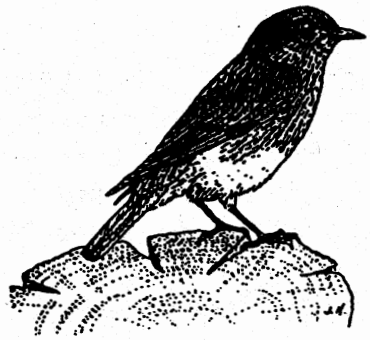


Ontario Eastern Bluebird Society

1999 Fall Newsletter
Editor: Bill Read
2-165 Green Valley Drive, Kitchener, ON N2P 1K3

Welcome to the 1999 Fall newsletter. **The AGM is set for March 18, 2000 at the RBG in Burlington.**

Another very successful year for Eastern Bluebirds. Not quite as successful as the 1998 record breaker but well above the long term average. A mild fall was followed by a relatively mild winter except the period from January 1st to January 15, 1999, which was unusually cold and windy with record snowfall in most areas. An excellent sumac crop may have enticed more EABL's than usual to over winter in the more southerly Carolinian areas and as far north as Port Hope and in Northumberland County.

Some mortality occurred during this bitterly cold period from January 1-15, 1999. Elizabeth Kellog reported a male EABL found dead on a lawn near Port Hope in mid-January. Don Wills found 7 dead bluebirds (6 males, 1 female) during a nestbox check in early spring. One of the males was banded as a nestling in August in one of Don's nestboxes by Bill Read.

Rob Eberly from Niagara Falls reported that dead EABL's had been found in nestboxes. Bill Read found dead EABL's at two sites, 2 females and 1 male in a box near St. George and 1 male in a nestbox near Alberton.

Many Eastern Bluebirds were able to survive this cold period - Hank Zuzek reported 4 EABL's using a nestbox in late January near Grimsby. Other sightings from Hamilton, Port Stanley and areas toward Windsor indicated many were able to overwinter successfully.

Warm spring weather resulted in many early nestings. The only downside to an otherwise exceptional breeding season was a cold period from May 24 - May 26 which caused some nestling mortality. Don Wills, near Caledonia lost 27 young and Dennis and Gwen Lewington lost 40 young on their trail near Sauble Beach. Many other reports were received of nestling mortality during this period. Despite this, it was still a phenominal nesting season, not quite as good as 1998 but almost. Don Wills fledged 643. Doug Harrison near Aylmer fledged 289, a record. Weather was ideal for the rest of the breeding season after the cold spell in May. I expect the fledged young per pair calculation for 1999 will be much higher than the long term average of 4.23. We will just have to wait to see when the surveys start coming in.

Tree swallow reproductive success was adversely affected by a very cold period from June 14 - 19 which resulted in much higher than usual TRES nestling mortality. Despite this cold period, June was still 1.9°C hotter than the long term average. The July mean temperature of 22.4°C was 2.5°C higher than the long term average. Weather information collected at the Waterloo Wellington Regional Airport (Regional Municipality of Waterloo).

Much lower precipitation levels in most months combined with higher temperatures especially in June and July resulted in more evaporation than usual. Many ponds that I have never seen dry were completely dried up by mid-July. We have had more rainfall during the fall but still have a long way to go to bring the water table up to where it was in 1997.

Table 6: Fledged young per pair per breeding season

Year	EABL Pairs	Fledged Young	Fledged Young per Pair
1990	793	3081	3.81
1991	794	3345	4.21
1992	801	3121	3.90
1993	553	2076	3.75
1994	516	1944	3.7
	3457	**13567**	**3.92**

1995	510	2328	4.56
1996	519	2365	4.56
1997	396	1607	4.06
1998	651	3489	5.36
	2076	**9789**	**4.71**

Analysis of EABL success during this decade 1990-1998 indicates the last half of the decade from 1995-1998 experienced very high EABL reproductive success. (4.71 fledged young per EABL pair) (see Table 6) while the period from 1990-1994 experienced much lower success at 3.92 fledged young per pair. Only in 1991 did the fledged young per pair reach four (4.21). 1993 and 1994 were the years with the lowest reproductive success of the decade.

