

Ontario Eastern Bluebird Society 1993 Fall Newsletter

Editor: Bill Read
165 Green Valley Drive, Unit 2, Kitchener, Ontario N2P 1K3

The OEBS Annual general meeting has been set for **March 26, 1994** at the Royal Botanical Gardens in Burlington.

Welcome to the 1993 OEBS Fall Newsletter!

Mean Temperature °C		
	Actual	Normal
September 1992	14.0	15.3
October 1992	1.2	3.7
November 1992	2.0	2.5
December 1992	-2.6	-4.0
January 1993	-4.7	-6.8
February 1993	-9.4	-6.4
March 1993	-3.3	-1.5
April 1993	5.9	5.8
May 1993	11.6	12.5
June 1993	16.7	17
July 1993	20.5	19.9
August 1993	19.9	18.7

Mean Rainfall (mm)		
	Actual	Normal
September 1992	114.6	74.7
October 1992	63.0	66.9
November 1992	157.8	70.8
December 1992	73.8	69.9
January 1993	106.8	61.9
February 1993	31.6	53.7
March 1993	38.8	72.7
April 1993	83.2	72.6
May 1993	42.4	76.3
June 1993	78.6	79.5
July 1993	111.6	90.4
August 1993	45.6	93.3

This year's field season (April - August, 1993) brought temperatures and precipitation that were closer to normal compared to 1992.¹

Early reports indicate fewer returning Eastern Bluebirds and lower reproductive success in 1993, especially on first broods. May's monthly mean temperature of 11.6°C was .9°C lower than the average of 12.5°C.² The first two weeks of May (1-12) were very warm with a mean temperature of 14.5°C for that period. This unusually warm period resulted in tree swallows nesting somewhat earlier than usual. From the 13th to the 27th the mean monthly temperature of 12.5°C was only exceeded on two days. This probably was a factor in reports of dead EABL nestlings on first broods as the cold weather did not stimulate usual insect activity during this period.

Note: Early reports indicate tree swallows did exceptionally well in 1993 after a disastrous year in 1992 with few reports of nestling mortality in 1993.

Lower numbers of returning EABL's in 1993 were probably attributable to the following factors:

1. EABL reproductive success was greatly affected by much lower than average temperatures and above average rainfall in 1992.³ This meant that fewer young birds migrated south in the fall.
2. Much lower than usual temperatures in February and March may have also been a factor in higher than normal mortality among over wintering EABL's, especially in Ontario and areas to the south of the Great Lakes.

¹Mean temperature and mean rainfall chart from 1992 Fall OEBS Newsletter

²Temperature and rainfall recorded at the Waterloo-Wellington Environment Canada Weather Office

³See 1992 Fall OEBS Newsletter, Page 1

December 1992 and January 1993 were much warmer than usual (see chart) but February, with a monthly mean temperature of -9.4°C , was 3°C colder than usual and March, with a monthly mean temperature of -3.3°C , was 1.8°C colder.

February, with a mean temperature of -9.4°C , was the coldest since 1979 (-11.9°C) and 1978 (-11.7°C) It is interesting to note that the winters of 1978 and 1979 resulted in higher than normal mortality in populations of overwintering EABL's throughout much of Eastern North America. It was at this time that concern over declining numbers of all three bluebird species that the North American Bluebird Society was founded by Lawrence Zeleny in 1978. March 1993 was the coldest since 1984.

This does not give us the whole picture as most of the extreme cold came during the last two weeks of February and the first two weeks of March. From the 17th of February 1993 to the 28th, the average daily temperature was only warmer than the average monthly temperature on one day - February 22. For this period the average was -12.4°C compared with a normal of -6.4°C for the month.

March was also cold with the daily average temperature only exceeding the monthly mean on three days from March 1 to the 19th. The average over this period (1 - 19) was -5.5°C compared with a normal monthly mean of -1.5°C .

This extreme cold in February and March would have made it very difficult for EABL's to overwinter successfully in Ontario and probably resulted in greater than usual mortality in overwintering populations just south of the Great Lakes in the eastern United States.

