW corner

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/18 **Ground Check:** Yes

Species: American White Pelican Nests (Ground Survey): 21 Nests (Aerial Survey): active Adults: 150

Species: California Gull Nests (Ground Survey): 100 Nests (Aerial Survey): 1000 nests Adults: 200

Species: Caspian Tern Nests (Ground Survey): 74 Adults: 80

Species: Double-crested Cormorant Nests (Ground Survey): 1077 Adults: 100

Historical Data:

American White Pelican

- colony established very soon after the reservoir was formed (Randall 1946)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell 4	SW2-17-15-W4	160-170 nests	1945	PNRS (1998); Randall (1946)
		157 nests	1951	Soper (1952)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell 4		20 adults	1963	Lies and Behle (1966)
continued		27 nests	1966	Vermeer (1969a)
		24 nests	1977	Brechtel, NRS Edmonton (1998)
		8 nests	1983	Ealey (1986)
		106 nests	1989	Brechtel, NRS Edmonton (1998)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell	w of Goose Island	150 pairs	1926	Munro (1927)
		active	1945	Randall (1946)
Lake Newell	SW2-17-15-W4	2580 nests	1951	Soper (1952)
		1000 nests	1965	PNRS (1998)

	500-1000 nests	1968	whole lake; Vermeer (1970a);
			Brechtel, NRS Edmonton (1998)
	565 nests	1976	Weseloh (1978); whole lake
	colony	1977	Brechtel, NRS Edmonton (1998)
	colony	1979	BSOD (1998)

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell	x-17-15-W4	less than 10	n.d.	Federation of Alberta Naturalists
		nests		(1998); nest with eggs
		1 adult	1993	Sherrington (1993a); May 16-19
		4 adults	1994	Sherrington (1994a); August 6-9

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell	SW2-17-15-W4	25 pairs	1945	Randall (1945)
		37 nests	1951	Soper (1952); Brechtel (1981)
		31 nests	1957	Brechtel (1981)
		30-50 nests	1964	Brechtel (1981); PNRS (1998)
		60-150 nests	1965	Brechtel (1981)
		100-150 nests	1966	Brechtel (1981)
		148 nests	1967	Brechtel (1981); Vermeer (1969a)
		232 nests	1969	Brechtel (1981)
		444 nests	1971	Brechtel (1981)
		564 nests	1976 -	Brechtel (1981)
		665 nests	1977	Brechtel (1981)
		595 nests	1978	Brechtel (1981)
		723 nests	1979	Brechtel (1981)
		777 nests	1980	Brechtel (1981)
		active	1989	Brechtel, NRS Edmonton (1998)
		300 adults	1995	PNRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell	Goose Island	100 pairs	1926	Munro (1927)
		active	1945	Randall (1945)
Lake Newell	SW2-17-15- W4	1930 nests	1951	Soper (1952)
		3000+ nests	1968	whole lake; Vermeer (1970a); Brechtel, NRS Edmonton (1998)
		6091 nests	1976	Weseloh (1978); whole lake
		5232 nests	1977	Nordstrom (1978); whole lake; major colony to SW of SW2-17-15-W4
		4 colonies	1979	BSOD (1998); 4 islands

Location: Lake Newell 5 Map: 72L/5 Legal: SW2-17-15-W4 Section SW2 TP 17 RGE 15 MER W4 UTME: 431357 UTMN: 5583206

Description: high water; sage/grass with moderate height willow, scattered poplar, island Notes: 1998 Ground Survey: island, big island SE and close to Pelican Island; herons at nestling stage

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/18 Ground Check: Yes

Species: Common Tern Adults: 3

Species: Great Blue Heron Nests (Ground Survey): 15 Adults: 4

Species: Western Grebe Adults: 20

Historical Data:

Great Blue Heron -- apparently new location; all Lake Newell historical data is under Lake Newell 8

Location: Lake Newell 6 - Unnamed Island Map: 72L/5 Legal: SE35-16-15-W4 Section SE35 TP 16 RGE 15 MER W4 **UTME: 432007** UTMN: 5581905

Description: high water; half dirt/low willow, island; late fledgling stage; many dead chicks and flooded areas from recent storms

Notes: 1998 Ground Survey; X258, SW corner, tiny island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/18 Ground Check: Yes

Species: Ring-billed Gull Nests (Ground Survey): 25 Nests (Aerial Survey): active (small) Adults: 80

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell 6	SE35-16-15-W4	0 nests	1978-1979	Brechtel (1981)
		6 nests	1980	Brechtel (1981)

Location: Lake Newell 7 - Unnamed Island Map: 72L/5 Legal: 30-17-15-W4 Section 30 TP 17 RGE 15 MER W4 UTME: 435300 UTMN: 5590300

Description: XH69, small trees on island Notes: 1998 Aerial Survey

Observers (Aerial Survey): Wayne Smith, Cliff Wallis Ground Survey Date: 1998/05/29 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 10+, 2 occupied Adults: 2

Historical Data:

Great Blue Heron -- apparently new location; all Lake Newell historical data is under Lake Newell 8

Location: Lake Newell 8 - Unnamed Island Map: 72L/5 Legal: 30-17-15-W4 Section 30 TP 17 RGE 15 MER W4 UTME: 435200 UTMN: 5590850

Description: north of XH69, small trees on island Notes: 1998 Aerial Survey

Observers (Aerial Survey): Wayne Smith, Cliff Wallis Ground Survey Date: 1998/05/29 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): <10, 1 occupied Adults: 1

Historical Data:

Great Blue Heron -- apparently new location

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lake Newell	NE36-16-15-W4	unoccupied	1979	Brechtel (1981); different location; old
				nests found
		1 nest	1980	Brechtel (1981)
		1 nest	1982	BSOD (1998)
Lake Newell	18-17-14-W4	9 nests	1982	BSOD (1998); different location
Lake Newell	30-17-14-W4	5 nests	1982	BSOD (1998)
Lake Newell		10 + 3 nests	1995	PNRS (1998); no locations given

Location: Langdon Reservoir 1 Map: 82I/13 Legal: SW36-22-27-W4 Section SW36 TP 22 RGE 27 MER W4 UTME: 315277 UTMN: 5642939

Description: high water; grass-forb island; late fledgling; extrapolated from 46 and 67 X 5 m transects Notes: 1998 Ground Survey; NW of 7 islands south

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/29 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 1015 Nests (Aerial Survey): active large Adults: 600

Species: Double-crested Cormorant Adults: 10

Historical Data:

- new survey location

Location: Langdon Reservoir 2 Map: 82I/13 Legal: SW36-22-27-W4 Section SW36 TP 22 RGE 27 MER W4 UTME: 315410 UTMN: 5643080

Description: high water; grass-forb island; late fledgling; extrapolated from 54 X 5 m transect Notes: 1998 Ground Survey; 1 of 7 islands south

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/29 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 513 Nests (Aerial Survey): active large Adults: 600

Historical Data:

- new survey location

Location: Langdon Reservoir 3 Map: 82I/13 Legal: SW36-22-27-W4 Section SW36 TP 22 RGE 27 MER W4 UTME: 315416 UTMN: 5642883

Description: high water; half bare dirt, half grass island; late fledgling; extrapolated from 100 X 5 m transect; chicks > # nests (many washed out)
 Notes: 1998 Ground Survey; 1 of 7 islands south near NE of group

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/29 Ground Check: Yes

Species: American White Pelican Adults: 37

Species: California Gull Nests (Ground Survey): 1494 Nests (Aerial Survey): active large Adults: 1000

Species: Double-crested Cormorant Nests (Ground Survey): 128 Adults: 30

Historical Data:

- new survey location

Location: Langdon Reservoir 4 Map: 82I/13 Legal: SW36-22-27-W4 Section SW36 TP 22 RGE 27 MER W4 UTME: 315417 UTMN: 5642793

Description: high water; half bare dirt, half grass island; late fledgling; extrapolated from 54 X 5 m transect Notes: 1998 Ground Survey; 1 of 7 islands south

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/29 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 269 Adults: 200

Species: Ring-billed Gull Nests (Ground Survey): 943 Adults: 700

Historical Data:

- new survey location

Location: Langdon Reservoir 5 Map: 82I/13 Legal: SW36-22-27-W4 Section SW36 TP 22 RGE 27 MER W4 UTME: 315474 UTMN: 5642513

Description: high water; grass island; late fledgling; extrapolated from 58 X 5 m transect Notes: 1998 Ground Survey; 1 of 7 islands south

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/29 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 218 Adults: 200

Species: Ring-billed Gull Nests (Ground Survey): 544 Adults: 500

Historical Data:

- new survey location

Location: Langdon Reservoir 6 Map: 82I/13 Legal: SW36-22-27-W4 Section SW36 TP 22 RGE 27 MER W4 UTME: 315770 UTMN: 5642560

Description: high water; grass-weed island; late fledgling; parts flooded, lots of washed out nests Notes: 1998 Ground Survey; 1 of 7 islands south

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/29 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 250 Adults: 200

Historical Data:

- new survey location

Location: Little Bow Reservoir 1 Map: 821/2 Legal: NW28-14-20-W4 Section NW28 TP 14 RGE 20 MER W4 UTME: 379935

UTMN: 5562152

Description: normal water level; bare dirt-some forbs, island; late fledgling stage Notes: 1998 Ground Survey; SE most of 5 small islands at north end; X200; 10 mi S of Lomond

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: American White Pelican Nests (Aerial Survey): active Adults: 10

Species: California Gull Nests (Ground Survey): 26 Nests (Aerial Survey): active Adults: 40

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting from aerial survey Nests (Aerial Survey): active Adults: 15

Historical Data:

- see Little Bow Reservoir 4 Location: Little Bow Reservoir 2 Map: 821/2 Legal: NW28-14-20-W4 Section NW28 TP 14 RGE 20 MER W4 UTME: 379780 UTMN: 5562095

Description: normal water level; forb-weed, island; late fledgling stage Notes: 1998 Ground Survey; SW most and larger of 5 small islands at north end; X200; 10 mi S of Lomond

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/21 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 90 Nests (Aerial Survey): active Adults: 30

Species: Ring-billed Gull Nests (Ground Survey): 5 Nests (Aerial Survey): active Adults: 10

Historical Data:

- see Little Bow Reservoir 4

Location: Little Bow Reservoir 3

Map: 821/2 Legal: NW28-14-20-W4 Section NW28 TP 14 RGE 20 MER W4 UTME: 379656 UTMN: 5562381

Description: normal water level; bare dirt-forb, island; late fledgling stage **Notes:** 1998 Ground Survey; tiny, NW most of 5 small islands at north end; X200; 10 mi S of Lomond

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/21 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 37 Nests (Aerial Survey): active Adults: 125

Historical Data:

- see Little Bow Reservoir 4

Location: Little Bow Reservoir 4 Map: 821/2 Legal: NW28-14-20-W4 Section NW28 TP 14 RGE 20 MER W4 UTME: 379769 UTMN: 5562553

Description: normal water level; bare dirt-forb, island; late fledgling stage Notes: 1998 Ground Survey; NE most of 5 small islands at north end; X200; 10 mi S of Lomond

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 42 Nests (Aerial Survey): active Adults: 100

Species: Double-crested Cormorant Nests (Ground Survey): 26 Nests (Aerial Survey): active Adults: 15

Species: Ring-billed Gull Nests (Ground Survey): 42 Nests (Aerial Survey): active Adults: 100

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Little Bow Reservoir	NW28-14-20-W4	colony	1965	PNRS (1998)
		29 nests	1969	PNRS (1998)
		21 nests	1972	PNRS (1998)
		colony	1977	Brechtel, NRS Edmonton (1998);
				island, Cormorant/Gull
		2 colonies	1978	BSOD (1998)
		2 colonies	1979	BSOD (1998); colonies on 2
				islands
		small part of	1980	Ealey (1986)
		100-200 pairs		

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Little Bow Reservoir	NW28-14-20-W4	0 nests	1964	Brechtel (1981)
		4 nests	1965	Brechtel (1981)
		2 nests	1966	Brechtel (1981)
		1 nest	1968	Brechtel (1981)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Little Bow Reservoir		7 nests	1969	Brechtel (1981)
continued		6 nests	1970	Brechtel (1981)
		3-12 nests	1972	Brechtel (1981)
		17 nests	1976	Brechtel (1981)
		25 nests	1977	Brechtel (1981)
		41 nests	1978	Brechtel (1981)
		10 nests	1979	Brechtel (1981)
		13 nests	1980	Brechtel (1981)
		active	1990	Brechtel, NRS Edmonton (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Little Bow Reservoir	NW28-14-20-W4	4 nests	1965	PNRS (1998)
		25 nests	1969	PNRS (1998)
		colony	1977	Brechtel, NRS Edmonton
				(1998); island, Cormorant/Gull
		colony	1978	BSOD (1998)
		2 colonies	1979	BSOD (1998); on 2 islands
		most of 100-200 pairs	1980	Ealey (1986)

Location: Little Fish Lake Map: 82P/8 Legal: NW4-28-16-W4 Section NW4 TP 28 RGE 16 MER W4 UTME: 416067 UTMN: 5691148

Description: low water; bare, rocky island with some forbs; egg stage, apparently deserted Notes: 1998 Ground Survey; east side of lake

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/17 **Ground Check:** Yes

Species: American White Pelican Nests (Ground Survey): 2 Nests (Aerial Survey): active small Adults: 0

Species: California Gull Nests (Ground Survey): 876 Nests (Aerial Survey): active small Adults: 1000

Historical Data:

- new colony locations

Location: Lost Lake Map: 82I/1 Legal: SE7-14-17-W4 Section SE7 TP 14 RGE 17 MER W4 UTME: 406903 UTMN: 5556222

Description: nesting on island with other species **Notes:** 1998 Ground Survey; north centre, small island; near Vauxhall; X201

Observers (Ground Survey): Cleve Wershler, Ray Wershler Ground Survey Date: 1998/05/31 Ground Check: Yes

Species: American White Pelican Adults: 4 Notes: 1998 Ground Survey; north centre

Species: Black Tern Adults: 10 + 5 (north centre)

Species: California Gull Nests (Ground Survey): 0 Nests (Aerial Survey): active; but not confirmed on ground survey Adults: 8

Species: Caspian Tern Nests (Ground Survey): 1 Nests (Aerial Survey): 1+2 pairs Adults: 2+9

Species: Common Tern Nests (Ground Survey): 57 Adults: 110

Species: Double-crested Cormorant Nests (Ground Survey): 22-28 Nests (Aerial Survey): 30+ Species: Forster's Tern Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 1 Nests (Aerial Survey): active Adults: 62

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lost Lake	6-14-17-W4	8 nests	1993	PNRS (1998); island

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lost Lake	6-14-17-W4	2 nests	1991	Koes and Taylor (1991); PNRS (1998); island
		confirmed nesting	1992	Koes and Taylor (1992)
		15 nests, 37 adults	1993	Koes and Taylor (1993); BSOD (1998)
		10 nests, 40 adults	1994	Sherrington (1994b); Lethbridge NRS (1998)
		20 nests, 20-54 adults	1995	Sherrington (1995a); Lethbridge NRS (1998)
		14 adults	1997	Sherrington (1997d)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lost Lake	6-14-17-W4	active	1991	Lethbridge NRS (1998)
		30 nests	1993	PNRS (1998)
		20 nests	1994	PNRS (1998)
		30 nests	1995	PNRS (1998)
		25 nests	1996	PNRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lost Lake	6-14-17-W4	colony	1993	PNRS (1998); island
		10 nests	1994	PNRS (1998)
		20 nests	1995	PNRS (1998)

Location: Lower Therien Lake 1 Map: 73E/14 Legal: S23-57-10-W4 Section S23 TP 57 RGE 10 MER W4 UTME: 475018 UTMN: 5976220

Description: low water; sandy rocky shore, grass-forb covered island; early fledgling stage Notes: 1998 Ground Survey; Map 73E/14; X205; 4 mi SW of St. Paul

Observers (Ground Survey): Wayne Smith, Ray Wershler

Ground Survey Date: 1998/06/07 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 55 Nests (Aerial Survey): active Adults: 130

Species: Black Tern Adults: 50

Species: California Gull Nests (Ground Survey): 600 Adults: 1000

Species: Common Tern Adults: 20

Species: Double-crested Cormorant Nests (Ground Survey): 43 Nests (Aerial Survey): active colony Adults: 100

Species: Ring-billed Gull Nests (Ground Survey): 1200 Adults: 2000

Species: Western Grebe Adults: 1

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lower Therien	23-57-10-W4	100-500 nests	1967	Vermeer (1970a); Ealey (1986)
Lake				
		176 nests	1973	Ealey (1986)
		110 nests	1974	Ealey (1986)
		55 nests	1975	Ealey (1986)
		7 nests	1976	Ealey (1986)
		4 nests	1978	Ealey (1986)
		5 nests	1987	Ealey (1986)
		2000-3000 nests	1990	Ealey (1986)
		2000 nests	1992	Ealey (1986)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lower Therien Lake 1	23-57-10-W4	9 nests	1977	Ealey (1986)
		active	1982	Ealey (1986)

Ring-billed Gull

LOCATION LEGAL # OF NESTS YEAR NOTES	LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
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Lower Therien Lake	23-57-10-W4	500-1000 nests	1967	Vermeer (1970a); Ealey (1986)
		8 nests	1987	Ealey (1986)
		100-200 nests	1990	Ealey (1986)
		2000 nests	1992	Ealey (1986)

Location: Lower Therien Lake 2 Map: 73E/14 Legal: NW2-57-10-W4 Section NW2 TP 57 RGE 10 MER W4 UTME: 474169 UTMN: 5972752

Description: low water; bare dirt center and grass-forb island; nests deserted as is island at extreme south end **Notes:** 1998 Ground Survey; Map 73E/14; X204; 7 mi SW of St. Paul

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/07 **Ground Check:** Yes

Species: Double-crested Cormorant Nests (Ground Survey): 15 Nests (Aerial Survey): 15 nests Adults: 0

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lower Therien Lake 2	2-57-10-W4	2 nests	1967	Vermeer (1970a)
		3 nests	1987	St. Paul NRS (1998)
		active	1988	Federation of Alberta Naturalists
				(1998)
		0 nests	1990, 1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lower Therien Lake 2	2-57-10-W4	20 nests	1964	St. Paul NRS (1998)
		29 nests	1967	Vermeer (1969a)
		57 nests	1972	St. Paul NRS (1998)
		69 nests	1973	St. Paul NRS (1998)
		75 nests	1974	St. Paul NRS (1998)
		71 nests	1975	St. Paul NRS (1998)
		66 nests	1976	St. Paul NRS (1998)
		70 nests	1977	St. Paul NRS (1998)
		56 nests	1978	St. Paul NRS (1998)
		50 nests	1979-1980	St. Paul NRS (1998)
		65 nests	1981	St. Paul NRS (1998)
		113 nests	1982	St. Paul NRS (1998)
		112 nests	1983	St. Paul NRS (1998)
		92 nests	1984	St. Paul NRS (1998)
		140 nests	1985	St. Paul NRS (1998)
		160 nests	1987	St. Paul NRS (1998)
		166 nests	1990	St. Paul NRS (1998)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Lower Therien Lake 2		160 nests	1991	St. Paul NRS (1998)

continued	208 nests	1992	St. Paul NRS (1998)
	surveyed (no	1997	St. Paul NRS (1998)
	data)		

Location: Majeau Lake Map: 83G/16 Legal: SW17-57-3-W5 Section SW17 TP 57 RGE 3 MER W5 UTME: 669730 UTMN: 5977760

Description: normal water level; balsam poplar island with willow and some birch, cattail at edge; late nestling stage

Notes: 1998 Ground Survey; Map 83G/16; north island in east lake; XH77; 4 mi W of Lac La Nonne

Observers (Ground Survey): Cliff Wallis **Ground Survey Date:** 1998/07/02 **Ground Check:** Yes

Species: Double-crested Cormorant Nests (Ground Survey): 49 Nests (Aerial Survey): 20 nests Adults: 26

Species: Great Blue Heron Nests (Ground Survey): 30 Nests (Aerial Survey): 30 nests Adults: 22

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Majeau Lake	SW17-57-3-W5	0 nests	1989	St. Paul NRS (1988); N island in E lake
		1 nest	1991	St. Paul NRS (1988)
		0 nests	1993	St. Paul NRS (1988)
		surveyed (no data)	1994	St. Paul NRS (1988)
		12 nests	1995	St. Paul NRS (1988)
		active	1997	Wollis (1999)

Great Blue Heron

- trees at a former colony were lost to fire (Soper 1939)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Majeau Lake	SW17-57-3-W5	occupied	1965	St. Paul NRS (1988); Brechtel (1981);
				N island in E lake
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Majeau Lake		20 nests	1969	Brechtel (1981); St. Paul NRS (1988)
continued		44 nests	1976	Brechtel (1981); St. Paul NRS (1988)
		30 nests	1977	Brechtel (1981); St. Paul NRS (1988)

54 nests	1978	Brechtel (1981); St. Paul NRS (1988)
60 nests	1979	Brechtel (1981); St. Paul NRS (1988)
45 nests	1980	Brechtel (1981); St. Paul NRS (1988)
47 nests	1983	St. Paul NRS (1988)
50 nests	1988	St. Paul NRS (1988)
25 nests	1989	St. Paul NRS (1988)
44 nests	1991	St. Paul NRS (1988)
38 nests	1993	St. Paul NRS (1988)
23 nests	1995	St. Paul NRS (1988)
active	1997	Wollis (1999)

Location: Medicine Hat Map: 72L/2 Legal: E5-13-5-W4 Section E5 TP 13 RGE 5 MER W4 UTME: 524950 UTMN: 5544525

Description: open cottonwood forest; new location for Medicine Hat; reported by D. Baresco; late nestling stage Notes: Not Surveyed in 1998 Aerial Survey; Map 72L2; N of Police Point, w side of S. Saskatchewan River

Observers (Ground Survey): Wayne Smith, D. Baresco Ground Survey Date: 1998/07/03 Ground Check: Yes

Species: Great Blue Heron Nests (Ground Survey): 24 Adults: 6

Historical Data:

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Medicine Hat	E5-13-5-W4	3	1992	Sherrington (1993b)
		19	1993	Sherrington (1993b)
		8 adults, 4 nests	1995	Sherrington (1995b)
		32	1996	Sherrington (1997c)
		28	1997	Sherrington (1997c)

Location: Meinsinger Lake Map: 82J/8 Legal: NW17-15-2-W5 Section NW17 TP 15 RGE 2 MER W5 UTME: 696150 UTMN: 5571350

Description: aspen woods at S shore of lake; late nestling stage **Notes:** 1998 Aerial Survey; Map 82J/8; XH81; by Chain L PP; photos 1/2

Observers (Ground Survey): Cliff Wallis **Ground Survey Date:** 1998/06/17 **Ground Check:** Yes Species: Great Blue Heron Nests (Ground Survey): 28 Nests (Aerial Survey): 20+ nests Adults: 12

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Meinsinger Lake	17-15-2-W4	66 nests	1985	Ealey (1986)

Location: Milk River Ridge Reservoir 1 Map: 82H/7 Legal: S8-5-19-W4 Section S8 TP 5 RGE 19 MER W4 UTME: 389494 UTMN: 5468829

Description: high water; half bare dirt, half forb-weed, island; late fledgling stage; extrapolated from 100 X 5 m transect

Notes: 1998 Ground Survey; large island at east end

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/22 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 5287 Nests (Aerial Survey): part of 1000+ nests Adults: 5000

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting on aerial survey Nests (Aerial Survey): 80+ nests Adults: 0

Species: Ring-billed Gull Nests (Ground Survey): 7734 Nests (Aerial Survey): part of 1000+ nests Adults: 6000

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Milk River Ridge	S8-5-19-W4	part of 2000 -	1978	Brechtel, NRS Edmonton (1998); large
Reservoir 1		3000 nests		island in E center
		colony	1979	Brechtel, NRS Edmonton (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Milk River Ridge Reservoir 1	S8-5-19-W4	38 nests	1981	Lethbridge NRS (1998) via J. Clark
		10 nests	1989	Lethbridge NRS (1998)
		active	1990	Brechtel, NRS Edmonton (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Milk River Ridge	S8-5-19-W4	part of 2000 -	1978	Brechtel, NRS Edmonton (1998); large
Reservoir 1		3000 nests		island in E center
		colony	1979	Brechtel, NRS Edmonton (1998)

