

Manitoba's Owl Survey



Annual Report 2012

By: Holly McCullough

Great Gray Owl illustration by Bryn McCullough, 2012

Manitoba's Nocturnal Owl Survey 2012 Annual Report

More than 100 passionate volunteers participated in the 2012 Nocturnal Owl Survey and it is my pleasure to present to you 22 years of fascinating survey results. Without the help of these folks, the nocturnal owl survey would not be possible. We would like to thank you from the bottom of our hearts for dedicating so much time and energy into making the monitoring of owls in Manitoba a success.

The data collected in the owl surveys will also contribute to the Manitoba Breeding Bird Atlas, which documents the distribution

and abundance of all breeding birds throughout Manitoba. If you would like more information or if you would like to get involved, please visit the website www.birdatlas.mb.ca or call Dr. Christian Artuso at 204-945-6816 or toll free at 1-800-214-6497.

NOTE: Surveyors and assistants, please record UTM coordinates for every survey stop next season to ensure your data will be incorporated into the Atlas.

| Year | # Volunteers | Distance Surveyed (Km) | # Routes | Total Owl Detections | # Owl Detections per Km |
|------|--------------|------------------------|----------|----------------------|-------------------------|
| 2000 | 106 | 1085 | 57 | 165 | 0.15 |
| 2001 | 91 | 1070 | 57 | 180 | 0.17 |
| 2002 | 198 | 2403 | 115 | 315 | 0.13 |
| 2003 | 162 | 1776 | 107 | 267 | 0.15 |
| 2004 | 150 | 1304 | 94 | 183 | 0.14 |
| 2005 | 102 | 1067 | 74 | 135 | 0.13 |
| 2006 | 91 | 946 | 65 | 262 | 0.28 |
| 2007 | 68 | 856 | 52 | 170 | 0.20 |
| 2008 | 78 | 1213 | 73 | 144 | 0.19 |
| 2009 | 92 | 1237 | 77 | 204 | 0.17 |
| 2010 | 94 | 1514 | 94 | 254 | 0.19 |
| 2011 | 103 | 1318 | 84 | 274 | 0.21 |
| 2012 | 102 | 1830 | 114 | 397 | 0.21 |

Hoo's-Hoo In The Woods?: A Novice's Experience Conducting A Nocturnal Owl Survey

Jim Duncan graciously gave me the opportunity to do data entry for the 2012 Nocturnal Owl Survey and after weeks of entering data from surveys sent in by passionate volunteers, I decided it was only fitting that I should conduct a survey of my own.

On a relatively calm and cool night in mid-April, I anxiously awaited the sunset, geared up and set off to experience my very first nocturnal owl survey. I chose an area familiar to me because it was close to my family's cabin, along an established route off Highway 59, south of Grand Marais. In addition to bringing my equipment, my partner and another friend came along to help assist me. On our drive to the site we brushed up on our collective knowledge by playing recordings of owl calls and quizzing each other as to which species we were listening to. We found it helpful to use common sounds to help us remember and differentiate the owl calls. For example, my companions thought the Barred Owl sounded similar to a barking dog.

Arriving at the first stop we nervously stepped out of the vehicle, started our stop watch and listened intently. No more than twenty seconds went by before we heard the wondrous call of a Boreal Owl, followed by another call shortly after. Our success continued throughout the next ten stops and

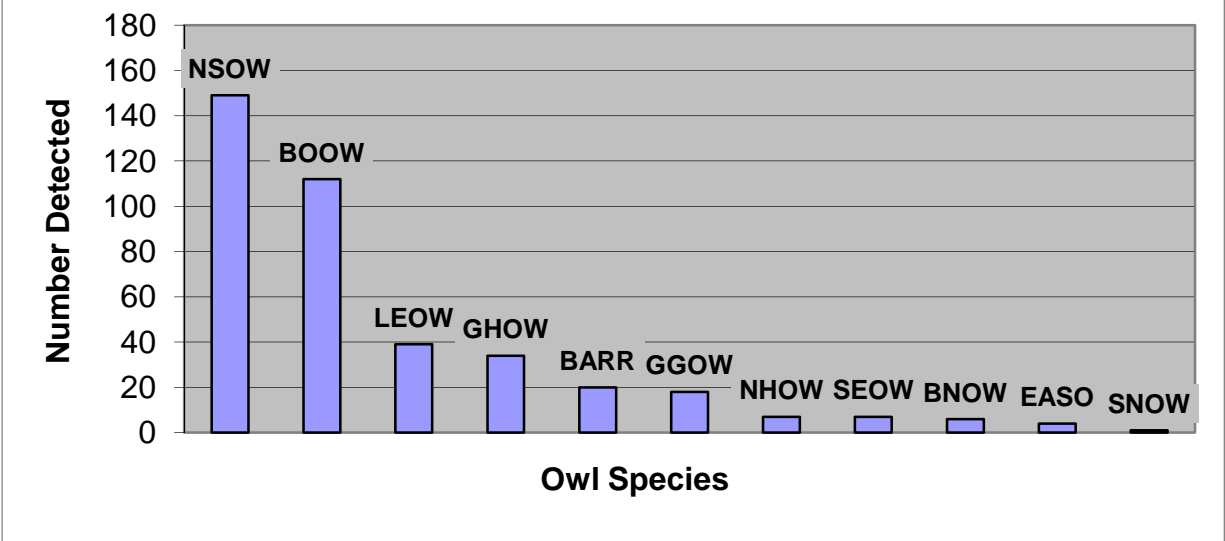
just as we thought our luck had run dry, we heard the high-pitched whistle call of a Northern Saw-whet Owl. We were amazed at how loud the other night callers were such as, Chorus Frogs, Wood Frogs and Wilson's Snipe. We didn't realize how difficult it was to separate by ear Boreal Owl calls from Wilson's Snipe calls. However, we were able to differentiate them based on the height at which the call was emanating from. For example, Snipe calls have a winnowing sound because they are produced in flight.

