

Beaverhill Bird Observatory
PO Box 1418
Edmonton Alberta Canada
T5J 2N5

D.T. Tyler Flockhart, Editor
October 2001



1999 Annual Report

Message from the Chairman

The banding season of 1999 was one of rebuilding. All of the staff members of 1998 moved on to other job opportunities and that meant the hiring of three new employees. Jeff Adamyk, Tyler Flockhart and Charles Prestley were chosen to run the station for 1999. Jeff had some previous banding experience, but there was still a great deal of training to be done. The volunteers of the BBO worked hard during the first month of the spring season, coming out every day to ensure that the staff became the competent banders they are today.

It was a good thing that our staff became competent, because it was a good year for banding. Over 4000 birds were banded with a relatively high number of species (70). While other stations in Alberta and Saskatchewan were having slow fall migrations, the birds streamed through the BBO area, keeping our staff busy banding 2172 birds.

The year was also a very good year for rarities. A Northern Mockingbird was a highlight for the banders, but there were numerous sightings of rare birds in the area that brought many birders to the area. The star attractions were a pair of White-faced Ibises that turned up on May 11. This was a new species record for Beaverhill Lake. The pair stuck around for about a week, allowing many birders from Edmonton and beyond to see these southern waders. After the ibises had disappeared, they were replaced by a visiting Snowy Egret. This fancy bird brought another wave of birders to the area. A Violet-green Swallow, another first for the Beaverhill area, was seen at the end of May and Francis Point and an Eastern Bluebird set up shop with a Mountain Bluebird at a nearby farm.

While the staff turned into very enthusiastic bird researchers, the handyman skills were also utilized. The second bunkhouse was finished and the interior of the lab received a face-lift in the form of a new coat of paint (along with every piece of furniture out at the site).

The BBO continued to grow as an organization. With an increase interest in the BBO and the Beaverhill Lake area, research beyond songbirds such as raptor, amphibian and insect monitoring have become part of the daily activities. Other annual BBO activities were successful this past year. The BBO sponsored bird bander's mini-conference, which is held every February, has become an event that is expanding each year. Also, the annual Beaverhill Bird Observatory's Crepe Spectacular was a culinary highlight for the staff, volunteers and visitors this past June. All in all, it was another successful year at the BBO.

Jason Duxbury
Chairman

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*filed
separately*

1999 Banding Season Summary

This report summarises the results of the 1999 field season of the Bird Observatory as well as the events of the organisation over the year. This report contains a masters species list collaborated from the seasonal reports of all species captured at the BBO, band recoveries discovered during 1999 from banding in previous years, a treasurers report, seasonal reports prepared by 1999 staff members, and other reports are articles published due to efforts at the BBO in 1999.

The Beaverhill Bird Observatory is located in the Beaverhill Natural Area, approximately 65km east of Edmonton, on the south shore of Beaverhill Lake, near Tofield, Alberta. Here the full time summer staff conducts bird-banding activities along with a daily census route to record bird species and relative numbers using the site along migration or for breeding. Thus, the BBO is a member of the Canadian Migration Monitoring program and is one of 16 such sites across the country.

During the banding season, both migration monitoring and MAPS (Monitoring Avian Productivity and Survivorship) occurs at the BBO. During spring (May 1st-June 9th) and fall (August 1st-October 9th), daily banding occurs from a half-hour before sunrise to 6 hours thereafter. During this time there is also a daily census along a set path and other species seen during banding that may not have been captured are recorded all of which result in the estimated daily totals for each day. During summer (June 10th-July 31st), the MAPS program takes over where 3 different sites are banded and undergo point counts to record those species which breed within the boundaries of the natural area. Also, a search for nests for all species is undertaken, although only songbird and raptor nests are normally banded.

Additional details from each program can be found in the spring (Jeff Adamyk), summer (Charles Priestley), and fall (Tyler Flockhart) reports found within this document.

Master Species List

Seventy species of birds were recorded as being captured in the nets of the BBO during the 1999 field season as reported in Table 1. The spring found 45 species, the summer recorded 21 species, and the fall reported 58 species. Together this represents one of the highest degrees of richness found at the BBO in the past few years. Highlights of the banding year include: Red-tailed Hawk, Northern Goshawk, Brown Creeper, Broadwing Hawk, Northern Shrike, Nashville and Chestnut-sided warblers, and Northern Mockingbird. Further details appear in the seasonal reports.

Table 1: Yearly Totals for Beaverhill Bird Observatory 1999

	Species	Total		Species	Total
1	Yellow Warbler	1139	36	American Tree Sparrow	7
2	Least Flycatcher	668	37	American Goldfinch	7
3	Myrtle Warbler	388	38	Western Palm Warbler	7
4	Tennessee Warbler	380	39	Eastern Pheobe	6
5	Clay-Colored Sparrow	291	40	White-crowned Sparrow	6
6	American Redstart	143	41	Mourning Warbler	6
7	Black-capped Chickadee	119	42	Hairy Woodpecker	6
8	House Wren	111	43	Red-winged Blackbird	6
9	Warbling Vireo	68	44	Canada Warbler	6
10	Trail's Flycatcher	57	45	Bl.-throated Green Warbler	6
11	Wilson's Warbler	52	46	Purple Finch	5
12	White-throated Sparrow	46	47	Gray Catbird	5
13	Swainson's Thrush	42	48	Bay-breasted Warbler	5
14	Orange-crowned Warbler	39	49	Common Yellowthroat	5
15	Red-eyed Vireo	36	50	Sharp-Shinned Hawk	4
16	Magnolia Warbler	34	51	Blue-headed Vireo	4
17	Blackpoll Warbler	32	52	Connecticut Warbler	3
18	Chipping Sparrow	28	53	Philadelphia Vireo	3
19	Brown-headed Cowbird	26	54	Pine Siskin	2
20	Lincoln's Sparrow	25	55	Yellow Shafted Flicker	2
21	Cape May Warbler	19	56	Broad-winged Hawk	1
22	American Robin	18	57	Northern Mockingbird	1
23	Ovenbird	18	58	Yellow-bellied Sapsucker	1
24	Baltimore Oriole	18	59	Tree Swallow	1
25	Cedar Waxwing	14	60	Alder Flycatcher	1
26	Ruby-crowned Kinglet	14	61	American Crow	1
27	Dark-eyed Junco	13	62	Chestnut-sided Warbler	①
28	Northern Waterthrush	12	63	Coopers' Hawk	1
29	Black and White Warbler	12	64	Western Tanager	1
30	Red-breasted Nuthatch	12	65	Nashville Warbler	①
31	Hermit Thrush	10	66	Brown Creeper	1
32	Downy Woodpecker	10	67	Northern Shrike	1
33	Song Sparrow	10	68	Golden-crowned Kinglet	1
34	Savannah Sparrow	9	69	Red-tailed Hawk	1
35	Rose-breasted Grosbeak	8	70	Northern Goshawk	1
Total				4037	