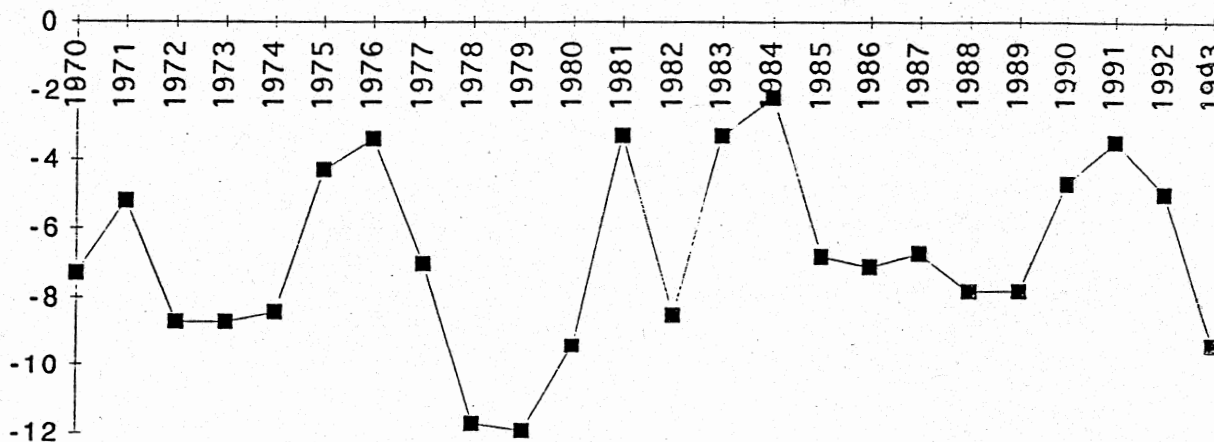
3. The great blizzard of '93 which swept up through the southern United States and east coast, March 12-15, may have resulted in higher than normal mortality among overwintering EABL's from Ontario depending on how far south they migrated. Many of these EABL's would have already started their northern migrations to summer breeding grounds further north and may not have been caught in the full fury of this storm. We will be in a better position to tell when we start receiving 1993 OEBS Nestbox Reports indicating the number of returning EABL pairs in 1993.

Resident populations, however, of Eastern Bluebirds in the states hit by this storm would have suffered much heavier than usual winter mortality.⁴ (more on this in the next newsletter)

In summary, early reports indicate EABL populations are somewhat lower than 1992 levels because of the factors mentioned above. We will be in a better position to answer this question when we start receiving 1993 OEBS Nestbox Surveys.

Monthly February Mean Temperature $^{\circ}\text{C}$ 1970 -1993

(Recorded at the Waterloo-Wellington Environment Canada Weather Office, near Kitchener, Ontario)



⁴Snowstorm Deadly for Bluebirds in Alabama. John Findlay, 111 P140-141 *Sialia* Autumn 1993 Volume 15, Number 4

The EABL is a weather sensitive bird and unusually cold weather both during the breeding season and on their wintering grounds will be the number one factor resulting in greater than normal declines in this species. Since the population was at a very high level in 1991, I expect that if weather in the next one or two years is nearer to normal, the population will quickly recover to 1991 levels.

OEBS Annual General Meeting

The OEBS Annual General Meeting has been set for Saturday, March 26th, 1994. Please set this date aside on your calendar. The meeting will be held at the Royal Botanical Gardens in Burlington, Ontario.

We have confirmed four speakers to date:

- *Kevin Berner* from Cobleskill, New York, will be joining us again to review the results of his studies looking at nestbox design and predator proofing nestboxes.
- *Bruce Duncan* will be discussing opossums and their northward expansion in Ontario. Bruce will help to clear up any misinformation you may have about opossums and their role or lack of one in EABL ecology.
- Your editor, *Bill Read*, will talk about weather from the great storm of 1897 to the blizzard of 1993 and its effect on EABL populations over that period.
- *Ted Chesky*, an Outdoor Educator with the Waterloo County Board of Education, will discuss Black-capped Chickadee 'ecology'.

Notes on EABL Populations and Distribution

I just finished reading a very informative article in *American Birds* pointing out the exquisitely subtle differences in shape, behaviour and markings which distinguish Western, Mountain and Eastern Bluebirds by Ken Kaufman.⁵

Kaufman notes that the differences in shape shown by Mountain Bluebirds are often more evident than colours or markings at a distance.

In the same issue was an interesting story about the reintroduction of military macaws in Guatemala. During the reading the author mentioned a small flock of Eastern Bluebirds that landed on the macaw enclosure (the S.S. Fulva race from Mexico). This EABL population extends as far south as the pinelands of Nicaragua.