I had originally delegated different duties to my assistants but once we started hearing multiple owl calls from different directions, we became so excited that we ended up sharing duties and working together to correctly identify what it was we were hearing.

We were lucky enough to hear six Boreal Owls and one Saw-whet Owl! I did not expect my first nocturnal owl survey would be so successful. Even if we hadn't heard one owl, the experience still would've been enjoyable simply because of the wonders that accompany being out in the wilderness anticipating the marvelous calls of the creatures of the night. My assistants and I have been won over and we look forward to improving our nocturnal owl call identification skills next season!



Owl Species Detected in the 2011 Survey



NSOW = Northern Saw-whet Owl, BOOW = Boreal Owl, LEOW = Long-eared Owl, GHOW = Great Horned Owl, BARR = Barred Owl, GGOW = Great Gray Owl, NHOW = Northern Hawk Owl, SEOW = Short-eared Owl, BNOW = Barn Owl, EASO = Eastern Screech Owl, SNOW = Snowy Owl

2012 Survey Highlights

I am pleased to announce that it has been a record year for the 2012 Nocturnal Owl Survey. Just over 100 incredible volunteers successfully surveyed 114 routes with a total distance of 1830 km. Surveyors and assistants detected 397 owls (number of detections per km was 0.21) and that is not even including unknown owl calls!

Based on trends from previous Manitoba Nocturnal Owl Surveys, the Northern Saw-whet Owl was the most prevalent owl species followed by the Great Horned Owl and then the Boreal Owl. In the 2012 Nocturnal Owl Survey, Northern Saw-whet Owl detections increased to a record high count of 149. The previous high from 2011 was 123 Northern Saw-whet Owls with an overall average of 82, acquired from the

1991-2012 results. Interestingly, there was a significant explosion in the amount of Boreal Owls counted for this year, putting them in at the number two position with a count of 112, up from 31 in 2011 and above the long-term average of 48 (based on data from 1991-2012). The rise in Boreal Owls is likely due to the increased abundance of Red-backed Voles for this season.

Another surprising find was that Long-eared Owls (with a total of 39) have surpassed Great Horned Owls' count of 34. The quantity of Barred Owl, Great Gray Owl and Northern Hawk Owl detections has been stable for the past two seasons. In contrast, Short-eared Owl, Barn Owl, Eastern Screech Owl and Snowy Owl counts have increased slightly.

Owl Survey

By: Walfried Jansen

*No stars nor green gossamer
of northern lights.*

Jack and I

*on the Gillam Road alone
with dust pale fruit
of passing cars balancing
between roadside trees
like a high wire act.*

No wind to carry it away.

*Late April we are cold
retrieving owl calls
from the dark
boreal forest note
their intensity and direction.*

*I remember an old friend
telling me owls call at night
to gather confused souls
of the newly dead.*

*The calls we hear
are territorial
clear pure and circular
always returning
to the same silence
that today inhabits the cold
space between us.*

*I wonder
if it was you
calling me from among
the blue petals
of your dreams
would I be able to hear you?*

