Beaverhill Bird Observatory

Annual Report 1984

Northern Goshawk
Second year male
1984
Beaverhill Lake, Alberta
Photo by Mitch Davidson

G. R. A. Ebel

Report No. 2

Beaverhill Bird Observatory
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Published November, 1986 by:

The Edmonton Bird Club
P. O. Box 4441
Edmonton, Alberta T6E 4T5

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ACKNOWLEDGMENTS

I thank Geoffrey Holroyd and Sylvia L'Hirondelle for their suggestions and comments on an earlier draft of this report.

Section 1. INTRODUCTION

1.1. Location of the Station

Beaverhill Lake is located approximately 70 km. southeast of Edmonton, Alberta. Its national and international reputation, largely promoted by such notables as Robert Lister, William Rowan and others, has made this lake the area most frequented by birders from the Edmonton area, and visted by others from the province, and from abroad.

The Beaverhill Lake Bird Banding Station (see Ebel, G.R.A. *in* Edmonton Naturalist Vol 13 No. 1 July 1985) became a committee of the Edmonton Bird Club and officially the Beaverhill Bird Observatory (BBO) in 1984, when it was jointly chaired by Rainer Ebel and Geoff Holroyd.
The station is located 5.5 miles east of Tofield (53.N 22' 112.W 30'; NW 1 and SW 12 Twp 51- Rge 18- W4) on the south-east shore of Beaverhill Lake, approximately 3/4 mile west of Robert Lister Lake (formerly "A" Lake). It is temporary in nature, as no fixed structures have been built, with banding operations occurring in a willow-grassland-aspen community known as Rainer's Ridge. For place names and access points to the lake refer to *Beaverhill Lake Gazetteer* published by the Edmonton Bird Club in 1984.

1.2. Operations and Achievements for the Report Year

The BBO began its operations on 8 April and finished for the year on 30 September. During this time a total of 31 days or 19,404 net-hours was devoted to banding and censusing of birds on the south shore of the lake. Sightings from other areas of the lake were collected and recorded.

Apart from establishing the necessary data forms such as Banding Data and Summary Sheets (all borrowed from Long Point Observatory) to maintain the banding function we established a census route which was surveyed daily when the station was operational and when sufficient personnel were present.

We constructed and placed one necessary but crude picnic table which became symbolic of BBO's existence at the lake. It provided a location marker on the south shore where cooperators and vistors could meet, visit, and work. With the organization and activity of the station we anticipated an increase in area usage by bird watchers. Indeed, during the 31 days of operation at least 50 people expressed interest and enthusiasm for the station and its objectives. About twice as many visitors, primarily people on tours, or casual visitors were shown bird banding and handling techniques, and bird identification. With this increase of people visiting the area it was necessary to construct an outdoor privy.

On 21 April a fire, carelessly attended, escaped its confinements

and blackened half a hectare of dry grass and willow at the station site. Fortunately, no one was seriously injured but camping equipment and personal items were lost.

Pat Nolan supplied five fence posts for nest boxes. These were located in the meadow covering Hohn's Head. Twenty nest boxes were established at various points around Lister and Beaverhill lakes.

The BBO, on behalf of the Edmonton Bird Club investigated the possibility of acquiring land to establish a permanent site on the shores of Beaverhill Lake, and to develop structures for the BBO where cooperators can live and work while engaged in projects. An area of 20 acres near the banding site was selected for its habitat diversity and its relative remoteness. Key personnel from Fish and Wildlife, Ducks Unlimited and Public Lands, all of who have vested interest in this area, were contacted and told of the function and operation of BBO, and its wish to become permanently located at Beaverhill Lake. Application to occupy lands near the lake will be made in 1985.

During the search for suitable lands it was found that the Edmonton Bird Club has an active Licence of Occupation disposition, LOC002313, on the south shore of Beaverhill Lake. Under this disposition they occupied 0.35 acres (100 x 150 feet) in NE 2-18-51-W4, approximately 1/2 mile west of the present banding site and constructed a blind, for the purposes of bird viewing. Vandals destroyed the blind. The possibility of relocating this LOC site to SW 12-18-51-W5 will be investigated in 1985.

1.3. Objectives

In 1984 the objectives of the BBO were defined at a spring meeting as follows:

a) to conduct studies of migrant and resident birds and other aspects of natural history, at Beaverhill Lake, in the Province of Alberta and elsewhere, and to publish the results of such studies;

b) to make the facilities of the Observatory available to amateur and professional biologists and students who are carrying out appropriate observations and research work;

c) to engage in educational activities related to the work of the Observatory;

d) to promote the preservation and conservation of Canada's natural heritage with special emphasis on the Beaverhill area of Alberta; and

e) to cooperate with organizations with similar objectives.

Section 2.0 PROJECTS UNDERWAY

2.1 Status of 1983 Projects

The status of the four projects initiated in 1983 is as follows:

1) Moulting sequence in vireos. Coordinator: Jim Lange
Active; See Summary

2) Techniques for determining age and sex in Savannah Sparrows. Coordinator: Rainer Ebel
Active; See Summary

3) Techniques for determining age and sex in a western population of Clay-colored Sparrows. Coordinator: Janos Kovacs
Inactive and open; See Summary

4) Timing flycatcher and warbler movements at Beaverhill Lake. Coordinator: G.R.A.Ebel
Active; See Summary

5) ~~Identification of hand held Empidonax - Least, Willow, and Alder-~~ flycatchers. Coordinator: Linda Murray
The following project was to start spring 1984 .
Cancelled; Coordinator unable to start

Personnel at the station were responsible for reporting and recording all field sightings (including those birds banded) of birds using Beaverhill Lake as a staging or breeding area.

2.2 New Projects

Fourteen new projects were proposed for the report year. Of these six were coordinated by volunteers; those remaining were shelved until 1985. Their objectives and summaries, including projects initiated in 1983, appear below.

2.2.1 Project Summaries and Objectives

1. Migration and Breeding Bird Monitoring
Schedule coordinators: Rainer Ebel and Geoff Holroyd

The purpose is to monitor migratory bird populations and census breeding birds in a defined area near the station. This was accomplished in two ways:

a) Daily census: were completed each day, when possible, before noon (preferably earlier). All birds seen from the census route were identified, counted, and recorded on the appropriate form.

b) Daily Estimated Total: at the end of each day, all bird records were tallied and summarized on the appropriate form. This total included birds seen on the census and by other observers within the census area. Birds seen elsehere around the lake were listed separately.

