

## Fall-Winter 2003 Newsletter

Welcome to the fall-winter 2003 OEBS newsletter. The AGM is set for Saturday March 15th, 2003 at the Royal Botanical Gardens in Burlington. The afternoon keynote speaker will be Robert McCaw, one of Canada's premier wildlife photographers. Members and club nest box reports will be featured in the morning session. The OEBS Conservation Award will be awarded in the morning session. Last year's recipient was Bob Burton, from Muskoka who has maintained a nestbox program in that area for many years. The bucket raffle will be continued. Any items you have to donate for this please bring them in the morning.

The 2001 nestbox report will be sent out some time in March or April. The 2002 nestbox questionnaire is included in this newsletter.

David Philips, senior climatologist for Environment Canada described the weather in 2002 as wacky. It was the winter (2001-2002) that went missing (January 2002 was 5.2oC warmer than normal, and February 2002 was 3.6oC warmer than normal), the spring that felt more like winter, the summer that overstayed and the fall that went missing. At time of writing, January 2003 has been below normal with bitterly cold weather and high winds throughout. What a difference a year makes! Let's hope that overwintering EABL's were able to make it through this bitterly cold 2003 January weather.

### 2002 Breeding Season Summary

Weather is without a doubt the major factor affecting bluebird reproductive success and survival.

After a mild winter, (Dec. Jan. Feb), the second warmest on record, spring was much colder than normal. May was 2.9oC colder than normal. Most of the nestling mortality occurred during May. Two periods were particularly troublesome, May 10-13 and May 16 to May 21. Most of the early nests failed during this last period. May 16 was not particularly cold but 30.5mm of rain made it difficult for bluebirds to find insects. On four of the nest five days, from the 17th to the 21st, temperatures at night were below freezing and during the day, never went above 9.3oC. On my nestbox trail, I counted 81 dead nestlings during this period. Don Wills had 75 dead young, mostly during this same period. Early nesting EABL's were particularly hit hard. (Weather data compiled at the Waterloo Wellington Regional Airport Environment Canada Weather Station)

Most trail monitors reported heavy nestling mortality during this early period.

Fortunately, the rest of the summer was hot and dry. EABL's nested very successfully with many nestings later in August. Very little nestling mortality was reported during this period. Despite record early losses, breeding success will probably be about average because of the success with 2nd broods. Don Wills fledged 557 EABL's (his 3rd highest total) despite losing 66 young to cold weather on first broods.

During extremely cold periods, bluebirds will feed earthworms to their young to keep them alive. Bluebirds are in the thrush family, but unlike robins, worms affect the digestive tract making it unable to produce a healthy white fecal sac which can be removed by the adults. This excrement builds up on the bottom of the nest. The young roost on it making it much colder than a clean straw nest. Under normal conditions, bluebirds remove every fecal sac from the nest. Tree swallows usually do not remove fecal sacs the last 1-2 days.

During this early spring period, adult EABL's were found dead in nestboxes. Don Wills found 5 dead adults, three in one nestbox. This is an unusual occurrence as bluebirds will overwinter in southern Ontario successfully. They can succumb when they are additionally taxed while incubating eggs or feeding nestlings when very few insects are available. By late spring, most of last year's berry producing trees have been stripped clean by the other birds. Eastern bluebirds will eat sumac later in the winter and early spring.

A male and a female EABL were found dead in a nestbox near Alberton on May 21, 2002. Another pair had built a nest over the top so they were entwined in the nest material. Don checked every box in very early spring so these bluebirds died during May. The female, (1461-69577) was banded by me (Bill Read) as a female nestling at Box 16 in the Carluke Inksetter orchard on May 17, 1997 making her 5 years old. She was retrapped in 2001 at the Sarabura orchard at box 24 on May 25, 2001. She produced 2 broods of young that year. Where she was found dead was about 1 Concession Road south of this orchard. The female was originally banded about seven to eight miles to the east at Carluke. During her life she stayed very close to her hatching location. Very few EABL's reach 5 years in the wild.

About 1 week later Don found another female dead on top of the nest in the same box. The cause of this adult mortality is only speculation. Don also found 2 other dead adult EABL's, a male in an empty nestbox and a female found dead over a nest brooding 3 young that were also dead.

