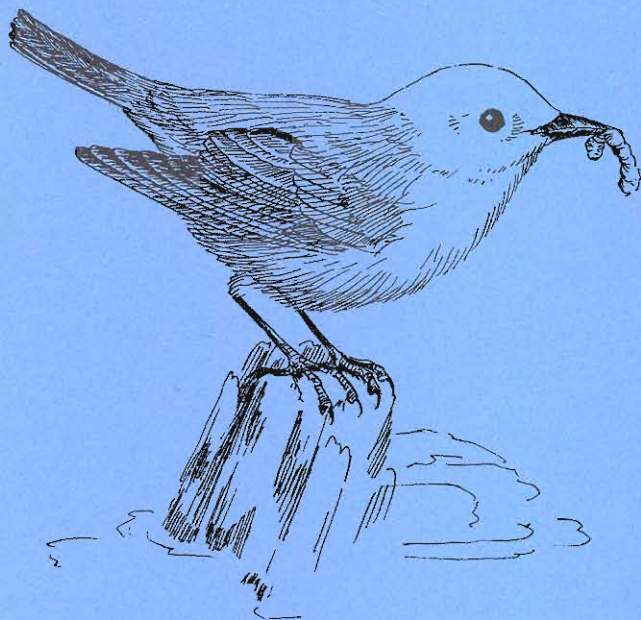


# *Sialia*

Volume 19, Number 2  
Spring 1997  
Pages 41-80  
Index

The Quarterly Journal  
Of  
The North American  
Bluebird Society



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*Sialia* means bluebirds. Hence the title of this journal. Technically, *sialia* is the Latinized, neuter plural version of the Greek word *sialia*, a noun meaning a "kind of bird." Since the Eastern Bluebird was the first bluebird classified by Carolus Linnaeus (1707-1778), he gave it the species name *sialis*, though he placed it in the genus *Motacilla* which is now reserved for the wagtails. It was William Swainson (1789-1855), who, in 1827, decided that the bluebirds needed a genus of their own within the thrush family (*Turdidae*). He selected the generic name *Sialia* which he simply adapted from the species name *sialis* which Linnaeus had used. Therefore, the scientific name for the Eastern Bluebird is *Sialia sialis* (pronounced see-ah'-ee-ah see'-ah-iss). Similarly, the Western Bluebird and Mountain Bluebird, the two other species within the genus, were named *Sialia mexicana* and *Sialia currucoides* (coo-roo-coy-dees) respectively. All three bluebird species are native only to the North American continent, although each inhabits different regions generally separated by the Rocky Mountains and by altitudinal preferences.

While the adult birds all show differing plumages, the young of all three species look remarkably alike, prominently displaying spotted breasts and large white eye rings. This similarity in plumage was the principal reason the Society chose the juvenile bluebird for its logo. Since bluebirds almost always choose to raise their young in small enclosed cavities, a young bluebird sitting near a nesting box seemed to symbolize our mission. The hope of any species resides in its young. Because of bluebird nesting preferences, the survival of their young may depend on the nesting box, especially since natural cavities, for a variety of reasons, are disappearing rapidly. The theme of bluebird young nurtured in man-made structures will be a recurring one in our art and literature. We hope that this theme will remind all about the plight of the bluebird, and will stimulate action which will allow this beautiful creature to prosper.

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# Sialia

The Quarterly Journal  
About Bluebirds

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## COVER

In 1981, Suzanne Pennell, *Sialia's* art editor at the time, illustrated an article about Prothonotary Warblers with the drawing used on this issue's cover.

*Sialia* welcomes original articles, art and photographs for publication. Although this journal is named for the bluebird, material relating to all native cavity nesting species will be considered. Manuscripts should be typed neatly and double-spaced. All material submitted is subject to editing or rewriting. Submit the original manuscript plus a duplicate copy if you wish to proof the material before publication. If the article has been submitted elsewhere (or previously published) that fact must be stated at the time of submission. All manuscripts will be acknowledged. Black and white glossy photographs are preferred. Print the subject, names of individuals pictured, photographer and return address on the back of each photograph. Art is welcome and should be in black pen-and-ink. We do not assume responsibility for manuscripts, photographs or art submitted. The editor's address is 10617 Grae Loch Road, Laurel, Maryland 20723.

# Presidential Points

Charlotte Jernigan

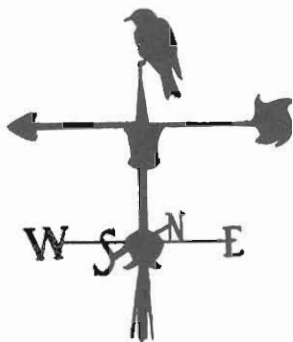
Think habitat! It's where all of us live (including other creatures), and it contains all things needed for survival. There are different types of habitats--each one supports different creatures. Wherever you live, you, no doubt, have the potential to make improvements in your surroundings.