Treasurers Report by Elson Olorenshaw

Elson reported that the BBO had a gross profit of \$32 617.80 from grants received, donations, sales, memberships and Ballie Bird-a-thon pledges for the 1999 year. Total expenses for the year were \$39 220.97 for office expenses, banding equipment and supplies, payroll and various other expenses. The BBO thus had a net loss of \$7 103.17 for the 1999 year. More details are presented in the treasurers report.

BEAVERHILL BIRD OBSERVATORY SOCIETY

Box 1418
Edmonton, Alberta
T5J 2N5

Balance Sheet

13th Period 1999

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Assets

Current Assets	
Chequing Account	\$10,295.06
Investments	\$20,000.00
Accounts Receivable	\$1,800.00
Interest Receivable	\$929.42
Total Current Assets	<u>\$33,024.48</u>
Deposits Paid	\$2,783.34
Property & Equipment	
Buildings	\$3,604.55
Donation Boxes	\$541.00
Computer	\$600.00
Banding Equipment	\$1,100.00
Display Board	\$527.00
Refrigerator	\$2,000.14
Solar Panels	\$846.38
Total Property & Equipment	<u>\$9,219.07</u>
Total Assets	<u>\$45,026.89</u>

Liabilities

Current Liabilities	
Deposits on account	\$1,000.00
Total Current Liabilities	<u>\$1,000.00</u>
Payroll Liabilities	
Income Tax Deductions	\$258.20
CPP Payable	\$168.16
EI Payable	\$251.47
Total Payroll Liabilities	<u>\$677.83</u>
Total Liabilities	<u>\$1,677.83</u>

Equity

Retained Earnings	\$50,452.23
Current Year Earnings	\$7,103.17
Total Equity	<u>\$43,349.06</u>
Total Liability & Equity	<u>\$45,026.89</u>

BEAVERHILL BIRD OBSERVATORY SOCIETY

Box 1418
Edmonton, Alberta
T5J 2N5

Profit & Loss Statement

January 1999 through 13th Period 1999

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Income

GRANTS	
Alta Govt - Step	\$3,169.00
Can. Gov't - Seed	\$3,164.00
Environment Can.	\$4,000.00
Manning DFP	\$4,000.00
Baillie Fund	\$902.90
Canada Trust Grant	\$4,500.00
ACA	\$1,000.00
Moose Jaw Exhibition	\$3,000.00
Total GRANTS	<u>\$23,735.90</u>
Memberships	\$472.00
Baillie Fund Pledges	\$1,576.65
Donations	
General donation	\$5,966.11
Gate Box	\$53.31
Lab Box	\$48.31
Total Donations	<u>\$6,067.73</u>
Interest	\$982.35
Sales	
Banding Conference	\$40.00
Misc Sales	\$50.00
Total Sales	<u>\$90.00</u>
Total Income	<u>\$32,924.63</u>

Cost of Sales

Calendars	\$200.00
Snowgoose Festival	\$106.83

Gross Profit

\$32,617.80

Expenses

Office Expense	
Mail Box Rental	\$126.26
Stationery	\$12.08
Postage	\$237.56
Printing	\$4.40
Reports/Manuals	\$71.65
Telephone	\$97.90
Bank Charges	\$91.83
Misc. Office Expense	\$242.33
Total Office Expense	<u>\$884.01</u>
Supplies	\$690.36
Repairs & Mntce	\$513.23
Bands & Equipment	\$210.01
Nets & Poles	\$191.20
Dues & Subscriptions	\$30.00
Property Taxes	\$75.21
Insurance	\$267.00
WCB Expense	\$100.00
Travel Expense	\$6,655.63
Payroll	
Wages	\$27,392.84
Vacation Pay Expense	\$473.60

BEAVERHILL BIRD OBSERVATORY SOCIETY

Profit & Loss Statement

January 1999 through 13th Period 1999

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Employer Expenses	\$1,737.88	
Total Expenses		<u>\$39,220.97</u>
Operating Profit		<u>(\$6,603.17)</u>
Other Expenses		
Calgary BBS	\$500.00	
Total Other Expenses		<u>\$500.00</u>
Net Profit / (Loss)		<u>(\$7,103.17)</u>

Spring Report by Jeff Adamyk

Jeff reported that the spring banding session at the BBO was a great success as all new staff were employed at the lab. Volunteers spend much of their spare time training the staff to allow many birds to be successfully banded in the spring and the future coming months. A total of 992 birds were captured in the spring, representing 24.5% of all birds captured over the year. May was busy with banding, familiarisation of the computer program where data would be entered and many new lab upgrades to improve the shape of the lab. Also, a new shower was made from the skeleton of the old one, and eavestroughs was installed to provide a more continuous supply of wash and waterfight water for the staff. New bunks were built for staff and/or volunteers, park lane was cleared to allow staff vehicles in without scratches to the paint and the old blackbird trap was resurrected to allow hopefully for the trapping of some Red-winged or Yellow-headed blackbirds in the coming seasons.