The results of these surveys were used to compile the Species Accounts and Bird Sightings in this report.

2. General Banding
Coordinator: Rainer Ebel; ph. 487-4812

The purpose is to use capturing devices such as mist nets as a technique to monitor birds and bird movement in the Beaverhill Lake area. Bird banding were conducted only by trained banders using a master set of bands.
This is the main activity at the station and the results are presented in Section 3.

3. Swallow Boxes and Martin Houses
Coordinator: Geoff Holroyd; ph. 438-1462

The purpose is to establish breeding populations of Tree Swallows, Purple Martins, and other hole nesting birds at Beaverhill Lake and to provide opportunities for more extensive studies of Tree Swallows.

SUMMARY: Tree Swallow nesting studies-- G.L. Holroyd.

In April and May, 18 boxes were put up on poles on the south east shore of Beaverhill Lake and in the aspen woods south of the shore. In these boxes, 12 pairs of Tree Swallows and four pairs of House Wrens nested.

Eleven completed clutches of Tree Swallows averaged 6.6 eggs (range 6 to 7 eggs). On average 5.8 eggs hatched and fledged (range 4 to 7). This is very high productivity for Tree Swallows indicating a healthy food supply.

In addition, seven females were caught and all were two years old or older except one, a yearling. Such a high proportion of older adults could indicate a shortage of nest boxes elsewhere since young birds are usually the colonizers of new nesting areas. Also the high occupancy rate indicates a shortage of nest sites; only two boxes were without eggs but both had nests build in them.

4. Colonial Bird Banding.

The purpose is to locate and count bird colonies on Beaverhill Lake. Coordinator: P.H.R. Stepney.

SUMMARY: Cormorant and pelican banding. - P.H.R. Stepney.

Banding of nestling birds on the Pelican Islands in Beaverhill Lake was continued by the staff of the Provincial Museum of Alberta in 1984. A more complete note will be included in the 1985 annual report.
In 1984, 41 young Double-crested Cormorants from 24 nests were banded and 43 young white pelicans from 84 nests. Both totals are up from 1983.

Note: To protect the birds access to the islands is restricted and by permit only. PLEASE watch the birds from shore.

5. Wing Morphology and Flight Abilities of Birds
Coordinator: Geoff Holroyd; ph. 438-1462

This study will collect information from birds caught for banding and use it to study the flight abilities of various groups of birds.

SUMMARY: Study of wing morhology and flight abilities of birds. - G.L.Holroyd.

This study is designed to investigate the wing shape and flight speed of birds and relate differences between species to their feeding methods. Several measurements of each bird were taken including wing area and weight. Data were collected from 92 birds of 25 species. The emphasis in this first year was to investigate techniques for making accurate measurements, especially wing area.
Two methods of recording the wing area were used. Both involved holding a bird against a board with its wing outstretched over a sheet of graph paper. The first method involved tracing the outline of the wing on the graph paper; the second method was to photograph the wing on the graph paper.
To test the accuracy of the methods, the wings of 4 birds were recorded five times each for each method. Tracing the outline resulted in wing areas that were 4 percent larger than the photographs. This is considered a small difference. However, there was a much larger difference in the variation when the technique was repeated five times. The photographs gave areas that varied by only 1/3 as much as the tracing method demonstrating that the photographic method is less variable. Consequently, all future measurements will be from photographs.

6. Water Levels
Coordinator: Rainer Ebel; ph. 487-4812

The purpose is to record and monitor water levels at Beaverhill Lake.

On 12 May 1983 a one meter staff gauge was installed by personnel from Alberta Environment, Water Survey Section near the north west corner of a concrete weir between Beaverhill and Lister lakes.

Staff gauge readings were recorded in an observer book whenever the bird banding station was in operation; transfered to data cards and forwarded to the Water Survey Section. A total of 17 readings was made from May to October. The maximum observed water level of 668.747 metres above sea level occurred on 14 August; the minimum of 668.329 metres on June 15. The maximum observed water level of 669.243 metres was recorded on 13 June 1974 and the minimum of 667.872 metres was on 27 August 1968.

7. Nest Record Card Scheme

The purpose is to record data on nests found at Beaverhill and transmit that information to the regional compiler.

SUMMARY: Nest Record Cards. - G.L. Holroyd.

The nest record scheme is a cooperative project of the Canadian Wildlife Service and several provincial museums. The Prairie Nest Record Scheme is coordinated at the Manitoba Museum of Man and Nature. The scheme encourages the collection, storage, and analysis of nesting data for all bird species. The cards are easy to fill out, yet useful to many reseachers who wish to study breeding habits of birds.

In 1984, 27 cards were completed for eight species (Table 1). Two species, Tree Swallow and House Wren, nested in boxes while the remainder were on the ground. The marshes at Beaverhill are very productive for nesting birds and a more extensive search would yield many more nests of more species.

TABLE 1. Nests recorded at south-east corner of Beaverhill Lake in 1984.

American Bittern	1
Blue-winged Teal	2
Mallard	2
Canvasback	1
Wilson's Phalarope	2
Tree Swallow	12
House Wren	4
Marsh Wren	3

Section 3.0 BANDING

3.1 Schedule

Banding at Beaverhill Lake began on 8 April 1984 and continued on weekends through May. In June, the week end of the 9/10th was missed . Banding activities continued into the first week end in July and on the 10th. Further activites were halted until the

17/18 and 25/26th August. The only weekend in September which ultimately was the last for the year was the 29/30th. Banding was conducted on a total of days in 1984.

3.2 Capture Devices

Mist nets were in position from dawn to dusk and furled for the night. The number used varied from one to twenty, depending on the number of operators and assistants. Nets of standard height (2.1 metres), of varying mesh size (31, 38, and 60 mm) and of varying length (3, 5.5, 9.1, 12.2, and 18.3 metres) were used to capture birds. These nets were placed either at preselected points along the shoreline (at Hohn's Head) to capture shorebirds, or in the grassland or grassland-willow communities to catch passerines and other small birds.

3.3 Recording Information

For each bird caught, operators at the station recorded age and sex (where possible), and species identity, to comply with the official bird banding requirements and regulations as laid out by the Canadian Wildlife Service and the U.S. Fish and Wildlife Service. The information collected was forwarded to the Bird Banding Office in Ottawa.