This past year I tried to encourage our members to plant a tree or shrub that would be beneficial and then let me know what they planted. Responses from both Canada and the United States tell me that our members are making a difference in the "habitat" where they live. Thanks so much for your participation!

Plantings that were listed by members were apple, serviceberry, blueberry, hawthorne, wild cherry, and dogwood. Joseph Suthren of Ontario mentioned that 60 species of wildlife eat serviceberries. Irene Franz, a charter member in Pennsylvania, promised to take a youngster by the hand with her to share in the experience of planting.

One of the cavity nesters that we usually don't think of when we're putting out berry-bearing trees is the Red-bellied Woodpecker. Woodpeckers are primarily insectivorous, but the Red-bellied seems to consume more vegetable matter than most. It is one of the beneficiaries of the backyard feeding stations and has gradually extended its range northward as a result. Holly berries, dogwood, and even poison ivy are relished. In the fall they sometimes store acorns and berries in crevices.

A dead limb in a big oak tree in our backyard has a cavity in it. Last spring the Red-bellied Woodpeckers noted that the rent was paid and they were welcome. After a short three days of excitement, European Starlings decided that the cavity would be their domain, and we saw very little resistance. Where our chosen two went to raise their family we don't know; however, they still come for black oil sunflower seeds and suet. The mesh bag



that came with the frozen turkey breast (now holding suet) is attached to a hook in the tree. This affords them their favorite snack.

On males the crown and nape are red; females have a red nape only. Their backs are black and white barred. A woodpecker's tongue is exceptionally long and is anchored at the base of the bill. It wraps around the skull and is extended by a complex system. The tips are barbed to help in extracting insects from holes, and the tongue is coated with sticky saliva which helps to retain the prey. They most commonly excavate nest holes in dead limbs of living trees. Males and females roost in separate holes between September and January, and often one of the roost holes becomes the nest site. Nest cavities are excavated in 7-10 days; eggs are white and unmarked.

If you're fortunate enough to have a pair of Red-bellied Woodpeckers, entice them with suet to help keep them around. As we continue to enhance our own surroundings, do what you know would be a good thing for the Earth? HAVE FUN DOING IT! ■

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# Prothonotary Warbler Nest Box Program in Northern Virginia

Larry Cartwright

Prothonotary Warblers (*Protonotaria citrea*) were fairly common breeders at two marshes in northern Virginia (Huntley Meadows and Dyke Marsh) until the late 1980's. Huntley Meadows is a 1,250 acre (505 ha) rectangular-shaped park in Fairfax County, Virginia. It contains a large marsh several hundred acres in size surrounded by second-growth woodland and meadows. A smaller marsh is located north of the major wetland. Dyke Marsh is a tidal marsh located along the Potomac River just south of Alexandria, Virginia. The wooded area adjacent to the marsh is flanked on the south by a major highway, giving this United States Park Service-operated wildlife preserve a linear shape. The preserve is slightly less than two miles (3.2 km) long and, if one includes two small islands lying directly offshore, is approximately 2,400 feet (720 m) at its greatest width. The soil is heavily saturated at both sites and standing water is present in much of the woodland during May and June, the Prothonotary Warbler's breeding season.

The past breeding success of Prothonotary Warblers at these two locations was attributed to the availability of cavities in small snags in the wetlands. At Huntley Meadows the snags were concentrated at several locations, the most notable being the boardwalk-accessible southern entrance to the large or primary marsh. Ten years ago as many as four breeding pairs of Prothonotary Warblers could be located just from a 150 foot (45 m) stretch of this boardwalk. Although less numerous and more dispersed, Prothonotary Warblers were dependable breeders at Dyke Marsh during this same time period. On average, three or four breeding pairs were tallied during the

Dyke Marsh Breeding Bird Survey, which is conducted yearly from Memorial Day Weekend through the end of June.

The snags gradually began to fall and the number of Prothonotary Warbler breeding pairs started to decline. Prothonotary Warblers were last documented as breeders around the boardwalk entrance to the primary marsh at Huntley Meadows in 1991. By this time, the loss of suitable snags had accelerated in this section of the park; most had toppled over by the following year. In 1995, only one breeding pair could be found in the entire park. Interestingly, this pair successfully raised young in a nest box set up as part of a Girl Scout project not specifically intended for Prothonotary Warbler management. Indeed, the box had been erected over dry land. It appeared that natural cavities in suitable habitat were at a premium.

The situation was similar at Dyke Marsh. Prothonotary Warblers were last confirmed as breeders in 1992. Territorial males were located during the 1993 through 1995 breeding bird surveys--many were noted singing well into late June, long after they should have secured mates. Although birds were obviously present, we could not document even one breeding pair. By contrast, the Prothonotary Warbler breeding population at nearby Manassas Battlefield Park, where snags were still prevalent in the wetlands, reportedly remained stable.