Summer Report by Charles Priestley

Chuck reported on the outcome of the MAPS program which takes over every summer when birds in the natural area are busy breeding, making nests, defending nests, and drawing little attention to themselves. Thus, it is a task to find their temporary abodes where young are raised so we can have an understanding of habitat requirements, nesting dates, and which species are found in the natural area. A total of 303 birds were captured during the MAPS program which represents 7.5% of all birds captured during the 1999 field season. The highlight was a juvenile Broadwinged Hawk captured at PARK in a mistnet. Insects seemed to be everywhere and the Tree Swallows capitalised by producing 210 young that we banded, a great reproductive output for the year. Charles also helped differentiate between the "dash and dive", "cautious shuffle", and "climb and grab" techniques to capture all the birds this summer.

Fall Report by Tyler Flockhart

Tyler reported a total of 2745 birds were captured during the fall representing 67.9% of all birds captured during 1999. A total of 58 species were found in the mistnets or the raptor traps, some species such as Yellow Warblers (n=970) were common, while others such as Brown Creepers (n=1) were rare. Many projects were prepared for next year, and many volunteers and visitors made their way out to the lab for the hectic but rewarding fall banding season.

May Species Count by Roy Fairweather

Roy reported on which species were recorded this year in the Beaverhill Lake area through various birders reports, and banding records from Edgar Jones who bands on the north side of the lake and the BBO which bands on the south side of the lake. This year the count occurred on the 29th and 30th of May. A total of 125 species were recorded over the two day period including Western Tanager, Willow Flycatcher and Eastern Bluebird.

Ballie Bird-a-thon by Lisa Takats

Lisa reported on the success of her Ballie Bird-a-thon this year, she was accompanied by Jason Rosneau. The Ballie Bird-a-thon is a fund raising event held throughout North America each year. The goal is to get sponsored by individuals or corporations and then record the maximum number of species you can in a 24 hour period. Lisa and Jason recorded 108 species, including a Northern Goshawk, Peregrine Falcon, White-winged Crossbill, Connecticut Warbler, Brown Creeper and Black-crowned Night-heron. This event helps to fund the BBO and 1999 brought over \$1 500.00 in funding directly from this event, definitely a worthwhile cause.

1999 Species Record Report by Roy Fairweather

Roy has been the Species record reporter for many years and 1999 was no exception. This year a total of 216 species were recorded in the Beaverhill Lake area, two of which (White-faced Ibis and Northern Mockingbird) were recorded here for the first time.

The Willet, Lisa Takats editor

This newsletter helps to inform members of the Beaverhill Bird Observatory of events put on by the BBO and what is happening at the BBO itself. The editor of this newsletter has been Lisa Takats. The Willet is published three times a year. This year (Volume 12, Numbers 1,2,3) advertised the 3rd annual banders workshop to be held February 26-28th in Edmonton and reported on the results of the field trip of the 1998 workshop. Articles appeared on Parrot fever, Ringing and Twitching, Butterfly counts at banding stations, banding trips to Montana, the life of a raptor nest over 7 years, results of the bander training workshop at Delta marsh, and other articles of interest.

Articles pertaining to Beaverhill Lake and BBO by various authors

The Alberta Naturalist, a journal published 4 times a year by the Federation of Alberta Naturalists (FAN) published two articles pertaining to Beaverhill Lake, both in the same issue. The first was concerning a new species record for Beaverhill Lake, reported by Jason Duxbury (president), Jeff Adamyk, and Charles Priestley (both summer staff) of the first documentation of White-faced Ibis and the most northern occurrence of this species. Christine Rice, a bird bander at the Beaverhill Bird Observatory for the 1998 field season, contributed an article regarding Odonata (damselflies and dragonflies) at Beaverhill Lake from data obtained during her summer at BBO.

The Edmonton Naturalist is published three times annually by the Edmonton Natural History Club, and this year published an article by Tyler Flockhart. This article was in the form of a poem about some of the highlights of the 1999 field season, entitled: Tigers named Sally, NOMO's, and my best friend Pip ~ Tales from the Beaverhill Bird Observatory summer 1999.

RANA spring/summer report 1999 by Tyler Flockhart

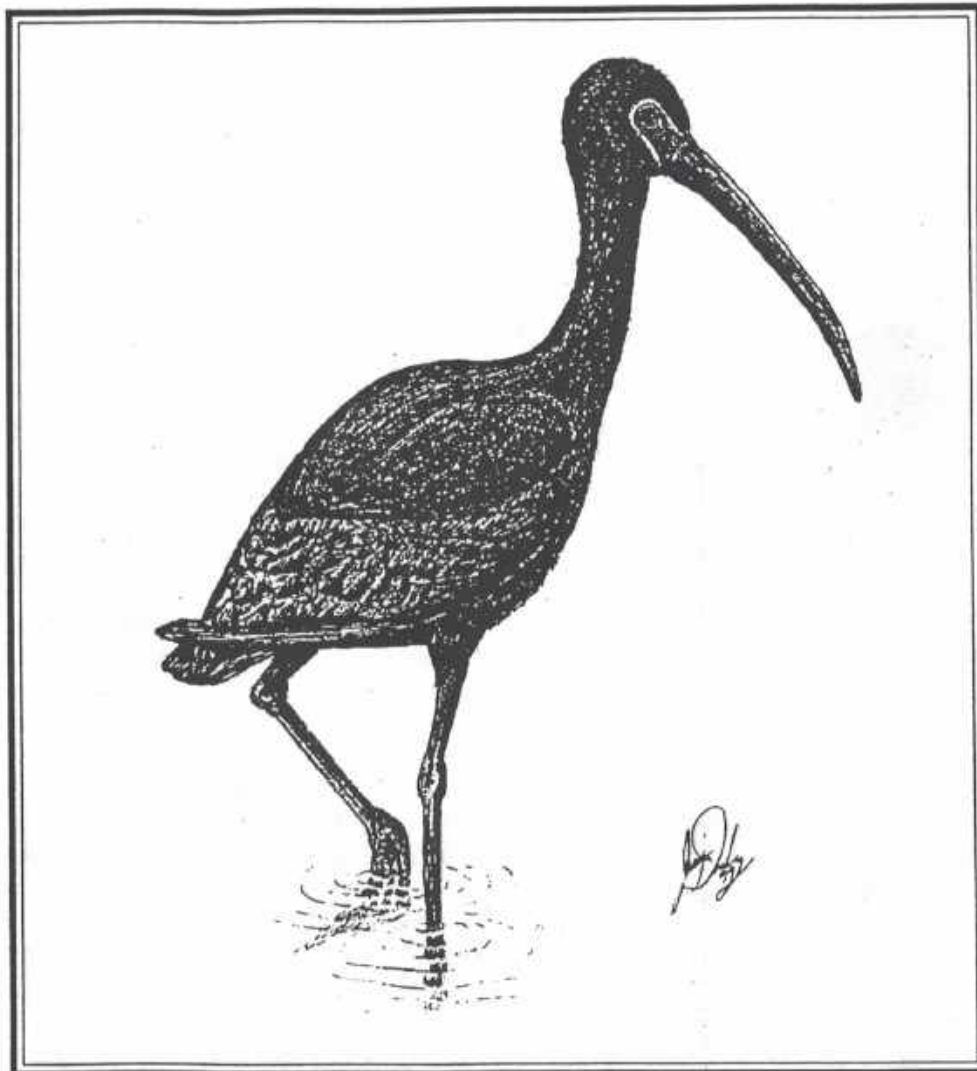
Researching Amphibian Numbers in Alberta (RANA) occurred at BBO during the summer of 1999. This is just another example of how research has diversified over the past few years. Over the summer, traps are set and checked daily to record amphibian movement, richness, and abundance over a matter of weeks. This report outlines the results of the 1999 RANA field season. The highlight of the summer would be the capture of a Tiger Salamander in one of the trap.