Location: Milk River Ridge Reservoir 2 Map: 82H/7 Legal: SW14-5-20-W4 Section SW14 TP 5 RGE 20 MER W4 UTME: 383683 UTMN: 5470975

Description: high water; grass with big willow patches, island; late fledgling stage **Notes:** 1998 Ground Survey; small island west of N spillway; 5 mi SE of Raymond; X210

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/22 **Ground Check:** Yes

Species: American White Pelican Adults: 30

Species: California Gull Nests (Ground Survey): 133 Nests (Aerial Survey): part of 100+ nests Adults: 100

Species: Double-crested Cormorant Adults: 1

Species: Franklin's Gull Adults: 10

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Milk River Ridge	SW14-5-20-W4	part of 200-400 nests	1978	Brechtel, NRS Edmonton (1998);
Reservoir 2				small island west of N spillway
		colony	1979	Brechtel, NRS Edmonton (1998)
		80 nests	1988	PNRS (1988)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Milk River Ridge	SW14-5-20-W4	part of 200-400 nests	1978	Brechtel, NRS Edmonton (1998);
Reservoir 2				small island west of N spillway
		colony	1979	Brechtel, NRS Edmonton (1998)

Location: Miquelon Lake 1 Map: 83H/7 Legal: NE30-49-20-W4 Section NE30 TP 49 RGE 20 MER W4 UTME: 372865 UTMN: 5902685

Description: low water; rocky, partly forb covered island; half egg, half nestling stage Notes: 1998 Ground Survey; X211; E of 2 islands, very small, near centre of NE bay

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/09 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 246 Nests (Aerial Survey): active small Adults: 200

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake	NE30-49-20-W4	470 nests	1964	Vermeer (1970a); Island A
		87 nests	1965	Vermeer (1970a)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake		315 nests	1964	Vermeer (1970a); Island A
		58 nests	1965	Vermeer (1970a)

Location: Miquelon Lake 2 Map: 83H/7 Legal: SW30-49-20-W4 Section SW30 TP 49 RGE 20 MER W4 UTME: 371786 UTMN: 5902032

 Description: low water; rocky, sand gravel beach, low shrub island, 15 small aspen; early fledgling stage; extrapolated from 100 X 5 m transect count
 Notes: 1998 Ground Survey; X211; W of 2 islands

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/09

Ground Check: Yes

Species: California Gull Nests (Ground Survey): 1750 Nests (Aerial Survey): part of several 1000 nests Adults: 2000

Species: Ring-billed Gull Nests (Ground Survey): 9925 Nests (Aerial Survey): part of several 1000 nests Adults: 10000

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake 2	SW30-49-20-W4	250 nests	1908	Farley (1919)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake 2	SW30-49-20-W4	300 nests	1964	Vermeer (1970a); Island B; estimate
		44 nests	1965	Vermeer (1970a)
		<100 nests	1968	Vermeer (1970a)
		1848 nests	1976	Weseloh (1978)
		colony	1980	Ealey (1986)
		colony	1985	PNRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake 2	SW30-49-20-W4	active	1908	Farley (1919)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake	SW30-49-20-W4	active	1908	Farley (1919)
		extinct	1918	Farley (1919); trees dead/fallen, nettles

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Miquelon Lake 2	SW30-49-20-W4	7 nests	1954	PNRS (1998)
Miquelon Lake 2		1200 nests	1964	Vermeer (1970a); Island B; estimate
		378 nests	1965	Vermeer (1970a)
		500-1000 nests	1968	Vermeer (1970a); BSOD (1998)
		10,087 nests	1976	Weseloh (1978)
		colony	1980	Ealey (1986)

Location: Moore Lake Map: 73L/10

Legal: 10-64-4-W4 Section 10 TP 64 RGE 4 MER W4 UTME: 531500 UTMN: 6040750

Description: mixed woods at southern tip of island Notes: 1998 Aerial Survey; Map 73L/10; Doris Island; 15 mi NW of Cold Lake (town); XH83

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Crane (Moore)		29 nests	1976	St. Paul NRS (1998); unclear if it
Lake				is this Moore Lake
		extinct	post 1976	St. Paul NRS (1998)
Moore Lake	10-64-4-W4	active	1972	PNRS (1998)
		20 nests	1990	St. Paul NRS (1998); Doris Island
		30 nests	1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Location: Muriel Lake Map: 73/L2 Legal: 11-60-5-W4 Section 11 TP 60 RGE 5 MER W4 UTME: 523673 UTMN: 6002552

Description: normal water; bare rocky shores of points; rest is low shrub/willow-weedy-grassy; egg/nestling stage Notes: 1998 Ground Survey; Map 73L/2; X213; 6 mi SE of Bonnyville

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/06 Ground Check: Yes

Species: American White Pelican Adults: 2

Species: Black Tern Adults: 1

Species: California Gull Nests (Ground Survey): 1200 Nests (Aerial Survey): part of 2000 nests Adults: 3000

Species: Common Tern Adults: 300 (50 Common Tern observed flying; also 250 in colony on island to SE (marked on 1:50,000 map)

Species: Double-crested Cormorant

Nests (Ground Survey): 1895 Nests (Aerial Survey): 400 nests Adults: 1500

Species: Franklin's Gull Adults: 400

Species: Herring Gull Nests (Ground Survey): 20 Nests (Aerial Survey): part of 2000 nests Adults: 15

Species: Ring-billed Gull Nests (Ground Survey): 2500 Nests (Aerial Survey): part of 2000 nests Adults: 3000

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Muriel Lake	11-60-5-W4	300-400 nests	1990	St. Paul NRS (1998)
		200-300 nests	1991	St. Paul NRS (1998)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Muriel Lake		300 nests	1992	St. Paul NRS (1998)
continued		300 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1996	St. Paul NRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Muriel Lake	11-60-5-W4	200 nests	1990	St. Paul NRS (1998)
		110 nests	1991	St. Paul NRS (1998)
		1200 nests	1992	St. Paul NRS (1998)
		800 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1996	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Muriel Lake	11-60-5-W4	3000 nests	1990	St. Paul NRS (1998)
		25 nests	1991	St. Paul NRS (1998)
		300 nests	1992	St. Paul NRS (1998)
		1000 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1996	St. Paul NRS (1998)

Location: Murray Lake 1 Map: 72E/15 Legal: SE1-10-8-W4 Section SE1 TP 10 RGE 8 MER W4 UTME: 503250 UTMN: 5515156

Description: high water; forb-low willow, some taller willow, island; late fledgling stage Notes: 1998 Ground Survey; Map 72 L; X214; moved to X215

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 72 Nests (Aerial Survey): part of <100 nests Adults: 250

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting on aerial survey Nests (Aerial Survey): 3 nests Adults: 25

Species: Great Blue Heron Nests (Ground Survey): 6 Adults: 3

Species: Ring-billed Gull Nests (Ground Survey): 72 Nests (Aerial Survey): part of <100 nests Adults: 250

Species: Western Grebe Adults: 5

Historical Data:

- see Murray Lake 2

Location: Murray Lake 2 Map: 72E/15 Legal: SW12-10-8-W4 Section SW12 TP 10 RGE 8 MER W4 UTME: 502349 UTMN: 5516211

Description: high water; bare dirt-forbs, 2 mid-size willow, island; 3 tree, 2 ground nests in middle of cormorant nests; nestling stage
 Notes: 1998 Ground Survey; Map 72 L; X215; X214 colony has moved to this one

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: American White Pelican Adults: 20

Species: California Gull Nests (Ground Survey): 420 Nests (Aerial Survey): active large Adults: 750

Species: Caspian Tern Nests (Ground Survey): 1 Adults: 2

Species: Double-crested Cormorant Nests (Ground Survey): 272 Nests (Aerial Survey): 50 nests Adults: 80

Species: Great Blue Heron Nests (Ground Survey): 5 Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 1120 Nests (Aerial Survey): active large Adults: 2000

Historical Data: (Murray Lake 1 and 2)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Murray Lake		100-500 nests	1968	Vermeer (1970a); Brechtel, NRS
				Edmonton (1998); nests on 3 islands
		151 nests	1976	Brechtel, NRS Edmonton (1998);
				Weseloh (1978)
		3 colonies	1978	BSOD (1998)
		3 colonies	1979	BSOD (1998)
	_	colony	1985	Ealey (1986)

Double-crested Cormorant (Murray Lake 1)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Murray Lake	SW12-10-8-W4	27 nests	1977	Brechtel (1981); moved from previous
				location
		4 nests	1978	Brechtel (1981)
		83 nests	1979	Brechtel (1981)
		28 nests	1980	Brechtel (1981)
		45 nests	1983	BSOD (1998)
		65 nests	1989	Lethbridge NRS (1998)
		active	1990	Brechtel (1981)

Double-crested Cormorant (Murray Lake 2)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Murray Lake	SE1-10-8-W4	0 nests	1967	Brechtel (1981); note different location
		77 nests	1976	Brechtel (1981)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Murray Lake	26-9-8-W4	30 nests	1967	Brechtel (1981)
		50 nests	1980	Brechtel (1981)
		active	1982	BSOD (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Murray Lake		1000-3000 nests	1968	Brechtel, NRS Edmonton (1998); 3
				islands
		747 nests	1976	Brechtel, NRS Edmonton (1998);
				Weseloh (1978)
		3 colonies	1978	BSOD (1998)
		3 colonies	1979	BSOD (1998)
		colony	1985	Ealey (1986)

Location: Muskeg Creek Map: 83B/16 Legal: SW11-45-1-W5 Section SW11 TP 45 RGE 1 MER W5 UTME: 698950 UTMN: 5861000

Description: conifers along Muskeg Creek Notes: 1998 Aerial Survey; BSOD (1998) 383 and 5681998 Aerial Survey; 2 miles NW of Springdale

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 15 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Muskeg Creek	SW11-45-1-W5	7 adults	1973	BSOD (1998)
		15 nests	1985	BSOD (1998)
		17 nests	1987	Ealey (1986)

Location: Namur Lake Map: 84H/7 Legal: 36-97-17-W4 Section 36 TP 97 RGE 17 MER W4

Description: on island on the north end of the lake **Notes:** not surveyed in 1998 Aerial Survey; Fish and Wildlife 1998 Ground Survey; X218

Observers (Ground Survey): John Martin **Ground Survey Date:** 1998/06/09 **Ground Check:** Alberta Fish and Wildlife

Species: American White Pelican Nests (Ground Survey): 279

Species: California Gull Adults: approx. 250

Species: Double-crested Cormorant Nests (Ground Survey): 312

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Namur Lake	36-97-17-W4	153 nests	1967	Vermeer (1969a)
		198 nests	1974	St. Paul NRS (1998)

0 nests	1975,1977	St. Paul NRS (1998); Bishoff &
		Fyfe (1976); disturbed earlier
75 nests	1978	St. Paul NRS (1998)
34 nests	1979	St. Paul NRS (1998)
25 nests	1985	St. Paul NRS (1998)
161 nests	1989	St. Paul NRS (1998)
135 nests	1990	St. Paul NRS (1998)
50 nests	1991	St. Paul NRS (1998)
surveyed (no data)	1997	St. Paul NRS (1998)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Namur Lake	36-97-17-W4	139-200 nests	1977	St. Paul NRS (1998)
		600-700 pairs	1985	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Namur Lake	36-97-17-W4	>40 eggs	1990	Westworth & Associates (1990)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Namur Lake	36-97-17-W4	surveyed (no data)	1997	St. Paul NRS (1998)

Location: Noral Lake Map: 831/9 Legal: 17-65-16-W4 Section 17 TP 65 RGE 16 MER W4 UTME: 410414 UTMN: 6054313

Description: normal water level; mixed spruce poplar with dead spars; egg/young nestling stage; count lower than actual (hard to see in spruce)

Notes: 1998 Ground Survey (from shore); Map 83I/9; XH88; 2 mi S of Noral

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/04 **Ground Check:** Yes

Species: Black Tern Adults: 10

Species: Double-crested Cormorant Nests (Ground Survey): 100 Nests (Aerial Survey): part of 70 nests Adults: 60

Species: Great Blue Heron Nests (Ground Survey): 30 Nests (Aerial Survey): part of 70 nests

Adults: 20

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Noral Lake	17-65-16-W4	12 nests	1978	St. Paul NRS (1998); Brechtel (1981)
		39 nests	1985	St. Paul NRS (1998)
		38 nests	1988	St. Paul NRS (1998)
		31 nests	1991	St. Paul NRS (1998)
		30 nests	1993	St. Paul NRS (1998)

Location: North Bellis Lake Map: 83I/1 Legal: 30-60-15-W4 Section 30 TP 60 RGE 15 MER W4 UTME: 421650 UTMN: 6008350

Description: small wooded island in west part of lake Notes: 1998 Aerial Survey; 5 mi NW of Bellis; XH89

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): <15 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
North Bellis Lake	29-60-15-W4	37 nests	1988	St. Paul NRS (1998); island at west end
		14 nests	1990	St. Paul NRS (1998)
		18 nests	1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Location: North Buck Lake Map: 83I/10 Legal: 12-66-18-W4 Section 12 TP 66 RGE 18 MER W4 UTME: 397053 UTMN: 6062589

Description: normal water level; mixed spruce aspen; young nestling stage; count may be lower by 10-15% than actual (hard to see in spruce); colony back from shore
 Notes: 1998 Ground Survey; Map 83I/10; XH90; 9 mi SE of Donatville

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/04 **Ground Check:** Yes

Species: Black Tern Adults: 8

Species: Forster's Tern Adults: 4

Species: Franklin's Gull Adults: 30

Species: Great Blue Heron Nests (Ground Survey): 95 Nests (Aerial Survey): 60 nests Adults: 40

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
North Buck Lake	12-66-18-W4	5 nests	1972	St. Paul NRS (1998); Brechtel (1981)
		8 nests	1978	St. Paul NRS (1998); Brechtel (1981)
		13 nests	1979	St. Paul NRS (1998); Brechtel (1981)
		13 nests	1981	St. Paul NRS (1998); Brechtel (1981)
		27 nests	1985	St. Paul NRS (1998)
		34 nests	1988	St. Paul NRS (1998)
		35 nests	1989	St. Paul NRS (1998)
		72 nests	1992	St. Paul NRS (1998)

Location: North Lucky Lake Map: 831/7 Legal: NE21-62-18-W4 Section NE21 TP 62 RGE 18 MER W4 UTME: 394525 UTMN: 6026650

Description: normal water level; white spruce, some paper birch island; most nests in dead spruce spars; late nestling; surveyed from west shore

Notes: 1998 Ground Survey; Map 83I/7; X220=XH93; 5 mi SE of Long L PP; access on Thorhild Grazing

Reserve

Observers (Ground Survey): Cliff Wallis **Ground Survey Date:** 1998/07/03 **Ground Check:** Yes

Species: American White Pelican Adults: 8

Species: Black Tern Adults: 3

Species: Double-crested Cormorant Nests (Ground Survey): 35 Nests (Aerial Survey): 20 nests Adults: 18

Species: Franklin's Gull Adults: 4

Species: Great Blue Heron Nests (Ground Survey): 3 Nests (Aerial Survey): not found Adults: 2

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
North Lucky Lake	21-62-18-W4	51 nests	1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
North Lucky Lake	21-62-18-W4	25 nests	1978	St. Paul NRS (1998)
		24 nests	1985	St. Paul NRS (1998)
		25 nests	1988	St. Paul NRS (1998)
		18 nests	1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Location: Orloff Lake Map: 83P/5 Legal: NE31-73-23-W4 Section NE31 TP 73 RGE 23 MER W4 UTME: 340200 UTMN: 6138900

Description: small wooded island at west end of lake

Notes: 1998 Aerial Survey; Fish and Wildlife 1998 Ground Survey; XH97; 14 mi NW of Calling L PP; this lake is erroneously labelled Rock Island Lake on some 1:50,000 maps

Observers (Ground Survey): M. Heckbert

Ground Survey Date: 1998/07/07 Ground Check: Alberta Fish and Wildlife

Species: Great Blue Heron Nests (Ground Survey): 20 Nests (Aerial Survey): 25

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Orloff Lake	16-74-23-W4	0 nests	1979	Brechtel (1981)
		15 nests	1980	Brechtel (1981)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Orloff Lake	SW6-74-23-W4	50 nests	1978	Brechtel (1981)
		40 nests	1979	Brechtel (1981)
		50 nests	1980	Brechtel (1981)
		25 nests	1990	BSOD (1998)

Location: Pakowki Lake 1 Map: 72E/6 Legal: NE4-5-8-W4 Section NE4 TP 5 RGE 8 MER W4 UTME: 498193 UTMN: 5467321

Description: low water; rocky-grass, some forbs, island; may be dry and accessed from mainland in 2-3 days Notes: 1998 Ground Survey; small island in west channel

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/20 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 5 Nests (Aerial Survey): active Adults: 50

Species: Common Tern Nests (Ground Survey): 25 Nests (Aerial Survey): active Adults: 25

Species: Ring-billed Gull Nests (Ground Survey): 70 Nests (Aerial Survey): active Adults: 250

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pakowki Lake	3-5-8-W4 (approx.)	part of 40-80 nests	1975	Ealey (1986); small island W arm
		part of 100 adults	1978	Brechtel, NRS Edmonton (1998);
				small island W arm
		small colony	1979	Brechtel, NRS Edmonton (1998);
				small island W arm
		colony	1985	Ealey (1986); small island W arm

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pakowki Lake	3-5-8-W4 (approx.)	1 adult	1980	June 22 (C. Wallis pers. comm.)
		1 adult	1996	Sherrington (1996c); August 1

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pakowki Lake	3-5-8-W4 (approx.)	0 nests	1978-	(Brechtel (1981); mall island W
			1979	arm
		36 nests	1980	(Brechtel (1981)
		100 birds	1992	Ealey (1986)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pakowki Lake	3-5-8-W4 (approx.)	part of 40-80 nests	1975	Ealey (1986); small island W arm
		part of 100 adults	1978	Brechtel, NRS Edmonton (1998);
				small island W arm
		small colony	1979	Brechtel, NRS Edmonton
				(1998);small island W arm
		colony	1985	Ealey (1986); small island W arm

Location: Pakowki Lake 2 Map: 72E/7 Legal: NW35-4-8-W4 Section NW35 TP 4 RGE 8 MER W4 UTME: 500290 UTMN: 5466368

Description: low water; rock-grass island; abandoned **Notes:** 1998 Ground Survey; 1 of 8 small islands at mouth of W arm by X222

Observers (Ground Survey): Wayne Smith, Ray Wershler. Ground Survey Date: 1998/06/20 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 263 Nests (Aerial Survey): active (1 large) Adults: 300 Species: Common Tern Nests (Ground Survey): 20 Adults: 20

Species: Double-crested Cormorant Nests (Ground Survey): 44 Adults: 0

Species: Ring-billed Gull Nests (Ground Survey): 176 Nests (Aerial Survey): active (1 large) Adults: 200

Historical Data:

- new survey location

Location: Pakowki Lake 3 Map: 72E/7 Legal: SE3-5-8-W4 Section SE3 TP 5 RGE 8 MER W4 UTME: 500379 UTMN: 5466285

Description: low water; rock-grass island; egg stage **Notes:** 1998 Ground Survey; 1 of 8 small islands at mouth of W arm by X222

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/20 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 49 Nests (Aerial Survey): active Adults: 60

Species: Common Tern Nests (Ground Survey): 10 Nests (Aerial Survey): active Adults: 10

Species: Ring-billed Gull Nests (Ground Survey): 32 Nests (Aerial Survey): active Adults: 40

Historical Data:

- new survey location

Location: Pakowki Lake 4 Map: 72E/7 Legal: SE3-5-8-W4 Section SE3 TP 5 RGE 8 MER W4 UTME: 500489 UTMN: 5466208

Description: low water; rock-grass island; egg stage Notes: 1998 Ground Survey; 1 of 8 small islands at mouth of W arm by X222

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/20 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 22 Nests (Aerial Survey): active Adults: 20

Species: Ring-billed Gull Nests (Ground Survey): 199 Nests (Aerial Survey): active Adults: 180

Historical Data:

- new survey location

Location: Pakowki Lake 5 Map: 72E/7 Legal: SE3-5-8-W4 Section SE3 TP 5 RGE 8 MER W4 UTME: 500683 UTMN: 5465968

Description: low water; rock-grass-forb island; 1 egg, 1 nestling stage **Notes:** 1998 Ground Survey; south rock island; X222

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/20 **Ground Check:** Yes

Species: American White Pelican Nests (Ground Survey): 2 Nests (Aerial Survey): 1 nest? Adults: 15

Species: California Gull Nests (Ground Survey): 391 Nests (Aerial Survey): active large Adults: 450

Species: Double-crested Cormorant Nests (Ground Survey): 92 Nests (Aerial Survey): 50 nests Adults: 35 Species: Ring-billed Gull Nests (Ground Survey): 43 Nests (Aerial Survey): active large Adults: 50

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pakowki Lake	3-5-8-W4 (approx.)	0 nests	1978-1979	Brechtel (1981); small island W arm
		8 nests	1980	Brechtel (1981)
		28 nests	1981	Lethbridge NRS (1998)

Location: Pakowki Lake 6 Map: 72E/7 Legal: SE13-5-8-W4 Section SE13 TP 5 RGE 8 MER W4 UTME: 503887 UTMN: 5469776

Description: low water; rock-grass-forb island; egg stage **Notes:** 1998 Ground Survey; long narrow island off N end of 2nd largest island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/20 Ground Check: Yes

Species: Common Tern Nests (Ground Survey): 130 Adults: 130

Historical Data:

- new survey location

Location: Pakowki Lake 7 Map: 72E/7 Legal: NW7-5-7-W4 Section NW7 TP 5 RGE 7 MER W4 UTME: 504398 UTMN: 5468804

Description: low water; open poplar woods with mod. dense rose shrubbery, island; abandoned but were active in 1998

Notes: 1998 Ground Survey; in trees on north island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/20 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 47 Nests (Aerial Survey): 20+ nests

Adults: 30

Species: Great Blue Heron Nests (Ground Survey): 10 Adults: 0

Historical Data:

- new survey location

Location: Parlby Creek Map: 83A/6 Legal: 31-40-23-W4 Section 31 TP 40 RGE 23 MER W4 UTME: 343524 UTMN: 5816520

Description: balsam poplar woods; nestling stage Notes: 1998 Ground Survey; BSOD (1998) 417-422; 1 mile NE of Tees

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/17 **Ground Check:** Yes

Species: Great Blue Heron Nests (Ground Survey): 24 Nests (Aerial Survey): 27 nests Adults: 6

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Parlby Creek (Tees)	N31-40-23-W4	occupied	1975	Brechtel (1981)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Parlby Creek (Tees)		occupied	1976	Brechtel (1981)
continued		occupied	1977	Red Deer NRS (1998)
		7 nests	1978	Brechtel (1981)
		occupied	1979	Red Deer NRS (1998)
		occupied	1980	Red Deer NRS (1998)
		occupied	1981	Brechtel (1981)
		19 nests	1982	BSOD (1998)
		18 nests	1987	BSOD (1998)
		19 nests	1988	BSOD (1998)
		18 nests	1989	BSOD (1998)
		28 nests	1991	BSOD (1998)

Location: Paul Lake Map: 83H/10 Legal: 4&5-54-20-W4 Section 4&5 TP 54 RGE 20 MER W4 UTME: 374200 UTMN: 5944400

Description: no description; UTMs approximate Notes: 1998 EINP Survey; most of the colony may have moved to Lamont Island

Observers (Ground Survey): R. Kaye, EINP Ground Survey Date: 1998/07/07 Ground Check: Elk Island National Park

Species: Great Blue Heron Nests (Ground Survey): 2 active; 2 inactive Adults: 0

Historical Data:

Great Blue Heron

- may have moved to Lamont Island at Astotin Lake in 1997

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Paul Lake	4-54-20-W4	14 nests	1990	St. Paul NRS (1998)
		17 nests	1991	Kaye (1998); St. Paul NRS (1998)
		19 nests	1992	Kaye (1998); St. Paul NRS (1998)
		22 nests	1993	Kaye (1998); St. Paul NRS (1998)
		17 nests	1994	Kaye (1998)
		15 nests	1995	Kaye (1998)
		20 nests	1996	Kaye (1998)
		13 nests	1997	Kaye (1998)

Location: Pelican Lake - North Island Map: 83P/14 Legal: SW9-79-21-W4 Section SW9 TP 79 RGE 21 MER W4

Description: larger island at north end of lake; central portion of island is devoid of vegetation with some scrubby willows on east and south side and some larger aspen trees on the west and north side of the island.

