

Bald Eagles in the Grand River Watershed

Winter 2007/2008

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Heather Wilson Photo



Heather Wilson Photo

Final Report
2007-08 Monitoring Season



Report Compiled by Art Timmerman & Bill Wilson
May 2008



Heather Wilson Photo

Thank You!!

The winter of 2007/2008 was the sixth winter of the co-ordinated bald eagle monitoring program from Zeller Drive in Kitchener downstream to Glen Morris and the third winter for the Glen Morris to Brantford reach of the Grand River.

Thanks to the many people – both our monitors and individuals with opportunistic sightings – who contributed data this past winter. As a result we have a much better picture of the use of the Grand River watershed by wintering bald eagles.

Prior to the arrival of the birds, Bill Wilson, Bob Scott and Marco DeBruin met with Karine Beriault and Art Timmerman of the Ministry of Natural Resources (MNR) to talk about monitoring priorities for the winter of 2007/2008. Based on these priorities it was decided to have six coordinated monitoring bald eagle “blitzes”. These blitzes involving up to 40 individuals at a time providing specific types of information that would not be obtained if everyone simply went out on their own.

Brant County

Glen Morris to Brantford reach

Coordinator - Bob Scott

Monitors -

Bill Brown

Paul General

Carol Ritchie

Courteney Brown

Tricia Givens

Bob Scott

Duane Brown

Aaron Ince

David Thompson

Adam Fernley

Doug & Judy Knowles

Tony Zammit

Dave Cheeseman

Greg Neale

Waterloo Region

Zeller Drive in Kitchener to the Glen Morris area and two upstream locations

Coordinators - Bill & Heather Wilson

Monitors -

Marilyn Armstrong

Larry Hubble

John Nother

Ron Bauman

Brian James

Doug Snyder

Jason Bracey

Andy & Kim Kelly

Andy Steinberg

Marco & Donna DeBruin

Ruth Kroft

Neil Taylor

Linda Dutka

Jeff Leader

Art Timmerman,

Randy Fowler

Michael McKeown

Wynn Watson

Jerry Guenther

Glenn & Barb Mockford

Clair Wehrle

Michael Holden

Anna Muss

Bill & Heather Wilson



winter of 1999/2000. By comparison, during the winter of 1999/2000, the bald eagles did not arrive until approximately one month later on December 19th (see Table 1).

Unlike the arrival date, no firm criteria have yet been established for determining the departure date of the birds. (It has been noted that departures generally coincide with the spring freshet.) The reason there are no criteria is because in the springtime, there are also migrant birds in the area that are not part of our regular overwintering population. Although these birds tend to be flying higher and if perching, tend to be in non-traditional areas, they are a challenge to observers.

Arrivals and Departures

Several years ago, Bill Wilson developed the criteria to be used to determine when the bald eagles had “arrived” back on their wintering grounds. He suggested that the birds have “arrived” when they are seen on three consecutive days or more flying at or below tree level, on perches or in hunting mode in areas where they have been seen in past winters. The birds may be seen in different locations within this three consecutive day period as long as they are seen in suitable habitat.

As we all know, the winter of 2007/2008 arrived early and this is reflected in the 2007 arrival date of November 23rd. This is the third earliest arrival date since we started keeping records of this during the

This year, at least two adults were observed on winter perches, flying low below canopy and exhibiting courtship behaviour during the week of March 31 – April 3 at four locations frequented throughout the winter. No eagles were reported from April 4-6. Therefore it seems reasonable to say that overwintering eagles left the area on or about April 4, 2008. This is the latest departure date we’ve seen so far.

The ‘arrival’ and ‘departure’ dates collected for nine winters are important as they are used by the MNR when making recommendations on the permitted timing of various activities that could affect bald eagle wintering behaviour.

Table 1: Arrivals and Departures - Bald Eagles in Cambridge/Kitchener

Winter	Arrival	Departure
1999 - 2000	Dec. 19	March 19
2000 - 2001	Dec. 18	March 28
2001 - 2002	Dec. 15	March 29
2002 - 2003	Nov. 16	March 19
2003 - 2004	Dec. 11	March 24
2004 - 2005	Nov. 11	March 26
2005 - 2006	Nov. 25	March 09
2006 - 2007	Dec. 6	March 26
2007 - 2008	Nov. 23	Apr. 4



Jason Bracey Photo

blitz that takes place on the fourth Saturday of March.)

One of the benefits of having coordinated bald eagle “blitzes” is that it allows us to get an estimate of the total number of birds using the area in the winter. In 2001 we were able to say there were “up to four” and in 2006/2007 we said there were “eight”. In the winter of 2006/2007 a total of 12 individual bald eagles were confirmed between Doon (Kitchener) and Brantford.