Early reports received for 1999 indicate this trend of above average reproductive success for the last half of this decade is continuing. As we approach the millennium, there are probably more Eastern Bluebirds in Ontario than in the last forty years.

The Eastern Bluebird population in Ontario and Canada is at a level of probably the early 1950's. it was at this time that starlings began to spread out from urban areas to more rural locations usurping cavities from native cavity nesters. (opinion of the editor)

Fledged young totals in Table 6 do not represent total fledged young for those years. Only surveys that included both fledged young and EABL pair totals for each year were included.

Fledged Young Per Pair Calculation As an Indicator of Nest Box Trail Management

This calculation is made using those surveys which included both the number of bluebird pairs and the number of fledged young. The fledged young total is divided by the number of EABL pairs to arrive at this figure. See Table 2 of the 1998 Nestbox report.

This calculation gives a very real indication of how successful you are as a bluebird trail operator. On the 1998 Nestbox report, we had figures ranging from 3.55 to 6.97 fledged young per pair per breeding season. The overall average for 1998 was 5.36 fledged young per pair per breeding season. With proper predator protection on all nestbox trails, this average would have been well over six in 1998.

I would encourage all of you to examine your trails to make sure that proper predator protection is included. In order to make this calculation, we need to know how many EABL pairs are on your trail. If one pair nests twice in different boxes, it still only counts as one pair. Keeping careful records and using a best estimate will be sufficient in most cases in determining how many EABL pairs you have on your nestbox trail.

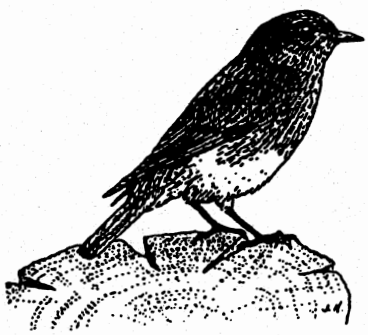
I hope you have a good winter and I will look forward to seeing everyone at the A.G.M. on March 18, 2000.

Bill Read

1999 Birdathon Results

Sylvia Van Walsum raised $544.50 in the 1999 Birdathon. 25% or $136.13 goes back to the OEBS.

Thanks again Sylvia for your continued support of our society.



House Wren Nest Destruction

By Tom Sproat

Tom Sproat presented part of his Ph.D. dissertation on house wren destruction at a recent BBRP Conference. A graduate student and researcher at Ball State University, OH, he was given a 1998 BBRP grant to help with this work, as his research area also included bluebirds. He sent two detailed papers, one on the nests destroyed and the other on the condition of the neighbouring nests. He has combined the two pages and edited them down, so we could include them in our newsletter. Tom has finished most of the statistics for the dissertation and found some interesting differences in how wrens defend against different species of intruders - a topic for a possible future presentation.

House Wren Nest Destruction Behaviour

Male house wrens are territorial and build stick nest bowls, called "dummy nests", in any suitable cavity in their territory. Both sexes may destroy the eggs and nestlings of other house wrens, and sometimes of other species. Both of these behaviours are important evolutionary responses that have allowed house wrens to survive in changing environments.

The function of house wrens' nest destruction behaviour is not fully understood. Three possible functions for wrens destroying other wrens' nests are: 1) to acquire a mate, 2) to reduce competition for food by offspring in other nests, and 3) to acquire a nest site occupied by another wren. While these theories are rather distinct, more than one may be correct. it is also possible that another theory may better explain why house wrens destroy other's nests. Many biologists feel house wrens do not focus their destructive behaviour toward other species' but do misdirect the behaviour.

We found house wrens at our site had an 18 day egg state (the first 4 days the female doesn't incubate). the peak for wren nest destruction in the egg stage was day 7, with almost no destructions after day 12. Day 7 coicided with the day females typically completed their clutch. This result would strongly support the theory of males wanting to acquire a mate, and would not fit well with the other 2 theories. House wren nest destruction in the nestling stage peaked at day 3 with virtually no destructions after day 6. This peak strongly supports the theory of reducing competition for food, but doesn't strongly support the other 2 theories. So, looking at the timing of nest destruction, it appears there may be more than one reason why house wrens destroy nests; both to acquire a nest and reduce competition for food by other wrens' young.

