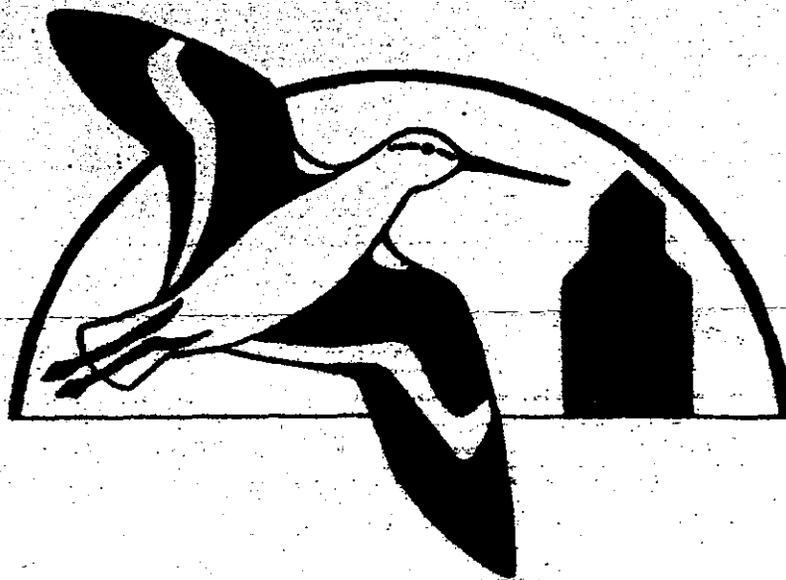


# BEAVERHILL BIRD OBSERVATORY 1986



## ANNUAL REPORT

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## Section 1 - Introduction

### 1.1 Location of the Station

Beaverhill Lake is located north-east of Tofield, approximately 70 kilometres south-east of Edmonton, Alberta. The centre of activities for the Beaverhill Observatory (BBO from now on) is a site chosen in 1984, located at the south-east corner of the lake (S 3, 22 N, 112 30 W; NW 1 and SW 1 2 Twp 51 Rge 18 W4M) approximately three-quarters of a mile west of Lister Lake (formerly "A" Lake). Up to five bird banders (including present BBO members) have banded there since at least 1980.

### 1.2 Objectives

The Beaverhill Lake Bird Banding Station became a committee of the Edmonton Bird Club and officially the Beaverhill Bird Observatory in 1984 when the objectives were defined at a 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.

### 1.3 Operations and Achievements

In 1986 the Observatory was operated for 107 days (mostly weekends) from April 6 to September 14 (compared to 25 days in 1985) for a total of 380 participant days of activity. Sixty-eight volunteers helped out at one time or another through the year and over 220 visitors were greeted and informed of the BBO and its' objectives. Bird banding was demonstrated whenever possible.

A big step was taken with the completion (August 14 - 22) of the first permanent building at the Observatory site - a bird banding laboratory - thanks to a tremendous effort by a number of BBO members and friends. A house trap for blackbirds was built on

March 24 and put to use for most of the year and another was started on July 16.

#### 1.4 Projects

As the various projects progressed, it has become apparent that they separate into two types:

1) The "core" projects - which are intended to build up (over the years) a large base of information on the bird population at Beaverhill Lake, relying on the participation of many members without requiring a large amount of field work from any one individual. They consist of:

- a) Bird Banding (Coordinator - Rainer Ebel)
- b) Bird Monitoring (Coordinator - Rainer Ebel)
- c) Nest Records (Coordinator - Geoff Holroyd)

2) Special projects - which are more restricted in scope and are usually carried out by a single person (with assistance from other members), enabling a more consistent and rigorous scientific approach. This year the "special" projects in progress were:

- a) Habitat selection and polygamy in the House Wren - M. Quinn
- b) Male parental care and monogamy in Tree Swallows - P. Dunn
- c) Duck and Raptor nest boxes - K. Grantmyre
- d) Sparrow surveys - R. Jones
- e) Cliff/Barn Swallow surveys - R. Ebel
- f) Water levels - R. Ebel.

At the moment the "special" projects are expected to be either short term (i.e. a few years in length) or of short duration in each year (i.e. not requiring extensive periods of intense field work). Any one of these (and other proposed) projects has the potential to develop into a substantial portion of the yearly activities at the BBO, but the manpower available is likely to have a limiting effect on this possibility. Because of the delay in producing this year's Annual Report, the 1986 project report summaries are being combined with those for 1987, to appear in the 1987 Annual Report.

Some of the other projects proposed or initiated in previous years but not worked on in 1986 are:

- 1) Moulting sequence in vireos - initiated by J. Lange, 1983.
- 2) Techniques for determining age and sex in Savannah Sparrows - initiated by R. Ebel, 1983.

- 3) Techniques for determining age and sex in a Western population of Clay-colored Sparrows - suggested, 1983.
- 4) Identification of hand held Empidonax (Least, Willow and Alder) Flycatchers - was to start in 1984 but did not.
- 5) Colonial bird banding - see report "Cormorant and Pelican Surveys by the Provincial Museum" by P.H.R. Stepney in the 1985 BBO Annual Report.

## Section 2 - Bird Banding

### 2.1 Introduction

A large step-up in the banding effort this year made for a dramatic increase (from previous years) in the number of birds banded - 1676 individuals (624 in 1985) of 56 species (36 in 1985). Although this was mainly due to special projects on House Wrens and Tree Swallows, general banding also produced higher numbers and more species, and there were more returns captured than in all previous years combined. Continued accumulation of this data will yield important information on longevity, breeding location fidelity, migration routes and many other subjects.

Independently from the BBO, Edgar Jones (EJ from now on) banded many birds on the east side of Beaverhill Lake, as he has for many years. For interest and comparison, his banding records for this area are included in Table 2.

Table 1 (see Appendix) gives a list of the band numbers used by the BBO and EJ at Beaverhill Lake, for quick reference for those who find a banded bird.

### 2.2 Information Recorded

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.