Section 4.0 RESULTS

4.1 Bands Used

The following band numbers were used at the station during the report year. This is included to provide quick reference for those who have a 'used' band in their posession.

Size 0.	1630-05802 to 05900	Size 1B.	1321-56641 to 56655
	1700-53001 to 53099		
		Size 1A.	921-19919 to 19926
Size 1.	940-24401 to 24419		
	940-14255 to 14300	Size 2.	762-34110
	940-28701 to 28800		

4.2 Recaptures, retraps etc.

In the report year 35 birds were recaptured at the station. All but one were captured and banded by station personnel. This one was one, a Savannah Sparrow, was banded by E. T. Jones. The majority were repeats, that is, birds which are captured, banded, and released in a 10' grid of latitude and longitude are recaptured within a three month period and within the orginal 10' grid of latitude and longitude. The remaining few were regarded as returns, that is, birds captured, banded and released within the 10' grid of latitude and longitude are recaptured at least 90

days from the date of banding within the orginal 10' grid of longitude and latitude.

Black-capped Chickadees were the most numerous (12) of the recaptured species. The only two returns were from August and September 1983. The remaining recaptures were repeats.

Eight Least Flycatchers that were previously banded during the third and fourth weeks in May and first week in June, were recaptured shortly thereafter. Only one that was banded on 3 June showed up two months later.

The Amisk Bridge Cliff Swallow colony located over Amisk Creek, near the south end of Beaverhill Lake was censused twice in previous years using mist nets. It was encouraging to find that at least two Cliff Swallows captured and banded on 8 June 1980 and another two, banded on 5 July 1981, remained members of the colony. Of the 61 Cliff Swallows banded at this colony, to date only 6.5 % were captured.

Only three previously banded Savannah Sparrows are recorded for the report year. Number 910-15167 was banded by in summer of 1981 and recaptured on 19 May. Number 940-14262 was caught twice on 19 and 20 May and was banded only 13 days previously.

A male and female Brown-headed Cowbird, both captured, banded and released in May 1983 returned to the Station area this year. Only the female was captured and handled a third time.

Two Clay-colored Sparrows and a single Marsh Wren that were banded during the final weeks of May were repeats during the first half of June. And lastly, a Yellow Warbler recorded as U/U (unknown age and sex) on 14 August 1983 reappeared as a male on 27 May.

4.3 Banding Results

A total of 381 birds representing 34 species was banded during 31 days of BBO operation (Table 2). During 15 consecutive days of banding (24-30 May and 19-26 August) on the east side of the lake Jones was able to band 758 birds representing 58 species (Table 3). A combined effort resulted in 1139 banded birds and 63 species. Compared with 1983 results (Beaverhill Lake Bird Banding Station: Annual Report 1983. G.R.A. Ebel. 1985. Edmonton Naturalist. Vol 13 (1)) there were 279 more birds banded in 1983 (1139 vs 1418) but difference between the number of species was slight (58 vs 62).
The combined totals (BBO and Jones) of species for which 100 or more birds were banded, were Least Flycatcher (194) and Clay-colored Sparrow (116). This represents a 17% and a 11% drop, from 1983 data, in flycatchers and sparrows, respectively for the report year.
Species which approached 100 were Tree Swallow (96) and Marsh Wren (92). In 1983 only 1 Tree Swallow and 76 Marsh Wrens were captured and banded.

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TABLE 2. List of species and number banded by BBO personnel and Edgar T. Jones at Beaverhill Lake from 8 April to 30 September, 1984

Species	Number		Species	Number	
	BBO	Jones		BBO	Jones
BLue-winged Teal		1	Yellow Warbler	12	64
Killdeer		1	Myrtle Warbler	13	37
Solitary Sandpiper		2	Western Palm Warbler		1
Greater Yellowlegs		2	Blackpoll Warbler	1	10
Lesser Yellowlegs		7	American Redstart		4
Pectoral Sandpiper	1	1	Ovenbird		1
Baird's Sandpiper		2	Northern Waterthrush		2
Least Sandpiper		9	Mourning Warbler		3
Stilt Sandpiper		3	Common Yellowthroat		3
Semipalmated Sandpiper		3	Wilson's Warbler	1	1
Yellow-bellied Sapsucker		1	Canada Warbler		1
Downy Woodpecker	5		Western Tanager		1
Western Wood-Pewee	2	6	American Tree Sparrow	23	
Traill's Flycatcher	5	14	Chipping Sparrow	10	22
Least Flycatcher	54	160	Clay-coloured Sparrow	26	90
Eastern Kingbird		6	Vesper Sparrow		3
Tree Swallow	94	2	Savannah Sparrow	29	31
Cliff Swallow	22		Sharp-tailed Sparrow		2
Barn Swallow	5	1	Le Conte's Sparrow	4	2
Black-Capped Chickadee	25	26	Song Sparrow		3
Boreal Chickadee	3		Lincoln's Sparrow	1	5
Red-breasted Nuthatch	1	2	White-throated Sparrow	6	
House Wren	14	4	White-crowned Sparrow	2	2
Marsh Wren	2	90	Slate-colored Junco	2	
Ruby-crowned Kinglet	2		Red-winged Blackbird	2	27
Veery		1	Yellow-headed Blackbird		20
Swainson's Thrush		6	Brown-headed Cowbird	5	6
Hermit Thrush		3	Baltimore Oriole	2	21
American Robin		1	Purple Finch		1
Cedar Waxwing	1		Pine Siskin		1
Solitary Vireo		1	American Goldfinch		4
Warbling Vireo	4	13			
Red-eyed Vireo		2	Total Species:	66	
Tennessee Warbler	1	19	Total Individuals:	381	758
Orange-crowned Warbler	1	1			