Conclusion

The 1999 field season at the BBO was a great success. The lab received a facelift, new summer staff were hired, and over 4000 birds were captured in the mistnets. A variety of other projects were started and continued, and new sightings of rare birds were made and reported. The BBO and its research is dependant on donations and grants from various organizations, we thanks all those involved.

ALBERTA NATURALIST

Alberta's Natural History Review



White-Faced Ibis

Drawing: Jason Duxbury

Grasslands Naturalists Wins the CNF Affiliate Award - A new species record for Beaverhill Lake - It's a small world, The mummy's curse - Notes on the prairie shrews - Alberta Issues - 2nd report on the Alberta Bird Record Committee - The passage of the passenger pigeon - Goblin's Gold

The luck of the ibis

A new species record for Beaverhill Lake

Jason Duxbury, Charles Priestley, Jeff Adamyk

How much luck does one have when the sighting of a secretive American Bittern is topped by another, even more exciting observation? On May 11, 1999 the arrival of two white-faced ibises (*Plegadis chihi*) eclipsed all other bird observations for that day at Beaverhill Lake.

What we (Jason Duxbury and Charles Priestley) first thought were a pair of double-crested cormorants quickly transformed into shapes never before seen at Beaverhill Lake. Two large, dark birds with shallow wing beats approached, flying northward from Lister Lake towards the marshes of the south east corner of Beaverhill Lake. It was only when the birds flew over the weir and



White Faced Ibis

Photo by R.E. Gehlert

their profiles could be seen that we realized what we were witnessing. The black of a cormorant turned into dark reds, greens and purples. The long slender decurved bills became evident, along with long pink legs. There could only be one possibility: the white faced ibis. But it was still hard to believe our eyes.

This bird species has not been recorded at Beaverhill Lake before. The first record of a white-faced ibis in Alberta was 1941 near Rosebud (~25 km southwest of Drumheller)(Goossen *et al.* 1995). Between 1941 and 1992 these southern visitors were observed over 90 times. Most of the accounts in Alberta have come from the area between Calgary and the extreme south-east corner of the province. A significant portion of the

sightings have occurred close to the Alberta-Montana border, around Pakowki Lake. In Alberta, there has not been a recorded sighting since 1992, and there has never been a sighting north of Rosebud. The historical sighting records of Beaverhill Lake as tabulated by Roy Fairweather of Tofield, Alberta indicate no previous record. The official bird checklist for Beaverhill Lake does not even list the species as a hypothetical. But there they were, flying before our eyes.

We watched with great relief as the birds banked west and decided to land on the mud flats near the south east shore of the lake. At that moment, an American Bittern flew by. Charles, never having seen a bittern before stared in amazement and was seemingly overwhelmed with observing the two species at once. However, when we had to choose between which species to pursue, the choice was an easy one.

We cautiously approached with Charles whispering "Don't take off, don't take off" with every step. The birds appeared to be oblivious to us. The visitors simply went about their business gorging on the ample invertebrates provided by the mud flats. With each step the ibises probed the sediments with their long curved bills, inserting them all the way to the hilt, reaching for prey unavailable to the other waders feeding in the same area. Even the godwits and avocets could not reach as deep.

A change in the weather was approaching from the north. The sound of the wind brushing against the surface of the water and the flutter of new leaves in the trees grew louder and louder as it approached. When the cool, blustery air arrived, the ibises flew from the unprotected mud flats to the cover of last years growth of cattails. In the marsh just north of the weir the pair of ibises fed in the shelter of old vegetation.

The old cattails also provided cover for the observers (now including Jeff Adamyk and Rob Rosnau), which allowed us to approach even closer than before. While we slowly moved towards the pair of birds, somewhere else in the marsh a hidden Bob Gehlert took photographs. Our party settled in behind a wall of tall grass where we were able to obtain a fantastic look at these birds through a spotting scope. It was at that moment when the ibises' colours and shapes became more apparent.

Their heron-like bodies were adorned with rich velvet-like colours: reds on the head neck and chest and green and purple iridescence on the wings. Legs were



White Faced Ibis

Photo by R.E. Gehlert

painted in pink hues that could only be rivalled by flamingos. The same pinks on the face were surrounded by a white border suggesting the birds were wearing a super-hero-esque mask. Judging by the size difference and the muted colours of the smaller ibis, it was possible that one was male and the other female. A breeding pair? One can only hope.

Our proximity to the ibises allowed us to hear some vocalizations. The calls they made were a cross between a quack and an oink. These sounds were made only when the birds seemed agitated by our presence, just before leaping to flight.