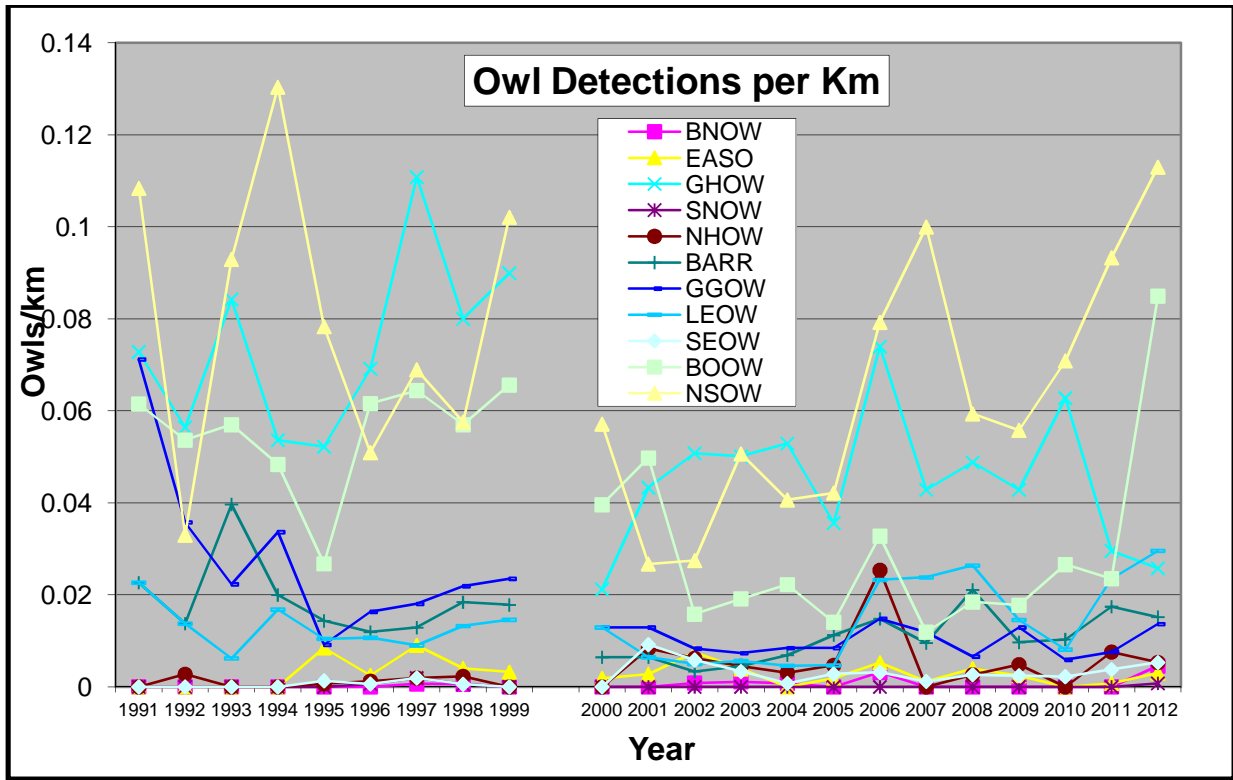
*Would I know
how to answer?*

Great Gray Owl Release

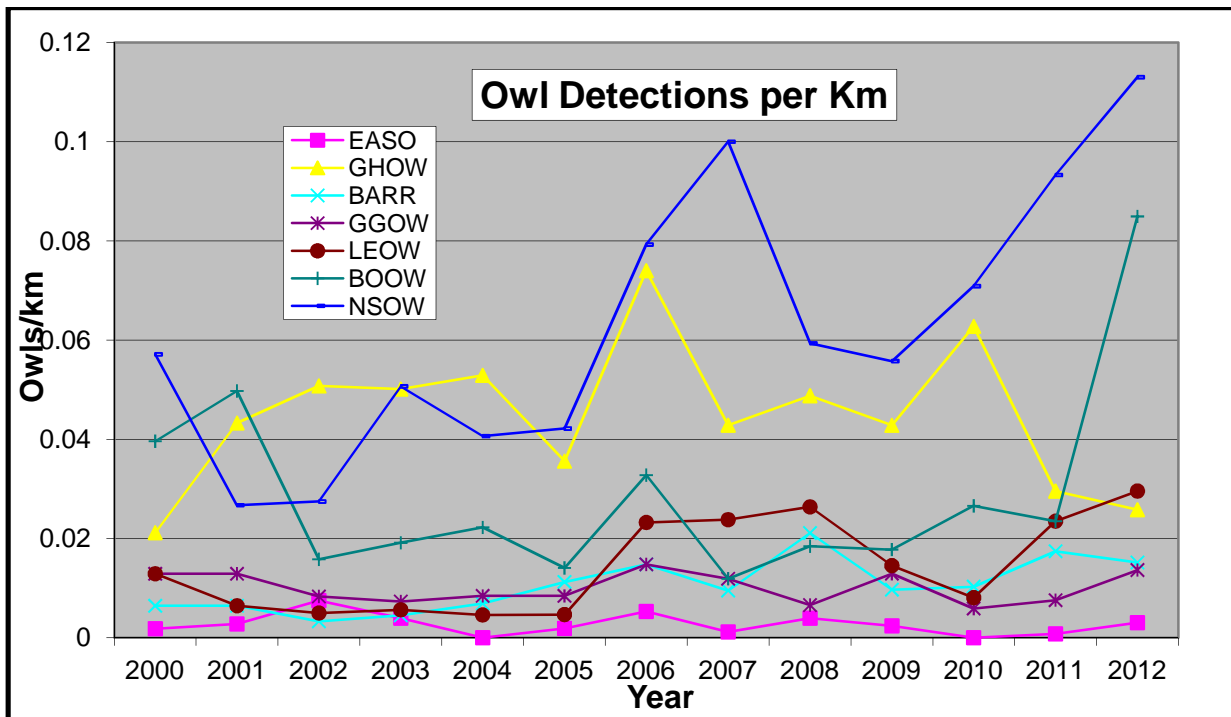
On a dark and stormy night Jim Duncan and I set off to release four Great Gray Owls on an ecological reserve just east of Libau, Manitoba. The owls had flown in on a West Jet plane from The Owl Foundation, an owl rehabilitation centre in Vineland, Ontario. All four owls were immature offspring of two permanently injured Great Gray Owls at The Owl Foundation. We parked our cars and started unloading the large pet carriers containing the owls. The release area was along a Great Gray Owl migratory path and was the perfect place to release the owls. I brought my keen, owl-loving sister Bryn along to help with the release. We both got the chance to hold and release one owl. I was surprised how light these large creatures were, but in fact their size is made up of a thick layer of feathers on a lightweight avian body. Jim pointed out different parts of the Great Gray Owl anatomy such as the asymmetrical placement of the ears to aid the owls in locating prey and showed us how to differentiate young from adult owls based on their feathers. The owls were surprisingly very calm and placid so handling was incredibly easy. It was truly magical to see them fly off into the night sky and I will always treasure the spectacular experience of releasing these Great Gray Owls.



For more information about the Owl Foundation please visit www.theowlfoundation.ca



The separation between 1999 and 2000 indicates a change in survey methodology. From 1991-1999, owl playbacks were used to conduct the surveys. Since 2000, owl playbacks were not used to allow data from Manitoba to be merged with owl surveys across Canada.



Manitoba Burrowing Owl Recovery Program

I received the opportunity to accompany Alex Froese in the field to learn about the Manitoba Burrowing Owl recovery program and to get some hands-on experience. The following is a summary of what I learned.

The two main goals for the Manitoba Burrowing Owl recovery program are:

- (1) To establish a re-introduction program using captive-bred Burrowing Owls in south-western Manitoba with the co-operation of private land owners. There is also a secondary goal of educating not only landowners but also the wider rural public.