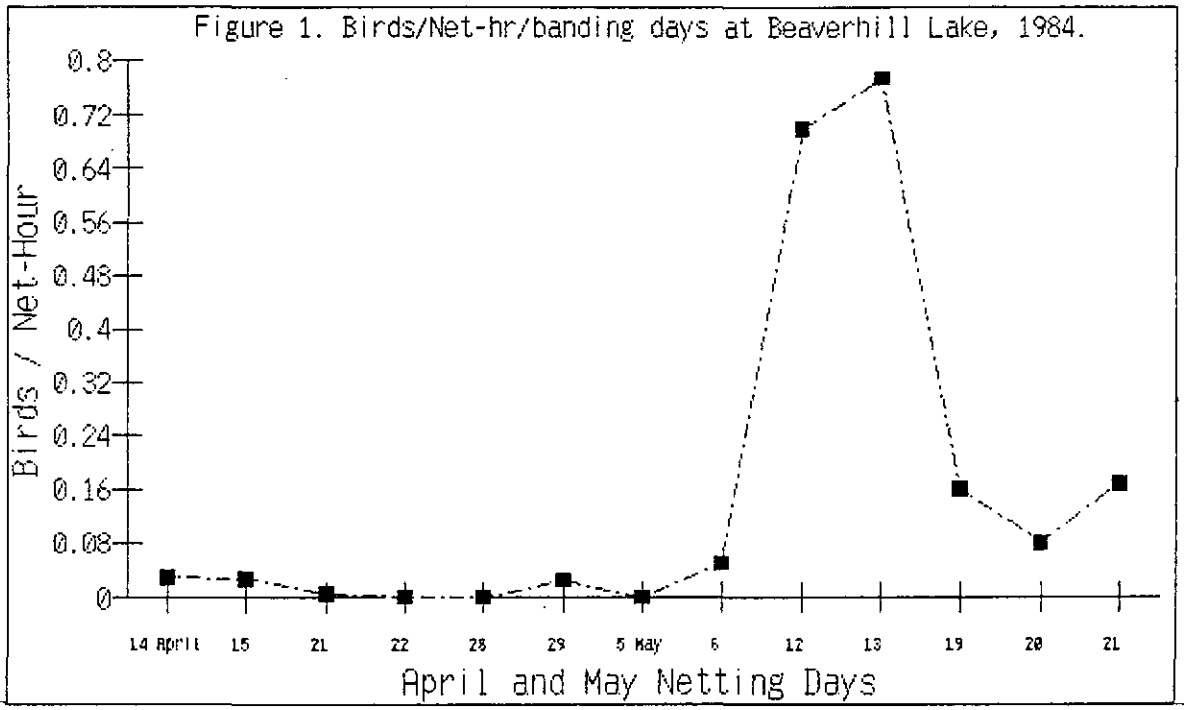
In 1983 Savannah Sparrow (217), Yellow Warbler (146), and Black-capped Chickadee (107) topped the list, but in the report year Savannahs dropped to 60, Yellow Warblers to 76, and Blackcaps to 51. Netting effort which was recorded in 1984 was not included during the 1983 banding season.

The banding station was relocated in 1984 some 2000 metres from its location in 1983. Although the vegetation (willow-grasses) appears outwardly similar in both locations, some nets are located closer (or in) a mature aspen forest. This may have affected the diversity and numbers of some species. It is not known were Jones had captured and banded birds at Beaverhill Lake.

For each month of BBO operation in 1984, the daily netting effort (number of nets X hr each net is in use), reported in net-hours, was summed and was as follows: April, 581; May, 823.5; June, 32; July, 7.5; August, 302; September, 191.5. Essentially, they indicated bander activity at the lake. Perhaps, partially because of enthusiastic banders, April/May were the months where the effort to capture birds was the greatest. This was also the migration period when birds were the easiest to capture as they pass through an area. The summer months of June and July basically reflected a period of inactivity for the BBO. This should be corrected as the Observatory grows and more keen people develop the necessary skills to handle and band birds. Effort was made to encourage people to actively participate at the Observatory and banding courses were planned planned in early 1985 at the John Janzen Nature Centre.

August and September were also regarded as migration months where the activity for both bander and birds increased before the onset of winter. September was a lack-lustre month compared to August, even though many sparrows and others are moving through the Edmonton area. It appeared that the location of the banding operation did not appeal to a diversity of species or large concentrations of passerines. It was believed that baited traps for certain species in addition to the use of mist nets be used in the Observatory area to maximize our banding efforts at the lake.

Figure 1 illustrates the number of birds per net-hour for each day of banding during April and May. Some birds were captured from 14 April to the 5 May but an appreciable increase in the number of birds per net-hour was noticed on 12 May. The 12-13 May weedend resulted in many species captured and may reflect the peak in the migration in the area. Thereafter, the numbers decreased to what appeared to be a stable level which may indicate the presence of a resident population.



5.0 BIRD SIGHTINGS

5.1 Contributors and Cooperators.

The following people have contributed to the bird sightings.

Leslie Baker(LB), Elisabeth Beaubien(EB), Marlene Buac(MB), Mike Casselman(MC), Dave Cuthiell(DC), Mitch Davidson(MDa), Dick Dekker(DD), Malcom Devine(MD), David & Margret Donald(D&MD), Mathew Ebel(ME), Rainer Ebel(GRAE), Jim Faragini(JF), Rosemary Harris(RH), Margot & Dave Heriveux(M&DH), Wes Hockachka(WH), Geoff Holroyd(GH), Michael Holroyd(MH), Winnie Horn (WHo), E.T.Jones(EJ), Richard Klauke(RK), Janos Kovacs(JK), Ben Kulan(BK), Jim Lange(JL), Don Large(DL), Pat Marklevitz(PM), Herb Pascoe(HP), Paul Peterson(PP), Mike Quinn(MQ), Alf Scott(AS), Helen Scott(HS), Teslin Seale(TS), Robert Swallow(RS), Terry Thormin(TT), Robert Turner(RT), Cleve Wershler(CW), Ray Wershler(RW) .

Other abreviations: AHY= after hatch year; ASY= after second year; HY= hatch year; U= unknown; M= male; F= female.

5.2 Species

The following is a list of species recorded by BBO cooperators at or near the Station. This list is a result of a predetermined census route and from casual observations while in attendance at the Station and from the area which is bounded by Francis Access in the west, Lister Lake to the east, Beaverhill Lake to the north and Rowan's Route to the south. Included for each species is numbers of birds sighted, early and late dates and, when and where possible, high numbers which may either represent peaks for migratory species or a degree of abundancy for resident species.

Spring is defined as 1 March to 31 May; Summer, 1 June to 31 July, Fall, 1 August to 30 November.