Imagine the setting: yellow-headed and red-winged blackbirds, marsh wrens and a sora in the background; white-faced ibises at center stage; willets, pectoral and least sandpipers, greater and lesser yellowlegs, dunlins and long-billed dowitchers at one's feet; and American white pelicans, a black-crowned night-heron and a great blue heron flying over head. It was the kind of experience that is etched into one's mind forever.

Unfortunately, the show had to end, but at least it ended with a great finale. Even these ibises had a tolerance level, and the moment we took one step too close they took to the sky. When they rose above the reeds, they were bathed in the rich golden rays of the setting sun. It was at this moment, contrasted in front of a backdrop of the dark gray clouds of an oncoming storm did we see their true colours. The reds turned into liquid bronze, the greens and purples exploded into a spectrum of iridescence and they seemed to look at us with fiery red

eyes. As if to taunt us, they did not fly far, only deeper into the marsh. However, we decided that such a display was a fitting end to the evening's viewing and decided not to follow. It was hoped that the birds would not be chased away so that other birders could share a similar experience.

As we packed up the scope and started heading back to the observatory, the shorebirds at our feet exploded into flight. It was not because of our footfalls the shorebirds scattered, but rather a low flying peregrine falcon that disappeared as fast as it appeared. It was a reminder that local birds can command awe as well.

Goossen, J.P., D.M. Ealey, H. Judge and D.C. Ducan. 1995. Distribution and Breeding Status of the White-faced Ibis, *Plegadis chiti* in Canada. The Canadian Field Naturalist 109: 391-402.

Jason Duxbury is Chairman of the Beaverhill Bird Observatory

Author's address (all authors):
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Odonates at Beaverhill Lake

Christine Rice

I really had no choice. Living at the edge of one of the largest wetlands in the aspen parkland region and armed with a butterfly net, how could I resist?

During the summer of 1998 I was a bird bander at the Beaverhill Bird Observatory, and though the early mornings were busy with birds, mist nets and bands, the afternoons were all my own. On 71 of the 150 days from May 9th to October 6th, I surveyed the odonates (dragonflies and damselflies) at Beaverhill Lake Natural Area. Located approximately 60 km east of Edmonton, this area typifies the shallow potholes and aspen-willow-grass complexes of Alberta's parkland. Each day I captured odonates along a set route that meandered through a range of habitat types including aspen forest, willow-grass complexes, ungrazed grasslands, pasture lands, lake shoreline, and open water at the weir. Surveys took place in the late afternoon and were most intense in the spring and early summer, becoming less frequent as fall approached and odonate diversity diminished.

A butterfly net was my weapon of choice for catching odonates which were identified, photographed and later released. Species identity was determined via a dichotomous key (Acorn 1981) and the unpublished notes

of John Acorn. Any individual I could not identify was photographed for later identification with the help of fellow enthusiasts John Acorn and Jon Hornung. Along with the species, sex, date and weather I recorded the specific habitat type in which each species was found, as well as any interesting behavioural or natural history notes. Odonates were often held and chilled for a short period in order to be more accommodating photography subjects; but no specimens were collected for this study.

Fifteen species of odonates were confirmed at Beaverhill Lake Natural Area (Table 1) out of a total of sixty-eight species confirmed for the province as a whole. Of particular interest are the accounts of three dragonfly species. First, *Anax junius* (green darner) were documented only on May 30th and again on August 29th. Large, colourful, and difficult to overlook, my data suggest that they were migrating through this area. Second, *Aeshna ermita* (lake darner) is typical at sites similar in habitat to Beaverhill Lake throughout Alberta (Acorn unpub.), yet they were encountered only once, on August 20th, 1998. Last, emeralds were also sparse, with a solitary *Epitheca spinigera* (spiny baskettail) recorded on May 30th, 1998.

Table 1: Species list with dates of emergence and peak abundance at Beaverhill Lake Natural Area in 1998

Odonate Species	Date First Observed	Time of Peak Abundance
<i>Lestes disjunctus</i>	June 30	July
<i>Coenagrion resolutum</i>	May 13	June
<i>Coenagrion angulatum</i>	May 13	June
<i>Enallagma cyathigerum</i>	June 11	n/a
<i>Enallagma ebrium</i>	June 11	Late June
<i>Aeshna eremita</i>	August 20 only	n/a
<i>Aeshna interrupta</i>	May 24	July
<i>Anax junius</i>	May 30 & Aug 29 only	n/a
<i>Epitheca spinigera</i>	May 30	Late May
<i>Leucorrhinia borealis</i>	May 9	May-June
<i>Libellula quadrimaculata</i>	May 16	Late May
<i>Sympetrum corruptum</i>	May 30	Early June
<i>Sympetrum costiferum</i>	June 24	Early July
<i>Sympetrum danae</i>	August 28	Early September
<i>Sympetrum internum</i>	July 6	July-August

Odonate collections by Ed Fuller at Beaverhill Lake Natural Area on June 25th, 1997 document several species not encountered in my survey. These include *Lestes dryas*, *Enallagma boreale*, and *Ishnura damula* (Cook pers. comm.). Identities of species captured in 1997 were confirmed with the help of Carl Cook. *Lestes dryas* (emerald spreadwing) is typically a more northern species, yet eight specimens were collected in just one day. *Enallagma boreale* (boreal bluet) is difficult to distinguish from *Enallagma cyathigerum* (northern bluet) without detailed examination of their genitalia ("bits") with a stereo microscope. It is possible that many individuals I recorded simply as *Enallagma* sp. in 1998 were in fact *E. boreale*. *Ishnura damula* (plains forktail) was an unexpected encounter. This damselfly characteristically inhabits warm springs and was first recorded in Alberta at the water outlet of Wabamun Power Plant in 1995 (Acorn pers. comm.). A lone male captured in Wagner Natural Area in 1995 was thought to be a dispersing individual (Page 1998). This species was certainly not expected at Beaverhill Lake.

Zygoptera (damselflies)

Damselflies are distinguished from dragonflies by their smaller size and slower, more erratic flight pattern. Perched damselflies hold their wings folded together above their thorax (except for the spreadwing damselflies), and appear slender since there is little size difference between their thorax and abdomen.