Notes: Not Surveyed in 1998 Aerial Survey; Fish and Wildlife 1998 Ground Survey; X224=XH102; 14 mi E of S Wabasca L; American White Pelican young were 3-4 weeks of age

Observers (Ground Survey): M. Heckbert **Ground Survey Date:** 1998/07/07 **Ground Check:** Alberta Fish and Wildlife

Species: American White Pelican Nests (Ground Survey): unknown--1328 young observed

Species: Double-crested Cormorant Nests (Ground Survey): 565 (25 in trees)

Historical Data: for whole lake, total number of American White Pelican nests was 150 in 1985; Double-crested Cormorant was 100 in 1980; Great Blue Heron was 57 in 1978

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pelican Lake	SW9-79-21-W4	0 nests	1967	Brechtel (1981)
		15 nests	1978	Brechtel (1981)
		active	1980	Brechtel (1981)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pelican Lake	SW9 (or 8)-79-21-W4	35 nests	1967	Brechtel (1981); Vermeer (1969b)
		57 nests	1978	Brechtel (1981)
		occupied	1980	Brechtel (1981)

Location: Pelican Lake - South Island Map: 83P/14 Legal: NW30-78-21-W4 Section NW30 TP 78 RGE 21 MER W4

Description: smaller island near centre of lake; no trees on the island but there is a fringe of 5-10 m of various weeds around the island where the gull nests were located

Notes: Not Surveyed in 1998 Aerial Survey; Fish and Wildlife 1998 Ground Survey; Map 83 P; X225; 12 mi E of S Wabasca L; American White Pelican young were 3-4 weeks of age

Observers (Ground Survey): M. Heckbert **Ground Survey Date:** 1998/07/07 **Ground Check:** Alberta Fish and Wildlife

Species: American White Pelican Nests (Ground Survey): unknown--780 young observed Species: Double-crested Cormorant Nests (Ground Survey): 460

Species: Ring-billed Gull Nests (Ground Survey): 200

Historical Data: for whole lake, total number of American White Pelican nests was 150 in 1985; Double-crested Cormorant was 100 in 1980; Great Blue Heron was 57 in 1978

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pelican Lake	30-78-21-W4	active	1977	Brechtel (1981)
		225 nests	1978	Brechtel (1981)
		216 nests	1980	Brechtel (1981)
		150 nests	1985	Brechtel, NRS Edmonton (1998)
		210 nests	1991	Brechtel, NRS Edmonton (1998)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pelican Lake	30-78-21-W4	100-500 nests	1967	Vermeer (1970a); Ealey (1986)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pelican Lake	30-78-21-W4	0 nests	1967	Brechtel (1981)
		242 nests	1978	Brechtel (1981)
		100 nests	1980	Brechtel (1981)

Location: Perryvale A Map: 83I/6 Legal: 2-63-22-W4 Section 2 TP 63 RGE 22 MER W4 UTME: 356000 UTMN: 6032400

Description: small conifer island in south part of small water body Notes: 1998 Aerial Survey; Map 831/6; XH104; 7 mi SE of Perryvale

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 25 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Perryvale A	2-63-22-W4	28 nests	1984	St. Paul NRS (1998)

18 nests	1990	St. Paul NRS (1998)
10 nests	1993	St. Paul NRS (1998)

Location: Pigeon Lake 1 Map: 83A/13 Legal: E27-46-28-W4 Section E27 TP 46 RGE 28 MER W4 UTME: 300432 UTMN: 5875423

Description: normal water level; rocky with a few forbs, island; late fledgling stage **Notes:** 1998 Ground Survey; Map 83 H; X226; just west of reserve, tiny island

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/25 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 174 Nests (Aerial Survey): part of 100 nests Adults: 270

Species: Franklin's Gull Adults: 400

Species: Herring Gull Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 19 Nests (Aerial Survey): part of 100 nests Adults: 30

Species: Western Grebe Adults: 70

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pigeon Lake	34-46-28-W4	active colony	1977	Ealey (1986)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pigeon Lake	34-46-28-W4	active colony	1977	Ealey (1986)

Location: Pigeon Lake 2 Map: 83G/1 Legal: NW6-47-1-W5 Section NW6 TP 47 RGE 1 MER W5 UTME: 691000 UTMN: 5879000

Description: wooded south shore of lake at west end of Pigeon Lake P.P. Notes: 1998 Aerial Survey; BSOD (1998) 384-391

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Pigeon Lake	NW6-47-1-W5	12 nests	1977	Brechtel (1981); 2Map 83 G
		5 nests	1978	Brechtel (1981)
		10 nests	1979	Brechtel (1981)
		11 nests	1982	BSOD (1998)
		16 nests	1984	BSOD (1998)
		16 nests	1985	BSOD (1998)
		14 nests	1986	BSOD (1998)
		16 nests	1987	BSOD (1998)

Location: Portage Lake 1 Map: 83I/16 Legal: 10-69-14-W4 Section 10 TP 69 RGE 14 MER W4 UTME: 432722 UTMN: 6090655

Description: nesting in area Notes: 1998 Ground Survey; 13 mi N of Lac la Biche; X191=XH107; bigger island further from S shore

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/03 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 3 Adults: 15

Species: Double-crested Cormorant Nests (Ground Survey): 2783 Nests (Aerial Survey): 500 nests Adults: 2500

Species: Franklin's Gull Adults: 100 Species: Great Blue Heron Nests (Ground Survey): 1 Nests (Aerial Survey): not seen Adults: 1

Species: Ring-billed Gull Nests (Ground Survey): 10 Nests (Aerial Survey): <50 gulls Adults: 50

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Portage Lake	10-69-14-W4	100 nests	1988	St. Paul NRS (1998);
				north of Lac la Biche
		75 nests	1989	St. Paul NRS (1998)
		708 nests	1991	St. Paul NRS (1998)
		1000 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1997	St. Paul NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Portage Lake	10-69-14-W4	25 nests		St. Paul NRS (1998);
				north of Lac la Biche
		0 nests	1989	St. Paul NRS (1998)
		19 nests	1991	St. Paul NRS (1998)
		31 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Portage Lake	10-69-14-W4	120 nests	1991	St. Paul NRS (1998)
		69 nests	1993	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Location: Portage Lake 2 Map: 831/16 Legal: 10-69-14-W4 Section 10 TP 69 RGE 14 MER W4 UTME: 432775 UTMN: 6090496

- Description: normal water level; dirt island with patches of low shrubs; dead birch and spruce spars; nestling stage; 38 tree nests
- Notes: 1998 Ground Survey; Map 831/16; 13 mi north of Lac la Biche; X191=XH107; smaller island closer to S shore

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/03 Ground Check: Yes

Species: Double-crested Cormorant Nests (Ground Survey): 38 Adults: 30

Species: Great Blue Heron Nests (Ground Survey): 1 Adults: 1

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Portage Lake	10-69-14-W4	25 nests	1988	St. Paul NRS (1998); north of Lac la Biche
		0 nests	1989	St. Paul NRS (1998)
		19 nests	1991	St. Paul NRS (1998)
		31 nests	1993	St. Paul NRS (1998)
		surveyed (no	1994	St. Paul NRS (1998)
		data)		

Location: Prefontaine Lake Map: 83G/15 Legal: 32-55-6-W5 Section 32 TP 55 RGE 6 MER W5 UTME: 641147 UTMN: 5962652

- Description: normal water level; white birch and spruce spars, bare dirt/forbs, low willow; 65 nests in trees, 15 ground; large nestling; surveyed from S shore
- Notes: 1998 Ground Survey; Map 83G/15; E island; X229=XH108; 6 mi SE of Sangudo; access at south side SW of island

Observers (Ground Survey): Cliff Wallis Ground Survey Date: 1998/07/02 Ground Check: Yes

Species: Double-crested Cormorant

Nests (Ground Survey): 80 Nests (Aerial Survey): 60 nests Adults: 60

Species: Great Blue Heron Nests (Ground Survey): 3 Nests (Aerial Survey): not found Adults: 1

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Prefontaine Lake	32-55-6-W5	0 nests	1976	St. Paul NRS (1998); eastern island
		16 nests	1986	St. Paul NRS (1998)
		80 nests	1990	St. Paul NRS (1998)
		58 nests	1992	St. Paul NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Prefontaine Lake	32-55-6-W5	12 nests	1986	St. Paul NRS (1998); eastern island
		9 nests	1987	St. Paul NRS (1998)
		1 nest	1988	St. Paul NRS (1998)
		10 nests	1990	St. Paul NRS (1998)
		9 nests	1992	St. Paul NRS (1998)

Location: Raft Lake Map: 73E/10 Legal: 5-54-5-W4 Section 5 TP 54 RGE 5 MER W4 UTME: 520100 UTMN: 5942750

Description: aspen, northeast side of lake **Notes:** 1998 Aerial Survey; Map 73E/10; XH110

Observers: Wayne Smith, Cliff Wallis **Aerial Survey Date:** May 29-31 1998 **Ground Check:** No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Raft Lake	5-54-5-W4	9 nests	1981	St. Paul NRS (1998)
		8 nests	1982	St. Paul NRS (1998)
		15 nests	1985	St. Paul NRS (1998)

16 nests	1988	St. Paul NRS (1998)
7 nests	1991	St. Paul NRS (1998)
8 nests	1993	St. Paul NRS (1998)

Location: Rattlesnake Lake 1 Map: 72E/14 Legal: N7-12-8-W4 Section N7 TP 12 RGE 8 MER W4 UTME: 494210 UTMN: 5536560

Description: high water; bare dirt, some low shrub, island; abandoned **Notes:** 1998 Ground Survey; E most of 3 islands; 494221 5536389; photos 31/32

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: Black Tern Adults: 1

Species: California Gull Nests (Ground Survey): 469 Nests (Aerial Survey): active Adults: 600

Species: Double-crested Cormorant Nests (Ground Survey): 23 Adults: 15

Species: Franklin's Gull Adults: 2

Species: Ring-billed Gull Nests (Ground Survey): 1441 Nests (Aerial Survey): active Adults: 2000

Species: Western Grebe Adults: 6

Historical Data:

- new survey location

Location: Rattlesnake Lake 2 Map: 72E/14 Legal: N7-12-8-W4 Section N7 TP 12 RGE 8 MER W4 UTME: 493758 UTMN: 5537098

Description: high water; bare dirt, some low shrub, willows, island; late fledgling stage Notes: 1998 Ground Survey; central of 3 islands

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/21 **Ground Check:** Yes

Species: American White Pelican Adults: 2

Species: California Gull Nests (Ground Survey): 90 Nests (Aerial Survey): active Adults: 200

Historical Data:

- new survey location

Location: Rattlesnake Lake 3 Map: 72E/14 Legal: N7-12-8-W4 Section N7 TP 12 RGE 8 MER W4 UTME: 493601 UTMN: 5537065

Description: high water; half bare dirt/gravel, half forb, island Notes: 1998 Ground Survey; W most of 3 islands; 494221 5536389; photos 31/32

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: California Gull Nests (Ground Survey): 12 Nests (Aerial Survey): active Adults: 100

Species: Caspian Tern Nests (Ground Survey): 13 Nests (Aerial Survey): active Adults: 100

Species: Common Tern Nests (Ground Survey): 55 Adults: 55

Historical Data:

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Rattlesnake Lake	unknown	pair	1989	Baresco (1989); Gollop (1989); nest with eggs

Location: Ribstone Creek Map: 73D/3 Legal: 9-37-9-W4 Section 9 TP 37 RGE 9 MER W4 UTME: 483950 UTMN: 5780250

Description: poplars on east side of Ribstone Creek Notes: 1998 Aerial Survey; BSOD (1998) 5660; 8831, 8820--9 miles NE of Coronation

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 10+ nests

Historical Data:

- 17 nests found in February 1997

Location: Rock Island Lake (Calling L area) Map: 83P/11 Legal: 21-75-22-W4 Section 21 TP 75 RGE 22 MER W4 UTME: 351250 UTMN: 6153000

Description: two small rocky islands at east end of Rock Island Lake
 Notes: 1998 Aerial Survey; Fish and Wildlife 1998 Ground Survey; X232; 14 mi N of Calling Lake; 46 American White Pelicans loafing

Observers (Ground Survey): M. Heckbert Ground Survey Date: 1998/07/07 Ground Check: Alberta Fish and Wildlife

Species: California Gull/Ring-billed Gull Nests (Ground Survey): 25 California and 177 California or Ring-billed Nests (Aerial Survey): 200-250 nests

Species: Common Tern Nests (Ground Survey): 16

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Rock Island Lake	x-75-22-W4	surveyed (no data)	1990	St. Paul NRS (1998)

Location: Ross Lake Map: 82H/2 Legal: NW30-2-22-W4 Section NW30 TP 2 RGE 22 MER W4 UTME: 360500 UTMN: 5446400

Description: Notes: 1998 Aerial Survey; difficulty in securing permission to access

Observers (Aerial Survey): Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31, 1998 Ground Check: Yes

Species: California Gull Nests (Aerial Survey): part of <100 nests

Species: Ring-billed Gull Nests (Aerial Survey): part of <100 nests

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Ross Lake	NW30-2-22-W4	part of 80 nests &	1975	Ealey (1986); Berezay et al. (1975); 2
		part of 482 nests		island colonies

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Ross Lake	NW30-2-22-W4	part of 80 nests &	1975	Ealey (1986); Berezay et al. (1975); 2
		part of 482 nests		island colonies

Location: Sandy Lake Map: 73E/13 Legal: S21-56-13-W4 Section S21 TP 56 RGE 13 MER W4 UTME: 442670 UTMN: 5967436

Description: low water; poplar with some spruce and dead spars; nestling stage; back from shore, NW corner Notes: 1998 Ground Survey; Map 73E/13; X234=XH116; 9 mi S of Hamlin

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/07 Ground Check: Yes Species: Double-crested Cormorant Nests (Ground Survey): 27 Nests (Aerial Survey): 50 nests Adults: 20

Species: Great Blue Heron Nests (Ground Survey): 14 Nests (Aerial Survey): 10+ nests Adults: 15

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Sandy Lake	S21-56-13-W4	0 nests	1978	St. Paul NRS (1998)
		7 nests	1979-1980	St. Paul NRS (1998)
		65 nests	1984	St. Paul NRS (1998)
		48 nests	1985	St. Paul NRS (1998)
		107 nests	1987	St. Paul NRS (1998)
			1989	St. Paul NRS (1998)
			1990	St. Paul NRS (1998)
		39 nests		St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Sandy Lake	S21-56-13-W4	9 nests	1979	St. Paul NRS (1998); Brechtel (1981)
		22 nests	1980	St. Paul NRS (1998); Brechtel (1981)
		10 nests	1984	St. Paul NRS (1998)
		20 nests	1985	St. Paul NRS (1998)
		5 nests	1987	St. Paul NRS (1998)
			1989	St. Paul NRS (1998)
		12 nests	1990	St. Paul NRS (1998)
			1992	St. Paul NRS (1998)
		surveyed (no data)	1994	St. Paul NRS (1998)

Location: Schroeder Lake Map: 83A/4 Legal: NE12-37-26-W4 Section NE12 TP 37 RGE 26 MER W4 UTME: 323400 UTMN: 5782600

Description: aspen on peninsula at west end of small water body Notes: 1998 Aerial Survey; BSOD (1998) 400-404; 4 miles NW of Pine Lake (town)

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 10 nests

Historical Data:

Great Blue Heron

- originally relocated here from Honeymoon Lake site

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Schroeder Lake	NW7-37-25-W4	1 nest	1982	BSOD (1998)
Schroeder Lake	NE12-37-26-W4	18 nests	1967	also in BSOD (1998) incorrectly as 12-
				36-26-W4 with 1 nest each year;
				Vermeer (1969b) lists in 18-37-26-W4
		occupied	1976	.BSOD (1998)
		10 nests	1978	BSOD (1998)
		50 nests	1982	BSOD (1998)
		26 nests	1987	BSOD (1998)

Location: Scope (Hays) Reservoir 1 Map: 72L/4 Legal: 3+10-13-14-W4 Section 3+10 TP 13 RGE 14 MER W4 UTME: 440028 UTMN: 5545893

Description: high water; forb-weed island w ring of tall willow/poplars (nests), large bare areas; nestling stage Notes: 1998 Ground Survey; NW of 2 big islands near center; X236 = XH117; 2 mi SE of Hays

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/19 **Ground Check:** Yes

Species: American White Pelican Nests (Ground Survey): 1181 Nests (Aerial Survey): 1200 nests Adults: 800

Species: Black Tern Adults: 10

Species: Caspian Tern Adults: 1

Species: Common Tern Adults: 30

Species: Double-crested Cormorant Nests (Ground Survey): 211 Adults: 20 Notes: 1998 Ground Survey; NW of 2 big islands near center; X236 = XH117; 2 mi SE of Hays

Species: Franklin's Gull

Adults: 200

Species: Great Blue Heron Nests (Ground Survey): 8 Nests (Aerial Survey): not found Adults: 3

Species: Ring-billed Gull Nests (Ground Survey): 83 Adults: 250

Historical Data:

- see Scope (Hays) Reservoir 5

Location: Scope (Hays) Reservoir 2 Map: 72L/4 Legal: 10-13-14-W4 Section 10 TP 13 RGE 14 MER W4 UTME: 440497 UTMN: 5545757

Description: high water; forb-weed island with ring of taller willow, poplar, large bare dirt areas; egg stage; dead nestlings from storms, renesting

Notes: 1998 Ground Survey; SE of 2 big islands near center; X236 = XH117; 2 mi SE of Hays

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/19 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 2665 Nests (Aerial Survey): active Adults: 1000

Species: Double-crested Cormorant Nests (Ground Survey): 32 Nests (Aerial Survey): active Adults: 50

Species: Franklin's Gull Adults: 150

Species: Ring-billed Gull Nests (Ground Survey): 2340 Nests (Aerial Survey): active Adults: 4000

Species: Western Grebe Adults: 20

Historical Data:

- see Scope (Hays) Reservoir 5

Location: Scope (Hays) Reservoir 3 Map: 72L/4 Legal: SW10-13-14-W4 Section SW10 TP 13 RGE 14 MER W4 UTME: 439732 UTMN: 5544954

Description: high water, bare dirt, rose shrub island; 2/3 washed out, 1/3 egg stage nests **Notes:** 1998 Ground Survey; S of 3 islands on W side; X236 = XH117; 2 mi SE of Hays

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/19 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 3 Nests (Aerial Survey): active Adults: 4

Species: California Gull Nests (Ground Survey): 50 Nests (Aerial Survey): active Adults: 200

Species: Double-crested Cormorant Nests (Ground Survey): 85 Nests (Aerial Survey): active Adults: 30

Species: Ring-billed Gull Nests (Ground Survey): 600 Nests (Aerial Survey): active Adults: 1500

Historical Data:

- see Scope (Hays) Reservoir 5

Location: Scope (Hays) Reservoir 4 Map: 72L/4 Legal: NW3-13-14-W4 Section NW3 TP 13 RGE 14 MER W4 UTME: 439449 UTMN: 5545457

Description: high water; bare dirt, some forbs, small poplar patch, island; egg stage, deserted Notes: 1998 Ground Survey; tiny middle of 3 islands on W side; X236 = XH117; 2 mi SE of Hays

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/19 **Ground Check:** Yes

Species: American White Pelican Nests (Ground Survey): 1 Nests (Aerial Survey): active Adults: 0

Species: California Gull Nests (Ground Survey): 32 Nests (Aerial Survey): active Adults: 100

Species: Caspian Tern Nests (Ground Survey): 1 Nests (Aerial Survey): active Adults: 2

Species: Ring-billed Gull Nests (Ground Survey): 8 Nests (Aerial Survey): active Adults: 25

Historical Data:

- see Scope (Hays) Reservoir 5

Location: Scope (Hays) Reservoir 5 Map: 72L/4 Legal: W3-13-14-W4 Section W3 TP 13 RGE 14 MER W4 UTME: 439429 UTMN: 5545879

Description: high water; bare dirt, some forbs, big patch of low willow, island; washed out, some with eggs Notes: 1998 Ground Survey; N of 3 islands on W side; X236 = XH117; 2 mi SE of Hays

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/19 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 146

Nests (Aerial Survey): active Adults: 200

Historical Data (whole reservoir):

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Scope (Hays) Reservoir	3+10-13-14-W4	837 nests	1989	Brechtel, NRS Edmonton (1998)
		500 nests	1993	Brechtel, NRS Edmonton (1998)
		10 nests	1995	PNRS (1995)
		20 nests	1996	PNRS (1996)

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Scope (Hays) Reservoir	3+10-13-14-W4	colony	1977	Brechtel, NRS Edmonton (1998)
		3 colonies	1979	3 islands
		colony	1995	PNRS (1995)

Caspian Tern

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Scope (Hays) Reservoir	3+10-13-14-W4	suspected	1991-1992	Federation of Alberta Naturalists
		nesting		(1998); Koes and Taylor (1992)
		8 adults	1996	Sherrington (1996b)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Scope (Hays) Reservoir	3+10-13-14-W4	0 nests	1967	Brechtel (1981)
		25 nests	1971	Brechtel (1981)
		261 nests	1976	Brechtel (1981)
		306 nests	1977	Brechtel (1981)
		332 nests	1978	Brechtel (1981)
		394 nests	1979	Brechtel (1981)
		329 nests	1980	Brechtel (1981)
		70 nests	1989	Lethbridge NRS (1998)
		30 nests	1993	BSOD (1998); large island

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Scope (Hays) Reservoir	3+10-13-14-W4	5 nests	1993	Brechtel, NRS Edmonton (1998); main island

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Scope (Hays) Reservoir	3+10-13-14-W4	3 colonies	1979	BSOD (1998); 3 islands
		200 nests	1993	PNRS (1998)
		500 nests	1995	PNRS (1998)
		colony	1997	Brechtel, NRS Edmonton

		(1998); island N side lake, Cormorant/Gull colony	

Location: St. Mary Reservoir 1 Map: 82H/6 Legal: NW19-4-24-W4 Section NW19 TP 4 RGE 24 MER W4 UTME: 338652 UTMN: 5464592

Description: high water; bare dirt, some forbs, island; egg stage, abandoned **Notes:** 1998 Ground Survey; island-Cormorant/Gull colony; X241; 6 mi SW of Spring Coulee

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/23 Ground Check: Yes

Species: American White Pelican Nests (Ground Survey): 1 Adults: 5

Species: California Gull Nests (Ground Survey): 307 Nests (Aerial Survey): part of 1000+ nests Adults: 750

Species: Double-crested Cormorant Nests (Ground Survey): 76 Nests (Aerial Survey): 80+ nests Adults: 30

Species: Ring-billed Gull Nests (Ground Survey): 15 Nests (Aerial Survey): part of 1000+ nests Adults: 20

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
St. Mary Reservoir	NW19-4-24-W4	1000-3000 nests	1968	Vermeer (1970a)
		part of 4835 nests	1975	Ealey (1986)
		1580 nests	1976	Ealey (1986); Weseloh (1978)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
St. Mary Reservoir		part of 1180 gull	1977	Brechtel, NRS Edmonton (1998);
		nests		island-Cormorant/Gull colony
continued		2 colonies	1978	BSOD (1998); Cormorant island &
				mainland NE of island
		4 colonies	1979	BSOD (1998); 3 islands & mainland