Various measurements were taken and recorded, to assist in determining the age and sex and sometimes even species of each bird, and other notes on the bird's condition were made, such as:

- 1) presence of cloacal protruberance or brood patch;
- 2) moulting evidence;
- 3) injuries - past or present;

- 4) miscellaneous remarks on plumage;
- 5) unusual markings.

Daily information about the banding operations was recorded separately which included:

- 1) whether or not the housetrap was in use;
- 2) what type of habitat the nets were used in;
- 3) how many nets were up and for how long (net-hours).

Unfortunately this daily information was occasionally omitted making consistent measurements of mist-netting success rate difficult.

### 2.3 Methods of Capture

The approach to capturing birds for banding purposes follows two lines at the BBO:

- 1) General banding - where an effort is made to capture any and every bird that comes along by whatever means available. This year, the only means were mist-netting and house trap.
- 2) ~~Specific banding - where a specific species is targeted~~ (usually at nest sites), often as part of a special project. This year, captures were made by hand, at nest boxes and by mist-netting at the nesting area.

The importance of this distinction lies in the difference in types of information that can be indicated by the records - bird population fluctuations for example.

### 2.4 Banding Schedule and Results

#### 2.4.1 General Banding

The house trap was in operation for 14 days - from April 20 to June 18, and from August 31 to September 14 and accounted for a total of 45 birds banded:

Brown-headed Cowbird - 19  
Red-winged Blackbird - 18  
Yellow-headed Blackbird - 7  
Starling - 1

Mist nets were used on 37 days from April 6 to September 14 for a total of approximately 1805 net-hours (during June and July, net-hours were rarely recorded). Figures 1 and 2 (see Appendix) show the weekly netting effort and success rate through the year.

All the general banding occurred in the immediate vicinity of the observatory site - or along the south shore of the lake close to the observatory. The mist nets accounted for 730 birds banded, of 50 species, with the most frequent species captured being Least Flycatcher, Yellow Warbler, Clay-colored Sparrow, Black-capped Chickadee and Tennessee Warbler.

#### 2.4.2 Nest-site Banding

Mike Quinn's and Peter Dunn's special projects on House Wrens and Tree Swallows resulted in large numbers of these birds being banded at nest boxes. A number of other birds were also banded at nests found through the summer, and the annual capture of Cliff Swallows was made at Amisk Bridge on June 7, combining for a total of 901 birds banded:

Tree Swallow	431	at nest boxes
House Wren	387	"
Black-capped Chickadee	14	"
Mountain Bluebird	1	"
Brown-headed Cowbird	1	} captured by hand
Cliff Swallow	62	} at Amisk Bridge (mist-nets)
American Crow	4	} by hand at a nest
Eared Grebe	1	} chased into a trap near its nest

#### 2.5 Birds Banded

Table 2 (see Appendix) lists all the birds banded at Beaverhill Lake by both BBO and EJ in 1986. The highlights for the BBO were a Black-billed Cuckoo (AHY/U) on July 1, a Canada Warbler (AHY/M) on August 14 and a Sharp-tailed Sparrow (AHY/M) on June 7.

#### 2.6 Retraps

In general, birds retrapped at the same location as banded are labelled "repeats" if it is less than 90 days later and "returns" if it is more than 90 days later. At Beaverhill Lake this may be an unsatisfactory method of distinction since some birds are still heading north to breeding grounds in early June and are already on the return trip in late July or early August. For this year, I have labelled all birds banded and retrapped in the same year as "repeats" and all retraps that were banded in previous years as "returns". The only possible conflict occurs in a Black-capped Chickadee (1700 53954) banded on May 3 and retrapped on August 10 (more than 90 days later), but this individual was

also retrapped many times through the summer so it obviously wasn't a "return".

### 2.6.1 Repeats

There were 51 individuals of 12 species retrapped as "repeats":

Species	Number of different individuals	Species	Number of different individuals
Least Flycatcher	6	Myrtle Warbler	1
Black-capped Chickadee	11	Clay-colored Sparrow	5
House Wren	5	Red-winged Blackbird	6
Warbling Vireo	3	Yellow-headed Blackbird	1
Tennessee Warbler	1	Brown-headed Cowbird	7
Yellow Warbler	6	American Goldfinch	3

Of particular interest were the Tennessee Warbler (33 days between captures), a Myrtle Warbler (10 days between captures) and the American Goldfinches (all three banded the same day - July 1 - and retrapped together 18 days later). The retrapped vireos exposed an identification problem between Warbling and Philadelphia Vireos in the Fall. Two vireos that were retrapped on July 19 and identified as "Philadelphia" Vireos turned out to have been banded in June as Warbling Vireos (at which time they would have been unmistakable). In view of this, together with the rarity of Philadelphia Vireos in the Beaverhill Lake area, it is quite possible that many, if not all the "Philadelphia" Vireos banded in the Fall were actually Warbling Vireos.

### 2.6.2 Returns

There were 24 returns from previous years - 16 from 1985, five from 1984 and one each from 1983, 1981 and 1980 (see Table 3). They consist of:

- 8 - Cliff Swallow
- 5 - Yellow Warbler
- 3 - Black-capped Chickadee
- 2 - Least Flycatcher
- 2 - House Wren
- 2 - Clay-colored Sparrow
- 2 - Savannah Sparrow

It was interesting to note that both Least Flycatcher returns were from 1984 (none from 1985) and that both retrapped Savannah Sparrows were returns rather than repeats. Returning Yellow Warblers formed a good proportion of the Yellow Warbler retraps (5 out of 11 or 45%) in spite of the large number of Yellow Warblers banded throughout

the year. Cliff Swallows were retrapped only as returns since they were captured only on one day out of the year. It is good to see that there are still a couple of old-timers among them, including a possible longevity record.