The Eastern Bluebird is the most widespread of the three bluebird species and has been sighted as far north as Moosonee on Hudson's Bay. For Canadian distribution, refer to Birds of Canada W. Earl Godfrey, National Museum of Natural Sciences.

Lloyd Tamen from Matchewan wrote to me on November 13, 1992 with some information about EABL's both in and around Matchewan and further north. (I would suggest getting a copy of a northern Ontario road map before reading further.) Lloyd mentioned that cold weather in late June, 1992 and in mid July was the main cause of nest failures. Most of Lloyd's boxes are located in forest clear cuts and that once the area becomes overgrown, the boxes have to be moved to newer clear cuts as bluebirds will not use them. At least five pairs nested in town including one pair in his backyard for the first time in at least fifteen years. One pair nested near Elk Lake, 25 miles south, four pair nested near Cochrane and one pair nested at Kapuskasing (at his sister's).

On a trip from Cochrane in mid July, Lloyd saw bluebirds at least three times at small towns along the road to Hearst and some in the area of Fort Frances (Thunder Bay).

The OEBS values information like this because it gives us a clearer picture of both distribution and population size. Thanks, Lloyd, and keep up the good work.

Banding Recoveries (Update)

In the spring of 1991 I banded five young EABL's from a first nesting in Box 11 in the Vanymeren orchard. (Four females and one male fledged around June 10, 1991.) The orchard is located just northeast of Paris, Ontario, along the Grand River.

⁵Ken Kaufman, "The Practiced Eye Bluebirds," American Birds Spring 92: Volume 46 No 1

During the 1992 field season, four of the five were retrapped in apple orchards, two in Vanymeren and two in Brubacher about 7 km to the east. A total of 28⁶ young were produced by these 2nd year birds and their mates. (See Nest Records top of next page.)

1992 Nesting Results EABL

Sex	Band No.	Eggs	Fledged Young	Orchard	Nestings
*F	2021-79116	13	9	Brubacher	3
F	2021-79117	8	2	Brubacher	2
F	2021-79118	7	7	Vanymeren	2
M	2021-79119	<u>11</u>	<u>10</u>	Vanymeren	<u>2</u>
		39	28		9

* As stated in the 1992 Fall Newsletter F2021-79116 nested three times producing nine fledged young. (The first time I have documented this by recapturing the female at each nesting.)

In 1993 I did not encounter any of the above birds but did retrap F2021-79115 in Vanymeren. This means that all five nestlings have been retrapped from 1 brood. It is highly improbable for all five young to survive their first winter but to eventually retrap all five is even more unlikely. Hopefully, in 1994 I will encounter some of these birds again.

Nesting Record for F2021-79115 1993

Nesting Attempt	Eggs	Box	Fledged Young	Orchard	Explanation
1st	6	VA30	4	Vanymeren	Cold weather of May 20-22
2nd	5	VA30	-	Vanymeren	- possible H. Wren interference H. Wren nest over 5 EABL eggs

1993 OEBS Nestbox Survey

While analyzing the 1992 OEBS nestbox surveys, I found about 10 - 15% of the surveys had the pages mixed up during the printing. If you happened to receive a newsletter with the pages mixed up - sorry! I have changed printers so hopefully this will not happen again.

Thank you to all who sent in nestbox surveys. Because of the weather related problems of the last two years it is extremely important that as many as possible nestbox reports are sent in, so that we can more accurately document any changes in the Ontario EABL population.

The 1992 OEBS Nestbox Report lists the names of all survey respondents by county. If you know of someone in your county who has an EABL trail and whose name is not on the list, would you please photocopy the survey sheet and give it to them to send in. I would also appreciate receiving the name and address of this individual plus the county. (Any size trail can be considered, even one or two boxes.)

Please make sure to include the number of returning pairs of EABL's on your trail as best you can to give us a better idea of increases or declines in Ontario's bluebird population. Any additional information can be written on the side of the survey or included on a separate page. Each year's OEBS survey is kept for future analysis and more information is always useful. An example of this is the letter that Lloyd Tamen sent me from Matchewan with details of additional nestings in northern Ontario. Information about other species is also useful, i.e. Tree

⁶In the 1992 Fall Newsletter, I stated that 32 young fledged that should have read 28 as above.

Swallows, Purple Martins, etc. Reports of TRSW mortality on 1992 surveys (i.e. dead nestlings) helped to give us a clearer picture of the extent of 1992 TRSW nestling mortality.

Thanks again to all those who have sent in OEBS surveys over the past six years!