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
St. Mary Reservoir	NW19-4-24-W4	0 nests	1967	Brechtel (1981)
		19 nests	1975	Broadhead et al. (1975)
		21 nests	1976	Brechtel (1981)
		16 nests	1977	Brechtel (1981)
		30 nests	1978	Brechtel (1981)
		44 nests	1979	Brechtel (1981)
		29 nests	1980	Brechtel (1981)
		22 nests	1989	Lethbridge NRS (1998)
		active	1990	BSOD (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
St. Mary Reservoir	NW19-4-24-W4	1000-3000 nests	1968	Vermeer (1970a)
		part of 4835 nests	1975	Ealey (1986)
		856 nests	1976	Ealey (1986); Weseloh (1978)
		part of 1180 gull	1977	Brechtel, NRS Edmonton (1998);
		nests		island-Cormorant/Gull colony
		2 colonies	1978	BSOD (1998); Cormorant island &
				mainland NE of island
		4 colonies	1979	BSOD (1998); 3 islands & mainland

Location: St. Mary Reservoir 2 Map: 82H/6 Legal: S3-5-24-W4 Section S3 TP 5 RGE 24 MER W4 UTME: 343536 UTMN: 5468682

Description: high water; grass-willow, island; now totally flooded but adults act like colony, 0 birds at nearby island

Notes: 1998 Ground Survey; new island at north end (2 islands)

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/23 **Ground Check:** Yes

Species: American White Pelican Adults: 2

Species: Common Tern. Adults: 2

Species: Ring-billed Gull Nests (Ground Survey): 0; no nests found despite apparent nesting on aerial survey Nests (Aerial Survey): part of 80+ nests Adults: 75

Historical Data:

Location: Stirling Lake Map: 82H/10 Legal: 6-7-19-W4 Section 6 TP 7 RGE 19 MER W4 UTME: 387175 UTMN: 5487513

Description: low water; bare dirt-forb island; late fledgling stage Notes: 1998 Ground Survey; small island N side; X242; 2 mi NW of Stirling

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/22 Ground Check: Yes

Species: American White Pelican Adults: 25

Species: Black Tern Adults: 2

Species: California Gull Nests (Ground Survey): 130 Nests (Aerial Survey): part of 300+ nests Adults: 250

Species: Caspian Tern Adults: 2

Species: Double-crested Cormorant Nests (Ground Survey): 27 Nests (Aerial Survey): not found Adults: 20

Species: Franklin's Gull Adults: 20

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Stirling Lake		<100 nests	1968	Vermeer (1970a); Brechtel, NRS Edmonton (1998)
		962 nests	1976	Brechtel, NRS Edmonton (1998); Weseloh (1978)
		6 colonies	1979	Brechtel, NRS Edmonton (1998); 6 small islands
				N side
		100 nests	1995	PNRS (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Starling Lake	6-7-19-W4	10 nests	1995	PNRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Stirling Lake		1000-3000	1968	Vermeer (1970a); Brechtel, NRS Edmonton
		nests		(1998)
		218 nests	1976	Brechtel, NRS Edmonton (1998); Weseloh (1978)
		6 colonies	1979	Brechtel, NRS Edmonton (1998); 6 small islands
				N side

Location: Taber Lake 1 Map: 82H/16 Legal: SW10-10-16-W4 Section SW10 TP 10 RGE 16 MER W4 UTME: 420618 UTMN: 5517312

Description: high water; bare dirt with cattail ring; late fledgling stage **Notes:** 1998 Ground Survey; X245; E most of 2 small islands at W end of N arm, may be one island in low water

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/21 **Ground Check:** Yes

Species: Black Tern Adults: 2

Species: California Gull Nests (Ground Survey): 30 Nests (Aerial Survey): part of 250 nests Adults: 75

Species: Common Tern Adults: 40

Species: Double-crested Cormorant Nests (Ground Survey): 30 Nests (Aerial Survey): 50+ nests Adults: 75

Species: Franklin's Gull Adults: 50

Historical Data:

- see Taber Lake 3

Location: Taber Lake 2 Map: 82H/16 Legal: SE9-10-16-W4 Section SE9 TP 10 RGE 16 MER W4 UTME: 420539 UTMN: 5517378

Description: high water; bare dirt with cattail ring; late fledgling stage Notes: 1998 Ground Survey; X245; W most of 2 small islands at W end of N arm, may be one island in low water

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes

Species: American White Pelican Adults: 10

Species: California Gull Nests (Ground Survey): 21 Nests (Aerial Survey): part of 250 nests Adults: 10

Species: Double-crested Cormorant Nests (Ground Survey): 63 Nests (Aerial Survey): 50+ nests Adults: 100

Historical Data:

- see Taber Lake 3

Location: Taber Lake 3 Map: 82H/16 Legal: NE4-10-16-W4 Section NE4 TP 10 RGE 16 MER W4 UTME: 420603 UTMN: 5516440

Description: high water; bare dirt with cattail ring; late fledgling stage; surveyed from shore Notes: 1998 Ground Survey; new location; small island at W side of S arm

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/21 Ground Check: Yes Species: American White Pelican Adults: 3

Species: California Gull Nests (Ground Survey): 20 Adults: 40

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting on aerial survey Nests (Aerial Survey): 20+ nests Adults: 8

Historical Data (whole lake):

- gulls reported nesting by Canadian Wildlife Service (1979a)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Taber Lake		active	1990	Brechtel, NRS Edmonton (1998)

Location: Tilley B Reservoir Map: 72L/12 Legal: SE31-18-12-W4 Section SE31 TP 18 RGE 12 MER W4 UTME: 454670 UTMN: 5601385

Description: high water; bare island, some grass-forb patches, 2 low willow patches; egg stage
Notes: 1998 Ground Survey; Cormorant island E central side of lake; X247; 7 mi NE of Tilley; same as Louisiana Lakes North of some authors

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/10 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 100 Nests (Aerial Survey): active Adults: 150

Species: Caspian Tern Nests (Ground Survey): 1 Adults: 2

Species: Common Tern Adults: 2

Species: Double-crested Cormorant Nests (Ground Survey): 386 Nests (Aerial Survey): active Adults: 100

Species: Franklin's Gull Adults: 50

Species: Ring-billed Gull Nests (Ground Survey): 500 Nests (Aerial Survey): active Adults: 1500

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Louisiana Lakes	9-17-10-W4	colony	1977	Brechtel, NRS Edmonton (1998);
N. Colony	(erroneous location)			Cormorant/Gull colony; probably
				Tilley B
Tilley B	30-18-12-W4	colony	1978	Brechtel, NRS Edmonton (1998);
Reservoir				Cormorant island N end
		colony	1979	Brechtel, NRS Edmonton (1998)

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Tilley B	30-18-12-W4	0 nests	1974	Brechtel (1981)
Louisiana Lakes	9-17-10-W4	20-30 nests	1976	Brechtel, NRS Edmonton (1998);
N. Colony	(erroneous location)			Brechtel (1981); Cormorant/Gull
				colony; probably Tilley B
Tilley B	30-18-12-W4	81 nests	1977	Brechtel, NRS Edmonton (1998)
		75 nests	1978	Brechtel, NRS Edmonton (1998)
		65 nests	1979	Brechtel, NRS Edmonton (1998)
		22 nests	1980	Brechtel (1981)
		125 nests	1989	Lethbridge NRS (1998)

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Louisiana Lakes		active	1979	Canadian Wildlife Service (1979b)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Louisiana Lakes	9-17-10-W4	colony	1977	Brechtel, NRS Edmonton (1998);
N. Colony	(erroneous location)			Cormorant/Gull colony; probably
				Tilley B
Tilley B	30-18-12-W4	colony	1978	Brechtel, NRS Edmonton (1998);
Reservoir				Cormorant island N end
		colony	1979	Brechtel, NRS Edmonton (1998)

Location: Tyrell Lake Map: 82H/8 Legal: NW9-5-17-W4 Section NW9 TP 5 RGE 17 MER W4 UTME: 409550 UTMN: 5469722

Description: low water; grass-some forb, island Notes: 1998 Ground Survey; small man made islands southeast of road on smaller part **Observers (Ground Survey):** Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/22 Ground Check: Yes

Species: Double-crested Cormorant Nests (Ground Survey): 5 Adults: 5

Species: Double-crested Cormorant Nests (Ground Survey): 0; no nests found despite apparent nesting on aerial survey Nests (Aerial Survey): 10+ nests Adults: 0

Historical Data:

- new survey location

Location: Upper Therien Lake Map: 73E/14 Legal: SE5-58-9-W4 Section SE5 TP 58 RGE 9 MER W4 UTME: 480923 UTMN: 5980980

Description: Notes: 1998 Ground Survey; Map 73E/14; 2 colonies; X249; St. Paul

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/07 **Ground Check:** Yes

Species: California Gull Nests (Ground Survey): 258 Nests (Aerial Survey): part of 250 nests Adults: 200

Species: Herring Gull Adults: 20

Historical Data:

California Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Upper Therien Lake	32-57-9-W4	300-400 nests	1981	St. Paul NRS (1998); 2 colonies; different
				location than 1998
		760 nests	1982	St. Paul NRS (1998)

Ring-billed Gull

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Upper Therien Lake	32-57-9-W4	200 nests	1981	St. Paul NRS (1998); 2 colonies; different
				location than 1998

Location: Utikuma Lake - North Island Map: 820 Legal: SW7-80-9-W5 Section SW7 TP 80 RGE 9 MER W5

Description: smaller island near northern shore **Notes:** Fish and Wildlife Ground Survey; Map 83 O; X251

Observers (Ground Survey): M. Heckbert **Ground Survey Date:** 1998/07/03 **Ground Check:** Alberta Fish and Wildlife

Species: American White Pelican Nests (Ground Survey): 0

Species: California Gull Nests (Ground Survey): 13

Species: Common Tern Nests (Ground Survey): 34

Species: Double-crested Cormorant Nests (Aerial Survey): 0

Species: Ring-billed Gull Nests (Ground Survey): 5

Species: Western Grebe Nests (Ground Survey): 64

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Utikuma L (N Island)	SW7-80-9-W5	0 nests	1967	Brechtel (1981)
		9 nests	1970	Brechtel (1981)
		active	1971-1974	Brechtel (1981)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Utikuma L (N Island)		97 nests	1978	Brechtel (1981)
continued		active	1979	Brechtel (1981)
		16 nests	1980	Brechtel (1981)
		2 nests	1985	Brechtel, NRS Edmonton (1998)
		part of 150	1989	Brechtel, NRS Edmonton (1998); N
		nests		+ S islands

California Gull

- see Utikuma Lake South Island

Double-crested Cormorant

	LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
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Utikuma L (N Island)	SW7-80-9-W5	0 nests	1967, 1970	Brechtel (1981)
		active	1971-1974	Brechtel (1981)
		61 nests	1978	Brechtel (1981)
		69 nests	1979	Brechtel (1981)
		active	1980	Brechtel (1981)

Location: Utikuma Lake - South Island Map: 83O Legal: E31-78-9-W5 Section E31 TP 78 RGE 9 MER W5

Description: western most of group of islands near southern shore **Notes:** Fish and Wildlife Ground Survey; Map 83 O; X252

Observers (Ground Survey): M. Heckbert **Ground Survey Date:** 1998/07/03 **Ground Check:** Alberta Fish and Wildlife

Species: American White Pelican Nests (Ground Survey): 126 Nests (Aerial Survey):

Species: Double-crested Cormorant Nests (Ground Survey): 87

Species: Western Grebe Nests (Ground Survey): 39

Historical Data:

American White Pelican

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Utikuma L (S Island)	E31-78-9-W5	0 nests	1967	Brechtel (1981)
		inactive	1966-1970	Brechtel (1981)
		active	1971-1974	Brechtel (1981)
		0 nests	1976	Brechtel (1981)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Utikuma L (S Island)		20 nests	1978	Brechtel (1981)
continued		12 nests	1979	Brechtel (1981)
		15-25 nests	1980	Brechtel (1981)
		17 nests	1985	Brechtel, NRS Edmonton (1998)
		part of 150	1989	Brechtel, NRS Edmonton (1998); N
		nests		+ S islands

California Gull (whole lake)

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Utikuma L		500-1000	1967	Vermeer (1970a); Ealey (1986);
		nests		whole lake

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Utikuma L (S Island)	E31-78-9-W5	0 nests	1967	Brechtel (1981)
		6 nests	1970	Brechtel (1981)
		active	1971-1974	Brechtel (1981)
		8 nests	1976	Brechtel (1981)
		14 nests	1978	Brechtel (1981)
		20 nests	1979	Brechtel (1981)
		25 nests	1980	Brechtel (1981)

Location: Vincent (west of) Map: 73L/3 Legal: 27-59-10-W4 Section 27 TP 59 RGE 10 MER W4 UTME: 472150 UTMN: 5997500

Description: small wooded island in very small water body west of Vincent Lake Notes: 1998 Aerial Survey; Map 73L/3; XH130; 3 mi NE of Abilene

Observers: Wayne Smith, Cliff Wallis Aerial Survey Date: May 29-31 1998 Ground Check: No

Species: Great Blue Heron Nests (Aerial Survey): 20 nests

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Vincent (west of)	27-59-10-W4	50-100 nests	1987	St. Paul NRS (1998)
		25 nests	1988	St. Paul NRS (1998)
		30 nests	1989	St. Paul NRS (1998)
LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Vincent (west of)		20 nests	1990	St. Paul NRS (1998)
continued		20 nests	1992	St. Paul NRS (1998)

Location: Waterton Reservoir Map: 82H/5 Legal: 14-4-28-W4 Section 14 TP 4 RGE 28 MER W4 UTME: 305879 UTMN: 5463870

Description: high water; bare dirt-forb-rose island; late fledgling stage; extrapolated from 46 X 5 m transect Notes: 1998 Ground Survey; island at E shore; X254; 2 mi W of Hillspring

Observers (Ground Survey): Wayne Smith, Ray Wershler Ground Survey Date: 1998/06/23 Ground Check: Yes Species: American White Pelican Adults: 15

Species: California Gull Nests (Ground Survey): 405 Nests (Aerial Survey): active colony Adults: 570

Species: Double-crested Cormorant Nests (Ground Survey): 33 Nests (Aerial Survey): no cormorants seen Adults: 20

Species: Ring-billed Gull Nests (Ground Survey): 135 Nests (Aerial Survey): active colony Adults: 190

Historical Data:

Double-crested Cormorant

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Waterton Reservoir	15-4-28-W4	active	1983	Lethbridge NRS (1998)
		200 adults + nests	1984	Ealey (1986)

Location: Winagami Lake Map: 83N Legal: NW26-76-18-W4 Section NW26 TP 76 RGE 18 MER W4

Description: New colonial nesting location **Notes:** Not Surveyed in 1998 Aerial Survey; Fish and Wildlife 1998 Ground Survey

Observers (Ground Survey): M. Heckbert **Ground Survey Date:** 1998/06/25 **Ground Check:** Alberta Fish and Wildlife

Species: California Gull Nests (Ground Survey): 122

Species: Common Tern Nests (Ground Survey): 149

Historical Data:

- new survey location

Location: Wolf Lake Map: 73L/11 Legal: SE9-66-7-W4 Section SE9 TP 66 RGE 7 MER W4 UTME: 500436 UTMN: 6060108

Description: normal water level; spruce-fir-poplar-birch woods; nestling stage; count lower by 10-15% (hard to see in spruce), colony back from shore at peninsula tip
 Notes: 1998 Ground Survey; not at locale in BSOD

Observers (Ground Survey): Wayne Smith, Ray Wershler **Ground Survey Date:** 1998/06/05 **Ground Check:** Yes

Species: Great Blue Heron Nests (Ground Survey): 24 Nests (Aerial Survey): not found Adults: 40

Species: American White Pelican Adults: 3

Species: Black Tern Adults: 6

Species: Common Tern Adults: 1

Species: Franklin's Gull Adults: 30

Species: Western Grebe

Adults: 14

Historical Data:

Great Blue Heron

LOCATION	LEGAL	# OF NESTS	YEAR	NOTES
Wolf Lake	4-66-7-W4	25 nests	1978	St. Paul NRS (1998)
		15 nests	1979	St. Paul NRS (1998)
		25 nests	1981	St. Paul NRS (1998)
		40 nests	1983	St. Paul NRS (1998)
		40 nests	1985	St. Paul NRS (1998)
		42 nests	1988	St. Paul NRS (1998)
		40 nests	1989	St. Paul NRS (1998)
		20 nests	1991	St. Paul NRS (1998)
		10 nests	1993	St. Paul NRS (1998)

3.2 INACTIVE OR SMALL FORMERLY ACTIVE COLONIES

Species	Location		Nests	Notes
Great Blue Heron	Albert Creek	523502, 11, 53252	small	Bruns (1998); Not Surveyed in 1998 Aerial Survey; SE Slopes region; not mapped (not in gazetteer); had 5 nests in 1997; unknown location
Double- crested Cormorant	Astotin Lake (East, beaver pond)	19-54-19-W4	small/inactive; not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey; Map 83H/10; X141; Elk Island NP; 11 nests 1988; 13 nests 1989; 22 nests 1990; 17 nests 1991; 9 nests 1992; 6 nests 1993; surveyed (no data) 1994
Great Blue Heron	Athabasca River	7-92-10-W4	small, active	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 74D/14; no #; XH4; 5 miles S of Mildred L on Cache Ck; active in 1985
Great Blue Heron	Baptiste River (South Fork)	NE16-41-12- W5	small/inactive; not surveyed	Bruns (1998); Not Surveyed in 1998 Aerial Survey; XH6; 23 mi WNW of Crimson Lake PP; 12 nests, 1995
Heron	Battle Lake	11-46-2-W5	small/inactive; not surveyed	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 83B/16; XH 7; 5 mi SW of Pigeon L PP; 1 nest 1980
Heron	Battle Creek- Springdale	4-44-27-W4	small/inactive; not surveyed	BSOD (1998); Not Surveyed in 1998 Aerial Survey; BSOD (1998) 429creek, 6 miles SE of Springdale; 2 nests 1987
Great Blue Heron	Battle River Big Knife Old	NE16-41-17- W4	extinct (see new colony immediately west)	1998 Aerial Survey; Map 83 A; XH 9; 7 mi NW of Big Knife PP; 12 nests 1967, not found 1978 or 1982; Red Deer NRS (1998)
Great Blue Heron	Battle River Battle Bend SE	NW4-40-10- W4	not found (see new location west)	1998 Aerial Survey; BSOD (1998) 3093 miles SE of Battle Bend; 3 nests 1978; Red Deer NRS (1998)
Great Blue Heron	Battle River Alliance 1	36-39-13-W4	not found	1998 Aerial Survey; BSOD (1998) 8821; 3 miles SE of Alliance; 14 nests in winter survey of Jan 1998; may have been mislocated on map; other locations close by
Great Blue Heron	Battle River Alliance 2	19-39-12-W4	not found	1998 Aerial Survey; BSOD (1998) 56905 miles SE of Alliance; 4 nests 1973
Great Blue Heron	Beaverdam Creek	SE21-28-3-W5	not found	1998 Aerial Survey; Brechtel (1981); Vermeer (1969b); BSOD (1998) 311-318; 3 miles SE of Dogpound; 25 nests 1965; 33 nests 1967; 50 nests 1972; 46 nests 1973; 38-50 nests 1974; 30 nests 1978; 27 nests 1982; 25 nests 1987
Great Blue Heron	Beaverhill Lake	24-52-18-W4	extinct	1998 Aerial Survey; St. Paul NRS (1998); BSOD (1998); Weseloh et al. (1977); extinct after 1978; north end of lake; XH12; 3 nests 1975; 20 nests 1976; 1 nest 1978; extinct thereafter
Great Blue Heron	Belly River	22-4-27-W4	extinct	1998 Aerial Survey; Vermeer (1969b); BSOD (1998); Gudmondson, personal communication; 3 mi NE of Hillspring; XH13; 55 nests 1967; 1 nest 1982
Great Blue Heron	Belly River	27-6-25-W4	extinct; part of main river channel now	1998 Aerial Survey; BSOD (1998); Gudmondson, personal communication; 1.5 mi S of junction of Belly and Waterton Rivers; XH14; 4 nests (0 active) 1982
Great Blue Heron	Berry Creek	26-23-13-W4	inactive/small	1998 Aerial Survey; BSOD (1998) 3207 miles W of Cessford; no suitable habitat; mislabelled?; 30 nests 1987
American White Pelican	Birch Lake	NE8-95-17-W4	not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey; Map 84H/2; X148; 9 mi S of Namur L; 120 nests in 1980 (Beaver 1980); 140 nests 1976; 70 nests 1977; 0 nests 1978; 50 nests 1980; 59 nests 1985; 0 nests 1989 and 1991
California Gull	Birch Lake	9-95-17-W4	not surveyed	St. Paul NRS (1998); Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 84H/2; X148; 9 mi S of Namur L; 15 pairs 1976; 20 pairs 1977; 30 nests 1985; surveyed 1991 (no data)
Great Blue Heron	Birch River	SW8-109-14- W4	not surveyed	St. Paul NRS (1998); Brechtel (1981); Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 84I/8; XH32 (Claire L); delta, southwest of L. Claire; XH16; 12 nests 1977

Ring-	Birch River	8-109-14-W4	not surveyed	PNRS (1998); Not Surveyed in 1998 Aerial Survey; X259 =
billed Gull	1			XH16; 1 fledged young 12 Aug, 1978 (PNRS)
California Gull	Bistcho Lake	1-123-5-W6	not surveyed	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 84 M; X150; 4 mi W of Jackfish Pt.; large colony (no date); no mention of this colony by McGillivray and Hastings (1988)
Great Blue Heron	Blindman River	NE28-43-2-W5	inactive/small	BSOD (1998) 319; Not surveyed in 1998 Aerial Survey; 3 miles E of Bluffton; 3 nests 1987
	Bolloque Lake	11-64-25-W4	inactive	St. Paul NRS (1998); BSOD (1998); 1998 Aerial Survey; Map 83I/12; 7 mi SE of Cross L; XH19; 1 nest 1976; 1 nest 1980; 0 nests 1983, 1988 and 1993; prob. extinct
Great Blue Heron	Bow River - Arrowwood	12-21-23-W4	inactive/ small	1998 Aerial Survey; 4 miles NE of Arrowwood; BSOD (1998) 329; Brechtel (1981); 20-23 nests 1972; 38 nests 1982
Great Blue Heron	Bow River - Grand Forks	SW8-12-12-W4	inactive; nests found	1998 Aerial Survey; BSOD (1998); 3 mi up from the Grand Forks; XH21; 10 nests 1972; occupied 1977; 20 nests 1978; 12 nests 1982
Great Blue Heron	Bow River- Calgary Cominco	6-23-29-W4	inactive/small	1998 Aerial Survey; XH22; PNRS (1998); BSOD (1998); opposite Carburn Park, Calgary; 1 nest 1991 and 1992
Great Blue Heron	Bow River - Carseland East	E35-21-25-W4	inactive/small	1998 Aerial Survey; Vermeer (1969b); BSOD (1998) 330-332; Brechtel (1981); 6 miles SE of Carseland; 18 nests 1967; 13 nests 1978; 0-30 nests 1982
Great Blue Heron	Bow River - Carseland West	S23-21-26-W4	inactive/small	1998 Aerial Survey; Vermeer (1969b); BSOD (1998) 321-328; Brechtel (1981); 5 miles SSW of Carseland; 30 nests 1965; 34 nests 1967; 41 nests 1972; 16 nests 1973; 19-34 nests 1974; 46 nests 1975; 20 nests 1978; 35 nests 1982
Great Blue Heron	Buck Lake A	13-46-6-W5	extinct	1998 Aerial Survey; BSOD (1998) 335; habitat cleared; 12 nests 1978; 19 nests 1982
Great Blue Heron	Buck Lake B	9-46-6-W5	inactive	1998 Aerial Survey; BSOD (1998) 392off SW end lake, 1 mile W of town Buck Lake; 50 nests 1976; active 1982
Great Blue Heron	Buck Lake C	16-46-6-W5	inactive	1998 Aerial Survey; BSOD (1998) 333-334; off SW end lake, 2 miles NW of town Buck Lake; 30 nests 1979; 15 nests 1982
Great Blue Heron	Buffalo Creek	SW-35-46-7- W4	not surveyed in 1998	BSOD (1998); Not surveyed in 1998 Aerial Survey; 16 nests seen in winter survey Jan 1998; originally in BSOD as W5
Great Blue Heron	Bull's Head Coulee	12-11-5-W4	inactive/small	1998 Aerial Survey; XH25; 4.5 mi S of Medicine Hat; 3 nests 1988 (PNRS 1998)
Great Blue Heron	Burbank (?Lake)	13-39-27-W4	inactive/small	BSOD (1998) 343; Not surveyed in 1998 Aerial Survey; 2 miles NE of Red Deer; 7 nests 1987
Great Blue Heron	Calahoo B (Blacks Lake)	36-54-28-W4	inactive/small	St. Paul NRS (1998); Not surveyed in 1998 Aerial Survey; Map 83H/12; XH26; 10 mi NE of Spruce Grove; 1 nest 1982; 3 nests 1985; 1 nest 1988; 0 nests 1991
Great Blue Heron	Cameron Lake	SE2-54-1-W5	inactive/small	St. Paul NRS (1998); Brechtel (1981); Not surveyed in 1998 Aerial Survey; Map 83G/9; XH27; 5 mi NW of Spruce Grove; 1 nest 1976; 2 nests 1977; 4 nests 1978; 7 nests 1979; 8 nests 1980; 12 nests 1983; 0 nests 1985; 7 nests 1988; 6 nests 1991; 12 nests 1993
Great Blue Heron	Clearwater River	NE13-35-9-W5	inactive/small	Bruns (1998); Not surveyed in 1998 Aerial Survey; XH33; 9 mi SW of Ricinus; 5 nests 1997
Great Blue Heron	Coal Lake	31-47-23-W4	inactive/small	BSOD (1998) 345-347; Brechtel (1981); Not surveyed in 1998 Aerial Survey; NW end of lake, 7 miles N of Wetaskiwin; 5 nests 1977; 7 nests 1978; 8 nests 1982
Great Blue Heron	Coal Lake	14-47-23-W4	inactive/small	BSOD (1998) 344; Brechtel (1981); Not surveyed in 1998 Aerial Survey; W side of lake, 4 miles NE of Wetaskiwin; 50 nests 1975; extinct 1978
Great Blue Heron	Coleman Lake	2-29-14-W4	inactive	1998 Aerial Survey; BSOD (1998) 348-351; Brechtel (1981); 15 miles S of Hanna; occupied 1976; 2 nests 1978; 1 nest 1979, 1980 and 1982
Great Blue Heron	Cow Lake	11-38-8-W5	not found	1998 Aerial Survey; Map 83 B; XH 35; 9 mi SW of Rocky Mtn House; 30-50 nests 1985 (Ealey 1986)