Lestes disjunctus (common spreadwing)

True to its name, the common spreadwing is one of the exceptions in the damselfly realm that holds its wings half open while at rest. The dark abdomen of the males is marked with pale blue at its tip and junction with the thorax, while the females are a contrasting dark metallic green.

During their short flight season these damselflies were most often found in the tall grasses of open sunny areas, and were never exceedingly abundant. Most of the individuals captured were females. Due to the unreliability of using thorax colour to distinguish females from similar species (Acorn unpub.) they usually were identified as *Lestes* sp.

Coenagrion angulatum (prairie bluet)

The male's abdomen is very dark with thin blue stripes dividing its segments and is highlighted with a pale blue tip.

Mating pairs and oviposting were observed on the very first day that this common resident was observed among the open fields, sunny forest gaps and edges, and the extensive willow-grass complexes.

Coenagrion resolutum (taiga bluet)

This common damselfly is identified by its distinctive banding pattern, consisting of two short and one long

black bands on a blue abdomen (Acorn unpub.).

The flight season, period of abundance and habitat used by this species was almost identical to the prairie bluet, however, mating periods were different for these two species. *C. resolutum* pairs were present in the latter half of their flight season, while *C. angulatum* tandems (mating pairs) were observed in the first half.

Enallagma cyathigerum (northern bluet)

Damselflies of this genus are typically larger and a more intense blue than *Coenagrion* sp. This species is difficult to distinguish from *E. boreale*. Consequently, most of the mating pairs observed were identified as *E.* sp.

Tenerals (recently emerged adults) were present until the beginning of July, the latest flight season of all the damselflies recorded. They were typically observed at the weir, or among the trails and grassy openings, and were never notably abundant.

Enallagma ebrium (marsh bluet)

Distinctive "bits" and three dark abdominal bands that increase in size as they near the tip make identification of this small bluet easy (Acorn unpub.).

Marsh bluets were common in late June, and usually found in sunny openings and along trails through the willows and poplars.

Anisoptera (dragonflies)

Their large size, sharp eyesight and remarkable aerial acrobatics make dragonflies voracious predators. While at rest their wings are held open and horizontal to their bodies. Their markings and colouration varies from subtle shades of browns and oranges to flashy hues of blues, yellows and greens.

Aeshna ermita (lake darner)

Brilliant eyes reflecting shades of green, yellow and blue characterize the large lake darner. Their thoracic bands are thick and colourful blends of yellow and blue, with a large indent in the leading edge of the first. Mature males are mostly bright blue, while females are usually green (Acorn unpub.).

One lake darner was identified at Beaverhill Lake. This individual was found dead on the morning of August 20th and its identity confirmed by fellow odonate enthusiast Jon Hornung. Most likely other lake darners were present, albeit in low numbers.

Aeshna interrupta (variable darner)

Two thin and straight blue-green bands on the sides of the thorax distinguish this large (62-65 mm) darner from other Aeshnids (Acorn unpub.). Adults were first confirmed on May 28th, most abundant in July, and captured until September 1st. Their flight season is presumably even longer since Aeshnids suspected to be variable darners were observed until October 6th.

Mating occurred for almost the complete

duration of their flight season and teneral were present from June into July. Despite the assumption that the wetlands of Beaverhill are used as breeding sites, ovipositing was never observed.

Variable darners had the longest daily flight period of all odonates observed. They were active from soon after dawn until twilight, whereas most odonates are active primarily during the warmth of the afternoon. They were typically observed at forest edges or in grassy forest gaps, and frequently a lone traveler would be seen cruising in a direct path across the willow-grass complexes surrounding Beaverhill and Lister Lake.

Anax junius (green darner)

The unmistakable and beautiful green darner has a brilliant green thorax with a contrasting blue (males) or pink (females) abdomen.

This species was observed on only two dates between May and October. Tandem pairs in the wheel formation were present on May 30th; only females were identified on August 29th. All captured individuals were fresh and in very good condition. Larvae searches were conducted at the weir by dredging the mud with a dip net, but were fruitless. This species is known to be migratory, and this data suggest that Beaverhill Lake Natural Area was along their migratory path in 1998.

Epitheca spinigera (spiny baskettail)

Iridescent blue eyes, small yellow markings along the thorax and dark bases to the hind wings identify the spiny baskettail (Acorn unpub.).

On May 30th, visiting odonate enthusiast Natasha Page captured the only documented spiny baskettail of the season. Other dragonflies of similar size and coloration were occasionally spotted in the spring, but their identity was not confirmed.

Leucorrhinia borealis (boreal whiteface)

This dark dragonfly has golden smudges at the base of its hind wings, reddish or yellow markings along the top of the abdomen, and a bright white face patch. Although it is of average size (~36 mm) when compared to other Alberta dragonflies, it is the largest member of its genus in North America (Acorn unpub.).

The first odonates spotted and captured at Beaverhill Lake in 1998 were boreal whitefaces (May 9th through to June 17th). This spring species was most common within sunny forest gaps or along cutlines and other forest edges.

Libellula quadrimaculata (four-spotted skimmer)

These stout dragonflies have rusty-orange highlights along the underside of their dark brown abdomen, tinges of green on the bottom edge of their brown eyes, and yellow hues behind their heads. Their name comes from dark spots on each of their four wings (although there are actually eight, not four spots).

These spring emergers were first captured on May 16th and recorded until June 17th. They were most often found amid sunny openings in young aspen and willow.

Sympetrum corruptum (variegated meadowhawk)

This brick-red dragonfly is distinguished from other meadowhawks by red wing veins, two yellow dots on the side of its thorax, gray patches along the top of its abdomen, and its large size (37-43 mm) (Acorn unpub.).

Their presence was recorded sporadically from May 30th until June 4th. Entomologist John Acorn captured the first individual of the season in front of the Beaverhill Bird Observatory banding station. All other sightings or captures occurred in grassy openings or by open water at the weir.

Sympetrum costiferum (saffron-winged meadowhawk)

Golden smudges along the leading edge of their wings give these dragonflies their name. Females and immature males are yellow-orange with subtle black markings along the sides of their abdomen. Males turn a dark orange-red when they mature.