- (2) To re-establish the wild Burrowing Owl population in southwest Manitoba.

The biggest challenge faced in the recovery program is working in the natural world with or against the elements. For example, flooding has had a detrimental effect on the Burrowing Owl population over the past couple of years.



Several factors are responsible for the rapid decline in Burrowing Owls that put them on the Endangered species list in Manitoba and Canada.

- (1) Habitat loss and fragmentation - For example, conversion of grassland and pastures to housing, agriculture, roads, etc.
- (2) Loss of burrows - Burrowing Owls occupy abandoned burrows made by other fossorial animals such as ground squirrels and badgers. If those animals are being exterminated (e.g. poisoning, shooting, etc.) then Burrowing Owls will have fewer sites to choose for nesting.
- (3) Decrease in prey abundance - 80% of the Burrowing Owl's diet is insects. The use of insecticides is detrimental to the Burrowing Owl population.
- (4) Increased predation - By avian predators (e.g. hawks) or by terrestrial predators (e.g. badgers).

The Manitoba Burrowing Owl recovery program is proving to be very successful. There were 6 offspring produced in 2011 by captive release pairs (several wild and captive release nests were lost due to flooding). In 2012, a whopping 18 offspring were produced (three times as many as last year)!

The program will continue next year in 2013 with the cooperation of Manitoba Conservation and Water Stewardship and the Assiniboine Park Zoo.

If you are interested in obtaining additional information about the Manitoba Burrowing Owl recovery program or if you would like to get on board with the Burrowing Owl survey in southwest Manitoba please contact Alex Froese at alexandra.froese@gmail.com or at 204-807-4668.



Acknowledgements

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- Alexandra Froese and Ken de Smet for all their work on the Manitoba Burrowing Owl recovery program.

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For more information, or if you participated in the 2012 owl survey and your name is not included above, please contact Jim Duncan!

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