### 2.6.3 Recoveries

There was only one bird captured at the observatory this year that had been banded elsewhere (a "recovery") - a Least Flycatcher, 1640 27486, AHY/F, on May 24 and its' original banding location and date are unknown as yet (a report has been sent to the Bird Banding Office). So far, we have not received any word of birds banded at the BEO and recovered elsewhere in the last couple of years.

Addendum to 1985 Annual Report: A Tree Swallow (910 22300) retrapped on May 4 and June 22 in 1985 was a "recovery" of a bird banded by J.C. Finlay, approximately 11 miles north of Kingman, Alberta, on June 4, 1984, as an AHY/F (i.e. it hatched in 1983 or earlier). At the time of the 1985 Annual Report, this information was not known.

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## Section 3 - Migration and Breeding Bird Monitoring

### 3.1 Methods

The sight records maintained by the BEO in the field notes are of three types:

- 1) The daily census - run as often as possible on a route set up in 1984 that takes in all the different habitats in the observatory area.
- 2) The daily estimated totals - for the immediate observatory area (as described in the 1984 Annual Report) which includes the census route. This is an estimate of birds seen or heard during the day rather than the number of birds suspected to be present.
- 3) Unusual records from other parts of the Beaverhill Lake area.

The most consistent censusing and tallying occurred in the Spring with hardly any records from late June and July and few from August and September. Perhaps observers and contributors experienced a certain amount of burnout over the summer

For breeding evidence, see Section 3.3.

### 3.2 Species Accounts

The following detailed accounts are intended to give a rough idea of the bird populations at Beaverhill Lake through the year

(April - September). In broad terms, April featured spectacular waterfowl numbers (and an incredible migration of Snow Buntings), May provided the main variety of shorebirds, June and July were fairly quiet with interesting surprises, and August was the month for warblers (mainly caught in the nets). All records (except in Tables 4 and 5) are from the observatory area unless otherwise indicated. For place names, refer to Beaverhill Lake Gazetteer, published by the Edmonton Bird Club in 1984.

A total of 168 species were recorded in 1986.

### 3.2.1 Common Loon to Ruddy Duck (33 species)

See Table 4 for a summary of the sightings through the year. It is apparent that the most uncommon species this year were Common Loon and Ring-necked Duck, whereas Cinnamon Teal have become one of the regular resident species.

Ducks are rarely separated into species after the end of June because of their difficult eclipse plumage, but it is still amazing that no Green-winged Teal, Mallard, Pintail, Gadwall or Redhead were recorded after June 1!

### 3.2.2 Bald Eagle to Sandhill Crane (17 species)

Two adult Bald Eagles were seen on April 20 and a single bird was present on May 3, Northern Harriers were seen regularly in the Spring (April 20 - May 24) and Fall (August 14 - 23) but not in between although they probably nested locally. A maximum of eight were recorded on April 26. There were two records of Sharp-shinned Hawks in the Spring on May 3rd and 24th (two birds each) and quite a few records in the Fall (August 2 - September 1). Two Northern Goshawk were seen on April 26 and thereafter single birds on May 18, June 7 and August 30 (an immature bird). The only Coopers Hawk was one on May 3. Swainson's Hawks are scarce in the immediate Observatory area although they are common in the surrounding farmland. The only records were singles on May 20th and 29th, and EJ banded three at a nest elsewhere in the Beaverhill Lake area on July 23. Red-tailed Hawks were seen frequently in Spring (April 6 - May 19) and on August 14th and 16th, with a maximum of 9 on April 26. Single Rough-legged Hawks were seen on April 20 and September 1 and an adult Golden Eagle was seen on May 2. American Kestrels are rarely seen around the Observatory but are common along nearby back roads. One was reported on July 28 and EJ banded one elsewhere around the lake on May 29. Merlins were only seen in the Fall - single birds on 4 occasions (August 16 to September 15), including an unusually dark bird on September 14. Single Peregrine Falcons on April 26 and May 4, a Gyr Falcon on May 4 and a large falcon on May 18 were among the more exciting sightings of the year.

A Ring-necked Pheasant on May 17 was uncommon for this area while Ruffed Grouse were reported many times between April 26 and June 1 (2 on May 24), and once on August 14.

Soras are common in the marshes of the Observatory area but were only reported 6 times (May 19 to August 16) with a maximum of 4 on June 7. American Coot were common throughout the summer (April 26 to August 16) - with a maximum of 70 on May 3. A spectacular migration of over 3,000 Sandhill Cranes occurred on April 26 and 300 were still present the next day, dwindling to 1 on May 20, the last record in Spring. In Fall, 50 were seen on August 31 and 60 on September 14th and 15th.

### 3.2.3 Black-bellied Plover to Black Tern (32 species)

See Table 5 for a summary of sightings through the year.

Among shorebirds, a number of regularly occurring species (Lesser Golden Plover, Semipalmated Plover, Ruddy Turnstone and Baird's, Pectoral and Stilt Sandpipers) were sparsely reported, either from lack of birds or lack of observation activity. On the other hand, quite a few non-regular species turned up - Piping Plover, Solitary Sandpiper, Whimbrel and Hudsonian Godwit. In Table 5 dowitchers are lumped together since species identification was not always made. However, 40 on May 9 were identified as Long-Billed Dowitchers and 10 on May 11 were noted as Short-Billed Dowitchers.

As in previous years, gulls were poorly documented as to species - it is hard to believe that no Bonapartes Gull were seen all year and that California Gulls were seen only once.

### 3.2.4 Black-billed Cuckoo to Northern Flicker (7 species)

One of the highlights of the year was the presence of Black-Billed Cuckoos in the summer. One individual out of at least two pairs was captured on July 1 and one was still present on August 14. Up to two Great Horned Owls were present in Spring (April 6 to May 24) and were probably around all summer but not reported, the only other report being of one on September 15. Short-eared Owls were occasionally seen hunting in the Observatory area (April 26 to August 23), and a Common Nighthawk was seen flying about in broad daylight on May 20. EJ banded one elsewhere around the lake on May 24.