This species first emerged at the end of June, was most abundant during the month of August, and remained a common sight until well into September. They were usually found in sunny forest gaps and grassy openings.

Sympetrum danae (black meadowhawk)

Black and fast accurately describes these small (~25mm) meadowhawks. Females and immature males are separated from the completely black mature males by their traces of yellow.

Black meadowhawks emerged in late summer (first captured on August 28th) and were most abundant during mid to late September. Tandems were a common sight in open fields, willow-grass complexes and grassy forest gaps from the time they were first detected until September 6th, though ovipositing was never witnessed.

Sympetrum internum (cherry-faced meadowhawk)

This species is similar in colouration and size to *S. costiferum* but can be separated by examination of its "bits".

It is very likely that *S. internum* was present earlier than documented with this study since determining the identities of species in this genus based on "bit" examination was not conducted until mid-summer.

Similar Odonate surveys have been conducted at Wagner Natural Area (Page 1998), Clifford E. Lee Natural Area (Griffiths & Griffiths 1980), Cypress Hills Provincial Park (Hilton 1985; Hornung unpub.), Elk Island National Park (Perkins unpub.), Devon Botanical Gardens (Stoyke 1987), Gull Lake (Acorn unpub.), and Lake Wabamun (Acorn unpub.). Gaps in our knowledge of the distribution of Alberta's odonate fauna occur in northwest and southeast Alberta (More 1998) and it is

recommended that future surveys focus on these regions.

Additional odonate research within the Beaverhill Lake Natural Area will provide a more complete species list, document population fluctuations and offer the opportunity for encountering interesting and rare species. Future surveys should attempt to target the occurrence of *Anax junius* (green darner), as there are few records for this species in Alberta.

Interest in odonates is escalating and they are quickly becoming a high profile group of insects. The Alberta Natural Heritage Information Centre has just recently added 25 species of odonates to the list of species they are tracking, and that are designated as having high conservation priority. As odonate enthusiasts and surveys become more rampant across Alberta, new species records and distribution expansions are sure to be documented.

Acknowledgements:

John Acorn provided encouragement and guidance for this project, as well as other ventures. Inspiration is always at hand with my dear friend Jon Hornung, who inherently oozes passion for odonates. Thankyou both.

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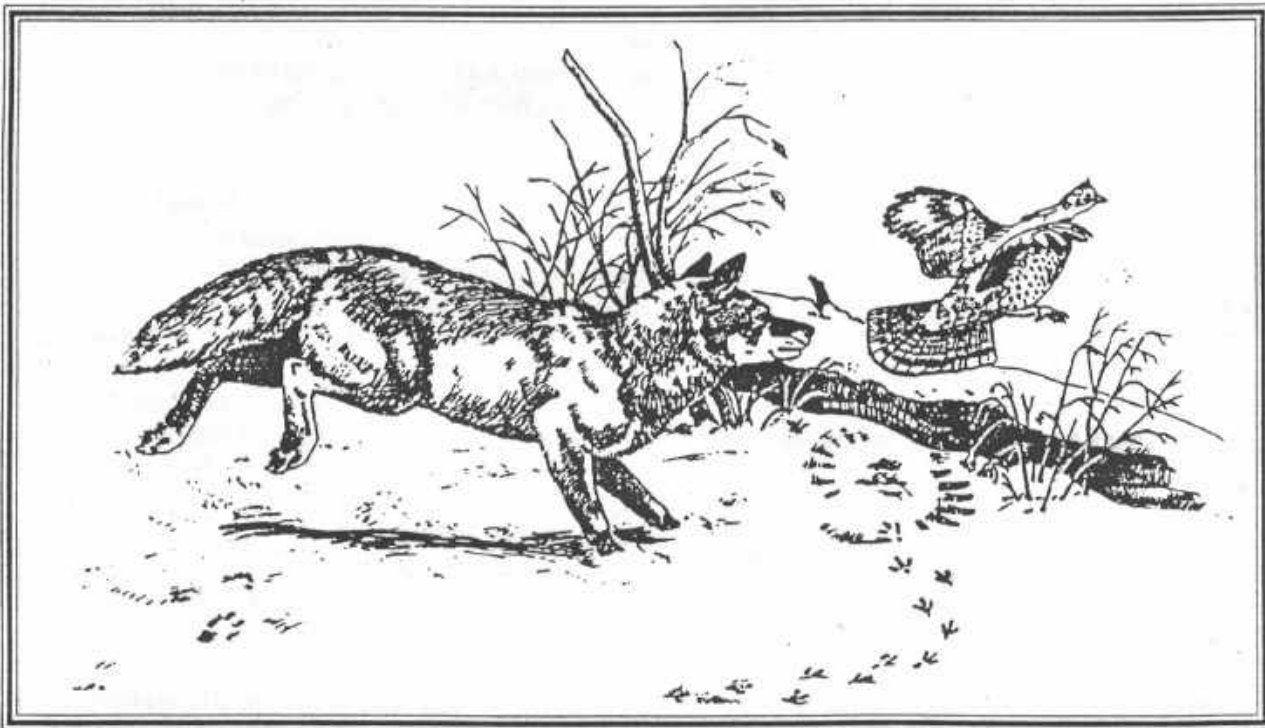
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NOMO



Tigers Named Sally, NOMO's and my Best Friend Pip

Tales from the Beaverhill Bird Observatory
~ Summer 1999

by Tyler Flockhart

The early calm and morning light
Were shattered fast with a dreadful sight
Of Ty and his hair and what he would say
"Bad hair, good birds...today is the day"
So Jeff, Chuck and Ty were banders for this year
To band with their hands, to identify by ear
It was a challenge, fun and improved our birding stance
So sit back and read our year at a glance
Of birds of rare would appear this May
'Til September, into the nets they would find their way
But some too big to become caught
Would be spotted and photographed without a second thought
The first surprise came very early in the spring
"White-faced Ibis!" Duxbury began to dance and sing
A rare sighting indeed in this neck of the land
The first, the only, celebration was at hand

