

---

---

# THE OWL FILES

ALBERTA NOCTURNAL OWL SURVEY, BEAVERHILL BIRD OBSERVATORY

Volume 3, Issue 1

April 2004

---



## Owl Survey Stories

As the Alberta Nocturnal Owl Survey expands, volunteers are becoming increasingly excited about sharing their owl survey stories. Following is a story of an incredible owl survey night.

Harvey and I went out on our first survey last night and had one of those nights that will keep us coming for more. We wanted to be out at full moon or as close to it as possible. The moon did not appear until 2225hrs but is made a difference it seems as Northern Saw-whet were calling non-stop. Here's the total: two Great Horned owls, one Great Gray, two Northern Saw-whet and, much to our surprise and listening enjoyment, one Long-eared owl. Although the temperature was only +3 C by 2330hrs, Wood frogs were still noisy as were three Ruffed Grouse. Coyotes were in fine form throughout the evening.

–Marc Demers – Opal Road Route (April 7, 2003)

If you have an interesting owl survey, be sure to send it in to us!!

*-Continued page 4*

## Alberta Raptor Nest Card Program

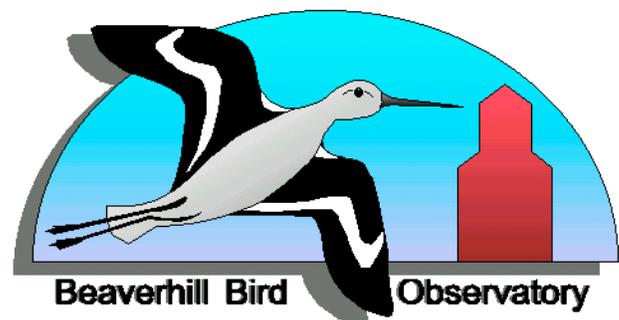
The raptor nest card program was initiated in 1988 by the Alberta government, for raptor banders and researchers to collect information on nest locations of birds of prey. The program was not maintained, however some raptor banders continued to fill out nest cards. The purpose of the project is to compile these long-term datasets and enter them into a database for analysis. The goal is to further develop the volunteer program and to make it compatible with other regional and national nest card schemes. Results include a better understanding of habitat use, productivity, and phenology (timing of nesting), which will help with status assessment and management.

This pilot year with a coordinator will allow for all backlogged data to be entered and analyzed and reports to be written, as well as organizing for the program to continue in cooperation with other nest record schemes being developed (Prairie Nest Record Scheme and national Nestwatch program). By collaborating with the Canadian Wildlife Service and the Federation of Alberta Naturalists (FAN), data can be compared across the prairie provinces, and nationally. The data will also contribute to the Breeding Bird Atlas update being coordinated by FAN.

*-Continued page 2*

## INSIDE THIS ISSUE

- 2 Thanks to Our 2004 Supporters
- 2 Alberta Raptor Nest Card Program
- 3 Owl Poem / Word Search
- 4 Spotlight on Alberta Photographers
- 5 Thesis Abstract
- 5 Species Profile
- 6 Alberta Conservation Association
- 6 Publications of Interest



Thanks to our 2004  
Funding and In Kind  
Supporters:



Federation of  
Alberta Naturalists



Alberta  
Conservation  
Association

Jim and Barb Beck



PARKS AND PROTECTED AREAS

## Alberta Raptor Nest Card Program (Con't.)

The *objectives* of this project are to:

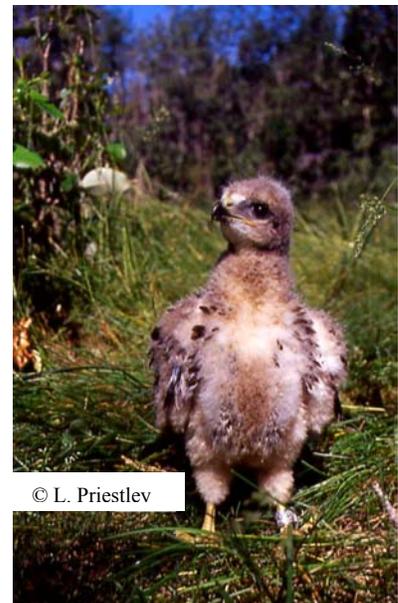
- 1) enter all backlogged data that has been collected since the mid-1990's
- 2) establish a full time volunteer-based raptor nest card program, where members of the public can report raptor nests, and participate in banding,
- 3) produce an information pamphlet on raptor nests and the monitoring program and how the public can get involved,
- 4) conduct educational presentations on birds of prey and their importance in the environment,
- 5) analyze data and write reports on distribution of breeding raptors, habitat requirements for nesting, and phenology of nesting.

Industry will also be interested in the results to see where different species of raptors are nesting, what kinds of habitat they are using, productivity, and timing of nesting. The data will help with management practices.