Yellow-Bellied Sapsuckers were only reported in May - two on the 4th and one on the 17th, while Downy Woodpeckers

were only reported in late Summer and Fall (July 1 to September 14). Northern Flickers were reported in small numbers in Spring (April 26 - May 18).

### 3.2.5 Olive-sided Flycatcher to Barn Swallow (13 species)

Two reports of Olive-sided Flycatchers (1 on May 24 and 1 banded on August 1) were unusual since it is not regularly reported in the area. Single Western Wood Pewees were banded on May 24 and August 17 and were regularly noted between those dates. For the second year in a row, a Yellow-bellied Flycatcher was caught in the nets (June 7) but this time not banded because the "0" bands were missing that day. Alder Flycatchers were as usual regularly banded and recorded throughout the Summer (May 24 to August 24) while Least Flycatchers were omnipresent as always and banded in large numbers (May 18 to August 31). Single Eastern Phoebes were reported on April 26 and May 3, followed by four reports of single Say's Phoebes (May 5 - 17). Up to four Eastern Kingbird were seen through the Summer (May 17 - August 16) and EJ banded one on the east side of the lake on May 24.

~~The only reports of Horned Lark were 20 on April 20 and one on May 3. With so many nest boxes present, Tree Swallows were numerous in the Observatory area (April 26 - July 30). On July 30, an estimated 10,000 swallows were observed flocking by the weir, made up of 5-10% Tree Swallows and 90-95% Bank Swallows (the only report for the year) and the report states that there had been more there the previous weekend. An estimated 300 Cliff Swallows nested at Amisk Bridge as usual and were reported on June 7 when banding was carried out there. Barn Swallows were present in small numbers (May 4 - September 14).~~

### 3.2.6 Blue Jay to European Starling (19 species)

Surprisingly, the only report of Blue Jays was of one on September 15, while Black-Billed Magpies were seen regularly (April 6 - September 14) and American Crows even more frequently, but none after August 16. As usual, Black-Capped Chickadees were observed and banded in fair numbers from April 26 on, but became more abundant in mid-August. Red-breasted Nuthatches were banded on May 18 and May 31 and one was reported on August 14. The House Wren was another species that benefitted from the increased number of nest boxes, and the first arrival was on May 18. Marsh Wrens arrived earlier on May 3 and were present in the marshes all summer until August 16, with a maximum of 11 on May 19. A Ruby-crowned Kinglet banded on May 4 was one of two caught that day (the other died - one of only two casualties for the whole year), and the only record for the year.

Mountain Bluebird were scarce in the Observatory area, reported only on May 9 and July 1 (singles). EJ banded a Veery on May 25 and a Gray-cheeked Thrush on May 26 on the east side of the lake, for the only records of these scarce migrants. Swainsons Thrushes were reported only between May 17th and 24th, but quite a few were banded in this time. On the other hand, Hermit Thrushes were noted frequently between May 3rd and 19th and on August 16, but only two were banded (May 3 and August 15). American Robins were present in small numbers from April 26 to July 1. A Brown Thrasher reported on May 19th and 24th was not one of the regular species of the Observatory area.

Three Water Pipits on April 20 and singles on May 3rd and 18th were the only reports of this species, and Sprague's Pipit was only reported once - (1) on May 5. Cedar Waxwings were present in small numbers from May 19 to August 14 with a maximum of 20 on May 24, and EJ banded one on May 29 on the east side of the lake. A single Loggerhead Shrike on May 19 was the only report. European Starlings are (unfortunately) becoming more numerous in the Observatory area, possibly due to the presence of duck nest-boxes, with up to 10 being seen regularly through the summer (April 20 - July 1).

### 3.2.7 Vireos and Warblers (16 species)

A Solitary Vireo seen on August 31, west of the Weir, was the only report for the year. Warbling Vireos were recorded in ones and twos throughout the summer (May 19 - August 30), with a maximum of five on July 1 and August 15. The BBO and EJ banded a combined total of 31 during the year (compared to a combined total of 17 in 1984 and BBO total of six in 1985). Philadelphia Vireos were banded in unusually high numbers in August, but see Section 2.4 on a possible identification problem. EJ banded one (AHY/U) on May 24, at which time it would be unmistakable. Red-eyed Vireos were noted in small numbers from May 24 to July 1, with a maximum of five on May 24.

Tennessee Warblers were noted more frequently than in previous years, with a maximum of 10 on May 24. BBO members banded 29 this year after many years of banding few if any. Most were caught in July and August with two caught on May 24. None were banded by EJ, whereas he usually catches fair numbers (10-20). This switch from previous years may be a result of a change in banding times (of year). Single Orange-crowned Warblers were noted on May 3 and September 15 and EJ banded one in May or June. Yellow Warblers appeared on May 17 and were, as usual, abundant throughout the summer (maximum - 20 on May 19) and large numbers were banded.

See Section 2.4 for some interesting retrap data. Magnolia Warblers were banded between August 14th and 24th, with a maximum of three on August 14, but there were no sight records otherwise. Yellow-Rumped (Myrtle) Warblers appeared on April 26 (two) and were noted and banded regularly up to May 19 and from August 14 to September 15, with a maximum of 12 on May 3rd and 10th. The only Western Palm Warbler was one banded at the station on September 14. Single Blackpoll Warblers were noted on May 18 and banded on August 23 and September 1, while EJ banded two (AHY/F and AHY/M) on May 22. American Redstart were banded in good numbers by BBO members - one AHY/F on June 3, and 14 from August 14th to 24th, with a maximum of nine on August 23 - and EJ banded three (May 22 -25). However, there were no sight records otherwise. One Mourning Warbler was noted on June 7. Single Common Yellowthroats were noted on May 20 and banded August 24 and September 14 by BBO members, while EJ also caught three (May 23 - 25). A few Wilson's Warblers were banded between August 10th and 31st, with no other reports, and a Canada Warbler banded on August 14 was the only record for this species.