5.2.1 Grebes to Geese: 15 species

PIED-BILLED GREBE. 1 on 13 to 28 May. 1 on 16 July. HORNED GREBE. 1 on 29 April. 4 on 5 May. High: 17 on 9 May. Last report for spring: 6 on 26 May. Single birds only throughout June and July. RED-NECKED GREBE. 1 on 16 July. EARED GREBE. 1 on 22 April. 3 and 2 on 8 and 12 May, respectively. High: 21 on 2 June. 1 on 17 and 3 on 21 June. WESTERN GREBE. First seen: 2 on 22 April. 2 on 9 May. 5 on 19 May. Recorded through June but in low numbers (< 10). *Breeding Evidence.* 50+ 3 young on 16 July. 100 on 17 August and again on 25 August- high. Numbers observed continually decreased; last report of 4 on 30 September. AMERICAN WHITE PELICAN. First report: 5 on 9 May. 11 on 19 May. High: 125, 16 July. *Breeding Evidence.* 76 adults in breeding condition and 32 adults in post breeding condition on 10 July. 35 on 17 August. Last report: 2 on 30 Sept. DOUBLE-CRESTED CORMORANT. First report: 2 on 5 May. Numbers reported were low (<5) for the spring period. Summer numbers sighted and reported were not high (max. 5 on 16 June). 1 on 25 August (RS). AMERICAN BITTERN. First report: 1 on 21 April. A high of 4 was heard on 26 May. Numbers this year do not suggest a high population in the census area. 5 on 16 June. GREAT BLUE HERON. First report: 2 on 8 April (DD). First observed at Station: 2 on 5 May. 5 on 8 May. Low numbers throughout the remaining period. 11 on 16 July. Mostly ones and twos were recorded for this period. Last report: 2 on 29 Sept. BLACK-CROWNED NIGHT-HERON. Earliest report: 1 on 23 April (DD). At the Station 1 occurred on 29 April. Fairly well established by end of May when a high of 10 was recorded on 26th. 25 on 16 June. Throughout summer numbers ranged from 2 to 20 birds. 20 is the recorded high (17 August) and the last report of 4, which includes 1 imm., occurred on 30 Sept.

TUNDRA SWAN. Earliest report: 32 on 31 March (DD). On the south side this number jumped to 55 on 1 April. High: 600 on 8 April. Last reported sighting: 3 on 20 May. 1, thought to be this species 10 July. Earliest report: 2 on 25 August. High: 100 on 29 Sept. GREATER WHITE-FRONTED GOOSE. Earliest report: 48 on 5 April

(DD). High: 4000 on 14 April. Last report: 1 on 12 May. Earliest return: 40 on 17 August. High numbers (100) encountered on 18 August and 16 Sept. SNOW GOOSE. Earliest report: 2 on 1 April. High: 750 on 8 April. Last record: 2 on 21 April and then again, 1 on 21 May. Earliest reported return: 30 on 29 September. High: 210 on 30 Sept. ROSS' GOOSE. Earliest report: 12 on 15 May (1983) and 12 on 18 May (DD). None reported in 1984. However, 20+ on 2 October 1983 near Francis Farm (OH). CANADA GOOSE. Earliest report: 2 on 17 March (RS). High: 500 on 1 April. Summer: present. High: 300 on 26 August. Last report 30 Sept on 50 birds.

5.2.2 Waterfowl (Teal to Ruddy Duck): 21 species

The following species were noted; high numbers for spring and fall and nesting data are included . See: Cuthiell, D. Bird Report, Spring 1984. *in* Alberta Bird Record. Vol: 2(1). D. Collister, editor. 1985. Calgary Field Naturalist's Soc. for more information and dates.

GREEN-WINGED TEAL. 6 on 5 April (DD). 300 on 8 April. 75 on 18 August. MALLARD. 8 on 24 March (DD). 70 on 7 May. *Nesting Evidence:* 5 eggs on 5 May. 10 eggs on 28 June. High: 480 on 16 Sept. NORTHERN PINTAIL. 8 on 24 March (DD). High: 300 on 30 Sept. BLUE-WINGED TEAL. 2 on 20 April(DD). *Nesting Evidence:* 7 eggs on 21 May. CINNAMON TEAL. 19 April (TT). pair on 4 May (GRAE). 3 on 19 & 20 May (TT,JL,LB,DC). NORTHERN SHOVELER. 5 on 5 April (DD). Spring High: 93 on 21 April.Summer High: 170 on 17 June. *Breeding Evidence:* 6 young on 16 July. Fall High 75 on 18 August. Last report: 30 on 30 Sept. REDHEAD. 20 on 14 April. Spring High: 45 on 15 April. Summer High: 11 on 2 June. Last report: 2 on 29 Sept. RING-NECKED DUCK. 7 April (RT). 2 on 21 April. Scarce visitor. LESSER SCAUP. 7 on 7 April(DD). Spring High: 400 on 22 April. Summer High: 164 on 17 June. Last report: 100 on 18 August. WHITE-WINGED SCOTER. 1 on 8 May. 7 on 12 May(JL). COMMON GOLDENEYE. 4 on 31 March (DD). 75 on 8 April. 2 on 17 June. Last report: 1 on 26 August. OLDSQUAW. **1 on 29 April; rare.**
BUFFLEHEAD. 3 on 15 April. Not abundant during Spring; high: 10 on 9 & 29 May. Summer High: 16 on 17 June. Last report: 2 on 16 Sept.
HOODED MERGANSER. 1 on 16 June. COMMON MERGANSER. 3 on 8 April. High: 10 on 14 April. 1 on 21 April. 1 on 8 May. 30 on 29 Sept.
RED-BREASTED MERGANSER. 4m on 8 April. 8 on 15 April(MD). 16 on 21 April. High: 20 on 22 April. 5 on 29 April. RUDDY DUCK. 4 on 21 April. Spring High: 28 on 26 May. Fall High: 20 on 18 August. Last Date reported: 1 on 16 Sept.

5.2.3 Osprey to Phalaropes. 41 species

OSPREY. 1 on 13 May (DD). BALD EAGLES. 2 imm. on 29 Sept. NORTHERN HARRIER. Earliest report for the lake: 2 on 15 March (MD); BBO personnel recorded 1, as their earliest on 25 March; 4 on 4 May and well established thereafter. However, spring/summer numbers seen do not increase above 4 reported on 8 May; on 29 Sept. 9 is the all time high for a day count. SHARP-SHINNED HAWK.