Eastern Bluebird Fall Migration

Depending on where their summer breeding areas are located, Ontario's Eastern Bluebirds migrate south in the fall using a number of different routes. Many follow the shorelines of the Great Lakes. Eastern Bluebirds are diurnal migrants and tend to travel shorter distances influenced more by weather than anything else. Eastern Bluebird migration in southern Ontario usually starts mid to late October and continues well into late November. In the north the migration is much earlier from late August to mid to late September. From August 31 to November 5, 1991, 1348 Eastern Bluebirds were counted as they migrated past Holiday Beach.⁷ It is quite probable that many more EABL's migrated past Holiday Beach after November 5, 1991. The fall of 1991 was unusually warm (see Fall '92 newsletter) and this resulted in record numbers of EABL's on the Ontario Christmas bird counts (284). With 102 EABLs counted at Point Pelee and another 96 at St. Catherine's, it probably indicates that they were delaying their migration somewhat both through the Niagara peninsula to Buffalo and south and along the Lake Erie shore line to Windsor and south. (The Spring '94 Newsletter will contain an article on Ontario EABL migration routes.)

North American Bluebird Society

I would recommend for all nestbox operators to become members of NABS (address below). Their Tenth Anniversary Edition 1988, has compiled some of the best articles written about Bluebirds over a ten-year period. I would recommend it highly, as I would recommend a subscription to the NABS.

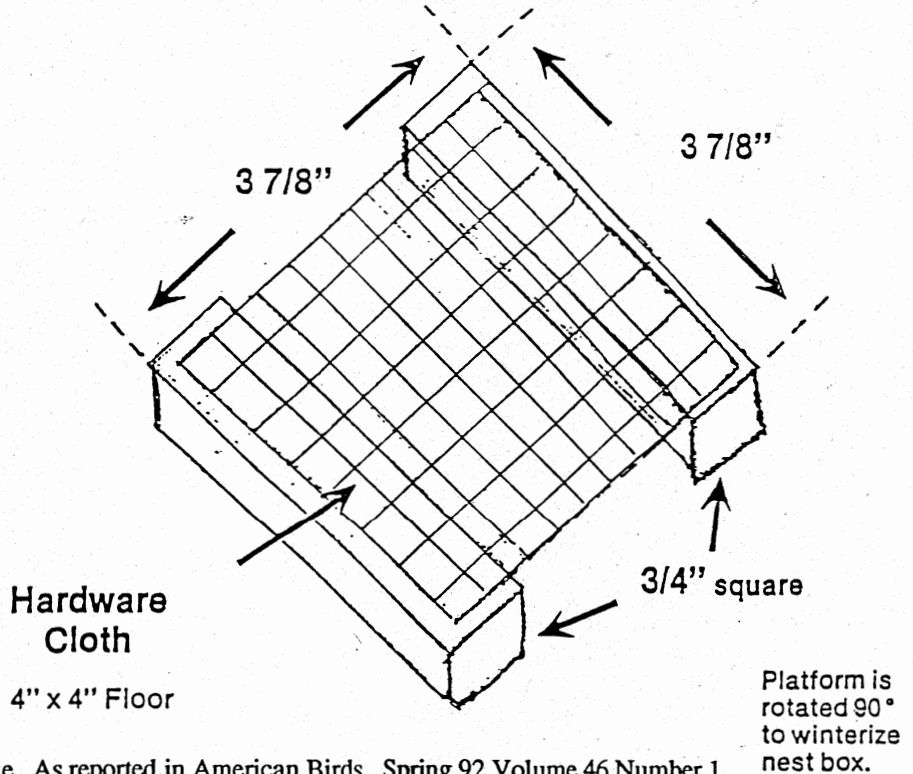
North American Bluebird Society, Box 6295, Silver Spring, Maryland, U.S.A. 20906-0295
 Membership - Regular: \$15.00 U.S.

Request for EABL Articles by Members of OEBS
 If you have an article you would like published in our newsletter, please send it to the editor, Bill Read, 165 Green Valley Drive, Unit 2, Kitchener, Ontario N2P 1K3

The following article, *Bluebird Nest Box Seasonal Conversion* by Don Macbeth is reprinted from *Sialia*, Summer 1993, Volume 15, Number 3.