### 3.2.8 Rose-breasted Grosbeak to Snow Bunting (16 species)

A Rose-breasted Grosbeak was noted on July 1 and one was banded on September 1. Tree Sparrows were numerous in early April with 28 banded on April 6. The last record was of one on May 11 and there were no records from the Fall. Chipping Sparrows were present only briefly - two on May 18th and 19th - but EJ banded many on the east side of the lake in May and June. The first Clay-colored Sparrow appeared on May 3 and as usual it was abundant throughout the summer with the last record being one banded on September 14. Single Vesper Sparrows were noted regularly from May 4 to July 1 and ten on August 14. Savannah Sparrows were common throughout the summer (April 26 - September 14), with a maximum of 32 on May 19. LeContes Sparrows were only listed between May 18 and June 1, in fair numbers (eight on average), but they were probably present throughout the summer as breeding birds. One was banded on June 7. Sharp-tailed Sparrows are a specialty of the BBO area, being regularly heard in June, whereas elsewhere in the general Edmonton-Beaverhill Lake region they seem quite scarce. A maximum of eight were noted on June 7, including one that was banded. A Fox Sparrow was seen on September 15 - a scarce migrant through the area. A few Song Sparrows were present through the summer (April 6 - July 1) and three were banded on July 19. One or two Lincoln's Sparrows were noted from May 3rd to 18th and five were seen on August 14. The last record was one banded on August 31. White-throated Sparrows were present in the first half of May (4th - 18th) with a few being banded along with White-crowned Sparrows which were more abundant in early May (20 on May 3) and were also seen in the Fall (September 14th and 15th). The first record of Dark-eyed

Juncos was of two banded on April 6 (along with Tree Sparrows). They remained only until May 4 (two) according to the field notes. Lapland Longspurs were seen on April 6 (10, April 20 (50) and September 15 (17). One of the most spectacular events of the year was a phenomenal migration of Snow Buntings on April 20. Flocks of 3-5,000 flew over all day to settle on the ice (just off-shore) all along the south shore until there were an estimated 500,000 - 1,000,000! Out of all these, BBO members managed to capture and band one individual. The numbers dwindled to 5,000 on April 26 and 500 on May 3. After May 4, none were seen for the rest of the year.

### 3.2.9 Bobolink to House Sparrow (13 species)

Bobolinks were only seen on May 17 (two) and July 1 (five). They are regular summer residents, if not actually breeding, in the fields just west of the gate to the Observatory area. Red-winged Blackbirds first appeared on April 6 and were omnipresent for most of the rest of the Spring and Summer, with peak numbers of 100 on May 9. Surprisingly, none were seen after July 1. Small numbers of Western Meadowlark were observed regularly from April 6 (five) to July 1 when a maximum of 15 were noted. Yellow-Headed Blackbirds formed a small portion of the resident blackbird population and were observed frequently from April 26 to June 7. Brewer's Blackbirds and Common Grackle are not regular residents of the Observatory area but were noted on June 7 (four at Amisk Bridge) and May 3 (one), respectively. Brown-headed Cowbirds are one of the most common birds in the immediate Observatory area and were observed in fair numbers throughout the year (May 3 - July 1), and a fledgling was caught by hand (for banding) on June 18. The Northern Oriole is another regular summer resident (May 17 to August 15).

Purple Finches were only seen for a couple of days in early Spring - May 3rd and 4th - and Pine Siskins were only recorded once - one on May 19. American Goldfinches arrive later than most of the summer residents, the earliest record being June 7. They seem to stay in flocks for most of the Summer, with a maximum of 40 seen on July 1. Three of the birds banded on this day turned up on July 19 also. A pair of Evening Grosbeaks banded on May 3 may have been the same ones seen on May 19 and July 1 in which case there is a faint possibility that they nested nearby, although there is no habitat (according to most sources) anywhere close. The only House Sparrow noted was one on May 17.

#### Addendum (received late):

A boat trip on June 14 at the north end of Beaverhill Lake (JF, RE, and ME) to look for a Franklins Gull colony produced some interesting records but no gull colony. Instead, a fairly extensive grebe

colony was discovered at the east end of South Island, consisting of 400+ Eared Grebes and 50 Western Grebes on nests. On a small island just to the north-east, Yellow Rails (seven heard) and Sharp-tailed Sparrows (10 - 15) were abnormally common. Also noteworthy were 40 Hooded Merganser of which five were females and a pair of White-winged Scoter.

An unusually marked sparrow was caught in the nets on August 24 (JL and JF) and described in detail as well as photographed. It was concluded later that it was a partial albino Clay-colored Sparrow.

### 3.3 Nest Records

There was no special effort made to find nests in 1986, but quite a few were discovered casually and mentioned in the field notes:

Mallard nest with 12 eggs on May 9  
Killdeer nest with 4 eggs on May 9  
Canada Goose on nest, May 2 -4, 15 young on May 19  
Blue-winged Teal nest with 3 eggs, May 17  
European Starling, 4 young on June 7

~~Nest record cards were filled out for a number of nest box nestings and sent to the Prairie Nest Record Scheme in Manitoba:~~

House Wren - 71 nests  
Black-capped Chickadee - 2 nests  
Tree Swallow - 15 nests