So based on these numbers we can say with confidence that the birds are increasing. This is consistent with a general increase in sightings of wintering birds through southern Ontario and nesting birds throughout the province. The bald eagle is clearly a recovering species.

How Many Eagles Were There?

For the winter of 2007/2008, an unprecedented total of 15 eagles were observed on the second bald eagle blitz (see Table 2). On half of the six blitzes at least 11 eagles were observed. (Two of the blitzes – February 9 and March 9 - were negatively affected by weather conditions.)

On the sixth and last blitz, six eagles were observed. (In some years, no eagles are observed on the last



Heather Wilson Photo

Table 2: Number of Eagles Recorded During Monitoring in 2007/2008

Monitoring Date (2008)	Number of Bale Eagles Observed
January 12	11 eagles
January 26	15 eagles
February 9	2 eagles (light steady snow poor visibility)
February 24	12 eagles
March 9	6 eagles (9 of the 15 sites in Waterloo were not monitored due to winter storm)
March 22	6 eagles (all in Waterloo Region)

Bird Studies Canada - www.bsc-eoc.org and follow the eagle tracking icons. 2007 monitoring report by Jody Allair <http://www.bsc-eoc.org/download/BAEARpt.pdf>

New Roost Sites

It takes a certain amount of detective work to find roost sites so congratulations to Bill Wilson and Bob Scott who each found one last winter!

There are now six known roost sites between Zeller Drive, Kitchener, and Brantford.

Based on the timing of sightings of bald eagles in several other areas, we suspect that there are other roosts in the watershed.

First-of-the-day sightings at specific monitoring sites last winter support the conclusion that at least two roost sites are being used annually and have been for several years.

However, since bald eagles are very sensitive to disturbance at night roosts and because of the importance of these areas for winter survival, we are not disclosing their locations.

Roost sites are areas where bald eagles spend the night. In most instances these areas provide well protected areas where the birds have more protection from the wind and resultant wind-chill and are not subject to overt human disturbance.

While bald eagles usually hunt alone during the day, at night a number of them will usually roost together. It is likely that the birds do not use the same roost site every night. They can alternate among several roost sites. The birds usually leave the roost shortly after dawn but may return anytime during the day especially if the weather is bad.



What Was Learned About Eagle Behaviour

It seems that whenever we go out to look at these birds we learn something new. But with these observations often come more questions.

Here are some highlights:

- ◆ there is a consistent use of some areas year after year; the same tree, even the same branch;
- ◆ in some areas the birds were seen sporadically, perhaps for a few days in a row and then not for a few weeks;
- ◆ many people saw obvious courtship displays among several of the birds;
- ◆ the food of choice for the eagles is fish; primarily carp and suckers;
- ◆ an adult was observed feeding on road-killed raccoon a far distance from the river;
- ◆ during the major thaw of early-January when the river rose to very high levels, many of the birds were observed in their regular perches. Perhaps they had switched from trying to catch large fish to trying to scavenge fish or mammals killed by the flooding;
- ◆ there seems to be a lot of variation in the behaviour of the birds and this may present some challenges when trying to defend some of the conditions of development near their habitats.
- ◆ Several birds were photographed this winter from a distance of 10 metres while other birds clearly flushed at distances of over 300 metres.

How the Data Have Been Used

The data collected has already been used by the MNR to comment on development proposals in Kitchener, Cambridge, Brantford and the Glen Morris area.

In Cambridge, the data will be used to map the Significant Habitat of Bald Eagle for the purposes of applying the Provincial Policy Statement.

Mapping of the Significant Habitat of Bald Eagle will also become the basis for the Regional Municipality of Waterloo's designation of their first Environmental Protection Area (EPA).

Finally, the data are provided to Bird Studies Canada who are compiling wintering sightings across the province.



Marco DeBruin Photo

When Will They Nest Here?

The last known nesting of bald eagles along mid-reaches of the Grand River occurred south of Glen Morris in the 1930s and early 1940s (R. Tilt and others). The nest was still present in 1949 but not active (Kitchener-Waterloo Field Naturalist Club). There has been an active nest near Dunnville since around 1995.

In early 2007 a new nest was found in southern Dufferin County. These birds successfully fledged one young. Early this year we became aware of new nests in northern Wellington County and near Caledonia. This latter nest is the first one in the Hamilton Study Area (HSA) in over 50 years!

We continue to be curious about why the birds have not taken up nesting in the areas where they are seen frequently in the winter, especially since there were five active nests on the Thames River to the west in 2007.



Mike Holden Family Photo

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