## Reports from the Field

Denis Lewington reported only 92 fledged young from his Bruce Peninsula trail down from a high of 202 in 1998. Sheldon Anderson who twins all his boxes with the help of Dave Raynor did not do as well in 2002 mainly because of the bitterly cold spring.

Glen Lundy from Welland lost two nests to house sparrows and one to weather and said 2002 was no different than the year before. Norm Shantz reported that it was not a good year mainly from losses on first broods. Robert Burton said that cold weather in early spring caused losses but good second broods made up for the early losses.

## Cowbirds, Bluebirds and Tree Swallows

Each year I find cowbird eggs in EABL nests. Eastern bluebirds have one of the highest rates of cowbird parasitism among cavity nesting passerines.

In 2002 at least six and possibly seven nests were parasitized. Most of the time I remove the cowbird eggs. In one instance I did allow the cowbird to hatch and live for a few days before humanly destroying. During this time I weighed the young and took pictures.

EABL clutch sizes in the parasitized nests are on average smaller than normal. In most nests that were parasitized, I usually found eggs that were missing or punctured. Clutch size was only 3.5 EABL eggs per nest. I suspect that cowbirds either intentionally or accidentally puncture some of the host's eggs (see chart cowbird parasitism), thus reducing the clutch size. This strategy maximizes success by reducing nestling competition for food, but still allowing the host to fledge some young for later parasitization.

## Cowbird Parasitism 2002

Location (orchards)	Cowbird Eggs	EABL Eggs	Comments	Fledged EABL's
Bru-Box 21	3 removed	4 blue	All 4 eggs viable – nest unsuccessful, cause not determined	0
Bru-Box 200	1 removed	3 white	2 of 3 with puncture marks, nest abandoned	0
Bru-Box Ke22	1 hatched, removed	3 blue	3 fledged	3
Bell-Box 6	1 layed with 1st EABL egg	5 blue	Only 2 eggs viable, 3 dried up, one with some embryo development	2
Bell-Box 9	1 removed	2 blue	1 EABL egg with puncture mark, nest abandoned	0
Bell-Box 14	1 removed	4 blue	4 fledged	4
<b>TOTAL</b>	<b>8</b>	<b>21</b>		<b>9</b>

## Tree Swallows Raising Bluebirds and Cowbirds

In 2002, I had a tree swallow nest with 5 TRES young and 1 EABL young. This has never happened before on my trail. On my first visit to this nestbox I recorded an EABL nest but no eggs. When I returned about one month later, there were 5 TRES young and 1 EABL young. All were very healthy. The EABL pair had moved to another box, but must have layed at least 1 egg before the tree swallows took over. When the young EABL was about 14 days old, I removed it and took it to a rehabilitator for later release. At that time only 4 TRES's were still alive (all 4 fledged), and I suspect the young EABL was taking more than its fair share of food (it was very healthy). Adult EABL's feed their young for 2-3 weeks after fledging. With tree swallows, the young are only fed for 1-2 days after fledging as they fly extremely well after fledging.

The other problem was that this young would not identify itself as a bluebird. She did incredibly well at the rehabilitators, but unfortunately a window was left open while they were left in a room to fly around and she flew out and was never located. At this point, she was only 22-23 days old. Tree swallows make excellent foster parents as they feed entirely protein-rich insects to their young. The need to place orphaned young usually occurs in May when tree swallows are still incubating eggs. I have never tried this, but in some cases it might work if they were the same size as the tree swallow young and there were only a few tree swallows.

One tree swallow nest was also parasitized by cowbirds. When I checked this nest, there was one cowbird egg and 3 tree swallow eggs. All hatched and fledged. The cowbird hatched first and left the nest after about 12 days. The tree swallows fledged around 20 days. Tree swallows do not make good hosts for cowbirds as they would not feed it after fledging.

## Christmas Bird Count

Listed below are the 100th Audubon Christmas Bird Counts for Ontario and Michigan. A total of 622 EABL's were reported in Ontario (a record) mostly from Carolinian areas near Lake Ontario and Lake Erie. The Michigan count recorded a total of 2121 EABL's with many concentrated around the Detroit area. I suspect that some of these EABL's are from Ontario and have crossed over from the Windsor area on their way south. A colour banding project initiated in Ontario would help to track these migration routes. I will be organizing this in the near future.