Appendix - Figures and Tables

Figure 1: Weekly Mist-netting Effort in 1986

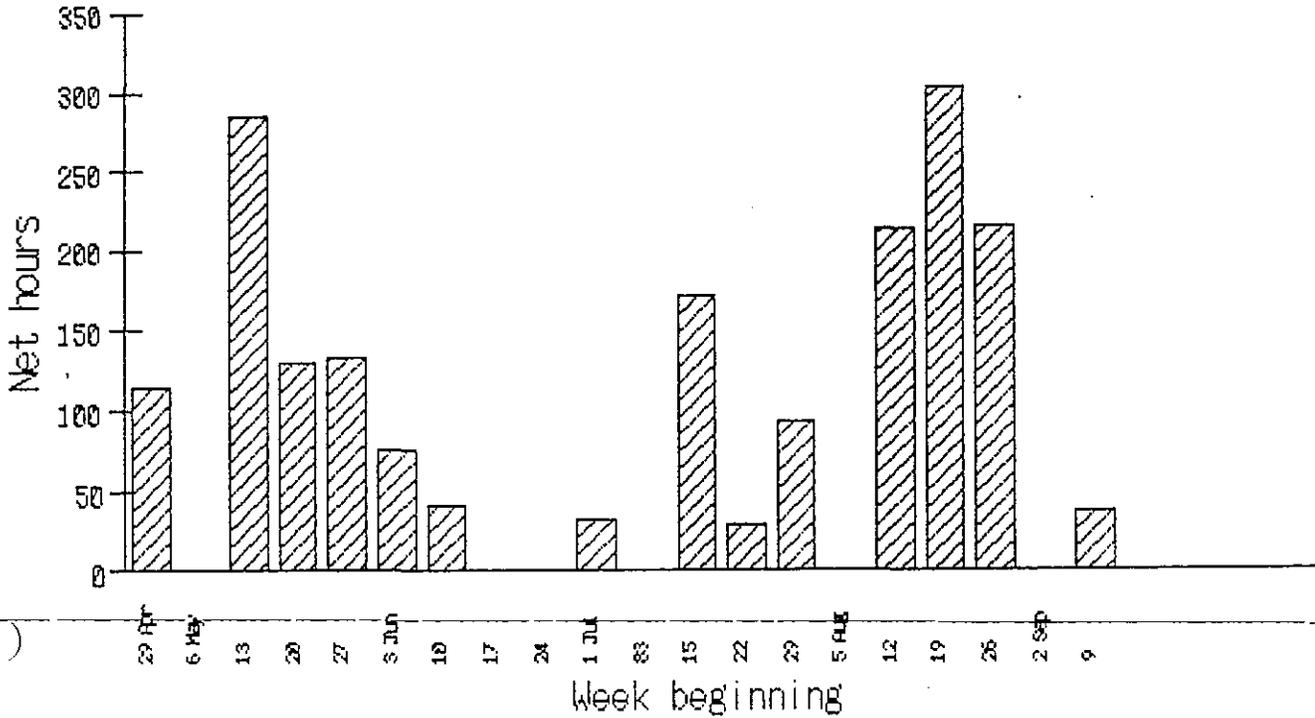


Figure 2: Weekly Mist-netting Success Rate in 1986

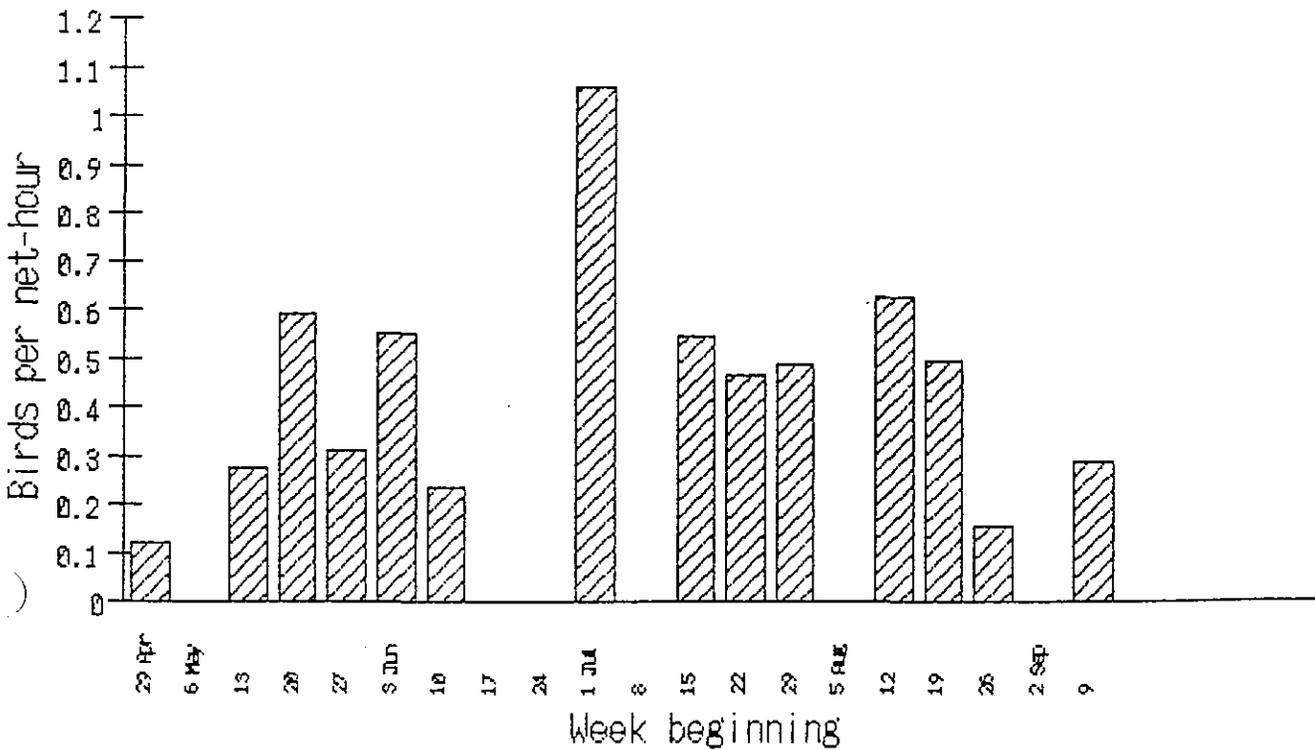


Table 1  
 Bands Used by the Beaverhill Bird Observatory and  
 Edgar Jones at Beaverhill Lake in 1986