22 April (Isuspect a single bird] MD) no other reports until (2) 19 May. COOPER'S HAWK. 1 on 24-30 April (1983) and 1 on 22/23 May (1983). 1 on 17 June. 1 on 30 Sept. NORTHERN GOSHAWK. 1 on 24 April (1983). (1 ?) on 12 May(DD). 1 on 14 May (1983-RW,CW). 1 on 20 May. BROAD-WINGED HAWK. Earliest report: 22 April (1?- MD). 1 on 4 and 5 May (PP,MC). SWAINSON'S HAWK. 1 on west side, 6 May 1979 (RW,CW). 1 on 2 June. 1 on 25 August. RED-TAILED HAWK. Earliest report: 2 on 7 April (DD). 4 on 21 April. 5 on 5 May. 4 on 7 May. Last report: 1 on 25 August. As a rule this abundant, widespread raptor of the Edmonton area is not often seen near the Banding Station. Most often it is reported for a brief time during the spring. ROUGH-LEGGED HAWK. Earliest record: 1 near Tofield (JJNC). Last spring report: 1 on 8 May (DD). 1 on 30 Sept. AMERICAN KESTREL. Earliest report: 1 on 8 April. 1 on 18 August. 1 on near Tofield 25 August. A scarce visitor to the south shore; more obvious near cultivated fields.

5.2.4. Shorebirds. 30 species

In 1984, 30 shorebirds were recorded at the lake during spring by BBO personnel and independent observers (Table 3). For comparison, 1983 first and last dates of sighting are included. In most instances, data from both years, may suggest observer activity rather than actual arrival and departure dates for species. Fall records are more wanting at this time and require careful and dedicated recording.

The status for each species has also been included. Migrants, those that are known to breed outside of the Edmonton area and more likely than not, outside of the province are designated 'M'. Visitors are noted as a 'V'. These species visit the lake during the spring or fall migration period, are not known to breed here but do so nearby or within the Edmonton area. Residents (R) are for those species who breed in the immediate lake area or have been recorded in each month except winter. Dates for residents include records reported during the fall period. A question mark queries the one or two sightings reported.

5.2.5 Jaegers to Woodpeckers. 20 species.

A probable PARASITIC JAEGER was seen on 29 May(EJ). FRANKLIN'S GULL. Earliest record: 10 on 14 April; 100 on 5 May. Species never numerous at the south during the summer as most birds are found at the north end where their colony is probably located. By 16 July 5 imm. were recorded. Last report: for the station, 201 on 16 Sept. BONAPARTE'S GULL. 30 on 27 April. Birds (60) reappeared on 16 June which may represent unsuccessful breeding or bachelors bird followed by another 10 on 18 August. Numbers signifigantly increase to 150 by 29 Sept which is our last report. RING-BILLED GULL. First report: 3 on 25 March and not reported until 28 April (10). Numbers of this gull never appear excessively abundant on the south side during spring. Summer records: 40 on 28 June. Fall (August) numbers at the Observatory increase which includes imm. Elsewhere, on the lake, 250 on 13 May. CALIFORNIA GULL. First report: 5 on 1 April; numbers do not

Table 3. Comparison of 1983 and 1984 spring arrival and departure dates for shorebirds at Beaverhill Lake, AB

	1983 First Date Sighting	1984 First Date Sighting	1983 Last Date Sighting	1984 Last Date Sighting	Status
Black-bellied Plover	9 May	13 May	2 June	6 June	M
Lesser Golden-Plover	9 May	12 May	17 May	20 May	M
Semipalmated Plover	8 May	8 May		13 May	M
Piping Plover	8 May				V
Killdeer	24 April	27 March	13 August	30 Sept	R
American Avocet	24 April	15 April		17 August	R
Greater Yellowlegs	9 May	23 April	2 October	3 June	R?
Lesser Yellowlegs		15 April	2 October	30 Sept	R?
Solitary Sandpiper		5 May		13 May	M
Willet	9 May	3 May	4 Sept	18 August	R
Spotted Sandpiper	23 May	13 May			V
Upland Sandpiper		27 May			?
Whimbrel	17 May	11 May			M
Hudsonian Godwit	23 April	3 May	24 April	20 May	M
Marbled Godwit	24 April	22 April		29 Sept	R
Ruddy Turnstone	15 May	13 May	25 May	2 June	M
Red Knot	8 May	12 May	2 June	2 June	M
Sanderling	9 May	13 May	6 June	2 June	M
Semipalmated Sandpiper	9 May	11 May	23 May	26 May	M
Least Sandpiper	23 May	8 May		21 May	M
White-rumped Sandpiper		19 May			M
Baird's Sandpiper	28 May	13 May		10 July	M
Pectoral Sandpiper	30 April	3 April	22 May		M
Dunlin	28 April	15 May			M
Stilt Sandpiper	9 May	11 May	22 May	29 May	M
Buff-breasted Sandpiper		29 May			V?
Short-billed Dowitcher	9 May	12 May			M
Long-billed Dowitcher	9 May	13 April		21 May	M
Common Snipe	24 April	19 April	2 October	30 Sept	R
Wilson's Phalarope	9 May	8 May	13 June	10 July	R
Red-necked Pharalope		17 May		21 May	M

Note:
M= migrant: adequate numbers were reported in each year.
V= visitor: only one report for both years; single bird.
V?= based on data for both years, when it was reported once. This species is known and reported yearly.
R= resident: is known to breed in the area.
R?= species is seen through breeding period but has never been found in breeding condition.