If you have found a raptor nest and would like to report it, the nest card is available for download for the Beaverhill Bird Observatory's website at:

<http://www.beaverhillbirds.com/bboraptorsnests.htm>

Funding from Alberta Conservation Association, Alberta Ecotrust and NAWMP is greatly appreciated!!





# Owl Poem

Owls are diving down  
Talons open and snap up  
He gets his dinner

*Calum Matthews  
Grade 2, St. Michael's University School, Victoria, British Columbia*

## Word Search – Owls Around the World

Find the hidden words, they can be vertical, horizontal, or backward. Circle all the words, then you'll have a number of letters left over that spell the secret phrase.

C	H	E	S	T	N	U	T	O	W	L	E	T	N	M
A	M	F	L	E	S	S	E	R	S	O	O	T	Y	A
L	W	O	E	L	G	A	E	L	T	T	I	L	E	N
S	D	O	O	W	D	E	T	T	O	P	S	L	Y	E
T	S	E	R	O	F	D	U	O	L	C	R	W	M	D
A	S	A	N	D	Y	S	C	O	P	S	E	O	G	O
E	A	S	T	E	R	N	G	R	A	S	S	L	Y	W
H	C	E	E	R	C	S	C	I	F	I	C	A	P	L
D	E	K	S	A	M	N	E	D	L	O	G	R	A	W
D	I	F	F	L	W	O	Y	N	W	A	T	U	J	O
J	U	N	G	L	E	H	A	W	K	O	W	L	A	N
E	R	L	W	O	H	S	I	F	Y	F	F	U	B	R
E	N	D	E	C	A	F	E	T	I	H	W	T	!	A
F	U	L	V	O	U	S	D	E	T	S	E	R	C	B
B	A	R	K	I	N	G	L	A	U	G	H	I	N	G

BAJAPYGMY
BARKING
BARNOWL
BUFFYFISHOWL
CHESTNUTOWLET
CLOUDFOREST
COLLAREDOWLET
CRESTED
EAGLEOWL
EASTERNGRASS
ELF
FULVOUS
GOLDENMASKED
JUNGLEHAWKOWL
LAUGHING
LESSERSOOTY
LITTLE
MANEDOWL
PACIFICSCREECH
SANDYSCOPS
SPOTTEDWOOD
TAWNYOWL
URALOWL
WHITEFACED

\*\*Last Issue Answer – Mice are food!

## SPOTLIGHT ON ALBERTA PHOTOGRAPHER'S

This Northern Hawk Owl is one of the eight owls, Harvey and I, spotted this past weekend. The total for the two days was one Hawk Owl, two Arctic owls and five Great Grays. Harvey had spotted five Great Grays the previous weekend. --Marc Demers (March 2, 2004)



Hello from Fort McMurray. We've had an exciting event up here, a Great Horned Owl took out a raven in front of maybe 60 people. This event has spurred a wild bird meeting to discuss owls. I'm taking some info about the owl prowls to increase interest. We thought we'd encourage everyone to bring an interesting fact about GHOWs as he's much in the news. --Jane Elser (February 19, 2004)



# Stable Isotope Analysis and the Investigation of the Migrations and Dispersal of Peregrine Falcons (*Falco peregrinus*) and Burrowing Owls (*Athene cunicularia hypugaea*)

Jason Duxbury, Department of Renewable Resources, University of Alberta, Edmonton

PhD. THESIS ABSTRACT: The study of animal migration leads to a better understanding of the connectivity between a species and its ecological requirements in different regions. To understand migration patterns is important since animals spend significant amounts of time in potentially ecologically and geographically different areas. If conservation and management of Peregrine Falcons (*Falco peregrinus*) and Burrowing Owls (*Athene cunicularia hypugaea*) are to be successful, the population dynamics during a complete annual life cycle of these species needs to be understood.

Sample sizes are limited with bird banding due to very low recovery rates and radio/satellite tracking due to the requirement of substantial resources. Traditional methods of tracking migrants have been effective in providing movement information about Peregrine Falcons and Burrowing Owls, but the information has taken decades to accumulate. The frustrations of low recovery rates associated with standard migration tracking techniques are being alleviated by new or improved techniques such as stable-isotope analysis (SIA). SIA provides a relatively new method to trace migratory birds back to their natal or breeding grounds without having been previously banded. Currently, SIA cannot replace the precision of band recoveries or transmitter relocations. However, since each bird that is analyzed for a stable-isotope signature equates to a band recovery, large amounts of data can be collected in a few years rather than a few decades.

The application of stable-isotope analysis to determine the summer origin of Peregrine Falcons migrating along the Gulf Coast of southern Texas, and of Burrowing Owls wintering in central Mexico and southern Texas will be discussed. The results of the application of SIA to determine the scale of Burrowing Owl dispersal will also be presented. Rates of permanent emigration associated with the large-scale dispersal of Burrowing Owls provide new information regarding their over-winter survivorship and inter-year movements.