So we hooted and hollered, high fives all 'round
Till the day I scared them off (not Takats) never again to be found
The fun didn't end there, it had only just begun
We expected bigger and better things every morning we saw the sun
One thing we found special was the two grouse that always drummed
On the logs beside the bunkhouse, Jeff's sleep was a little bummed
Out on the flats again another surprise to meet our face
Not Ibis anymore, but a Snowy Egret in its place
A blistering pure white against the drab of dead reeds
Where the cattails from the year before had dispersed their seeds
The shorebirds moved on again as they always do
But their departure brought a great surprise, a bird of new

TIGERS NAMED SALLY, NOMO'S AND MY BEST FRIEND PIP...CONTINUED

Near the end of spring migration, June 8th to be exact
Another rare species showed up to keep our reputation intact
A bird whose spring migration took him a little adrift
A Northern Mockingbird, oh wow, what a perfect birthday gift

Known to us as a NOMO, his stats are in our book

His photo upon our wall, to always have a second look

I turn now to my best friend Pip, he deserves his own rhyme

A little hare, who jumped around, lived life and took his time

He was cute and small, furry and fuzzy, always the perfect sight

Till one day he ended up in the lab and could have spent the night

If it weren't for Jeff and Lisa to hold him in their arms so wide

To take him to the door and toss him back outside

Off hours were spend in many, many different ways

Chuck and Ty took and few and painted for a couple of days

The floor looks grand, the ceiling too, the walls were done as well

All the people who saw the before and after said that it looked swell

Jeff hunkered down on the computer to do the dirty deed

While Chuck and I usually ran off to play and be free



Broad-winged Hawk

Data entry was slow and slower, we did it in little parts

And after a page or two, a well-deserved game of computer hearts

We walked to the weir, one of the waterfowl hotspots

To look and try to identify at least one of those distant dots

Night-Herons and Bitterns and quite often a Great Blue

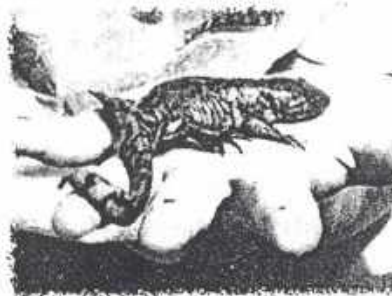
Twenty minutes would easily turn into an hour or two

Amphibian monitoring was done in the spring and again in the fall

One day we did the checks was a great relief for us all

That the salamanders were still hanging around in the riparian alley

So we picked up and measured our little friend, and called that Tiger "Sally"



Tiger Salamander

So after our work was done for the day, we'd head into town

A little place called Tofield to turn that frown upside down

We'd head to the nature center, then go for a bite

About ten o'clock or so, we would call it a night

TIGERS NAMED SALLY, NOMO'S AND MY BEST
FRIEND PIP...CONTINUED

To drive down the little narrow
gravel road took a lot of nerve

Especially when one person
yells "Porcupine" and the other
yells back "Swerve!"

We would bounce along
through the farmer's field,
driving very slow

While the great horned owl sat
in the tree, keeping an eye on us
down below

We would crawl into bed and
think of the birds we would
soon get

Hopefully when morning came,
it would not be windy and/or
wet

Magnolias and Redstarts,
Canadas and Yellows

The ladies a little drab, but some
really good lookin' fellows

The warblers they came, the
sparrows did too

At times there were so many
birds we didn't know what to
do

The raptors we caught were far
between and few

A Cooper's, a Broad-wing, a
Sharpie or two

So the banding is stopped since
summer is done

We remember the good times,
we remember the fun

If you are in Tofield, the BBO is
near

Stop by next summer, and be
apart of the poem for next year. 🐾

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Turkey Vulture *Cathartes aura*
Crested Caracara *Caracara plancus*
Cardon cactus *Pachycereus pringlei*

Program and Abstracts



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Abstracts of NARMS Symposium

Towards a Standardized Nocturnal Owl Monitoring Program

LISA TAKATS, Beaverhill Bird Observatory, 7th floor, O. S. Longman Building, 6909-116 Street, Edmonton, AB, T6H 4P2 Canada. GEOFF HOLROYD, Canadian Wildlife Service, #200-4999-98 Avenue, Edmonton, AB, T6B 2X3 Canada.

Call and broadcast surveys have long been known to be effective in collecting information on distribution, relative abundance, and species richness of nocturnal owls. However, few studies have looked at the effectiveness of long-term monitoring to determine natural population fluctuations of owls. Volunteer surveys for nocturnal owls are underway in several Canadian provinces, but there has been little effort to standardize protocols as with Breeding Bird Surveys. Broadcast surveys were conducted for five years in the Foothills Model Forest in Alberta to determine environmental conditions affecting call rate (time of night, time of year, etc.). The call methods used were also studied (length of time of listening periods, species of owl broadcasts, length of survey time, etc.). A standardized volunteer survey of nocturnal owls will be an important part of the North American Raptor Population Monitoring strategy. Results of a national meeting held in Winnipeg in September 1999 will also be presented.

POSTER PRESENTATIONS

Proposed Outline for the North American Raptor Monitoring Strategy, and Proposed Format for Information About Each Species

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State University, 1910 University Av., Boise, ID 83725 USA.

The Monitoring program of USGS Biological Resources Division and the Migratory Bird Management Office of the U. S. Fish and Wildlife Service have provided funds for the development of the North American Raptor Monitoring Strategy (NARMS). At the Monitoring of North American Raptor Populations symposium and evening workshop we must decide on an Outline for the NARMS, and on a format in which contributors can submit information about each species. This poster presents a proposed outline, based in part on previous meetings of persons interested in NARMS. We also present a format for assembling information about species. This format is based on one developed by Loren Ayers, Stan Anderson, and Phil Schempf for the Merlin (*Falco columbarius*). Please consider the outline and format, then, if you wish to comment on them, we can discuss comments and suggestions for changes during the workshop, Thursday evening, November 5.

Trends in Counts of Migrating Peregrines at Assateague Island, MD-VA and Padre Island, TX

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Migrating Peregrine Falcons (*Falco peregrinus*) become concentrated at Assateague Island, Maryland-Virginia in the fall and at Padre Island, Texas in the fall and spring. Since 1977 on