indicate great abundance during spring. Fall: 125 on 25 August last report from the Observatory. HERRING GULL. 1 on 21 April. Many unidentified gulls were seen; no attempt to recognise species was made by observers.
COMMON TERN. First record: 11 on 12 May. Peak(?) 12, 19 May, thereafter numbers decrease to single birds. Another increase (10) on 16 June. Last report: 4 on 16 Sept. FORSTER'S TERN. First report: 2 on 5 May; thereafter, ones and twos. Summer high: 5 on 16 July. Species known to breed on Lister Lake. BLACK TERN. First Record: 1 on 13 May (TT) increasing to 20 (26 May) to fours, fives and sixs during July. Last record: 2 on 14 August. MOURNING DOVE. 2 on 13 May (PP), several east of lake and a pair near the lake on 15 May(PM).
GREAT HORNED OWL. One or two (a probable pair) were seen throughout the spring and summer. Four were reported on 25 August, all hooting. SNOWY OWL. 1 on 17 March. SHORT-EARED OWL. First report: 1 on 17 March. 4 on 22 March. 1 on 25 August. NORTHERN SAW-WHET OWL. 1 on 30 Sept (migrant). COMMON NIGHTHAWK. 2 on 20 May.
BELTED KINGFISHER. 1 on 17 August. YELLOW-BELLIED SAPSUCKER. 1 banded, 24-30 May(EJ). DOWNY WOODPECKER. 2 on 8 May; a pair reported through period; highest number 4 on 30 Sept. Five banded: 1 AHY/M, 1 AHY/F, 2 HY/U, 1 HY/M . HAIRY WOODPECKER. One heard on 7 May. NORTHERN FLICKER. Spring report: 1 on 29 April: 5 (high?) on 5 May; thereafter ones and twos. Last recorded: 1 on 28 June.

5.2.6 Flycatchers to Thrushes: 22 species.

WESTERN WOOD-PEWEE. First Spring report: 1 on 19 May. 2 on 26 May. Summer report: 1 on 16 June. Not obvious this year. EJ banded 6 from 24 to 30 May. BBO banded two: both AHY, M & F.
TRAILL'S (Alder) FLYCATCHER. First report: 1 banded AHY-F, 26 May; 2 present on 16/17 June; reappeared(?) mid (17) August, 2 banded, all HY-U. Last report: 1 banded U-U, 25 August.
LEAST FLYCATCHER. First report for Spring: 18 on 19 May. 40 (high?) on 26 May. EJ banded a total of 160 between 24 to 30 May. Well represented at the station during summer and in August. Last report 26 August. See Ebel (1985. Beaverhill Bird Banding Station 1983 Report. EN. Vol 13(1).) for discussion on this species. In 1984 the peak occurred in the week 22-28 May. SAY'S PHOEBE. Spring report: 1 on 8 and 13 May. EASTERN KINGBIRD. First report: 3 on 2 June. 4 on 16 & 28 June. 5 on 10 July. Fall and last report: 10 on 17 August. HORNED LARK. Spring report: 100 on 22 March (DD). 150 on 25 March and dropping to 1 by 9 May. Two+ recorded on 29 May, (RW) is the last report. TREE SWALLOW. First report: 2 on 22 April with numbers increasing to 108 on 6 May (high?). Numbers declined dramatically the following day to 10 birds. By 20 May 50 were reported which suggests a second wave to the area. As before the numbers dropped the following day and held between 20 and 30 adults for June and July. By 28 June 87 young were banded. See graph for swallow occurrence and distribution. BANK SWALLOW. First report for year: 35 on 20 May (high?) Last report: 2 on 16 June. They feed on occasion over the south shore. Evidence for a nearby colony is lacking. CLIFF

SWALLOW. First reported: 35 on 20 May. The Amisk Bridge is the largest colony near the Observatory. On 1 and 10 July, 175 and 200 + birds were estimated while a total of 22 were banded. Last report: 2 on 25 August. BARN SWALLOW. First report: 1 on 5 May. 24 on 6 May. Numbers vary and show great fluctuation. Some weekend swallows number 1 (26 May) while other times as many as 25 many be seen (1 July). Last report: 18 on 25 August. This species is the last of the swallows to leave the area, lingering well into September in some years.
BLUE JAY. First report: Singles, 29 April and 20 May; 17,25,26 August. BLACK-BILLED MAGPIE. Although a resident it is not common nor abundant at the Observatory. 2 on 29 April and also for the other eight times it was spotted. AMERICAN CROW. First Report: 4 on 1 April. 10 on 14 April. Largest number reported: 70 on 18 August. Last date: 1 on 28 Sept. As a rule they are not abundant in the Observatory area; numbers greater than 10 are rarely recorded.
BLACK-CAPPED CHICKADEE. Regular resident of the station making themselves scare during the summer until August when many more numbers are heard, seen and banded. First report: 2 on 14 April
BOREAL CHICKADEE. 3 banded, 24 September; Rare occurrence in the area. RED-BREASTED NUTHATCH. Appear to move through the area in August and September. First report: 1 on 26 August. 3 on 16 September. 1 on 24 September. HOUSE WREN. First reported: 2 on 19 May; thereafter regular. Young in nest box by 28 June. By 10 July, 5 ad and 14 banded young. Last report: 1 on 16 September. MARSH WREN. First reported: 2 on 6 May; thereafter regular. Last report 1 on 29 September. Will also linger into first half of **October or later, if weather is suitable. SEDGE WREN. 1 on 16** July. RUBY-CROWNED KINGLET. Spring report: 1 on 29 April and Fall report: 1 on 30 September; both birds banded. HERMIT THRUSH. First Spring report: 1 on 29 April. 3 on 5 May last report. AMERICAN ROBIN. First sighting: 2 on 14 April; not numerous nor abundant in the station area.

5.2.7 Thrashers to Warblers: 23 species.

A single GRAY CATBIRD, also the only catbird for the year was reported on 25 August (RS). WATER PIPITS (6) were reported by BBO observers on 14 and 29 April. Last report was 19 May when only a single bird was heard. PA was the only one to report 2 SPRAGUE'S PIPITS for the spring period (27 May).
One CEDAR WAXWING was banded on 17 June (ASY-M) which also was the first report for the year. The high for the year occurred on the 18 August (10); last report 26 August (5). A NORTHERN SHRIKE (or shrike sp) was recorded on the 29 Sept. PM noted a possible (attributed to time period) LOGGERHEAD SHRIKE on the 16 May sitting on the wire longside Rowan's Route. EUROPEAN STARLING was not common or abundant in the station area; two on 6 May; high (11) on 9 May; and 2 on 10 July.

EJ is the only bander to report SOLITARY VIREO for the Beaverhill Lake area. He capture one between 24-30 May. WARBLING VIREO normally apprear before the other vireo species. Evidence for the

presence of Warbling Vireos (2) occurred in the station area on 19 May.They were a regular breeder although not abundant as one and two's were often encountered. Maximum of 5 was recorded on the 16 June. First caught on the 26 May and the last banded on the 17 August. In total 4 banded. In contrast EJ banded 13 between 24-30 May. The over all totals between 1983 and 1984 is slightly less or 22 vs 17, respectively. RED-EYED VIREO were reported for the station area on 2 June and throughout the month in one's and two's. EJ banded 2 Red-eyed Vireos between 24-30 May; none were banded by BBO members.