Female house wrens did not always abandon the nest after a wren attack. of all the nests attacked by house wrens in the egg stage, about half of these nests were retained by the incubating female. After an attack in the nestling stage more nests were retained by females than abandoned. Perhaps most surprising of all, less than 17% of the house wren nests that were abandoned following a wren attack were reclaimed by house wrens. All of these seem to contradict the nest site acquisition theory. That is, wrens do not appear to destroy nests primarily to get the nest box.

House wrens construct their nests in 5 basic stages. The dummy nest stage represents a single male claiming a nest box and attempting to attract a female. The complete nest stage occurs when a male has paired with a female and is helping her

complete the nest. The egg stage represents the time when the female is laying and incubating eggs. The nestling stage starts when the first egg hatches and lasts until the first nestling leaves the nest. The fledgling stage begins when the first nestling leaves the nest, I included 2 other stages: the empty nest stage and the nest destroyed stage, to make the list of possible nesting stages complete.

Looking at adjacent nest boxes to wren nests destroyed by other house wrens gives some new insights to this behaviour. There were significantly fewer adjacent nest boxes with complete nests. This is understandable since several studies reported females associated with nests were less likely to destroy nests. We also found adjacent nest boxes had significantly more dummy nests and recently destroyed nests. This may indicate competition between wrens (for mates or nest sites?) These findings can also help us manage bluebird trails.

If most house wren nest destruction comes from neighbouring wrens, there may be circumstances where leaving house wren nests is better than removing them. if wrens are most likely to destroy other nests when they have a dummy nest of their own, then removing the dummy nests of a territorial male might perpetuate that male's nest destroying behaviour by continually setting him back to the dummy nest stage. Also, if wrens are most likely to destroy nests when they lost their own nest, it would be very dangerous to adjacent belubird nests to remove an active wren nest.

Some people ask, "What do I do if...?" Here are some preferences I've adopted. First, if a wren nest is 2 or more boxes from an active bluebird nest, I'd leave it alone. Removing the nest might force the territorial male to move closer to the bluebird nest. Secondly, if a wren nests in a box adjacent to an active bluebird nest I'd put up another nest box about 20 feet from the wren nest in the opposite direction from the bluebird nest. The male wren might be more likely to direct his attention to the nearby, empty box than go to the bluebird nest. Finally, repeated and serious problems with house wrens are probably because the habitat allows them to achieve a high population level and may not be ideal bluebird habitat. If I'm having continual house wren use of my nest boxes, I'd consider looking at the habitat as no longer suitable for bluebirds, and move my boxes to another location.

"I believe it is important for bluebird trail managers to understand house wren nest destruction behaviour is an important part of the wren's overall ecology. It appears to be an old and stable behaviour. As bluebird managers we have the potential to create situations that will increase house wren activity, as well as reduce it. I believe it is very important to see house wren nest destruction behaviour as an instinct important for the species survival and is not directed at bluebirds."

Reprinted from Bluebird News Audubon Chapter of Minneapolis, PO Box 3801 MPLSMN55403 Volume II, No.4, October 1999, Page 10.

Long-term Trends in House Sparrows and Starlings

Some FeederWatchers cringe at the thought of House Sparrows and European Starlings descending in large flocks upon their feeders, eating everything in sight and making an obvious ruckus. These two highly-adaptable, urban, introduced species have succeeded in colonizing much of North America after they were introduced here in the 1800's. Along the way, they have been blamed for such misdeeds as aiding in the decline of bluebirds.