California Gull	Cowoki Lake	2-19-13-W4	inactive, flooded	1998 Aerial Survey; Map 72 L; X159; 9 mi E of Brooks; active 1967 (Ealey 1986)
Ring- billed Gull	Cowoki Lake	2-19-13-W4	inactive, flooded	1998 Aerial Survey; Map 72 L; X159; 9 mi E of Brooks; active 1967 (Ealey 1986)
	Davey Lake	SE21-34-27- W4	inactive/small	BSOD (1998) 430-431; Not surveyed in 1998 Aerial Survey; 9 miles SE of Innisfail; 7 nests 1995; 8 nests 1996
Great Blue Heron	Delburne Lake	NW22-37-23- W4	inactive/small	Red Deer NRS (1998); BSOD (1998) 352-353; Not surveyed in 1998 Aerial Survey; 2 miles SE of Delburne; 3 nests 1977 and 1978; also 3 nests in 1981 at 27-34-27-W4 in PNRS (1998), ?same location as below
Great Blue Heron	Delburne Lake	27-34-27-W4	inactive/small	Brechtel (1981); PNRS (1998); Not surveyed in 1998 Aerial Survey; 1 nest 1974; 3 nests 1981; ?same location as above
Double- crested Cormorant	Dillberry Lake PP	x-41-4-W4	inactive/small	Ealey (1986); Not surveyed in 1998 Aerial Survey; Map 73 D; 20 nests reported in 1929 by Vermeer (1969a)
Great Blue Heron	Dillberry Lake PP	x-41-4-W4	inactive/small	Ealey (1986); Not surveyed in 1998 Aerial Survey; Map 73 D; 5 nests on east shore of Freshwater Lake and 1 pair on east side of Dillbery Lake, 1974
California Gull	Dowling Lake	NE12-32-15- W4	inactive, lake dry	1998 Aerial Survey; Weseloh (1978); Steve Brechtel, NRS (1998); X160; 6 mi NE of Hanna; 500-1000 nests 1968; 824 nests 1976; part of 6000 adults 1977; 2 colonies 1979
Great Blue Heron	Dowling Lake	5 or 7-32-14- W4	inactive, lake dry	1998 Aerial Survey; Vermeer (1969b); BSOD (1998) 354-358; off SE end lake, low willow bushes on island; 5 miles N of Hanna; 11 nests 1967; 11 nests 1968; 0 nests 1969; 16 nests 1976; 12 nests 1978; 34 nests 1979; active 1980 and 1982; also 20 nests in 1972 on pond near lake SW4-32-15-W4extinct in 1978
Double- crested Cormorant	Dowling Lake	NE12-32-15- W4	inactive, lake dry	1998 Aerial Survey; BSOD (1998); Brechtel (1981); 0 nests 1967 and 1975; 25 nests 1976; 27 nests 1977; 21 nests 1978; 34 nests 1979; 23 nests 1980
Ring- billed Gull	Dowling Lake	NE12-32-15- W4	inactive, lake dry	1998 Aerial Survey; 2 islands; BSOD (1998); Weseloh (1978); Steve Brechtel, NRS (1998); X160; 6 mi NE of Hanna; 3000+ nests 1968; 5184 nests 1976; part of 6000 adults 1977; 2 colonies 1979 on 2 islands
California Gull	Eagle Lake	?30-23-24-W4	inactive	1998 Aerial Survey; Steve Brechtel, NRS (1998); X161; 4 mi SE of Strathmore; 100-500 nests 1968; 0 nests 1976
Ring- billed Gull	Eagle Lake	?30-23-24-W4	inactive	1998 Aerial Survey; Steve Brechtel, NRS (1998); X161; 4 mi SE of Strathmore; 100-500 nests 1968; 0 nests 1976
Great Blue Heron	East Hamilton Lake	28-58-13-W4	inactive	1998 Aerial Survey; Map 73L/4; St. Paul NRS (1998); Brechtel (1981); XH42; near Stry (Saddle L area); 4 nests 1977; 0 nests 1990
Great Blue Heron	Elbow River	5-24-2-W5	inactive/small	1998 Aerial Survey; UTM916559, spruce stand on river edge; BSOD (1998); Ealey (1986); XH43; 4 nests 1984; active 1985
Great Blue Heron	Elinor Lake	NW30-65-11- W4	inactive/small	St. Paul NRS (1998); Brechtel (1981); Not surveyed in 1998 Aerial Survey; Map 73L/12; XH44; 3 nests 1977; 1 nest 1980; 0 nests 1991
Double- crested Cormorant	Elk Island NP.	UQ 812-488	inactive/small	Steve Brechtel, NRS (1998); Not surveyed in 1998 Aerial Survey; peninsula of a lake; not mapped; may = Astotin L; 13 nests 1989
	Figure Lake	2-63-18-W4	inactive	1998 Aerial Survey; Map 831/7; no date, no #; Ealey (1986); XH47; 6 mi NE of Long Lake PP; no activity datahistorical nest site
Great Blue Heron	Fish Creek	S36-22-1-W5	extinct	Not surveyed in 1998 Aerial Survey; BSOD (1998) 361-366; Brechtel (1981); Map 82 J; 9 nests 1967; 22 nests 1973; 24-37 nests 1974; 7 nests 1978; 3 nests 1979; 6 nests 1980; 16 nests 1982
Ring- billed Gull	Forsyth Lake	6-62-6-W4	inactive/small	1998 Aerial Survey; Map 73L/7; St. Paul NRS (1998); X165; 4 mi N of Moose L PP; surveyed 1981 (no data)

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American	Frank Lake	19?-18-27-W4	inactive/small	1998 Aerial Survey; X166; colony existed in pre-war years;
White				but as the area was used as a bombing range during the war,
Pelican				the colony was deserted; colony of 500 or more birds in 1960 (Hohn et al 1961)
California	Energle Lake	19?-18-27-W4	inactive	1998 Aerial Survey; Steve Brechtel, NRS (1998); Weseloh
California	Frank Lake	19?-18-2/-W4	inactive	
Gull				(1978); Wallis et al. (1996); X166; small colony at other
				location; part of 30 nests 1967; 100-500 nests 1968; 0 nests
				1970 and 1989; 75 nests in Basin 3 1975; 311 nests in 1976; 3
D 11	D	100 10 07 11/4	1	nests 1994
Double-	Frank Lake	19?-18-27-W4	inactive/small	1998 Aerial Survey; Wallis et al. (1996); X166; 4 nests 1994
crested				
Cormorant	Frank Lake	19?-18-27-W4	lingeting	1998 Aerial Survey; Steve Brechtel, NRS (1998); Weseloh
Ring-	Frank Lake	19?-18-2/-W4	inactive	(1978); Wallis et al. (1996); X166; small colony at other
billed Gull				
				location; part of 30 nests 1967; 100-500 nests 1968; 1017 nests 1976; 815 nests 1994
Creat Dive	Calabad (area)	9-41-14-W4	extinct	1998 Aerial Survey; BSOD (1998) 308; 1 mile W of Galahad;
Heron	Galahad (area)	9-41-14- W4	extinct	7 nests 1967; extinct 1978
	Casara Laka	NIW29 57 1	linestive ald	
	George Lake	NW28-57-1- W5	inactive; old	1998 Aerial Survey; Map 83G/16; St. Paul NRS (1998);
Heron		WS	nests found	XH53; 9 mi E of Lac La Nonne; 4 nests 1982; 2 nests 1983; 1
Double-	George Lake	28-57-1-W5	inactive; old	nest 1985; 9 nests 1991; 4 nests 1993 1998 Aerial Survey; Map 83G/16; St. Paul NRS (1998);
	George Lake	28-57-1-W5		X170=XH53; 9 mi E of Lac La Nonne; 6 nests 1991; 8 nests
crested			nests found	1993
Cormorant				
Double-	George Lake		suspected	1998 Fish and Wildlife Survey; island north of boat launch;
crested	(Hines Creek)		nesting	may have had Great Blue Heron in past
Cormorant	Ghost Pine	21 25 22 11/4	autimat	Breachtal (1081), BCOD (1008) 425 427. Net averaged in 1008
		31-35-23-W4	extinct	Brechtel (1981); BSOD (1998) 425-427; Not surveyed in 1998 Aerial Survey; 4 miles NW of Elnora; 12 nests 1978; 8 nests
Heron	Creek			
California	God's Lake	18?-90-2-W5		1981; 7 nests 1982; extinct 1987
California Gull	God's Lake	18?-90-2-w5	not surveyed	PNRS (1998); Not Surveyed in 1998 Aerial Survey; 15 miles
Ring-	God's Lake	18?-90-2-W5	not surveyed	NW of Peerless Lake; X171; 52 nests 1991 PNRS (1998); Not Surveyed in 1998 Aerial Survey; 15 mi NE
billed Gull	OUUS Lake	10:-90-2- WJ	not surveyed	of Peerless L; X171; 1 nest June 6, 1991)
	Goodwin Lake	20-74-11-W4	not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey;
Heron	Goodwill Lake	20-/4-11-004	not surveyed	Map 73M/5; island; XH54; off NW corner of Cold Lake base;
rieron				6 nests in 1986 (Westworth & Associates 1990); 4 nests 1990;
				26 nests 1992; surveyed 1994
Double-	Graham Lake	approx 28-87-	not surveyed	Brechtel (1981); Not Surveyed in 1998 Aerial Survey; X172;
crested	Oralialii Lake	4-W4	not surveyed	22 mile NE of Gregoire L PP; 2 nests in 1980 (Westworth and
Cormorant				Associates 1990)
California	Grouard	20-75-14-W5	inactive	1998 Aerial Survey; Map 83N/9; Ealey (1986); X173;
Gull	Channel	20-73-14- 145	mactive	Grouard; active 1979
Ring-	Grouard	20-75-14-W5	inactive	1998 Aerial Survey; Map 83N/9; Ealey (1986); X173;
billed Gull		20-75-14-115	mactive	Grouard; active 1979
and the second se	Gull Lake	NW33-42-1-	inactive/small	Ealey (1986); BSOD (1998) 367-368; Not surveyed in 1998
Heron	Guil Lake	W5	mactive/smail	Aerial Survey; 6 miles E of Rimbey; 11 nests 1984; 5 nests
TICIOII				1987; also erroneously in BSOD as Rimbey area with 1 nest
				each year
Great Blue	Highwood	SW1-19-29-W4	extinct	1998 Aerial Survey; Brechtel (1981); BSOD (1998) 371-372?;
Heron	River A	5 W 1-19-29-W4	extinct	at town of High River; 23 nests 1969; 21 nests 1970; 23 nests
1101011				1973; extinct 1978
Great Blue	Highwood	N30-18-29-W4	not found	1998 Aerial Survey; Brechtel (1981); BSOD (1998) 369-370
Heron	River B	1130-10-29- 104	(wiped out by	5 miles SW of High River; 5 nests 1978; 25 nests 1982; see
1101011			96 flood?)	Highwood RiverBaker Creek entry
Great Blue	Highwood	33-18-29-W4	extinct	BSOD (1998) 296-297; Not Surveyed in 1998 Aerial Survey;
Heron	RiverBaker	55-16-25-114	extinet	14 nests in 1967, extinct in 1978; Vermeer (1969b); originally
	Creek			placed in BSOD as 28-29-18-W4 (near Delia)
	OICON	1	1	[placed in DOOD as 20-27-10-114 (lical Della)

	Hondo Lake	24-70-27-W4	inactive; old	1998 Aerial Survey; Map 83P/4; island; St. Paul NRS (1998);
Heron			nests found	XH56; 2 mi E of Hondo; 50 nests 1987; 40 nests 1990; 35 nests 1992
Great Blue Heron	Honeymoon Lake	S13-36-26-W4	inactive/small	1998 Aerial Survey; Brechtel (1981); Vermeer 1969b); BSOD (1998) 373-377; 5 miles SW of Pine Lake (town); 5 nests 1967; active 1976; 28 nests 1978; 10 nests 1980; 6 nests 1982; 2 nests 1987; 8 nests found in winter 1996; on island at first then moved to shore and 5.5 miles north to an island in Schroeder Lake
California Gull	Horse Lakes- NW Buffalo Bay	2-76-15-W5	inactive	1998 Aerial Survey; Ealey (1986); X176; 4 mi NW of Grouard; active 1979
Ring- billed Gull	Horse Lakes- NW Buffalo Bay	2-76-15-W5	inactive	1998 Aerial Survey; Ealey (1986); X176; 4 mi NW of Grouard; active 1979
Ring- billed Gull	Horse Lakes-S Buffalo Bay	24-75-15-W5	inactive	1998 Aerial Survey; Ealey (1986); X177; 2 mi W of Grouard; active 1979
California Gull	Horse Lakes-S Buffalo Bay	24-75-15-W5	inactive	1998 Aerial Survey; Ealey (1986); X177; 2 mi W of Grouard; active 1979
Ring- billed Gull	Horsefly Lake	12-9-16-W4	inactive	1998 Aerial Survey; Map 82 H; Ealey (1986); X179; 6 mi SE of Taber; active 1967
California Gull	Horsefly Lake	12-9-16-W4	inactive	1998 Aerial Survey; Map 82 H; Ealey (1986); X179; 6 mi SE of Taber; active 1967; erroneous location (9-15-16-W4) in BSOD (1998)
Great Blue Heron	Island Lake- near Smoky L	E35-61-17-W4	inactive	1998 Aerial Survey; Map 831/8; Brechtel (1981); BSOD (1998); XH 58; 15 mi N of Smoky L; 1 nest 1972; 18 nests 1978 and 1979; 15 nests 1984; 18 nests 1988; 9 nests 1990; 0 nests 1992; surveyed 1995
Great Blue Heron	Islet Lake	1 or NE2-52- 20-W4	inactive/small	1998 Aerial Survey; Map 83H/7; 4 mi S of Elk Island NP; Vermeer (1969b); St. Paul NRS (1998); Brechtel (1981); XH62; 8 nests 1967 (Vermeer 1969b), erroneously listed as 78 in BSOD (1998); 25 nests 1976; 12 nests 1977; 16nests 1978; 1 nest 1979 and 1980; 0 nests 1986, 1987 and 1990
Great Blue Heron	Jamieson Lake	NE35-43-7-W4	not surveyed in 1998	St. Paul NRS (1998); Vermeer (1969b); Brechtel (1981); on Wainwright base, no access Not Surveyed in 1998 Aerial Survey; 15 nests 1967; occupied 1978 and 1980
California Gull	Johnson Reservoir	12-16-14-W4	dry	1998 Aerial Survey; Map 72L/5; Ealey (1986); X181; 8 mi N of Rolling Hills; active 1967
Ring- billed Gull	Johnson Reservoir	12-16-14-W4	dry	1998 Aerial Survey; Map 72L/5; Ealey (1986); X181; 8 mi N of Rolling Hills; active 1967
California Gull	Keho Lake	x-11-23-W4	inactive (flooded)	1998 Aerial Survey; BSOD (1998); Steve Brechtel, Edmonton NRS (1998); Weseloh (1978); X183; 3 mi SE of Barons; 1000- 3000 nests 1968; 1459 nests in 4 colonies 1978; 4 colonies 1979; islands on west side
Double- crested Cormorant	Keho Lake	SW36-11-23- W4	inactive (flooded)	1998 Aerial Survey; Steve Brechtel, Edmonton NRS (1998); Brechtel (1981); X183; 3 mi SE of Barons; 0 nests 1967, 1976 and 1978; 7 nests 1979 and 1980; active 1990
Ring- billed Gull	Keho Lake	x-11-23-W4	inactive (flooded)	1998 Aerial Survey; 4 islands W side; Weseloh (1978); BSOD (1998); X183; 3 mi SE of Barons; 3000+ nests 1968; 4296 nests 1976; 4 colonies 1978 and 1979; 1000 adults 1995 (PNRS 1998)
Great Blue Heron	Keith Lake	15-64-8-W4	not found	1998 Aerial Survey; Map 73L/11; 6 mi NE of Truman; St. Paul NRS (1998); XH64; was in NE corner, no sign of adults or nests; surveyed 1994 but no data
Great Blue Heron	Killarney Lake	5-42-1-W4	extinct; lake dry	1998 Aerial Survey; Map 73D/9; St. Paul NRS (1998); XH34; 5 nests 1974 (? near Chauvin) and 5 nests 1980; 0 nests 1990
California Gull	Kleskun Lake	x-73-4-W6	inactive; too wet	1998 Aerial Survey; Map 83 M; Ealey (1986); X186; 11 mi E of Sexsmith; 50 pairs 1979

Ring-	Lac Sante	8-56-11-W4	inactive	1998 Aerial Survey; Map 73E/13; St. Paul NRS (1998); X235;
billed Gull				8 mi NE of Two Hills; 150 nests 1993
Ring- billed Gull	Lake Athabasca	12-115-4-W4	not surveyed	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 74L/15; island near Burntwood Is.; X193; 100-500 nests 1968
California Gull	Lake Athabasca		not surveyed	St. Paul NRS (1998); Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 74L/16; X194; 250 nests in 1977; colony in 1987; 150 nests in 1990 and 1991
Caspian Tern	Lake Athabasca	29-115-3-W4	not surveyed	St. Paul NRS (1998); Hohn (1972); Ealey (1986); Not Surveyed in 1998 Aerial Survey; X194; Egg Island near Burntwood Island; 20 pairs 1971; 47 nests 1977; 84 nests 1987; 101 nests 1988; 75 nests 1989; 60 nests 1990; 85 nests 1991
Great Blue Heron	Leming Lake	NW2-65-4-W4	inactive/small	St. Paul NRS (1998); Brechtel (1981); Not surveyed in 1998 Aerial Survey; Map 73L/9; XH70; 14 mi NW of Cold Lake (town); 2 nests 1978; 25 nests 1979; 4 nests 1982; 0 nests 1990; surveyed in 1995 but no data
California Gull	Lesser Slave Lake-Swan Pt	22-74-9-W5	inactive	1998 Aerial Survey; Map 83 O; Swan Pt; 9 mi NE of Kinuso, Ealey (1986); X197; active 1979
Ring- billed Gull	Lesser Slave Lake-Swan Pt	22-74-9-W5	inactive	1998 Aerial Survey; Map 83 O; Swan Pt; 9 mi NE of Kinuso, Ealey (1986); X197; active 1979
California Gull	Lesser Slave Lake-West	17-75-13-W5	inactive	1998 Aerial Survey; Map 83 O; opposite Joussard; Ealey (1986); X196; west end; active 1979
Ring- billed Gull		17-75-13-W5	inactive	1998 Aerial Survey; Map 83 O; opposite Joussard; Ealey (1986); X196; west end; active 1979
California Gull	Lesser Slave Lake-Joussard	9-74-13-W5	inactive	1998 Aerial Survey; Map 83 O; near Joussard; Ealey (1986); X198; Joussard; active 1978
Ring- billed Gull	Lesser Slave Lake-Joussard	9-74-13-W5	inactive	1998 Aerial Survey; Map 83 O; near Joussard; Ealey (1986); X198; Joussard; active 1978
Great Blue Heron	Lesser Slave Lake-Grouard	x-75-14-W5	not found; need exact location	1998 Aerial Survey; Map 83N/9; NW end; Grouard area; Ealey (1986); XH71; 20 nests (no date)
	Lesser Slave	20-73-5-W5	inactive	1998 Aerial Survey; Map 83 O; off E end of Lake; Ealey (1986); X199; 4 mi N of Slave Lake; 50 Forster's Terns; ; active 1979
Great Blue Heron	Little Bow River	19-16-26-W4	extinct	1998 Aerial Survey; Map 82 I; 12 mi E of Nanton; BSOD (1998); Brechtel (1981); XH72; deserted farmyard; 4 nests 1979; 14 nests 1982
Great Blue Heron	Little Red Deer River	E9-33-3-W5	extinct	1998 Aerial Survey; Brechtel (1981); BSOD (1998) 378-382; 3 miles NE of Harmatton; housing development; 18 nests 1972; 45 nests 1973; 50 nests 1976; 13 nests 1978; 12 nests 1987
Great Blue Heron	Lloyd Creek	28-44-2-W5	inactive/small	Ealey (1986); Not surveyed in 1998 Aerial Survey; Map 83B/16; XH73; 5 mi NE of Bluffton; 2 nests 1985
Great Blue Heron	Long Lake	1-63-19-W4	inactive	1998 Aerial Survey; Map 831/7; Long Lake PP; St. Paul NRS (1998); XH74; surveyed 1989 and 1995 (no data); 0 nests 1990
Great Blue Heron	Lougheed Lake area	NW33-44-14- W4	inactive; lake dry	1998 Aerial Survey; BSOD (1998) 423-424; 6 miles NW of Killam; 12 nests 1978; 7 nests 1982
Great Blue Heron	Lower Mann Lake	1 & 12 or 13 & 14-60-11-W4	inactive; old nests found	1998 Aerial Survey; Vermeer (1969b); St. Paul NRS (1998); XH 75; 4 mi NE of Ashmont; 13 nests 1967; 1 nest 1972; 0 nests 1978, 1980 and 1990
Great Blue Heron	Lyndon Creek	NE11-13-30- W4	small or inactive	1998 Aerial Survey; no date, no #; Bruns (1998); XH76; 18 mi NW of Claresholm; ?historical colony (no data)
Gulls	Many Island Lake	13-1-W4	extinct	1998 Aerial Survey; historical nesting of gulls, said to be Ring- billed (Munro 1929)
Great Blue Heron	Marguerite Lake	12-65-6-W4	extinct	1998 Aerial Survey; Map 73L/10; St. Paul NRS (1998); XH 79; 12 mi N of La Corey; 3 nests 1981; 2 nests 1982; 0 nests 1990
Great Blue Heron	Marie Lake	E16-65-3-W4	inactive/small	Not surveyed in 1998 Aerial Survey; Map 73L/9; St. Paul NRS (1998); Brechtel (1981); XH78; 14 mi NW of Cold Lake (town); 8 nests 1980