I am a new volunteer in Brandywine Creek State Park, a Delaware park just north of Wilmington. I was asked to assist in the bluebird program which included building some new boxes and upgrading others with materials supplied by the park superintendent. I read books by Lawrence Zeleny as well as Donald and Lillian Stokes. Instead of building roosting boxes (as well as nest boxes) it appeared that winterizing boxes would be the best way to help wintering bluebirds. Armed with information from the books and several articles in *Sialia* (Bullerman's box 14(4): 125-127 plus Darling and Thompson-Delaney's recommendation of hardware cloth platforms beneath nests to reduce blowfly infestation from 87 to 32 percent 15(1):13-16), I set about building nest boxes.

Figure 1. Nest Box Platform 90° Rotation for Summer and Winter



⁷Holiday Beach is located near Windsor on Lake Erie. As reported in *American Birds*, Spring 92 Volume 46 Number 1

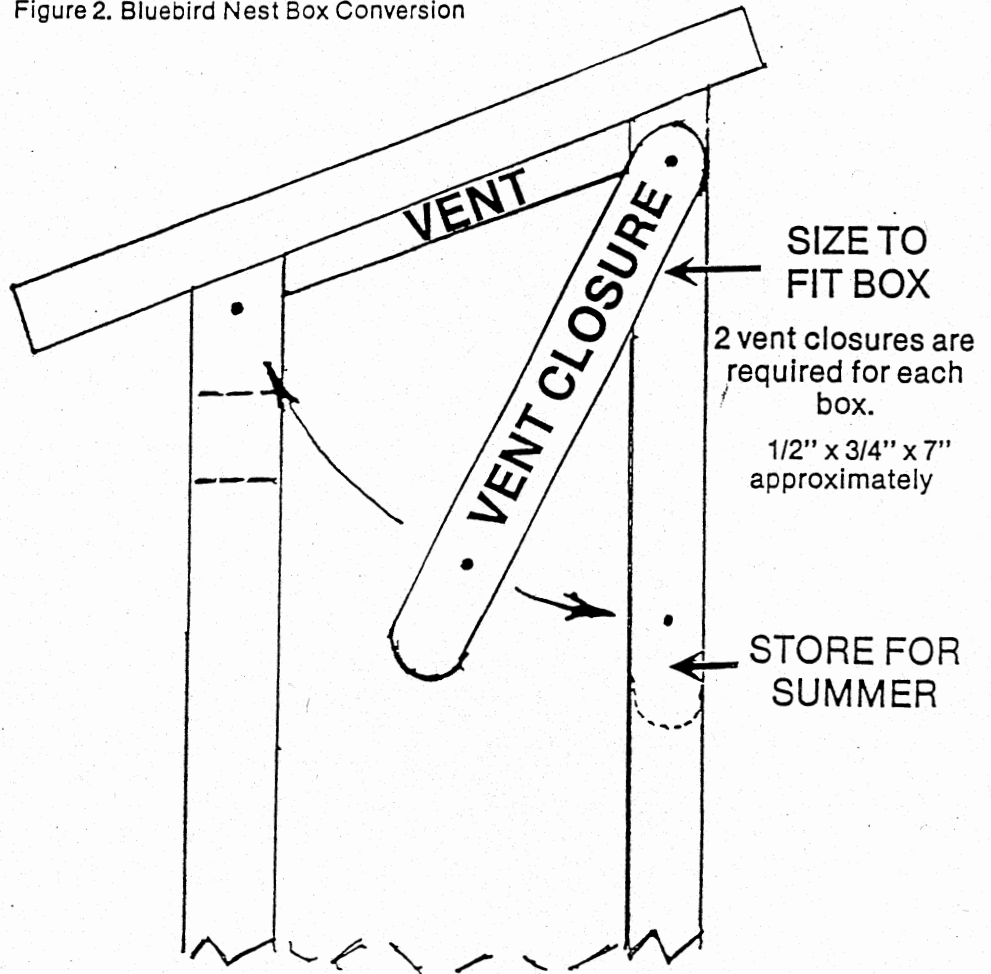
The park superintendent and I decided to build deep side-opening boxes with a 4 x 4 inch floor. Beyond that I was on my own. The box floors are now 4 x 3 1/4 inches with 3/8 inch slots running from front to rear. Each roof extends 4 inches beyond the front and 3/4 inch on each side.