Yet you might be surprised by their recent population trends. FeederWatch data show that the House Sparrow is declining over most of the continent. Similarly, significant declines in the European Starling population are occurring in the East-Central and Mid-Atlantic regions. Today in these regions, FeederWatchers report 15-20% fewer starlings at their feeders than were reported a decade ago. Over most of the West, starling populations have been stable or variable over time. FeederWatchers in the southwest, however, have been documenting an increase in the number of starlings over the last decade. in this region, the number of individuals being reported at feeders has increased by 35% over 10 years, although the percentage of feeders being visited by starlings (about 45%) has changed little.

We hope that the examples given above have shown you the potential for Project FeederWatch to be a real conservation tool, signaling important changes in bird populations across North America. A more detailed account of the 1998-99 FeederWatch season can be found on the Internet at: http//birds.cornell.edu/Publications/birdscope. Thanks again to all our past and present FeederWatchers for providing us with the means to detect the above trends.

Laura Kammermeier & Wesley Hochachka Cornell Laboratory of Ornithology

Predator Controls for Nestbox Success

Don Wills

Monitored nestbox trails throughout North America can truly be classed as one of the most successful conservation tools for restoring bird populations. Eastern Bluebirds, tree swallows and woodduck have especially benefited from the thousands of nestboxes set out by dedicated groups and individuals. However, populations of natural predators, both flying and climbing, have also increased in record numbers. To insure safe nesting, some sort of predator proofing must be used.

My nestbox trail consists of over 400 nestboxes for bluebirds, woodducks, owls and prothonotary warblers. Every box has been mounted on a galvanized steel post ranging from one inch diameter for prothonotary warblers to two and one half inches in diameter for the large woodduck and barn owl boxes. The post that the box is mounted on is probably more important to the bird's safety than the design or construction of the actual nestbox. For extra protection from climbing predators, a heavy coating of grease is applied. I look for barrels of old **grease** at farm auctions or local garages. I apply a fresh coating early in the spring and always add more later to the posts of nesting bluebirds. Raccoons like to keep their paws clean so will not even look at a well greased post.

Boxes mounted over water are not greased but are fitted with a cone shaped metal guard. This guard is placed on the post and fastened with a hose clamp so it can be raised or lowered depending on the water depth. Raccoons will climb the bottom portion of pipe but cannot reach over the edge of the guard. My nestboxes in cattle pastures cannot be greased because unlike coons, cattle love to lick the grease off the pole. Smaller metal cone guards have solved this problem.

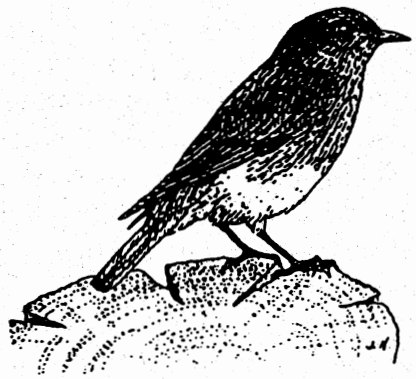
Since using grease and cone predator guards on metal posts and mounting boxes away from overhanging branches, I have not lost a single bird to climbing predators.

By eliminating this type of predation, more time and effort can be used to control flying predators such as starlings and house sparrows and cleaning out parasitic blowfly larvae.

While travelling around Ontario, I have noticed hundreds of perfectly good nestboxes mounted on wooden posts or trees with absolutely no protection from predators. Instead of helping the birds, these nestboxes or "coon feeders" are supplying an easy fast food meal for any predator that climbs to the nest. Raccoons especially like fat, juicy young only days from fledging.

Anyone setting up nestboxes must be prepared to use any available method to ensure that the nesting bird is safe. A properly monitored nestbox trail takes dedication and hard work, but the rewards are great. After all, there can never be enough bluebirds!

Don Wills is OEBS Conservation Director.



PROW - Prothonatory Warbler

Project Prothontary Update

Don Wills

In 1996 at the North American Bluebird Society annual meeting, the OEBS raffled a Robert Bateman print of an Eastern Bluebird to fund the Prothonatory Warbler nestbox project undertaken by Birds Studies Canada. Money was raised for building nestboxes, surveying wooded swamps along northern Lake Erie and meetings for the recovery team. I have been involved with this project from the start. The following is an update of the current status of the warbler in Canada.