Band Size	Beaverhill Bird Observatory		Edgar Jones	
0	1660	80826-80900	1730	71012-71300
	1700	53378-53395		71308-71328
		53924-54000		71334-71339
	1720	49511-49600		
	1750	41206-41900		
		53701-53739		
1	940	24884-24900	940	32075-32106
	2010	99201-99451		
		99501-99600		
		99701-99723		
		99801-99900		
1A	921	19935-19974	961	51603-51613
1B	1321	56661-56695	1321	54906
			1251	60673-60679
2	762	34112-34142	872	15548-15559
		34199		15567-15568
3	1323	53996	983	45839
5	825	47296-47299	765	93590-93592
		47201		
6			746	16667
7			987	24814-24816
8			608	32426

Table 2  
Birds Banded in 1986 at Beaverhill Lake by the  
Beaverhill Bird Observatory and Edgar Jones

Species	BBO	EJ	Species	BBO	EJ
Eared Grebe	1		European Starling	2	
Lesser Scaup		1	Warbling Vireo	25	6
Sharp-shinned Hawk	1		Philadelphia Vireo	12	
Swainson's Hawk		3	Red-eyed Vireo	6	1
American Kestrel		1	Tennessee Warbler	29	
Killdeer		3	Orange-crowned Warbler		1
Sanderling		1	Yellow Warbler	93	27
Semipalmated Sandpiper	14	9	Magnolia Warbler	5	
Least Sandpiper	12		Myrtle Warbler	21	1
Wilson's Phalarope		1	Western Palm Warbler	1	
Black-billed Cuckoo	1		Blackpoll Warbler	2	2
Great Horned Owl		1	American Redstart	16	3
Common Nighthawk		1	Common Yellowthroat	2	3
Downy Woodpecker	3		Wilson's Warbler	4	
Olive-sided Flycatcher	1		Canada Warbler	1	
Western Wood Pewee	2		Rose-breasted Grosbeak	1	
Traill's (A) Flycatcher	19	9	Aa. Tree Sparrow	28	
Least Flycatcher	213	109	Chipping Sparrow	2	73
Eastern Kingbird		1	Clay-colored Sparrow	53	60
Tree Swallow	433	5	Savannah Sparrow	10	11
Cliff Swallow	62		LeConte's Sparrow	1	2
Barn Swallow	1	1	Sharp-tailed Sparrow	1	
American Crow	4	3	Song Sparrow	3	2
Black-capped Chickadee	54	2	Lincoln's Sparrow	4	
Red-breasted Nuthatch	2		White-throated Sparrow	4	
House Wren	407	6	White-crowned Sparrow	4	
Marsh Wren		4	Dark-eyed Junco	2	
Ruby-crowned Kinglet	1		Snow Bunting	1	
Mountain Bluebird	1		Red-winged Blackbird	27	9
Veery		1	Yellow-headed Blackbird	7	
Gray-cheeked Thrush		1	Brown-headed Cowbird	32	2
Swainson's Thrush	4	5	Northern Oriole	8	2
Hermit Thrush	2		American Goldfinch	26	11
American Robin	3	4	Evening Grosbeak	2	
Cedar Waxwing		1			
Total species				55	40
Total individuals				1676	367
					Combined
					69
					2065

Table 3  
Birds Retrapped as "Returns" in 1986  
at the Beaverhill Bird Observatory

Species	Band number	Original Data Age/Sex	Date banded	Year	Dates retrapped in 1986	Comments
Least Flycatcher	1630 05850	AHY/F	May 27	1984	Aug 2	
	05856	AHY/M	May 27	1984	May 25, 31	
Cliff Swallow	890 49642	AHY/U	Jun 8	1980	Jun 7	Retrapped as "AHY/F"
	910 22092	AHY/F	Jul 5	1981	"	
	940 28787	AHY/F	Jul 1	1984	"	Retrapped as "AHY/M"
	24848	AHY/M	Jul 14	1985	"	
	24858	AHY/F	"	"	"	
	24860	AHY/M	"	"	"	
	24872	AHY/F	"	"	"	Retrapped as "AHY/M"
Black-capped Chickadee	1700 53003	U/U	Aug 17	1984	Aug 10, 14	
	53767	U/U	Aug 25	1985	May 3, 17	
	53921	U/U	Sep 21	"	Aug 15	
House Wren	1700 53200	AHY/M	Jun 2	1985	Jul 7	
	53732	AHY/U	Jun 7	"	May 31	
Yellow Warbler	1700 53150	AHY/U	May 20	1985	Jun 11, Jul 1	
	53156	AHY/M	May 21	"	May 24, 31	
	53164	AHY/F	May 26	"	Jul 1	(1700 55164 in records)
	53171	AHY/M	May 26	"	May 25, 31, Jul 1	
	53708	AHY/M	Jun 22	"	Jun 2	
Clay-colored Sparrow	1630 05218	AHY/U	May 22	1983	May 18, 24	
	1700 53253	AHY/M	May 18	1985	May 17, Jul 25	
Savannah Sparrow	940 14274	AHY/M	May 13	1984	May 19	
	24428	AHY/U	May 19	1985	May 4, 17	

Table 4  
Sight Records of Waterfowl  
at the Beaverhill Bird Observatory in 1986