The nesting platform was next. Two pieces of 3/4 x 3/4 x 3 7/8 inch wooden strips with hardware cloth attached between them formed the platform (Fig. 1). The raised platform serves to provide extra ventilation under the nest during the summer. In the fall, it is rotated one-quarter turn (90°) which closes off the 3/8 inch openings at the top of each side under the roof overhang. By installing a 1/2 inch thick x 3/4 inch wide x 7 inch long wooden strip over each vent opening and using a screw at the rear as a pivot, the strip can be moved to winterize the box (Fig. 2). It is fastened in front with a second screw. The dimensions of the vent closure can be altered to fit the box style being built. I have recently built two Peterson boxes and the closure works well. The vent closure is self-storing. During the summer it is swung down and placed parallel to the back of the box fastening it with the second screw.

This all-seasons box can be converted in less than a minute which saves time and reduces the extra materials a monitor might have to carry. Best of all, it produces a cool or a warm unit for the bluebirds depending on the seasonal needs.

Editor's Note: Nestboxes should always face southeast to avoid the strong northwest winds and storms during the breeding season. This is a great idea for first brood nestings to keep cold drafts and rain out of the box. The vent(s) could then be opened when it gets warmer in June. The extra warmth provided by closing the draft vents could make the difference between a successful or unsuccessful nesting.

Figure 2. Bluebird Nest Box Conversion



Bereavement

Doreen Stahle passed away on May 14, 1993. Our membership will miss her involvement in the OEBS. Doreen acted as membership secretary treasurer, and helped organize past AGM's.

Ontario 1993 Eastern Bluebird Nestbox Survey

Name _____

Address _____

_____ Postal Code _____ Phone (____) _____

County where bluebird boxes are located: _____

If more than one county, number in each: _____

How many bluebird boxes did you monitor? _____ Total number of boxes on your trail? _____

How many times did you check your trail during during the nesting season? _____

Number of boxes used successfully¹ by Eastern Bluebirds? _____

Number² of successful Eastern Bluebird nestings (broods): _____

Number of young EABL's fledged³: _____ Unsuccessful Eastern Bluebird nestings⁴: _____

1. "Used successfully" means at least one bluebird was fledged. More than one nesting per box equals one box used successfully.
2. Include all Eastern Bluebird nestings in each box; for example, two broods raised in one box equals two successful nestings.
3. A young bird is said to be fledged when it leaves the nestbox on its own power.
4. Include in this category if a nest was built and eggs were laid but for some reason no Eastern Bluebirds fledged.

Blue White

Number of Eastern Bluebird eggs laid in boxes: _____

Number of EABL eggs known to have hatched: _____ Number of EABL eggs which did not hatch: _____

Number of eggs for which fate unknown: _____

Description of Box

Top opening: _____ Side Opening: _____ Front Opening: _____

Depth from bottom of hole to floor: _____ Inside dimensions: _____

Wood type and thickness: _____ Colour of box: _____

What sort of predator protection was used, if any? _____

Successful Nestings of Other Species:

House Wren: _____

Tree Swallow: _____

Tree Swallow Unsuccessful Nestings: _____

Black Capped Chickadee: _____

House Sparrow: _____

Banding Totals:

Eastern Bluebird: _____

Tree Swallow: _____

Name of Bander: _____

Number of years you have maintained a nestbox trail: _____

What methods were used to discourage House Sparrows? _____

Date of first Eastern Bluebird sighting in 1993 _____

Date of last Eastern Bluebird sighting in 1993: _____

Number of pairs of EABL's represented by your nestbox trail: _____ Has the population of EABL's in your area increased or decreased over the past 5 yrs.? ___ from 1992? _____

Number of pairs of Eastern Bluebirds in your area nesting in natural cavities _____

Where are your boxes located? Please circle:

Pastureland, open field, cereal crops (corn, barley, oats, wheat, etc.), hedgerow, woodland edge, railway tracks, lawn (any mowed area, park, golf course), cemetery, roadside, orchard, garden

If eggs or nestlings were lost, indicate the importance of the presumed cause, (Number - "1" for the most important to "8" for the least important):

Pesticides/herbicides: _____ Humans: _____ Raccoons: _____ House Wrens: _____

House Sparrows: _____ Squirrels: _____ Snakes: _____ Blowflies: _____

Weather: _____ Other: _____

Would you be willing to share your trail and experiences with others? _____

*
*
*
*
*
*
*

Suggestions for changes in survey or overall comments:

Did you receive C.W.I.P funding?
Yes: _____ No: _____

Mail to: William F. Read
165 Green Valley Dr., #2,
Kitchener, Ontario N2P 1K3