EJ banded 19 TENNESSEE WARBLERS on the north east side of Beaverhill Lake between 24 and 30 May. The only June report comes from PM who reported a single bird near Lister Lake on the 3rd. One was reported by BBO personel in the station area on 1 July and one banded (AHY-F) on the 25 August. Earliest report of a ORANGE-CROWNED WARBLER for the Beaverhill area is from EJ who banded one between 24-30 May. No other reports or records until 16 Sept. when BBO banded a HY-U bird. YELLOW WARBLERS arrived on the 13 May. By the 19th 2 (AHY-M & F) were banded while the maximum counted (14) for the area occured two days later. From 24-30th EJ handled 64 birds, considerable more birds than the numbers captured by banders at the station. Banding and censusing for the fall migration period resumed on the 17 August. From this date to the 26 August five were HY-F and one U; a AHY-F was the only adult banded. The last report was on 16 Sept; it was a HY-F. The first report for YELLOW-RUMPED (Myrtle) WARBLER occurred on the 8 May and the 19th they were much in evidence. Ten were banded by station personnel for the month of May while EJ recorded 37 for the period 24-30 May. By the last week in May they have left the station area only to reappear the 16 Sept when 3 adults were banded and one was seen. EJ recorded the only PALM WARBLER for the lake area on the 24 May. BLACKPOLL WARBLERS seen to pass through along the east side of the Lake between the 25 and 27 May as bot8 htations (EJ) banded adults. For AMERICAN REDSTART, OVENBIRD, NORTHERN WATERTHRUSH, MOURNING WARBLER see EJ results Table 2. COMMON YELLOWTHROATS were banded by EJ (3, 24-30 May) and a single one recorded on 28 June , 1 July and 16 July. One WILSON'S WARBLER was banded by EJ between 24-30 May and BBO banders also managed to capture a single bird on the 17 August. To finish the warblers for the year (and us) EJ netted the only CANADA WARBLER sometime between 24-30 May.

5.2.8. Tanager to Emberzines: 18 species.

WESTERN TANAGER. 1 banded, 19-26 August, EJ. A single ROSE-BREASTED GROSBEAK the only spring and only report occurred on the 19 May. Our earliest Spring report of TREE SPARROWS occurred on 1 April (40). This number dropped to 1 by the 29 th and remained at a single bird to the last (5 May). From the 14 to the 29 April three were banded but in the fall migration 20 were netted on 29 and 30 Sept. This also is the earliest report for the migration period. A yearly total of 10 CHIPPING SPARROWS were banded by BBO personnel while EJ banded 22 for his yearly total between 19-26 August. By the 19 May they are well represented

and soon disappear where only a few remain by the last day of the month. A single summer report occurred on 28 June and another single HY-U on 25 August. CLAY-COLORED SPARROWS are regular abundant residents breeding throughout the area. A total of 26 birds were banded at the Observatory while EJ at his station handle 90 birds between 19 to 26 August. Earliest date: 19 May; last date: 26 August. VESPER SPARROW. First reported on 6 May (2); last day 25 August (2). Not common but regular in the Observatory area. Maximum number reported is two. LARK BUNTING. 15 May- WHo. This species is a straggler to the entire Beaverhill area. Breeds or occurs further south as far north as Brooks (?). SAVANNAH SPARROW. Earliest date: 22 April (4)- MD. By the 29 April BBO personnel recorded 10 on their census and their after they become abundant and common. Last date, 1, 29 Sept. LE CONTE'S SPARROW. Earliest date: 29 April. Highest number reported: 16 on 21 May. Last date: 1 on 16 Sept. SHARP-TAILED SPARROW. First Date: 24 May-EJ, extreme. 6 on 28 June. Last date: 2 on 16 Sept. This resident bird is often found in association with bulrushes that dot the lakeshore.
SONG SPARROW. First Date: 1 on 5 May. Last report: 1 on 2 June. Censusing and various reporters suggested that this species was not common in the area. LINCOLN'S SPARROW. First report: 1 on 19 May; Summer record: 1 on 1 July; Last date; 4 on 25 August.
WHITE-THROATED SPARROW. First report: 2 on 19 May. Summer report: 1 on 2 June. Last report: 2 on 16 Sept. WHITE-CROWNED SPARROW. First report: 1 on 21 April (High?). 4 on 13 May. Fall dates: See EJ banding results. HARRIS' SPARROW. 2 on 24 May (EJ). DARK-EYED (Slate-colored) JUNCO. First report: 1, 29 April. Fall Repot: 1 on 17 August. Last report: 1 on 30 Sept. LAPLAND LONGSPUR. First reported 24 March (DD). 12 on 25 March. High (?): 900 on 15 April. Last spring report: 10 on 29 April. Fall report: 3 on 16 Sept. There is some suggustion that this species may overwinter in some years in the Beaverhill Lake area . Small flocks were encountered during November and mid-December. SNOW BUNTING. First winter/spring report: 1000 on 8 April. Late spring report: 2 on 13 May.

5.2.9. Bobolink to House Weaver (Sparrow): 8 species

BOBOLONKS are a relatively recent addition to the avifauna of Beaverhill Lake. There is at least one known colony, located at the north west corner of Kallal Meadows, and possibly another colony, although not confirmed, somewhere on the west side of the lake. The exact location has never been revealed to BBO personnel. It is important that these areas be monitored and adequately documented to assess the stability of the population. The 10 July was the last date that Bobolinks were seen at Kallal Meadows. Their absence corresponded to the recently mowed grasses by the owner.

In future years greater effort should be made by observers to document the arrival dates for the various age classes in RED-WINGED and YELLOW-HEADED blackbirds. The meadowlark arrives in the area relatively early but for some unknow reason its

departure is less well known.

The presences of BREWER'S and RUSTY blackbirds and grackles are acknowledged in the lake area but their seasonal occurrence, arrival and departure dates are obscure and wanting. This may reflect observer reluctance to correctly identify blackbirds.

HOUSE WEAVERS (Sparrow) are occasionally seen or heard in the station area but as a rule they are not present. With the advent of bird boxes in the crown lands it is suspected that they will become more numerous.