Species	Spring:			Fall:			Maximum numbers
	First date	Last date	Number of sightings	First date	Last date	Number of sightings	
Common Loon	May 4	-	1	-	-	-	1
Pied-billed Grebe	May 17	May 19	3	Aug 16	-	1	1
Horned Grebe	Apr 26	Jun 1	10	-	-	-	12 (May 12)
Red-necked Grebe	May 2	Jun 1	3	-	-	-	1
Eared Grebe	May 3	May 25	5	-	-	-	4 (May 19)
Western Grebe	May 2	Jun 1	10	-	-	-	30 (May 24)
American White Pelican	May 3	-	-	-	Sep 14	(8)	42 (Aug 2)
Double-crested Cormorant	May 3	-	-	-	Aug 31	(8)	8 (May 3)
American Bittern	May 3	-	-	-	Jul 1	(9)	10 (May 24)
Great Blue Heron	Apr 8	-	-	-	Aug 16	(11)	3 (May 3)
Black-crowned Night Heron	May 2	-	-	-	Aug 23	(12)	9 (May 19)
Tundra Swan	Apr 20	May 3	3	-	-	-	600 (Apr 26)
White-fronted Goose	Apr 20	May 18	8	Aug 23	-	1	5000 (Apr 20)
Snow Goose	Apr 20	May 3	4	Sep 14	-	1	3000 (Apr 20)
Canada Goose	Apr 20	-	-	-	Aug 23	(15)	3000 (Apr 20)
Green-winged Teal	Apr 26	May 25	10	-	-	-	22 (May 4)
Mallard	Apr 6	Jun 1	14	-	-	-	1000 (Apr 20)
Northern Pintail	Apr 6	Jun 1	14	-	-	-	50 (Apr 20)
Blue-winged Teal	Apr 26	-	-	-	Aug 16	(13)	50 (Aug 16)
Cinnamon Teal	May 3	Jun 7	6	-	-	-	4 (May 18)
Northern Shoveler	Apr 26	-	-	-	Aug 16	(13)	32 (May 3)
Gadwall	Apr 26	Jun 1	9	-	-	-	23 (May 25)
American Wigeon	Apr 26	-	-	-	Aug 16	(13)	300 (Aug 16)
Canvasback	May 2	-	-	-	Aug 16	(8)	9 (May 11)
Redhead	Apr 6	Jun 1	13	-	-	-	50 (May 24)
Ring-necked Duck	May 9	-	1	-	-	-	2
Lesser Scaup	Apr 6	-	-	-	Aug 16	(14)	60 (May 3)
White-winged Scoter	May 3	May 11	3	-	-	-	3 (May 3)
Common Goldeneye	Apr 6	-	-	-	Aug 16	(8)	18 (May 18)
Bufflehead	May 4	-	-	-	Aug 16	(9)	11 (Jun 1)
Common Merganser	Apr 6	May 2	2	-	-	-	2 (Apr 6)
Red-breasted Merganser	Apr 26	May 3	2	-	-	-	50 (Apr 26)
Ruddy Duck	May 2	-	-	-	Aug 16	(12)	65 (May 18)

A.S. Under "Number of sightings" in the fall, numbers in brackets refer to the entire year.

Table 5  
Sight Records of Shorebirds, Gulls and Terns  
at the Beaverhill Bird Observatory in 1986

Species	Springs:			Fall:			Maximum Numbers
	First date	Last date	Number of sightings	First date	Last date	Number of sightings	
Black-bellied Plover	May 24	May 25	2	Aug 23	Sep 1	2	28 (May 24)
Lesser Golden Plover	May 5	May 17	2	-	-	-	50 (May 17)
Semipalmated Plover	May 18	-	1	Sep 1	-	1	1
Piping Plover	May 20	-	1	-	-	-	1
Killdeer	Apr 6	-	-	-	Aug 16	(18)	50 (Jul 26)
American Avocet	Apr 26	May 25	7	-	-	-	12 (May 17)
Greater Yellowlegs	Apr 20	Apr 26	2	Aug 16	Sep 14	4	8 (Aug 16)
Lesser Yellowlegs	Apr 26	May 19	5	Aug 16	Sep 14	3	50 (May 4)
Solitary Sandpiper	-	-	-	Aug 14	-	1	15
Willet	Apr 26	-	-	-	Aug 23	(11)	10 (May 4)
Spotted Sandpiper	May 17	-	-	-	Sep 15	(5)	2
Whimbrel	May 17	-	1	-	-	-	2
Hudsonian Godwit	May 3	-	1	-	-	-	3
Marbled Godwit	Apr 26	-	-	-	Sep 14	(13)	30 (Jul 1)
Ruddy Turnstone	-	-	-	Aug 23	-	1	1
Red Knot	May 17	May 24	2	Sep 15	-	1	3
Sanderling	May 24	May 25	2	Aug 16	Sep 15	3	16 (Sep 15)
Semipalmated Sandpiper	May 11	May 25	6	Sep 1	-	1	500 (May 24)
Least Sandpiper	May 11	May 24	5	-	-	-	14 (May 17)
Baird's Sandpiper	May 20	-	1	-	-	-	1
Pectoral Sandpiper	May 9	May 20	3	-	-	-	12 (May 5)
Stilt Sandpiper	-	-	-	Sep 1	Sep 14	2	-
Dowitcher sp.	May 4	May 25	5	Sep 1	Sep 15	2	82 (Sep 15)
Common Snipe	Apr 26	-	-	-	Aug 23	(9)	5 (May 4)
Wilson's Phalarope	May 9	-	-	-	Jul 1	(8)	19 (Jun 7)
Red-necked Phalarope	May 11	May 25	5	-	-	-	1500 (May 24)
Franklin's Gull	Apr 20	-	-	-	Aug 23	(13)	30 (May 24)
Ring-billed Gull	Apr 6	Jun 7	9	-	-	-	100 (Apr 26)
California Gull	Apr 20	-	1	-	-	-	3
Common Tern	Apr 26	Jun 1	8	-	-	-	5 (May 18)
Forster's Tern	May 11	-	-	-	Jul 1	(8)	15 (May 24)
Black Tern	May 9	-	-	-	Aug 16	(10)	74 (May 24)

A.S. Under "Number of sightings" for the fall, numbers in brackets are for the whole year.

### Participants and Acknowledgements

The following BBO members held federal Bird Banding permits in 1986 and were the principal banders through the year: Peter Dunn, Rainer Ebel, Jim Faragini, Geoff Holroyd, Jim Lange, Gerry McKeating, Mike Quinn.

They were assisted at various times by: Elizabeth Beaubien, Matthew Ebel, Karl Grantmyre, Michael Holroyd, Roger Jones, Dorothea Jones, Val Kinjerski, Pat McKeating, Renata Osterwaldt, Christine Reid, France Royer, Shirley Talavia.

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