Most eastern bluebirds in Southern Ontario follow the north shores of Lake Ontario and Lake Erie on their way south in the fall. They cross over into the United States near Windsor at the west end of Lake Erie. The highest one-day count was recorded at Holiday Beach on October 27, 1991 with 825 EABL's flying over. Holiday Beach is located about 10 km from Windsor on the Lake Erie shoreline. EABL's would also cross at Sault Ste. Marie and migrate south through Michigan. Others would travel along the west shore of Lake Huron until they could cross over into Michigan when they reached the south end of Lake Huron.

Christmas bird counts give us some idea of population trends over time. In 1985, only 42 EABL's were reported in Ontario and 158 in Michigan on the Audubon Christmas counts (85th counts – December 15, 1984 – January 2, 1985). There were fewer counts and counters in 1985, but this alone does not account for the huge increase.

The November 8, 2002 Hamilton Naturalists Club fall bird count recorded 322 EABL's in the Hamilton area (a record by over 100). On the most recent Hamilton Boxing Day Christmas bird count, 52 EABL's were seen (also a record). These are both records and tell us that Eastern Bluebirds have increased substantially in Ontario over the past 10-15 years. Warm weather and well placed properly managed nestbox trails have contributed greatly to this increase.

### 100th Audubon Christmas Bird Count for Ontario December 16, 1999 to January 3, 2000

Location	# of EABLs
Blenheim	14
Cambridge	62
Cedar Creek	102
Fisherville	8
Hamilton	23
London	7
Long Point	26
Niagara Falls	42
Port Colborne	13

Prince Edward Point	3
Point Pelee	CW
Presqu'île P.P.	18
St. Catherines	36
St. Thomas	57
Strathroy	6
Thousand Islands	13
West Elgin	117
Warton Mountain Bluebird	1
Woodhouse Township	75
<b>Total</b>	<b>622</b>

**100th Audubon Christmas Bird Count for Michigan  
December 16, 1999 – January 3, 2000**

<b>Location</b>	<b># of EABL's</b>
Ann Arbor	119
Anchor Bay	29
Allegan State Game Area	61
Abion	80
Berrien Springs	59
Battle Creek	63
Bay City	1
Clinton	86
Coloma	28
Detroit	218
Dowagiac	36
Detroit River	5
East Lansing	107

Flint	23
Genesee County	76
Gobles	26
Grand Rapids	120
Hartland	56
Holland	5
Hudsonville	34
Kalamazoo	89
Lapeer County	200
Manistee	3
Mecosta County	10
Midland	13
Mount Pleasant	19
New Buffalo	28
Niles	31
Port Huron	45
Pontiac	198
Rockwood	19
Tuscola U.F.A.	1
Waterloo State (Rec. area)	100
Western Macomb County	133
<b>Total</b>	<b>2121</b>

### Boxes for Sale

George W. Coker has been very busy this past fall and winter building bluebird nestboxes. These are excellent quality boxes, from \$5.00 - \$7.00 each. George can show you how to mount them. Some T-bars may be available.

Contact George at 1-905-643-2033, 1330 Hwy 8 Winona, ON L8E 5K6

## Greasing Poles to Prevent Raccoon Predation

Nest failures caused by raccoons continue to be a major problem in most years and usually result in the number one presumed cause of nest failure on most nestbox surveys (except in years where weather is the number one presumed cause), raccoons then rank second. Failures caused by raccoons can be more devastating than weather related failures. If the failure is caused by weather, the EABL pair can renest but raccoons very often kill the incubating female, making renesting impossible.

Nestboxes mounted on posts can be especially vulnerable and some bluebirders now recommend moving the boxes every two or three years to prevent predators such as raccoons from becoming familiar with their location. Once raccoons learn the source of a meal they will revisit the box on a regular basis. If predation occurs in a newly erected nestbox, that box should be moved immediately to a new location and put on a greased T-bar or pole with a raccoon guard.