Great Blue	Matchayaw	SE20-55-1-W5	inactive/small	St. Paul NRS (1998); Brechtel (1981); Wollis (1999); Not
Heron	Lake			surveyed in 1998 Aerial Survey; Map 83G/16; XH 80; 5 mi NE of Onoway; 14 nests 1967; 11 nests 1976; 14 nests 1977; 13 nests 1978 and 1979; 14 nests 1980; 6 nests 1983; 13 nests 1985; 10 nests 1988; 6 nests 1993; active 1996
Ring- billed Gull	McGregor Lake	23-18-22-W4	inactive	1998 Aerial Survey; Map 82 I; N end; Ealey (1986); X208; 3 mi SW of Milo; 30 adults 1985
Great Blue Heron	Meyer (D) Lake	23-69-24-W4	inactive	1998 Aerial Survey; Map 831/13; XH82; 2 mi NE of Grosmont; inaccurate location?; Vermeer (1969b); 6 nests in 1979 (Westworth & Associates 1990); 17 nests 1967; 6 nests 1978; 0 nests 1980 and 1990; originally moved here from Island Lake
Double- crested Cormorant	Ministik Lake		extinct	1998 Aerial Survey; historical nesting (no data) reported by Vermeer (1969a) as having 12 nests in 1929
Great Blue Heron	Ministik Lake		extinct	1998 Aerial Survey; historical nesting (no data) reported by Munro (1929) in 1924 as having 70 nests
Great Blue Heron	Moose Lake PP	34-61-7-W4	inactive/small	1998 Aerial Survey; Map 73 L; no date, no #; Ealey (1986); XH84; historical nesting (no data)
American White Pelican	Mountain Rapids (Slave River)	E25-126-11 + W30-126-10- W4	not surveyed	St. Paul NRS (1998); Vermeer (1969a); Steve Brechtel, NRS Edmonton (1998); Not Surveyed in 1998 Aerial Survey; Map 74M/13; X212; active 1789; 100 pairs, early 1900s; 50 pairs 1967; 27 nests 1974; 25 nests 1975; 32 nests 1976; 36 nests 1977-1978; 42 nests 1979; 44 nests 1980; 59 nests 1981; 92 nests 1982; 85 nests 1983; 114 nests 1984; 156 nests 1985; 140 nests 1986; 128 nests 1987; 207 nest 1988; 195 nests 1989; 195 nests 1990; 205 nests 1991; 423 nests 1992; surveyed (no data) 1994; 325 nests 1995
Great Blue Heron	Mud Lake	36-59-8-W5	inactive/small	Ealey (1986); 1998 Aerial Survey; Map 83J/3; XH85; 13 mi W of Thunder L PP; 3 nests 1984
Great Blue Heron	Muriel Lake	36-59-5-W4	inactive/small	1998 Aerial Survey; Map 73 L; no date, no #; Ealey (1986); XH86; 10 mi SE of Bonnyville; historical nesting (no data)
Great Blue Heron	Murray Lake	26-9-8-W4	inactive/small	1998 Aerial Survey; Vermeer (1969b); BSOD (1998); Brechtel (1981); XH87; 19 mi SE of Bow Island; 30 nests 1967; 50 nests 1980; active 1982
California Gull	Namaka Lake	12-23-24-W4	inactive	1998 Aerial Survey; 8 mi SE of Strathmore; Poston et al. (1990); X217; mainland; active 1964 (PNRS 1998) on mainland
Ring- billed Gull	Namaka Lake	12-23-24-W4	inactive	1998 Aerial Survey; 8 mi SE of Strathmore; Poston et al. (1990), no data; X217; historical colony
Heron	New Norway (area)	12-45-22-W4	extinct	1998 Aerial Survey; BSOD (1998) 5689creek, 5 miles W of New Norway; habitat mostly gone; active 1973 (no data)
Great Blue Heron	North Edwand Creek	16-61-15-W4	inactive	1998 Aerial Survey; Map 831/8; St. Paul NRS (1998); XH91; 10 mi N of Bellis; 5 nests 1987; 0 nests 1990
Great Blue Heron	North Saskatchewan River	N14-57-14-W4	inactive/nests found in disrepair	1998 Aerial Survey; Map 73E/13; BSOD (1998); St. Paul NRS (1998); Brechtel (1981); XH94; 4 mi SW of Hamlin; 1 nest 1977
Great Blue Heron	Oldman River- Picture Butte	1-11-19-W4	inactive	1998 Aerial Survey; Map 82H/16; XH95; Vermeer (1969b); Brechtel (1981); BSOD (1998); 14 mi E of Picture Butte; 14- 19 nests 1967; 17 nests 1981; 15 nests 1982; trees were cut
Great Blue Heron	Oldman River- Lethbridge	4 or NE9-8-22- W4	inactive/small	1998 Aerial Survey; Map 82H/10; near St Mary River; XH96; SW corner of Lethbridge; Brechtel (1981); Ealey (1986); active 1980; 56 nests 1981; 10 nests 1982
Great Blue Heron	Oldman River- Ft. Macleod	29-8-22-W4	not found	1998 Aerial Survey; not in original data base; Lethbridge NRS (1998) via Jim Clark; active 1980
Great Blue Heron	Oster Lake	NE9-54-20-W4	extinct	1998 Aerial Survey; pond; St. Paul NRS (1998); XH 45; Elk Island National Park; 9 nests 1971; 13 nests 1977; 0 nests 1990, 1992 and 1993; 3 nests 1991

Great Blue	Oven	9-28-3-W4	inactive/small	1998 Aerial Survey; Map 72 M; no data on sheet; BSOD
Heron	- Jun			(1998); XH99; 8 mi NE of Oyen; shelterbelt?; historical, no data
Great Blue Heron	Parting Lake	NW22-58-6- W5	extinct	1998 Aerial Survey; Map 83J/2; St. Paul NRS (1998); Wollis (1999); XH100; Paddle River, 3 mi SE of Roselea; 15 nests 1980; 20 nests 1983; 25 nests 1985; 12 nests 1986; 19 nests 1988; 18 nests 1991; 20 nests 1993; sometime after 1993, beaver cut trees and colony became extinct
American White Pelican	Pastecho Lake	16-80-3-W5	inactive	Steve Brechtel, NRS Edmonton (1998); Not Surveyed in 1998 Aerial Survey; Fish and Wildlife Ground Survey; X223; 21 mi W of Wabasca; 5 nests 1990
Great Blue Heron	Paul Lake	4-54-20-W4	inactive/small	St. Paul NRS (1998); Not surveyed in 1998 Aerial Survey; EINP Ground Survey 1998; Map 83H/10; XH101; 14 nests 1990 and 1991; 19 nests 1992; 22 nests 1993
Great Blue Heron	Pembina River	SE16-60-1-W5	inactive/small	St. Paul NRS (1998); Wollis (1999); Not surveyed in 1998 Aerial Survey; 11 mi W of Westlock; XH103; active 1980; 19 nests 1982; 12 nests 1983; 11 nests 1985; part removed by bulldozer in 1989; 4 nests 1991; 3-12 nests 1993; duplicated in BSOD as Rossington
Great Blue Heron	Pembina River - Dapp		inactive/small	Wollis (1999); Not surveyed in 1998 Aerial Survey; first discovered 1994, 12 nests 1995
Great Blue Heron	Perryvale B	27-63-23-W4	inactive	1998 Aerial Survey; Map 831/6; St. Paul NRS (1998); XH105; at Perryvale; 3 nests 1988; 4 nests 1990; 10 nests 1993
Great Blue Heron	Pinehurst Lake	24-65-10-W4	inactive/small	Not surveyed in 1998 Aerial Survey; Map 73L/11; 11 mi NE of Helina; St. Paul NRS (1998); XH106; 0 nests 1990; 6 nests 1993 (Wallis et al. 1994)
Double- crested Cormorant	Plain Lake	28-53-12-W4	inactive	1998 Aerial Survey; Map 73E/12; St. Paul NRS (1998); X227; 7 mi S of Two Hills; 30 nests 1982; 78 nests 1983; 33 nests 1987; 18 nests 1988; 16 nests 1989; 14 nests 1990; 0 nests 1992
American White Pelican	Primrose Lake		not surveyed 1998	from Poston et al. (1990); may be in Saskatchewan; no other data
California Gull	Primrose Lake		not surveyed 1998	from Poston et al. (1990); may be in Saskatchewan; no other data
Double- crested Cormorant	Primrose Lake		not surveyed 1998	from Poston et al. (1990); may be in Saskatchewan; no other data
Great Blue Heron	Primrose Lake		not surveyed 1998	from Poston et al. (1990); may be in Saskatchewan; no other data
Ring- billed Gull	Primrose Lake		not surveyed 1998	from Poston et al. (1990); may be in Saskatchewan; no other data
Great Blue Heron	Red Deer River -Blindman R	18-39-26-W4	inactive/small	Ealey (1986); Not surveyed in 1998 Aerial Survey; Map 83A/5; at Blindman River; XH111; 3 mi NW of Red Deer; 4 nests 1985
Great Blue Heron	Red Deer River -Dinosaur	Cent28-21-12- W4	not found	1998 Aerial Survey; BSOD (1998); Vermeer (1969b); 393- 398; Brechtel (1981); NW side of Dinosaur PP; 32 nests 1967; 41 nests 1971; active 1975 & 1977; 10 nests 1978 and 1979; 4 nests 1980; 25 nests 1982; 34 nests 1987
California Gull	Rock Island Lake-Frog L area	20-56-1-W4	inactive; dry	1998 Aerial Survey; Map 73E/16; St. Paul NRS (1998); X231; 12 mi E of Frog L town; surveyed (no data) in 1978; 115 nests in 1990
Great Blue Heron	Rocky Mountain House (area)	N25-39-8-W5	small/inactive	1998 Aerial Survey; Brechtel (1981); XH112; 9 mi W of Rocky Mtn House; 6 nests 1978
Great Blue Heron	Romeo Lake	31-58-6-W5	extinct; new 1999	1998 Aerial Survey; BSOD (1998); XH113; 6 mi SW of Roselea; canoe launch area; 1nest 1976; extinct post 1976 but new activity in 1999, at least 10 nests (Wollis 1999)

Great Blue Heron	Rosebud River	27-30-1-W5	extinct	1998 Aerial Survey; BSOD (1998) 399near river 3 miles NE of Carstairs; 15 nests 1979
Great Blue Heron	Ross Creek	3-12-3-W4	extinct	1998 Aerial Survey; also checked 3 miles upstream; 3 mi W of Irvine; BSOD (1998); Brechtel (1981); XH114; 0 nests 1967; 25 nests 1972; 45 nests 1976; 70-80 nests 1980; 10 nests 1982
Double- crested Cormorant	Seven Persons Reservoir	29-10-7-W4	not surveyed	Lethbridge NRS (1998); Not Surveyed in 1998 Aerial Survey; active in 1989
American White Pelican	Shanks Lake	27-1-21-W4	inactive	1998 Aerial Survey; 50 nests reported by Vermeer circa 1960s
California Gull	Shanks Lake	27-1-21-W4	inactive or individual nesters	1998 Aerial Survey; Map 82 H; Ealey (1986); Yuill et al. (1975); Steve Brechtel, NRS Edmonton (1998); X238; 4 mi NE of Del Bonita; 100-500 nests 1968; part of 43 nests 1975; 0 nests 1976; have nested on peninsula in NW corner as well as on low island to the S of the peninsula
Ring- billed Gull	Shanks Lake	27-1-21-W4	inactive or individual nesters	1998 Aerial Survey; Map 82 H; Ealey (1986); Yuill et al. (1975); X238; 4 mi NE of Del Bonita; part of 43 nests 1975
Heron	Sheep River- Black Diamond A	27-20-2-W5	extinct; 1 Bald Eagle nest nearby	1998 Aerial Survey; BSOD (1998) 406-410, 412-416; 2 miles NE of Black Diamond; 23 nests 1970; 18 nests 1972; 12 nests 1973; 9 nests 1978; 13 nests 1982
Great Blue Heron	Sheep River- Black Diamond B	35-20-2-W5	nests found; extinct	1998 Aerial Survey; PNRS (1998); BSOD (1998) 411; 4 miles NE of Black Diamond; 27 nests 1970; 12 nests 1994
Great Blue Heron	Sheep River- Turner Valley	6-20-2-W5	extinct	1998 Aerial Survey; BSOD (1998) 405; 1 mile SW of Turner Valley; 25 nests 1969; extinct 1978
California Gull	Sinking Lake	3-60-6-W4	inactive; low levels	1998 Aerial Survey; Map 73L/2; St. Paul NRS (1998); X239; 1000 nests 1979; part of 50 nests 1981
Ring- billed Gull	Sinking Lake	3-60-6-W4	inactive; low levels	1998 Aerial Survey; Map 73L/2; St. Paul NRS (1998); Ealey (1986); X239; part of 50 nests 1981
Great Blue Heron	Sounding Creek	NW36-34-13- W4	extinct	1998 Aerial Survey; BSOD (1998) 432; 11 mi SW of Coronation; no suitable habitat; 7 nests 1988
Great Blue Heron	South Tea Lake	NW9-67-7-W5	inactive/small	Brechtel (1981); Not Surveyed in 1998 Aerial Survey; XH119; 14 mi NE of Swan Hills; 7 nests 1978; 6 nests 1979 and 1980
Great Blue Heron	Spruce Island Lake	NE1-64-26-W4	small/inactive; not surveyed	St. Paul NRS (1998); Brechtel (1981); Wollis (1999); Not Surveyed in 1998 Aerial Survey; Map 83I/12; XH120; 8 mi S of Cross L PP; 4 nests 1977 and 1978; 6 nests 1979 and 1980; 20 nests 1990; active 1995
Great Blue Heron	St. Mary River	NE or NW5-3- 24-W4	extinct (part of main channel)	1998 Aerial Survey; Map 82H/3; near Woolford PP; BSOD (1998) ; XH121; 50 nests 1982
California Gull	Stobart Lake	30-22-23-W4	inactive	1998 Aerial Survey; Ealey (1986); X243; active colony 1983
California Gull	Suds Lake	27-5-18-W4	no nests; dry	1998 Aerial Survey; island N side; Steve Brechtel, NRS Edmonton (1998); X244; New Dayton; a few nests 1979
Ring- billed Gull	Suds Lake	27-5-18-W4	no nests; dry	1998 Aerial Survey; island N side; Steve Brechtel, NRS Edmonton (1998); X244; New Dayton; a few nests 1979
Great Blue Heron	Taber P.P.	18-10-16-W4	inactive/small	1998 Aerial Survey; Map 82H/16; along Oldman River; Ealey (1986); XH122; active small colony 1982 (no data)
Double- crested Cormorant	Thunder Lake	NW30-59-5- W5	extinct	Wollis (1999); Not Surveyed in 1998 Aerial Survey; Map 83J/2; XH123; Thunder L PP; large numbers in 1996; extinct after winter fish kill of 1996/97
Great Blue Heron	Thunder Lake	NW30-59-5- W5	extinct	St. Paul NRS (1998); Vermeer (1969b); Brechtel (1981); Wollis (1999); Not Surveyed in 1998 Aerial Survey; Map 83J/2; XH123; Thunder L PP; 14 nests 1967; 0 nests 1969; 14 nests 1975; 12 nests 1976; 15 nests 1977; 22 nests 1978; 33 nests 1979; 30 nests 1980; 18 nests 1983; 0 nests 1984, 1986 and 1990; 18 nests 1993, 0 in 1996

California Gull	Timko Lake	33-17-13-W4	inactive; island	1998 Aerial Survey; Map 72 L; Ealey (1986); X248; 4 mi NW of Tilley; active 1967
Ring- billed Gull	Timko Lake	33-17-13-W4	inactive; island	of Tilley, active 1967 1998 Aerial Survey; Map 72 L; Ealey (1986); X248; 4 mi NW of Tilley; active 1967
Great Blue Heron	Trout Creek	NE34-11-28- W4	small/inactive	1998 Aerial Survey; Vermeer (1969b); Brechtel (1981); BSOD (1998); XH124; 7 mi SW of Claresholm; active 1963; 12 nests 1967; 0 nests 1982
Great Blue Heron	Unnamed Lake	NW33-44-10- W4	inactive	1998 Aerial Survey; Map 73D/14, SW of Peninsula Lake; Brechtel (1981); Ealey (1986); XH126; 13 mi NE of Sedgewick; 12 nests 1979
Great Blue Heron	Unnamed Lake	12-62-10-W5	inactive/small	1998 Aerial Survey; Map 83J/6; no date, no #; Ealey (1986); XH128; 13 miles NE of Carson-Pegasus PP.; no data
Great Blue Heron	Unnamed Lake	1-90-15-W5	not surveyed	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 84 C; XH125; 18 mi N of Marten R; 6 nests 1984
American White Pelican	Utikuma Lake - East Island	28+33-79-9-W5	inactive	Brechtel (1981); Not Surveyed in 1998 Aerial Survey; Fish & Wildlife Ground Survey 1998; Map 83 O; X250; N end of E Island; 0 nests 1967; inactive 1975; 39 nests 1978; 0 nests 1979; 129 nests 1980
California Gull	Utikuma Lake - East Island	28+33-79-9-W5	inactive	Brechtel (1981); Not Surveyed in 1998 Aerial Survey; Fish & Wildlife Ground Survey 1998; Map 83 O; X250; N end of E Island; 500-1000 nests in 1967
Double- crested Cormorant	Utikuma Lake - East Island	28+33-79-9-W5	inactive	Brechtel (1981); Not Surveyed in 1998 Aerial Survey; Fish & Wildlife Ground Survey 1998; Map 83 O; X250; N end of E Island; 0 nests 1967, 1970, 1978 and 1979; 55 nests 1980
Great Blue Heron	Vermilion River	13-52-10-W4	not found	1998 Aerial Survey; Map 73E/6; St. Paul NRS (1998); XH129; 12 mi N of Minburne; 27nests 1988; 15 nests 1991
American White Pelican	Wadlin Lake	SW1-101-11- W5	not surveyed	Brechtel (1981); Vermeer (1969a); Not Surveyed in 1998 Aerial Survey; Map 84 G; X253; 51 mi SE of Ft. Vermilion; 15 nests 1968; 18 nests 1974; active 1977; 19 nests 1978
California Gull	Wadlin Lake	SW1-101-11- W5	not surveyed	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 84 G; X253; 51 mi SE of Ft. Vermilion; active 1985
Ring- billed Gull	Wadlin Lake	SW1-101-11- W5	not surveyed	Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 84 G; X253; 51 mi SE of Ft. Vermilion; active 1985
Great Blue Heron	Wakomao Lake	NE5-60-24-W4	not found	Brechtel (1981); St. Paul NRS (1998); 1998 Aerial Survey; Map 83I/4; 3 mi NE of Clyde; XH131; 39 nests 1978; 44 nests 1979; 25 nests 1980; 35 nests 1983; 6 nests 1989; 8 nests 1991; 35 nests 1993
Great Blue Heron	Whelp Brook	22-42-26-W4	not found	1998 Aerial Survey; BSOD (1998) 428; 4 miles SW of Ponoka; 14 nests 1987
Great Blue Heron	Whitefish Lake	18-62-13-W4	extinct; not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey; Map 73L/5; XH132; 4 mi W of McRae; 2 nests 1972; 0 nests 1990
Great Blue Heron	Willow Creek	NE or SW28- 13-28-W4	extinct	1998 Aerial Survey; Brechtel (1981); BSOD (1998); XH133; Willow Creek PP; active 1973-1978; 30 nests 1979; 6 nests 1982; new one to SE not found
California Gull	Winefred Lake	34-74-4-W4	not surveyed	St. Paul NRS (1998); Ealey (1986); Not Surveyed in 1998 Aerial Survey; Map 73M/7; X255; off N end of Cold Lake base; 500-1000 nests 1967; surveyed (no data) 1982
Double- crested Cormorant	Winefred Lake	34-75-4-W4	not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey; Map 73M/10; X256=XH134; off north end of Cold Lake base; 10 nests 1981; 8 nests 1982; surveyed 1997 (no data)
Great Blue Heron	Winefred Lake	34-75-4-W4	not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey; Map 73M/10; XH134; off north end of Cold Lake base; 8 nests 1980; 2 nests 1982; 12 nests 1985 and 1986; 9 nests 1991
Ring- billed Gull	Winefred Lake	34-74-4-W4	not surveyed	St. Paul NRS (1998); Not Surveyed in 1998 Aerial Survey; Map 73M/7; X255; off N end of Cold Lake base; 100-500 nests 1967; 50 nests 1982
Great Blue Heron	Wolf Creek	NW4-27-44- W4	inactive/small	Not Surveyed in 1998 Aerial Survey; Map 83 A; not mapped; location unclear, maybe =H429; 2 nests 1987

Great Blue	Woods Lake	unknown	Not Surveyed in 1998 Aerial Survey; not mapped; from Poston
Heron		location	

3.3 SURVEYED WATERBODIES WITH NO HISTORICAL OR 1998 COLONIES

Location	Legal	Aerial Survey	Notes
	Concert and the lands of	Date	
Bantry A Reservoir	16-12-W4	May 29-31 1998	attempted nesting on one of the Bantry Reservoirs by American White Pelican in 1977
Bantry B Reservoir	16-12-W4	May 29-31 1998	
Bartman Reservoir	25-11-W4	May 29-31 1998	
Bens-Watt Lakes	54-13-W4	May 29-31 1998	
Bittern Lake	47-21-W4	May 29-31 1998	
Brosten Reservoir	28-8-W4	May 29-31 1998	
Cessford Reservoir	24-11-W4	May 29-31 1998	
Chappice Lake	14-3-W4	May 29-31 1998	had water
Charlotte Lake	61-1-W4	May 29-31 1998	dry
Coaldale	10-20-W4	May 29-31 1998	
Connemara/Silver Lake	16-28-W4	May 29-31 1998	
Contracosta Lake	31-12-W4	May 29-31 1998	loafing birds only
Crestomere Lake	43-27-W4	May 29-31 1998	
Dolcy Lake	42-4-W4	May 29-31 1998	dry
Forty Mile Coulee	1-11-W4	May 29-31 1998	
Grassy Island Lake	33-3-W4	May 29-31 1998	
Handhills Lake	29-16-W4	May 29-31 1998	
Jamieson Lake (near Brooks)	19-14-W4	May 29-31 1998	
Jensen Reservoir	4-22-W4	May 29-31 1998	dry
Jessie Lake	61-5-W4	May 29-31 1998	
Johnson Lake (near Brooks)	19-14-W4	May 29-31 1998	
Johnson Reservoir (lake NW of)	NE22-16-14-W4	May 29-31 1998	gulls appeared to be nesting from aerial survey but 1998/06/21 ground inspection revealed no nests
Kenilworth Lake	50-4-W4	May 29-31 1998	dry
Kininvie	16-11-W4	May 29-31 1998	
Little Miguelon Lake	49-20-W4	May 29-31 1998	
Marion-Shooting Lakes	37-17-W4	May 29-31 1998	
Mattoyekieu Lake	25-18-W4	May 29-31 1998	
Mud Lake (Fort Macleod)	9-27-W4	May 29-31 1998	
Oliver Lake	50-21-W4	May 29-31 1998	
Onetree Reservoir	19-14-W4	May 29-31 1998	
Proutv	16-15-18-W4	May 29-31 1998	
Red Deer Lake	43-22-W4	May 29-31 1998	
Reed Lake	2-21-W4	May 29-31 1998	
Ribstone Lake	44-5-W4	May 29-31 1998	dry
Sam Lake	14-2-W4	May 29-31 1998	had water
Samson Lake	43-23-W4	May 29-31 1998	
Sherburne Lake	9-14-W4	May 29-31 1998	
Sieu Lake	25-18-W4	May 29-31 1998	
Sounding Creek Reservoir	30-5-W4	May 29-31 1998	
Sounding Lake	37-4-W4	May 29-31 1998	dry
Sullivan Lake	35-14-W4	May 29-31 1998	lake levels conducive to some island formation
Sunken Lake	39-5-W4	May 29-31 1998	dry
Vermilion Lakes	54-13-W4	May 29-31 1998	
Wavy Lake	45-15-W4	May 29-31 1998	dry, mostly marshy
Yellow Lake	9-12-W4	May 29-31 1998	

4.0 ANALYSIS AND DISCUSSION

This is the first relatively comprehensive province-wide survey of American White Pelicans, Great Blue Herons, Double-crested Cormorants, Ring-billed Gulls and California Gulls that has been done in Alberta in a single year. Previous surveys have focused on selected regions or selected species or have been conducted over multiple years.