## Species Profile

by *Alberta Sustainable Resource Development*  
([http://www3.gov.ab.ca/srd/fw/threatsp/bo\\_desc.html](http://www3.gov.ab.ca/srd/fw/threatsp/bo_desc.html))

Burrowing Owls (*Athene cunicularia*) are comical little birds that generally look like a short fat owl on stilts. They have the typical large "owl" head and eyes, relatively large wings and a stubby tail. They often stand upright on long thin legs. By standing tall, they can see farther out over the flat prairie. Burrowing owls are coloured with a mottled pattern of dark brown and light brown spotted with white. The underparts are pale brown to white. This coloration provides good camouflage in a prairie habitat.



Burrowing owls are the only North American owl in which the female is smaller than the male. Adult females may be more heavily coloured on the underside and often, (but not always), appear darker than the male. Again, it is thought that the difference probably reflects the difference in the habits of the birds. While females spend much of their time underground, males are nearly always out in the direct sun and their colour appears to fade over the summer.

The burrow is probably the most unique feature of burrowing owls. It is important to the birds for protection, raising young, social contacts, temperature control, and attracting food. Burrowing owls rarely dig their own burrows, and in Alberta, they prefer to take over and modify abandoned burrows of badgers, ground squirrels, or foxes. Even on their wintering grounds, the owls use burrows for roosting and protection. The critical factor in the decline of burrowing owl populations appears to be the loss of burrows. Ground squirrels, badgers, and prairie dogs (in the United States) are considered pest animals and their numbers have been reduced in many areas. Burrowing owls rely on these species to create new burrows or maintain old ones. Without the burrowing mammals, the owls cannot find suitable nesting sites.

## ALBERTA CONSERVATION ASSOCIATION

ACA is a non profit, non government association working collaboratively to conserve, protect and enhance Alberta's wildlife, fisheries and habitat.

**Our Mission:** *"Working together with Albertans to conserve, protect and enhance our natural biological resources."*

**Our Vision:** We envision an Alberta where citizens understand and support good stewardship of our natural biological resources, where habitat integrity is maintained, where Government, business and citizens work together for nature conservation, and where future generations can value, enjoy and use those natural biological resources.

Annually, ACA focuses several million dollars towards conservation efforts, delivering a wide variety of projects, programs and services across the province:

- Research and data collection
- Hands on project delivery
- Monitoring, analysis and evaluation
- Program funding
- Facilitation, collaboration of stakeholders
- Industry information and public education

ACA receives funding from a variety of Alberta conservationists including significant contributions from hunters and anglers and a growing group of corporate partners. Every time hunting or fishing licences are purchased, ACA receives a portion of the funds to allocate to important conservation projects.

Our two major business areas consist of 'on the ground' project delivery, and administering our [Grant Eligible Conservation Fund](#). Our 'on the ground' projects are grouped into three main business areas, [Fisheries](#), [Habitat](#) and [Wildlife](#). ACA is responsible in managing costs while maintaining scientific credibility and excellence as cornerstones in the services we deliver.

For more information on the Alberta Conservation Association: <http://www.ab-conservation.com/>

### QUESTIONS AND ANSWERS

Q: How do I choose a route?

A: In 2003, all new Alberta survey routes are being set randomly. We will try to assign routes that are near your residence, so let us know where you would like to run your survey route. All previous routes can be maintained if the volunteers prefer to stay with their routes.

Q: There is someone I know who would like to conduct an owl survey, who should they contact?

A: Have them contact us at Ph: (780) 951-8901 or E-mail: [lisa@beaverhillbirds.com](mailto:lisa@beaverhillbirds.com)

### Publications of Interest/Reference Books

Lobel, A. 1982. Owl at Home. HarperTrophy.

Mowat, F. 1996. Owls in the Family. Yearling Books.

Oliver, M. 2003. Owls and Other Fantasies. Beacon Press.

Waddell, M. and P. Benson. 2003. Owl Babies. Candlewick Press.

### Websites of Interest

<http://www.beaverhillbirds.com>

<http://www.bsc-eoc.org/bscmain.html>

<http://owling.com/>

<http://www.mindspring.com/~owlman/>

Would you like to submit an article?? We welcome submissions from anyone interested in owls. Articles can be about experiences, studies, observations, poems, stories, etc. We also welcome photos. To submit please send a copy to:

Lisa Priestley, Beaverhill Bird Observatory  
7<sup>th</sup> floor, 6909-116 Street, Edmonton,  
Alberta T6H 4P2

Phone: (780) 918-4804

E-mail: [lisa@beaverhillbirds.com](mailto:lisa@beaverhillbirds.com)