Since the idea behind bluebirding is to provide a safe, predator-proof nestbox for EABL's, many nestbox operators are now placing boxes on either greased T-bars or metal poles with special raccoon cone guards. A thorough application of grease on a T-bar or pole has proven to be almost 100% effective in keeping raccoons from climbing them. One application in the spring should last for the entire nesting season and if applied properly will cause very little pollution at the T-bar or pole as the grease does not slide down. Some grease may have to be added the next year and any excess grease can be scraped back into the original container, mixed up and reused again.

The Ontario Eastern Bluebird Society recommends placement on a T-bar that is greased or a metal pole with a special raccoon cone guard. Brushy fence rows are the worst possible place to put a bluebird box because they are highways for EABL predators such as raccoons, red squirrels, grey squirrels, weasels, snakes and possibly opossum.

### West Nile Virus Hits Area Bird Population

By Christina Trapani

(reprinted from the Fall 2002 Indiana Bluebird flyer, Volume VI, No. 4)

At last count 343 people in Michigan were reported infected with the West Nile virus. When the first human case of West Nile virus was discovered in the United States in 1999 it wasn't immediately linked to migratory birds until birds in captivity and in the wild were found dying off in the same regions where human cases were being discovered. Then crows were the birds to watch.

In May of 2001, the first infected crow was discovered in Michigan. More and more resident bird watchers are looking out their windows and noticing the population of many different species of birds dwindling.

Dody Wyman of the River Raisin Raptor Centre in Manchester said that right now there are more questions than answers about the West Nile virus and its relation to the decreasing bird population. Since August, Wyman, who works primarily with sick or injured raptors or birds of prey, has taken in 20 raptors with what she describes as "West Nile virus like symptoms." Of the 20, she said she's seen about 75% mortality rate and only one great horned owl, she said, appears to be releasable. She hesitates to release it because new findings indicate that the virus might cause detached retina in birds, leading to blindness. "I won't be releasing any birds that come with the virus symptoms until we know more about it." she said.

She has received calls from people concerned about the small bird population. “A lot of people who have bird feeders are calling and saying they used to get 50 birds and now there are only 5. I can’t speak about the little birds so much, but there is no question that there are fewer birds,” said Wyman.

She recently attended a bird rehabilitation conference where a Kentucky veterinarian spoke about the epidemic. “There were an awful lot of unanswered questions. As far as how or why the effect is so profound on the bird population, I don’t think there is an answer,” said Wyman. While she worries about the bird population and welfare of birds, she notes that the virus was detected in Asia in 1937 and bird populations in those areas have survived.

For her birds that she has in captivity and uses for educational purposes, she has screened in all of their cages and has begun treating them with the equine vaccine. There has not yet been an avian vaccine developed. “We are not sure the equine vaccine works on the birds, but it doesn’t hurt them,” she said.

In retrospect, Wyman said, she had a few birds in her rehabilitation centre as early as last spring that had symptoms similar to those associated with West Nile virus. She has seen it affect an equal number of red tailed hawks and great horned owls. “It truly is a very sad thing to know that one time a red tailed hawk was in the breeding population for many years and then they come in delirious with seizures. They are thin and then they die. It really hits them hard,” she said.

The West Nile virus was also detected in humans in 1937 in a woman who lived in the West Nile region of Uganda. The first human case identified in the United States was in 1999 in New York. The same year a large number of birds in captivity in the Bronx Zoo and in the wild in other parts of New York began dying off.

The virus can lead to encephalitis or an inflammation of the brain. West Nile virus is transmitted from birds to humans and other mammals in mosquitoes. The Centre of Disease Control states that the chance of becoming ill from a mosquito bite is rare, but precautions should be taken.

Wyman encourages residents to put bat houses up and welcome the swallows. Both are natural mosquito predators and keep the mosquito population down. Residents are also advised to dispose of any standing water. Mosquitoes lay their eggs in standing water.

*Editor’s Note: This article is from Michigan but all of Indiana’s surrounding states are experiencing similar problems with West Nile virus. Following are figures obtained from the web site of CGC, (Centre for Disease Control) and was updated on November 5. It looks like the threat is everywhere, but for some reason there are less reports in Kentucky and Indiana.*

<b>State</b>	<b>Positive Human Cases</b>	<b>Deaths</b>
Michigan	483	40
Indiana	247	1
Illinois	719	46
Ohio	409	21
Kentucky	67	5