The following species' accounts provide a general overview of nesting locations, typical nesting, reported threats, nesting populations by time period (pre-1970s, 1970s, 1980s/1990s and 1998) and status based on inferred trends. Summaries of the data include trends of significant and minor colonies with estimates of number of nesting pairs from 1998 surveys and from either pre-1970s or pre-1980s. Active nest data are used wherever possible.

As no province wide, single year survey has been done before, the data are not directly comparable and some caution should be exercised in using the trend or status information. Higher populations for some species found in 1998 may indeed indicate an actual increase from previous decades but the magnitude of the increase is, at least in part, a reflection of the better sampling effort.

4.1 AMERICAN WHITE PELICAN

All American White Pelican colonies were situated on islands, primarily in larger bodies of water. One is located in the middle of the Slave River Rapids.

Vermeer (1970) noted this species has a low tolerance to disturbances on nesting islands. He reported that at least 10 colonies had disappeared from 1950-1978 in Canada because of direct human-related causes.

ST=STATUS + increasing	- decreasing	= stable	m minor	? unkno	own	
American Whit	e Pelican	# active ne	ests (range of v	alues); ns=no su	irvey data	
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Beaverhill Lake	whole lake	0-81	0-14	0-395	171	+
Birch Lake	NE8-95-17-W4	ns	0-140	0-120	ns	=
Buffalo Lake	whole lake	active	0	0	282	+
Chip Lake	whole lake	0	0	0	23	+
Frank Lake	19?-18-27-W4	500 birds	0	0	0	-
Gardiner Lake (North)	x-98-16-W4	ns	24	ns	0	m
Grassy Lake	whole lake	ns	ns	<10-50	2	m
Hastings Lake	18-51-20-W4	ns	ns	0-50	0	m
Joseph Lake	SE12-50-22-W4	0	0	active	480	+
Lac Ste Anne	W15-54-3-W5	few	ns	ns	1	m
Lake Newell 4 - Pelican Island	SW2-17-15-W4	0-170	24	8-106	21	-
Little Fish Lake	NW4-28-16-W4	0	0	0	2	m
Lower Therien Lake	whole lake	2	0	0-3	55	+
Miquelon Lake		250	0	0	0	-
Mountain Rapids (Slave River)	E25-126-11 + W30- 126-10-W4	active 1789; 50-100 pairs	27-42	44-423	ns	+
Namur Lake	36-97-17-W4	153	0-198	25-161	279	+
Pakowki Lake	whole lake	ns	0	8-28	49	+
Pastecho Lake	16-80-3-W5	ns	ns	5	0	m
Pelican Lake - N & S Islands	9-79 and 30-78-21-W4	0	240	150-216	2108 yg	+
Portage Lake 1	10-69-14-W4	ns	ns	0	3	m
Scope (Hays) Reservoir	whole lake	ns	ns	837	3850	+
Shanks Lake		50	ns	ns	0	-
St Mary Reservoir	whole lake	0	0	0	80	+
Utikuma Lake	whole lake	0	9-156	129-150	126	=
Wadlin Lake	SW1-101-11-W5	15	18-19	ns	ns	?
ST=STATUS + increasing	- decreasing	= stable	m minor	? unkno	wn	

AMERICAN WHITE PELICAN SUMMARY:

Of 25 American White Pelican colonies, 11 significant (over 25 nesting pairs) colonies have increased in size while 3 significant colonies (Frank Lake, Miquelon Lake and Shanks Lake) have become inactive and 1 significant colony (Lake Newell) has seen a general, though weak, decreasing trend. Two significant colonies have been reasonably stable. Seven colonies are considered minor, 3 of which were inactive in 1998. The current status of the Wadlin Lake colony is unknown--it was a minor colony in previous surveys.

The overall trend for American White Pelican is increasing. This agrees with the Breeding Bird Survey trend map.

The total number of known nesting pairs in 1998 was over 6400 nests. This compares to a total estimated provincial population of less than 900 nesting pairs prior to 1980. Much of this increase is "real" and cannot be attributed only to increased sampling effort.

4.2 CALIFORNIA GULL

Most California colonies were situated on islands in both small and large bodies of water. There are occasional records of colonies on causeways and peninsulas but these have often been subject to heavy predation.

Colonies have disappeared periodically due to periods of drought or increased water levels that have flooded out nesting islands.

ST=STATUS + increasing	- decreasing	= stable	m minor	? unkn	own	
California C	all a state of the second s	# active n	ests (range of v	alues); ns=no si	urvey data	
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Akasu Lake	whole lake	ns	ns	ns	1282	+
Antoine Lake	4-67-14-W4	ns	ns	active	2000	+
Beaver Lake	34-65-12-W4	ns	ns	100	part of 500	+
Beaverhill Lake	whole lake	100-500	453	30-307	131	=
Birch Lake	9-95-17-W4	ns	15-20	30	ns	=
Bistcho Lake	1-123-5-W6	ns	ns	large colony	ns	+
Bruce Lake	E3-26-26-W4	ns	part of 400 adults	ns	178	=
Buffalo Lake	whole lake	7-500	952	5000	740	=
Bushy Head Lake	35-44-7-W4	ns	ns	125-175	301	+
Campbell = Tilley A Reservoir	NE6-18-12-W4	ns	part of 1000 adults	ns	207	=
Chip Lake	whole lake	100-500	1240	ns	560	=
Cowoki Lake	2-19-13-W4	active	ns	ns	0	-
Crawling Valley Reservoir =Barkenhouse Lake	whole lake	ns	active	ns	196	=
Dowling Lake	NE12-32-15-W4	500-1000	824	ns	0	-
Eagle Lake	?30-23-24-W4	100-500	0	ns	0	-
Ferguson Lake	25-72-6-W6	ns	ns	500 adults	part of 200	+
Frank Lake	19?-18-27-W4	100-500	311	815	0	-
Frog Lake	whole lake	ns	ns	active	120	+
God's Lake	18?-90-2-W5	ns	ns	52	ns	+
Grassy Lake	whole lake	ns	ns	ns	1548	+
Grouard Channel	20-75-14-W5	ns	active	ns	0	-
Horse Lakes-NW Buffalo Bay	2-76-15-W5	ns	active	ns	0	-
Horse Lakes-S Buffalo Bay	24-75-15-W5	ns	active	ns	0	-
Horsefly Lake	12-9-16-W4	active	ns	ns	0	-
Irricana (Salt) Lake	NE11-27-26-W4	1000-3000	1205	active	0	-
Johnson Reservoir	12-16-14-W4	active	ns	ns	0	-

ST=STATUS + increasing California		the address	m minor	? unkn		1
Location	Legal	pre-1970s		alues); ns=no s		-
Joseph Lake	SE12-50-22-W4	500-1000	1970s 239	1980s/1990s	1998	SI
Keho Lake	x-11-23-W4	1000-3000	4-1459	218-500	1500	++
Kitsim Reservoir	whole lake			ns	0	
	x-73-4-W6	ns	ns	ns	610	+
Kleskun Lake		ns	50	ns	0	
Lac la Biche	whole lake	500-1000	ns	85-2000	146	-
Lac Ste Anne	whole lake	ns	ns	500	400	=
Lake Athabasca	29-115-3-W4	ns	250	150	ns	=
Lake Newell	whole lake	500-2580	565	ns	150	-
Langdon Reservoir	whole lake	ns	ns	active	3759	+
Lesser Slave Lake - Swan Pt	22-74-9-W5	ns	active	ns	0	-
Lesser Slave Lake-West	17-75-13-W5	ns	active	ns	0	-
Lesser Slave Lake-Joussard	9-74-13-W5	ns	active	ns	0	-
Little Bow Reservoir	whole lake	29	21	active	195	+
Little Fish Lake	NW4-28-16-W4	ns	ns	active	876	+
Lost Lake	6-14-17-W4	ns	ns	8	0	m
Lower Therien Lake 1	23-57-10-W4	100-500	4-176	5-3000	600	+
Many Island Lake	13-1-W4	active	ns	ns	0	-
Milk River Ridge Reservoir 1	SW14-5-20-W4	ns	part of 2000- 3000	active	5287	+
Milk River Ridge Reservoir 2	S8-5-19W4	ns	part of 200- 400	80	133	=
Miguelon Lake 1	NE30-49-20-W4	87-470	ns	ns	246	=
Miguelon Lake 2	SW30-49-20-W4	44-300	1848	active	1750	+
Muriel Lake	11-60-5-W4	ns	ns	200-400	1200	+
Murray Lake	whole lake	100-500	151	active	492	+
Namaka Lake	12-23-24-W4	active	ns	ns	0	-
Namur Lake	36-97-17-W4	ns	139-200	600-700 pairs	250 adults	=
Pakowki Lake	whole lake	ns	part of 40-80	active	730	+
Pelican Lake	30-78-21-W4	100-500	ns	ns	0	-
Pigeon Lake	E27-46-28-W4	ns	active	ns	174	=
Rattlesnake Lake	whole lake	ns	ns	ns	571	+
Rock Island Lake (by Calling L)	21-75-22-W4	ns	ns	active	part of 202	+
Rock Island Lake-Frog L area	20-56-1-W4	ns	ns	115	0	<u> </u>
Ross Lake	NW30-2-22-W4	ns	part of 562	ns	part of <100	-
Scope (Hays) Reservoir	whole lake	ns	active	active	228	=
Shanks Lake	27-1-21-W4	100-500	0-43	ns	0	-
Sinking Lake	3-60-6-W4	ns	1000	50	0	-
	NW19-4-24-W4	1000-3000			307	-
St Mary Reservoir 1 Stirling Lake	6-7-19-W4		1580 962	ns 100	130	
		<100				
Stobart Lake	30-22-23-W4	ns	ns	active	0	-
Suds Lake	27-5-18-W4	ns	active small	ns	0	m
Taber Lake	whole lake	ns	ns	ns	71	+
Filley B Reservoir	30-18-12-W4	ns	active	ns	100	+
Timko Lake	33-17-13-W4	active	ns	ns	0	m
Jpper Therien Lake	SE5-58-9-W4	ns	ns	300-400	258	=
Jtikuma Lake	whole lake	500-1000	ns	ns	13	-
Wadlin Lake	SW1-101-11-W5	ns	ns	active	ns	?
Waterton Reservoir	14-4-28-W4	ns	ns	active	405	=
Winagami Lake	NW26-76-18-W4	ns	ns	ns	122	+
Winefred Lake	34-74-4-W4	500-1000	ns	ns	ns	?

CALIFORNIA GULL SUMMARY:

Of 74 California Gull colonies, 25 significant (more than 25 nesting pairs) colonies have increased while 27 have decreased in size. 17 colonies have remained relatively stable. Three are considered minor colonies and two are of unknown status as there have been no recent surveys. Some of the increasing colonies may represent stable situations--there is no pre-1980 survey data to indicate whether some of these colonies existed at that time.

The overall trend for California Gull is slightly increasing as many of the declining colonies have been relatively small whereas many of the increasing colonies have been relatively large. This is a trend that has been evident throughout North America and agrees with the Breeding Bird Survey trend map.

The total number of known nesting pairs in 1998 was estimated to be over 28700. This compares to a total estimated provincial population of about 12000-15000 nesting pairs prior to 1970. Part of this apparent increase can be attributed to a more comprehensive census conducted in 1998.

4.3 CASPIAN TERN

Caspian Terns nest exclusively on islands in Alberta. While these tend to be at larger lakes, they have nested or attempted to nest on smaller man-made reservoirs.

In addition to the nesting sites, individuals have been spotted in widely scattered locations (e.g. Badger Reservoir, Burnstick Lake, Chip Lake, Fort McMurray, Kitsim Reservoir, Lac La Biche, Pakowki Lake, Stirling Lake) in Alberta and they may be expected to attempt nesting at other sites.

ST=STATUS + increasing	- decreasing	= stable	m minor	? unkn	own		
Caspian Tern		# active n	# active nests (range of values); ns=no survey data				
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST	
Lake Athabasca	29-115-3-W4	ns	47	60-101	ns	+	
Lake Newell	whole lake	0	0	<10	74	+	
Lost Lake	6-14-17-W4	ns	ns	1	1	+	
Murray Lake 2	SW12-10-8-W4	0	0.	0	1	+	
Namur Lake	36-97-17-W4	ns	ns	>40 eggs	0	m	
Rattlesnake Lake 3	N7-12-8-W4				13	+	
Scope (Hays) Reservoir	whole lake	0	0	active	1	+	
Tilley B Reservoir	30-18-12-W4	ns	0	ns	1	+	
ST=STATUS + increasing	- decreasing	= stable	m minor	? unkn	own		

SUMMARY:

Of 8 Caspian Tern nesting locations, all but one (Namur Lake) have increased in size or are new nesting locations from those known prior to the 1980s. In addition there are reports of adults at several other water bodies in southern Alberta, possibly indicative of new nesting locations.

The overall trend for Caspian Tern is significantly increasing though the overall population is still very low.

The total number of known nesting pairs in 1998 was 91 in southern Alberta. The Lake Athabasca site was not surveyed but it is expected to still be active.

4.4 DOUBLE-CRESTED CORMORANT

Double-crested Cormorants nest in a variety of situations but the largest colonies are on islands in larger water bodies. This species has a preference for ground nesting but nests both on the ground and in trees, sometimes in association with Great Blue Herons.

ST=STATUS	+ increasing	- decreasing	= stable	m minor	? unkn	own		
D	ouble-crested Cor	morant	# active n	ests (range of va	alues); ns=no si	urvey data		
Loca	tion	Legal	pre-1970s	1970s	1980s/1990s	1998	1	ST
Antoine Lake		4-67-14-W4	ns	ns	60-251	1120		+
Arthur Lake		22-55-5-W5	ns	ns	27-67	78		+

Astotin Lake	NW23-54-20-W4	ns	0	0-52	63	+
Astotin Lake (E, beaver pond)	19-54-19-W4	ns	ns	6-22	ns	m
Beaver Lake	entire lake	ns	ns	active?	0	m
Beaverhill Lake	whole lake	0	0-30	24-248	33	=
Bruce Lake	E3-26-26-W4	ns	ns	ns	14	m
Buffalo Lake	whole lake	0	0	41	206	+
Campbell = Tilley A Reservoir	NE6-18-12-W4	ns	0-64	40-124	68	=
Chip Lake	whole lake	0	0	0	106	+
Crawling Valley Reservoir =Barkenhouse Lake	whole lake	ns	0-23	46-65	0	-
Dillberry (Freshwater Lake)		20	0	0	0	m
Dowling Lake	NE12-32-15-W4	0	0-34	23	0	m
Fincastle Lake 2	16-10-15-W4	ns	ns	ns	6	m
Frank Lake	19?-18-27-W4	0	0	4	0	-
Frog Lake	2-57-3-W4	2	92-277	0-2000	1145	+
George Lake	28-57-1-W5	ns	ns	6-8	0	m
Graham Lake	approx 28-87-4-W4	ns	ns	2	ns	m
Grantham	S25-13-15-W4	ns	ns	ns	<10	m
Grassy Lake	whole lake	ns	ns	ns	92	+
Hastings Lake	18-51-20-W4	ns	ns	ns	65	+
Irricana Lake	NE11-27-26-W4	0	0-18	93	0	-
Joseph Lake	SE12-50-22-W4	0	0	85-142	390	+
Keho Lake	SW36-11-23-W4	0	0-7	7	0	m
Kerr Lake	9-64-14-W4	ns	ПS	77-98	180	+
Kitsim Reservoir	whole lake	ns	ns	45	247	+
Lac Canard	SW36-56-10-W4	ns	0-100	50-332	583	+
Lac la Biche	whole lake	8-120	13	600-1500	1964	+
Lake Newell	whole lake	30-232	444-771	798	1077	+
Langdon Reservoir 3	SW36-22-27-W4	ns	ns	ns	128	+
Little Bow Reservoir 4	NW28-14-20-W4	0-7	3-41	13	26	+
Lost Lake	whole lake	ns	ns	10-20	50	+
Lower Therien Lake	whole lake	20-29	50-79	50-208	58	=
Majeau Lake	17-57-3-W5	0	0	0-12	49	+
Milk River Ridge Reservoir 1	SW14-5-20-W4	ns	ns	38	80	+
Milk River Ridge Reservoir 2	S8-5-19W4	ns	ns	10	0	m
Miguelon Lake		active	0	0	0	m
Ministik Lake		12	0	0	0	m
Muriel Lake	11-60-5-W4	ns	ns	200-1200	1895	+
Murray Lake	whole lake	0	4-104	28-65	272	+
Namur Lake	36-97-17-W4	0	0	active	312	+
Noral Lake	17-65-16-W4	ns	0	0	100	+
North Lucky Lake	NE21-62-18-W4	ns	0	51	35	+
Orloff Lake	NE31-73-23-W4	ns	0	15	0	m

ST=STATUS + increasing	- decreasing	= stable	m minor	? unkno	wn	
Double-crested C	ormorant	# active no	ests (range of v	alues); ns=no su	rvey data	
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Pakowki Lake	whole lake	ns	0	36	136	+
Pelican Lake	whole lake	0	257	100+	1025	+
Plain Lake	28-53-12-W4	ns	ns	0-78	0	-
Portage Lake	whole lake	ΠS	ns	75-1000	2821	+
Prefontaine Lake	32-55-6-W5	ns	0	16-80	80	+
Rattlesnake Lake 1	N7-12-8-W4	ns	ns	ns	23	+
Sandy Lake	SE21-56-13-W4	ns	0-7	39-107	27	+
Scope (Hays) Reservoir	whole lake	0	25-394	30-70	328	+
Seven Persons Reservoir	29-10-7-W4	ns	ns	active	ns	m
St. Mary Reservoir 1	NW19-4-24-W4	0	14-44	22-29	76	+
Stirling Lake	6-7-19-W4	0	0	10	27	+
Taber Lake	whole lake	ns	ns	ns	93	+
Thunder Lake	NW30-59-5-W5	0	0	active, large	ns	-
Tilley B Reservoir	30-18-12-W4	ns	0-81	22-125	386	+
Tyrell Lake	NW9-5-17-W4	ns	ns	ns	5	m
Utikuma Lake	whole lake	0	61-69	active	87	+
Waterton Reservoir	14-4-28-W4	ns	ns	active	33	+
Winefred Lake	34-75-4-W4	ns	ns	8-10	ns	m
ST=STATUS + increasing	- decreasing	= stable	m minor	? unkno	wn	

SUMMARY:

Of 62 Double-crested Cormorant colonies, 37 significant (more than 25 nesting pairs) colonies have increased while only 4 significant colonies have decreased in size. Three colonies have remained relatively stable. Eighteen are considered minor colonies, with a slightly smaller number of which are increasing compared to those decreasing.

The overall trend for Double-crested Cormorant is significantly increasing--this agrees with the Breeding Bird Survey trend map.

Vermeer (1969) reported that there were only 4 colonies totalling less than 200 nests in Alberta in 1967. By 1980, 27 colonies with 2300 nests were documented (Brechtel 1981). The total number of known nesting pairs in 1998 was estimated to be over 15500. Much of this increase is "real" and cannot be attributed to increased sampling effort alone.

4.5 GREAT BLUE HERON

With a few exceptions, most Great Blue Heron nests were in trees and near water. In the north this could be either poplar species (usually *Populus balsamifera*) or white or black spruce (*Picea glauca* or *Picea mariana*) while in the south, nests are usually in cottonwoods (*Populus deltoides*), balsam poplar (*Populus balsamifera*) and, rarely, aspen (*Populus tremuloides*) or willow (*Salix* spp.). Occasional individuals or small numbers were found nesting on islands in lakes on the ground. Most colonies were on dry land; however, the occasional colony was located on dead trees or shrubs in standing water.

Vermeer noted that Great Blue Herons often nest in dead trees and that the birds' excrement probably contributes to the death of these trees. Colonies will disappear as trees blow over and the birds will often move to nearby locations. This seems to be the principal cause of heronry loss. Severe flooding may also play a role in hastening the loss of dead and dying trees. Major channel shifts were noted after the severe floods of the mid 1990s in southwestern Alberta--in a few instances, the river channel had shifted and removed the nesting trees.