The Prothonatory Warbler is on Canada's endangered species list. The two areas where I monitor boxes are a Long Point swamp forest and the Dundas Marsh near Hamilton.

In 1996 when the project was organized, the survey around Long Point indicated 2 nesting pairs. The other core population area in Rondeau Provincial Park showed 3 pairs plus a few singing males. The entire population of Canada in 1996 was estimated to be no more than 10 pairs.

In 1997, I was allowed to set up 4 different experimental nestboxes at Long Point. The location I chose turned out to be ideal and produced the first double brood. The first brood with 3 young used a PVC plastic design and then after fledging moved immediately to a miniature wooden bluebird box design for 4 more young on the second brood. Conditions in this swamp forest were perfect with water levels at all time highs. Chest waders were required to reach boxes from June 1 to July 26. By the fall of 1997 water levels had receded to more normal conditions. 1998 produced a warm, dry spring which proved to be perfect for Eastern Bluebirds but the lack of snow and rain changed the water conditions at Long Point and most other sites. Pools of standing water were under the boxes and the Prow arrived almost 3 weeks earlier than in 1997. One nesting pair at the Dundas Marsh also produced 6 fledglings. Rondeau Provincial Park increased to 10 pairs with a few other sites nearby producing young. The estimated 1998 total for Canada had risen to 17 pairs plus 5 singing males.

The drought conditions of 1998 continued over the winter and by spring 1999, most swamp forests in Carolinian areas were dry. Long Point had the lowest water table in decades and only 2 nestbox locations had standing water.

The Prow's arrived in early May with the first female nesting in my PVC box over a completely dry forest floor. All boxes are mounted on steel poles with cone predator guards fixed to the functional nests. In addition to this, a heavy coating of grease was also applied. Five nestings occurred at Long Point with 3 boxes located over dry land. Two boxes produced 5 fledglings. The two boxes over water produced 6

fledglings each and 1 box was predated by a squirrel or chipmunk that jumped from an overhanging branch when the young were 5 days old.

Drought conditions at Dundas Marsh created many problems as all boxes had to be moved from areas used by PROW in 1998. Despite the low water conditions, 2 singing PROW males were recorded by May 12. One male controlled the nestboxes at the end of the Desjardin Canal and the other took the boxes near the nesting site of 1998. I experimented with a box design made out of a hollowed out elm log with a natural slab top and a 1-1/4" entrance hole. In 1998, the warblers used this design producing 6 fledglings. In 1999, both males added moss to their natural cavity boxes and ignored the PVC and miniature bluebird wood boxes. One nesting occurred near the original site but the male at the end of the canal sang for an entire month with no female arriving. Unfortunately, the nesting which had 5 young failed after 5 days. The box had all predator controls in place but when the young were 5 days old, they had disappeared from the box. The adults remained on location with the female attempting a second nest in the adjacent natural cavity box, but completely gave up after a week.

A total of 6 pairs and 1 singing male produced 22 fledglings in a year that had the worst nesting conditions ever.

I surveyed Rondeau Provincial Park with Sandy dobbins of Bird Studies Canada during the first week of June 1999. We found 6 nesting pairs and 2 singing males. Five nests were in nestboxes with 1 in an old rotting stump next to the water. The PROW's in Rondeau seemed to be leaving the natural cavities to nest in the miniature bluebird nestboxes mounted on steel posts with predator guards.

Overall results after 3 years of the program are encouraging. The warblers are using the boxes successfully and the overall population is moving in the right direction. Hopefully with more normal water levels in these historic breeding areas, the PROW population in Canada can be restored.

Don Wills is the OEBS Conservation Director.

These Co-ordinators are ready to help you.....