Vandalism has been a problem in the past at some colonies. Vermeer notes incidents of 12-15 herons being shot at colonies at Island Lake in 1965 and Trout Creek in 1963. Trees were cut at an Oldman River colony in the 1960s and there was vandalism at Bow River and Isle Lake colonies. Fire removed a colony at Majeau Lake in the 1930s. ST=STATUS + increasing - decreasing = stable m minor ? unknown

Great Blue I				values); ns=no sur	vey data	- 1
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Albert Creek	523502, 11, 53252	ns	ns	5	ns	m
Anderson Creek North	NW18-44-4-W5	ns	ns	16-21	10	m
Arthur Lake	NE2255-5-W5	44	18-40	19-30	12	-
Astotin Lake	NW23-54-20-W4	ns	ns	0-19	11	m
Athabasca River	7-92-10-W4	ns	ns	active	ns	m
Bang's Lake	12-60-8-W4	ns	ns	16-33	24	=
Baptiste River (South Fork)	NE16-41-12-W5	ns	ns	12	ns	m
Battle Creek - Springdale	4-44-27-W4	ns	ns	2	ns	m
Battle Lake	11-46-2-W5	ns	ns	1	ns	m
Battle R - Alliance 2	19-39-12-W4	ns	4	ns	0	m
Battle R - Big Knife	NE7-41-16-W4	12	11	14	19	m
Battle R - Battle Bend SE	NW4-40-10-W4	ns	3	ns	0	m
Battle R - Battle Bend E	24-40-10-W4	ns	ns	9	4	m
Battle R - Battle Bend S	SW6-39-11-W4	ns	ns	ns	<15	m
Battle R - Castor Ck	SE2-39-12-W4	ns	ns	15-20	20	m
Battle R - Forestburg	27-40-15-W4	ns	ns		4	
Battle R - Wetaskiwin	E12-45-23-W4	30		21	10	m
			30-53			-
Beaver Lake	entire lake	ns	30-75	19-100	60	
Beaverdam Creek	SE21-28-3-W5	25-33	30-50	25-27	0	
Beaverhill Lake	24-52-18-W4	ns	1-20	0	0	m
Belly River	22-4-27-W4	ns	ns	1	0	m
Belly River	NE27-6-25-W4	ns	ns	0-4	0	m
Birch River	SW8-109-14-W4	ns	12	ns	ns	m
Blackfoot Lake	NW30-52-19-W4	ns	15-31	20-88	32	=
Blindman River	NE28-43-2-W5	ns	ns	3	ns	m
Bolloque Lake	11-64-25-W4	ns	1	0-1	0	m
Bow River - Arrowwood	12-21-23-W4	ns	20-23	38	0	-
Bow River - Grand Forks	SW8-12-12-W4	ns	10-20	12	0	m
Bow River-Calgary Cominco	6-23-29-W4	ns	ns	1	0	m
Bow River - Carseland East	E35-21-25-W4	18	13	0-30	0	-
Bow River - Carseland West	S23-21-26-W4	30-37	16-46	35	0	-
Boyne Lake	1-61-12-W4	ns	ns	10-16	20	m
Brazeau Reservoir	N34-45-11-W5	ns	18	43	10	-
Buck Lake A	13-46-6-W5	ns	12	19	0	m
Buck Lake B	9-46-6-W5	ns	50	active	0	-
Buck Lake C	16-46-6-W5	ns	30	15	0	
Buffalo Creek	SW-35-46-7-W4	ns	ns	14	ns	m
Buffalo Lake 1	N26-40-21-W4	7-9	16-25	12-26	14	=
	12-11-5-W4				0	
Bull's Head Coulee	13-39-27-W4	ns	ns	3		m
Burbank (?Lake)		ns	ns		ns	m
Burnstick Lake (Birch Lake)	SW18-35-6-W5	ns	10-11	31	35	+
Calahoo B (Blacks Lake)	36-54-28-W4	ns	ns	0-3	ns	m
Cameron Lake	SE2-54-1-W5	ns	1-7	0-12	ns	m
Campbell = Tilley A Reservoir	NE6-18-12-W4	ns	ns	ns	4	m
Capt Eyre Lake	20-38-5-W4	ns	ns	active	5	m
Carvel Lake	29-52-2-W5	ns	ns	active	5	m
Chip Lake 1	NE8-54-10-W5	13-36	48-60	40-67	45	=
Clearwater River	NE13-35-9-W5	ns	ns	5	ns	m
Coal Lake	31-47-23-W4	ns	5-7	8	ns	m
Coal Lake	14-47-23-W4	ns	0-50	ns	ns	-
Coleman Lake	2-29-14-W4	ns	1-2	1	0	m

ST=STATUS + increasing		= stable	m minor	? unkno		
Great Blue				/alues); ns=no su	rvey data	
Location		pre-1970s	1970s	1980s/1990s	1998	ST
Cow Lake	11-38-8-W5	ns	ns	30-50	0	-
Crimson Lake PP.	SE27-40-8-W5	ns	ns	25	25	=
Davey Lake	SE21-34-27-W4	ns	ns	7-8	ns	m
Delburne Lake	NW22-37-23-W4	ns	3	3	ns	m
Delburne Lake (?same as above)	27-34-27-W4	ns	1	3	ns	m
Dillberry (Freshwater Lake)		ns	5	0	0	m
Dowling Lake	5 or 7-32-14-W4	0-11	12-34	active	0	-
Driedmeat Creek	SW8-45-19-W4	ns	ns	10-16	<15	m
East Hamilton Lake	28-58-13-W4	ns	4	0	0	m
Elbow River	5-24-2-W5	ns	ns	4	0	m
Elinor Lake	NW30-65-11-W4	ns	3	0-1	ns	m
Erickson Lake	36-63-6-W5	ns	9-13	14	11	m
Fincastle Lake 1	16-10-15-W4	ns	ns	7-11	12	m
Fish Creek	S36-22-1-W5	9	3-37	0-6	ns	-
Fort Island	17-55-10-15-W4	ns	ns	6-20	4	m
Frenchman Lake	E16-64-10-W4	7	20-45	26-50	30	=
Frog Lake 3	26-57-3-W4	45	100-200	30-100	56	=
Galahad (area)	9-41-14-W4	7	0	ns	0	m
Gambling Lake	20-50-20-W4	ns	ns	active	<10	m
George Lake	NW28-57-1-W5	ns	ns	1-9	0	m
Ghost Pine Creek	31-35-23-W4	ns	12	0-8	ns	m
Goodwin Lake	20-74-11-W4	ns	ns	4-26	ns	m
Gull Lake	NW33-42-1-W5	ns	ns	5-11	ns	m
Hastings Lake	18-51-20-W4	ns	ns	ns	9	m
Heart Lake	whole lake	ns	ns	30-33	40-50	+
Highwood River A	SW1-19-29-W4	23	0-23	ns	0	m
Highwood River B/Baker Ck	N30 & 33-18-29-W4	14	5	25	0	-
Hondo Lake	24-70-27-W4	ns	ns	35-50	0	
Honeymoon Lake	S13-36-26-W4	5	28	2-10	0	
Hubert Lake	NW14-64-2-W5	ns	15-26	26-35	3	
Island Lake	NW30-67-23-W4	ns	15-26	18-50	38	
Island Lake-near Smoky L	E35-61-17-W4	ns	1-18	0-18	0	
Island Lake	1-68-24-W4	1-10	0	0-18	0	-
Isle Lake	4-54-5-W5		5		0	m
Isle Lake	21-53-6-W5	ns	and the second sec	ns 22	25	
Islet Lake	1 or NE2-52-20-W4	<u>ns</u> 8	ns 12-25	0-1	0	=
Jamieson Lake	NE35-43-7-W4	15				
Kerr Lake			active	active	ns	m
	9-64-14-W4	ns	15-51	11-55	12	
Killarney Lake	5-42-1-W4	ns	ns	0-5	0	m
Lac Canard	SW36-56-10-W4	ns	20-60	12-45	4	
Lac la Biche	whole lake	ns	ns	1-9	25	+
Lake Newell	whole lake	ns	ns	14	11	m
Leming Lake	NW2-65-4-W4	ns	2-25	0-4	ns	-
Little Bow River	19-16-26-W4	ns	4	14	0	m
Little Red Deer River	E9-33-3-W5	ns	13-50	12	0	-
Lloyd Creek	28-44-2-W5	ns	ns	2	ns	m
Long Lake	1-63-19-W4	ns	active	0	0	m
Lougheed Lake area	NW33-44-14-W4	ns	12	7	0	m
Lower Mann Lake	1/12/13 & 14-60-11-W4	13	1	0	0	m
Majeau Lake	SW17-57-3-W5	20	30-60	23-50	30	=
Marguerite Lake	12-65-6-W4	ns	ns	0-3	0	m

Great Blue	g - decreasing	# active ne	sts (range of	values); ns=no su	ryew data	1
Location	Legal		sts (range of v 1970s	(alues); ns=no su 1980s/1990s		Com
Location Marie Lake	E16-65-3-W4	pre-1970s	the second se	8	1998	ST
Matchayaw Lake	SE20-55-1-W5	ns 14	ns 11-14		ns	m
				6-14	ns	m
McNaught Lake	NE10-71-10-W6 E5-13-5-W4	ns	ns	ns	5	m
Medicine Hat		0	0	32	24	=
Meinsinger Lake	NW17-15-2-W5	ns	ns	66	28	-
Meyer (D) Lake	23-69-24-W4	17	6	0	0	m
Ministik Lake		70	0	0	0	-
Miquelon Lake	10 64 4 1114	active	0	0	0	m
Moore Lake	10-64-4-W4	ns	ns	20-30	10	-
Mud Lake	36-59-8-W5	ns	ns	3	0	m
Murray Lake	whole lake	30	ns	50	11	-
Muskeg Creek	SW11-45-1-W5	ns	ns	15-17	15	m
New Norway (area)	12-45-22-W4	ns	active	ns	0	m
Noral Lake	17-65-16-W4	ns	12	30-39	30	=
North Bellis Lake	29-60-15-W4	ns	ns	14-37	<15	-
North Buck Lake	12-66-18-W4	ns	5-13	13-72	95	+
North Edwand Creek	16-61-15-W4	ns	ns	0-5	0	m
North Lucky Lake	NE21-62-18-W4	ns	25	18-25	3	-
North Saskatchewan River	N14-57-14-W4	ns	1	ns	0	m
Oldman River-Picture Butte	1-11-19-W4	14-19	ns	15-17	0	m
Oldman River	29-8-22-W4	ns	ns	active	0	m
Oldman River-St. Mary River	NE9-8-22-W4	ns	ns	10-56	0	-
Orloff Lake	NE31-73-23-W4	ns	40-50	25-50	20	-
Oster Lake	NE9-54-20-W4	ns	9-13	0-3	0	m
Pakowki Lake 7	NW7-5-7-W4	ns	ns	ns	10	m
Parlby Creek	31-40-23-W4	ns	7	18-28	24	=
Parting Lake	NW22-58-6-W5	ns	ns	15-20	0	m
Paul Lake	4&5-54-20-W4	ns	ns	13-22	2	m
Pelican Lake	SW9 (or 8)-79-21-W4	35	57	active	0	-
Pembina River	SE16-60-1-W5	ns	ns	3-19	ns	m
Pembina River - Dapp		ns	ns	12	ns	m
Perryvale A	2-63-22-W4	ns	ns	10-28	25	=
Perryvale B	27-63-23-W4	ns	ns	3-10	0	m
Pigeon Lake	NW6-47-1-W5	ns	5-12	11-16	10	m
Pinehurst Lake	24-65-10-W4	ns	ns	0-6	0	m
Portage Lake	whole lake	ns	ns	0-31	2	-
Prefontaine Lake	32-55-6-W5	ns	0	1-12	3	m
Raft Lake	5-54-5-W4	ns	ns	7-16	10	m
Red Deer River-Blindman	18-39-26-W4	ns	ns	4	0	m
Red Deer River-Dinosaur	Cent28-21-12-W4	32	10-41	4-34	0	
Ribstone Creek	9-37-9-W4				10	
		ns	ns	active	0	m
Rocky Mountain House (area)	N25-39-8-W5	ns	<u> </u>	ns	0	m
Romeo Lake	31-58-6-W5	ns		10		m
Rosebud River	27-30-1-W5	ns	15	ns	0	m
Ross Creek	3-12-3-W4	0	25-45	70-80	0	-
Sandy Lake	S21-56-13-W4	ns	9	3-22	14	m
Schroeder Lake	NE12-37-26-W4	18	10	1-50	10	-
Scope (Hays) Reservoir 1	3+10-13-14-W4	0	0	5	8	m
Sheep River	6-20-2-W5	25	0	ns	0	-
Sheep River	27-20-2-W5	ns	9-23	12	0	m
Sheep River	35-20-2-W5	ns	27	12	0	-

ST=STATUS	+ increasing	- decreasing	= stable	m minor	? unkn	own	
Great Blue Heron			# active nests (range of values); ns=no survey data				
Locat	tion	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Sounding Creek		NW36-34-13-W4	ns	ns	7	0	m
South Tea Lake		NW9-67-7-W5	ns	6-7	6	ns	m
Spruce Island Lal	ke	NE1-64-26-W4	ns	4-6	6-20	ns	m
St. Mary River		NE or NW5-3-24-W4	ns	ns	30-50	0	-
Taber P.P.		18-10-16-W4	ns	ns	active	0	m
Thunder Lake	-	NW30-59-5-W5	0-14	12-33	0-30	0	-
Trout Creek		NE34-11-28-W4	12	ns	0	0	m
Unnamed Lake		NW33-44-10-W4	ns	12	ns	0	m
Unnamed Lake		1-90-15-W5	ns	ns	6	ns	m
Vermilion River		13-52-10-W4	ns	ns	15-27	0	-
Vincent (west of)		27-59-10-W4	ns	ns	20-30	20	=
Wakomao Lake		NE5-60-24-W4	ns	39-44	6-35	0	-
Whelp Brook		22-42-26-W4	ns	ns	14	0	m
Whitefish Lake		18-62-13-W4	ns	2	0	ns	m
Willow Creek		NE or SW28-13-28-W4	ns	30	0-6	0	-
Winefred Lake		34-75-4-W4	ns	ns	2-12	ns	m
Wolf Lake		SE9-66-7-W4	ns	15-25	10-42	24	=
ST=STATUS	+ increasing	- decreasing	= stable	m minor	? unkn	own	

SUMMARY:

Of 170 Great Blue Heron colonies, 4 significant (more than 25 nesting pairs) colonies have increased while 42 significant colonies have decreased in size or become extinct. 17 colonies have remained relatively stable.

107 are considered minor colonies. Of this number only 12 are considered to be increasing while 55 are decreasing (or extinct) and 9 are considered stable. 31 of these minor colonies were not surveyed in 1998.

The overall trend for Great Blue Heron is significantly decreasing. This does not agree with the Breeding Bird Survey trend map which, other than an area of Aspen Parkland and Dry Mixedwood Boreal Forest in East-central Alberta, shows all areas increasing. Of particular note from the 1998 census is the virtual absence of known active colonies along the major rivers in the South Saskatchewan Basin. Only one active colony on a river (Medicine Hat) was located in 1998 in this region.

The total number of known nesting pairs in 1998 was estimated to be 1100. Despite the increased effort represented by the 1998 census, this compares to a total estimated provincial population of 1500-1600 nesting pairs prior to 1980.

4.6 RING-BILLED GULL

Most Ring-billed Gull colonies were situated on islands in both small and large bodies of water. There are occasional records of colonies on causeways and peninsulas but these have often been subject to heavy predation.

Colonies have disappeared periodically due to periods of drought or increased water levels that have flooded out nesting islands.

ST=STATUS +	increasing	- decreasing	= stable	m minor	? unkn	own	_
A CONTRACTOR OF	Ring-billed G	ull des an	# active n	ests (range of va	alues); ns=no si	irvey data	
Location	And a state of the second state	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Akasu Lake		whole lake	ns	ns	ns	1253	+
Antoine Lake		4-67-14-W4	ns	ns	active	200	+
Beaver Lake		34-65-12-W4	ns	ns	100	part of 500	+
Beaverhill Lake		whole lake	1000-3000	1295	ns	40	-
Birch River Delta		8-109-14-W4	ns	1	ns	ns	m

ST=STATUS + increasing	- decreasing	= stable	m minor	? unkn		-
Ring-billed	# active nests (range of values); ns=no survey data					
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Bruce Lake	E3-26-26-W4	ns	active (part of 400 adults)	ns	210	=
Buffalo Lake	whole lake	500-1000	2000	active	1225	=
Bushy Head Lake	35-44-7-W4	ns	ns	350-400	905	+
Campbell = Tilley A Reservoir	NE6-18-12-W4	ns	active (part of 1000 adults)	ns	1242	+
Chip Lake	whole lake	100	249	ns	340	+
Cowoki Lake	2-19-13-W4	active	ns	ns	0	-
Crawling Valley Reservoir =Barkenhouse Lake	whole lake	ns	active	ns	1282	+
Dowling Lake	NE12-32-15-W4	3000+	5184	ns	0	-
Eagle Lake	?30-23-24-W4	100-500	0	ns	0	-
Ferguson Lake	25-72-6-W6	ns	ns	active	part of 200	+
Frank Lake	19?-18-27-W4	100-500	1017	3	0	-
Frog Lake	whole lake	ns	ns	0-300	2	-
God's Lake	18?-90-2-W5	ns	ns	1	ns	m
Grassy Lake 2	E34-9-12-W4	ns	ns	ns	3726	+
Grouard Channel	20-75-14-W5	ns	active	ns	0	-
Horse Lakes-NW Buffalo Bay	2-76-15-W5	ns	active	ns	0	-
Horse Lakes-S Buffalo Bay	24-75-15-W5	ns	active	ns	0	-
Horsefly Lake	12-9-16-W4	active	ns	ns	0	- 1
Irricana (Salt) Lake	NE11-27-26-W4	1000-3000	4812	active	0	<u>+ -</u>
Johnson Reservoir	12-16-14-W4	active	ns	ns	0	-
Keho Lake	x-11-23-W4	3000+	4296	active	0	-
Kitsim Reservoir	whole lake	ns	ns	ns	2941	+
Lac la Biche 3	4-68-14-W4	ns	ns	active	490	+
Lac Sante	8-56-11-W4	ns	ns	150	0	-
Lac Ste Anne	W15-54-3-W5	ns	ns	active	450	=
Lake Athabasca	12-115-4-W4	100-500	ns	ПS	ns	2
Lake Newell	whole lake	1930-3000+	5232-6091	ns	1331	<u> </u>
Langdon Reservoir	whole lake	ns	ns	active	1487	+
Lesser Slave Lake-Swan Pt	22-74-9-W5	ns	active	ns	0	- 1
Lesser Slave Lake-West	17-75-13-W5	ns	active	ns	0	-
Lesser Slave Lake-Joussard	9-74-13-W5		active		0	-
Lesser Slave Lake-East	20-73-5-W5	ns		ns	0	-
Little Bow Reservoir	whole lake	ns 4-25	active	ns	47	+
Lost Lake	6-14-17-W4		active	active 10-20	4/	- T
Losi Lake	23-57-10-W4	ns	ns 0	100-2000	1200	-
Many Island Lake	And with the second	500-1000				
	13-1-W4	active	ns	ns	0	
McGregor Lake	23-18-22-W4	ns	ns	active		-
Milk River Ridge Reservoir 1	SW14-5-20-W4	ns	part of 2000- 3000	active	7734	+
Milk River Ridge Reservoir 2	SW14-5-20-W4	ns	part of 200- 400	active	0	-
Miquelon Lake 1	NE30-49-20-W4	58-315	ns	ns	0	-
Miquelon Lake 2	SW30-49-20-W4	7-1200	10087	active	9925	+
Muriel Lake	whole lake	ns	ns	10-3000	2500	=
Murray Lake	whole lake	1000-3000	747	active	1192	=
Namaka Lake	12-23-24-W4	active	ns	ns	0	-
Pakowki Lake	whole lake	ns	part of 40-80	active	520	+
Pelican Lake	30-78-21-W4	0	ns	ns	200	+

ST=STATUS + increasing	- decreasing	= stable	m minor	? unkn	own	
Ring-billed	Gull	# active n	ests (range of v	alues); ns=no s	urvey data	1
Location	Legal	pre-1970s	1970s	1980s/1990s	1998	ST
Pigeon Lake	E27-46-28-W4	ns	active	ns	19	m
Portage Lake 1	10-69-14-W4	ns	ns	69-120	10	-
Rattlesnake Lake 1	N7-12-8-W4	ns	ns	ns	1441	+
Rock Island Lake (Calling L area)	21-75-22-W4	ns	ns	0	part of 177	+
Ross Lake	NW30-2-22-W4	ns	part of 562	ns	part of <100 nests	-
Scope (Hays) Reservoir	whole lake	ns	active	200-500	3031	+
Shanks Lake	27-1-21-W4	ns	43	ns	0	-
Sinking Lake	3-60-6-W4	ns	ns	50	0	-
St Mary Reservoir 1	NW19-4-24-W4	1000-3000	856	ns	15	-
St Mary Reservoir 2	S3-5-24-W4	ns	ns	ns	part of 80	+
Stirling Lake	6-7-19-W4	1000-3000	218	ns	0	-
Suds Lake	27-5-18-W4	ns	active	ns	0	-
Tilley B Reservoir	30-18-12-W4	ns	active	ns	500	+
Timko Lake	33-17-13-W4	active	ns	ns	0	-
Upper Therien Lake	SE5-58-9-W4	ns	ns	200	0	-
Utikuma Lake	whole lake	0	ns	ns	5	m
Wadlin Lake	SW1-101-11-W5	ns	ns	active	ns	?
Waterton Reservoir	14-4-28-W4	ns	ns	active	135	+
Winefred Lake	34-74-4-W4	100-500	ns	50	ns	?
ST=STATUS + increasing	- decreasing	= stable	m minor	? unkn	own	

SUMMARY:

Of 70 Ring-billed Gull colonies, 23 significant (more than 25 nesting pairs) colonies have increased while 34 have decreased in size. Six colonies have remained relatively stable. Four are considered minor colonies and three are of unknown status as there have been no recent surveys.

The overall trend for Ring-billed Gull is increasing as many of the declining colonies have been relatively small whereas many of the increasing colonies have been relatively large. This is a trend that has been evident throughout North America and agrees with the Breeding Bird Survey trend map.

Some notable declines have occurred in large colonies at Beaverhill Lake, Dowling Lake (dry), Irricana (Salt) Lake, Keho Lake (higher water levels), Lake Newell, St. Mary Reservoir and Stirling Lake.

The total number of known nesting pairs in 1998 was over 46000. This compares to a total estimated maximum provincial population of about 20000-25000 nesting pairs prior to 1970 (20000 according to the Canadian Wildlife Service in 1968) but not much different than the Canadian Wildlife Service estimate of 40000 pairs in 1977. After a phenomenal rise through the 1970s, it appears that the growth curve has flattened out. This may be due to an end to the explosion of irrigation reservoir construction and associated nesting islands and to a tempering of an initial growth phase with "natural" population controls including disease, predation, human disturbance, drought, and high water levels during wetter periods.

The difference of 6000 nesting pairs can be attributed, at least in part, to a more comprehensive census conducted in 1998 and is within a sampling error of +/-15%. The 1998 studies showed more significant colonies declining than increasing, even though overall population size was rising due to expansion in a greater number of the largest colonies.

5.0 RECOMMENDATIONS

Further monitoring surveys of all colonial nesting birds should be undertaken on a periodic basis.

For species that are increasing or stable, this can be on a 3-5 year basis for significant colonies.

For species that are decreasing, all colonies should be resurveyed every 3 years and significant colonies should be resurveyed annually. More detailed population work should also be undertaken to assess survival rates and underlying causes that may be contributing to the apparent declines. In all instances, representative coverage of different natural regions (e.g. Boreal Forest, Aspen Parkland, Grassland) should also be a goal.

A comprehensive survey of all these colonial nesting species should be undertaken every 10 years. The following are recommendations for individual species.

5.1 AMERICAN WHITE PELICAN

Northern colonies that were not surveyed in 1998 (e.g. Birch Lake, Wadlin Lake, Mountain Rapids) should be censused as soon as possible. The most significant colonies (over 100 nests) should be resurveyed every 3-5 years, including:

Scope (Hays) Reservoir Utikuma Lake

Beaverhill Lake	Lake Newell 4 - Pelican Island
Birch Lake	Mountain Rapids (Slave River)
Buffalo Lake	Namur Lake
Joseph Lake	Pelican Lake - South Island

A comprehensive survey of all known American White Pelican colonies should be undertaken every 10 years.

5.2 CALIFORNIA AND RING-BILLED GULLS

The most significant colonies (over 1000 nests, recent or historical) should be resurveyed every 3-5 years, including:

Akasu Lake	Irricana (Salt) Lake	Langdon Reservoir 1/3	Murray Lake 2
Antoine Lake	Joseph Lake	Lower Therien Lake 1	Rattlesnake Lake 1
Buffalo Lake	Keho Lake	Milk River Ridge	Scope (Hays) Reservoir
Campbell Reservoir	Kitsim Reservoir 6	Reservoir 1	St Mary Reservoir 1
Dowling Lake	Lac la Biche	Miquelon Lake 2	Stirling Lake
Grassy Lake 2	Lake Newell 3	Muriel Lake	

A comprehensive survey of all known and potential California and Ring-billed Gull colonies should be undertaken every 10 years.

5.3 CASPIAN TERN

The most significant colonies (Lake Athabasca and Lake Newell) should be resurveyed every 3-5 years. Notes on nesting at other locations should kept when conducting surveys of colonial nesting birds and other species. Lake Athabasca (Egg Island) should be censused as soon as possible.

5.4 DOUBLE-CRESTED CORMORANT

The most significant colonies (over 250 nests, recent or historical) should be resurveyed every 3-5 years, including:

Antoine Lake	Lac Canard	Murray Lake	Scope (Hays) Reservoir
Beaverhill Lake	Lac la Biche	Namur Lake	Tilley B Reservoir
Frog Lake	Lake Newell	Pelican Lake	
Joseph Lake	Muriel Lake	Portage Lake	

A comprehensive survey of all known and potential Double-crested Cormorant colonies should be undertaken every 10 years.

5.5 GREAT BLUE HERON

An increased survey effort is needed to address the concern over apparent declines of this species in the settled parts of Alberta, particularly in the Grassland and Aspen Parkland Natural Regions and the Dry Mixedwood Boreal Forest Subregion. This includes southern Alberta's major prairie streams--the Belly, Bow, Oldman, Highwood, Red Deer, St. Mary's, Sheep and Waterton Rivers, and Ross and Willow Creeks as well as former major nesting lakes in central Alberta--Buck, Cow, Thunder and Wakamoto Lakes.

Resurveys of all Great Blue Heron colonies should be conducted every 3 years. Detailed annual surveys, including survival data, should be undertaken at the following significant stable or increasing colonies until a better understanding of overall trends and underlying causes can be established:

Bang's Lake Beaver Lake Blackfoot Lake Buffalo Lake 1 Burnstick Lake (Birch L) Chip Lake 1 Crimson Lake P.P. Frenchman Lake Frog Lake 3 Heart Lake Island Lake Isle Lake Lac la Biche Majeau Lake Noral Lake North Buck Lake Parlby Creek Perryvale A Vincent (west of) Wolf Lake

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