Brant County
Don Wills
411 Mulligan Rd
Caledonia N3W 2G9
905-765-2117

Bruce County
Dennis & Gwen Lewington
20 Ramsgate Dr
Stoney Creek L8G 3V5
905-662-7952

Lorne Smith
408-1775-9th Ave East
Owen Sound N4K 6T3
519-371-1569

Dufferin County
David Hampton
302-330 Spadina Rd
Toronto M5R 2V8
416-922-5498

Sheldon Anderson
RR#1
Orangeville L9W 2Y8
519-941-3923

Durham County
Mike Sulivan
53 James St East
Newcastle L1B 1C3

Essex County
Essex County Field
Naturalists Club
c/o Betty Learmouth
2405 Princess St Windsor
N8T 1V2 519-944-0825

Grey County
David & Sharon Turner
349 Belsize Dr
Toronto M4S 1M7
416-483-2788

Norfolk County
Don Bull
8 Clare Innis Court
Caledonia N3W 1G5
905-765-1049

Al Robinson
196 Talbot St N
Simcoe N3Y 3W9
519-426-6811

Halton County
Halton Bluebird Club
c/o Sandy Gage
1477 Burloak Dr
Burlington L7R 3X5
905-335-4688

Hamilton-Wentworth
George W. Coker
1330 Hwy 8
Winona L8E 5K6
905-643-2033

Huron County
Thomas Lobb
RR#2
Clinton N0M 1L0
519-482-3342

Lambton County
Mike Bouman
St. Clair Gardens Rd
Sombra N0P 2H0
519-892-3307

Don A. Smith
210-175 Wellington St
Sarnia
519-336-6568

Manitoulin County
Clayton Van Horne
Box 265 Manitowaning
Manitoulin Island
P0P 1N0 705-859-3281

Middlesex County
Don Butoski
3756 Mossley Dr
Mossley N0L 1V0
519-269-3149

Eleanor & Peter Davies
10165 Elviage Dr
RR#32
London N6P 1P2
519-473-0419

District of Muskoka
J. Robert Burton
Box 1417 Bracebridge
P1L 1V5 705-645-5979
519-769-3258

Niagara
R. Glen Lundy
RR#1 12550 Crowland
Welland L3B 5N4
905-384-2432

Henry Bauer
719 Memorial Drive
Fenwick L0S 1C0
905-893-6690

NorthumberlandCounty
El Wood - M Jones
2147 Spring St
Castleton K0K 1M0
905-344-7661

Hazel Bird
Box 45
Harwood K0K 2H0
905-342-5218

R. Martin Bird
247 Main St RR#4
Brighton K0K 1H0
613-475-2785

Ottawa-Carleton
Ottawa Duck Club
Barc Dowden
29 Pellan Cr Kanata
K2K 1J7 613-592-3553

Michael & Dorothy Shaw
284 Kirchoffer Ave
Ottawa K2A 1Y2
613-728-1450

Oxford County
Doug Harrison
19 Washington Ave
Norwich N0J 1P0
519-863-3113

Renfrew County
Howard H. Wickett
476 Airth Blvd
Renfrew K7V 4B6
613-432-6124

Simcoe County
Gordon Luker
RR#1 Big Cedar Estates
Hawestone L0L 1T0
705-327-1582

Thunder Bay District
Mrs. Jean Lister
160 Blanchard St
Thunder Bay
P7A 7J7

Timiskasing District
Lloyd Taman
Box 159
Matachewan P0K 1M0
705-565-2253

Victoria County
Don parkes & Herb
Furniss Box 141
Beaverton L0K 1A0
705-426-9868

Tom & Louise Horne
136 Ferguson Rd
Kirkfield K0M 2B0
705-454-9516

Waterloo County
Bill Read
2-165 Green Valley Dr
Kitchener N2P 1K3
518074804853

Wayne & Linda Buck
RR#1
New Hamburg N0B 2G0
519-662-2529

Norm Shantz
1201-1414 King St E
Kitchener N2G 4T8
519-578-4258

Wellington County
David Lamble
745 Guelph St
Fergus N1M 2X5
519-843-1205

Bryan Wyatt
63 Woodland Glen Dr
Guelph M1G 3S3
519-822-5871

York County
Evelyn Ballard
18868 Bathurst St
Newmarket L3Y 4V9
905-773-0505

Art & Margaret Russell
Bx 101 RR#1 Klein's Rd
Kleinborgh L0J 1C0
905-893-1538