In an attempt to prevent the complete loss of Prothonotary Warblers at Huntley Meadows and Dyke Marsh, a nest box program designed specifically to help this species commenced in 1996. Volunteers were recruited to construct, erect, and

monitor the boxes. I became coordinator of the program. Dan and Lisa Petit, who have conducted experimental surveys along the Tennessee River in west-central Tennessee and in the 5,400 acre Killbuck Marsh in northeastern Ohio using nest boxes constructed both of wood and one-half gallon milk cartons, assisted us in our efforts. The Petits' study showed that the breeding density of Prothonotary Warblers is contingent upon nest cavity availability and not on prey base. The breeding density of Prothonotary Warblers in the Tennessee River study area increased to at least six times that of the pre-survey density just by the installation of nest boxes.

The Prothonotary Warbler is a unique species since it is the only cavity nesting warbler found in the eastern half of the United States. It is also a beautiful bird. The male's head and underparts are golden yellow. The wings are blue-gray and lack wing bars. The blue-gray tail has large white patches, which are often seen in flight. The female is a duller yellow, but in other respects is similar to the male.

The Prothonotary Warbler is a neotropical migrant. They winter in mangrove swamps, primarily along the Central American and northern South American coast. Males generally begin arriving on the breeding grounds in northern Virginia during the last week of April. Females begin to show up about a week later. Breeding pairs prefer to nest in snags over open water in areas where the tree canopy provides partial or complete shade. For those readers interested in starting their own nest box program, Dan and Lisa Petit advise that boxes should be placed three to six feet (.9 to 1.8 m) above ground (any higher encourages Tree Swallows) on a snag with a 6-inch (15 cm) diameter base or less. Prothonotary Warblers do best in a forested wetland with an open understory since scrubby habitat may create competition with House Wrens. Males leave nest offerings, i.e., pieces of

moss, in several cavities before the arrival of females. The female then decides which cavity will be used for breeding. Consequently, the Petits suggest that boxes should be placed in clusters of at least three boxes per cluster. During the Tennessee River study, Lisa Petit discovered that territorial males can be induced to tolerate other Prothonotary Warbler nests as close as about 100 feet (30 m) from their own nesting boxes.

Enthusiastic volunteers began erecting boxes in early April. Ordinary strapping tape was used to secure the milk carton nest boxes to appropriate young deciduous trees. Several wooden boxes were also used. Twenty boxes were placed around the primary marsh at Huntley Meadows. Following the advice of the Petits, boxes were arranged into five clusters of varying sizes depending on habitat suitability. Four clusters totaling 14 boxes were erected around the northern or secondary marsh while a single cluster of five boxes was set up along the western boundary of the park. This area of the park contains a wetland jointly protected by Huntley Meadows and the United States Coast Guard. Girl Scout Cadette Troop 1838, under the sponsorship of Dr. Gary Graves, a professional ornithologist, and Sidney Graves, independently set up and monitored 11 additional boxes on the periphery of the secondary wetland.

By the second week of May, Prothonotary Warblers were seen or observed singing near boxes at all three marshes. At least three territorial males were identified at the primary marsh and four at the secondary wetland. I personally observed a singing male on 10 and 19 May 1996 perched about three feet above one of the boxes bordering Coast Guard property. Offerings of moss were deposited in about one-fourth of the Huntley Meadows boxes. Nonetheless, only the Girl Scouts reported successful nesting attempts. Prothonotary Warblers nested in two of

their 11 boxes. Both broods fledged, with one brood containing four fledglings. Prothonotary Warblers, which had established territories around nest boxes at other locations, either relocated or did not secure mates and never progressed beyond the moss-offering stage.

Besides the good news from the Girl Scouts, I received two surprising reports of Prothonotary Warblers successfully nesting in natural cavities. Dan Petit observed a male Prothonotary Warbler feeding two fledglings near the primary marsh in mid-June while a second individual found a pair feeding nestlings



Photograph by Jane Agee

An adult male Prothonotary Warbler at a natural nest cavity at Manassas Battlefield Park, Virginia.



along a major tributary of the primary marsh. While pleased that some natural cavities are still available for Prothonotary Warblers at the park, two pairs is far below the numbers documented at Huntley Meadows in the mid-1980's. It still appears that supplementing existing cavities with boxes is the correct approach to take.

While these events were unfolding at Huntley Meadows, another volunteer had placed 16 boxes at Dyke Marsh, dividing them into four clusters. All four clusters attracted territorial males and moss offerings were discovered in every box. By 16 May one of the boxes contained a completed nest with two Prothonotary Warbler eggs. Unfortunately, during the next weekly survey the eggs were

missing and nesting material was found protruding from the box entrance. Presumably, the eggs had been consumed by a predator.

In conclusion, I must admit that the results of the first year's Prothonotary Warbler nest box program appear less than impressive. Two out of 50 boxes produced fledglings at Huntley Meadows, for a 4% success rate, and none produced even nestlings at Dyke Marsh. Nonetheless, the presence of territorial males, moss offerings, and three nests, (two of them successful) indicates that the birds find the man-made structures suitable for their needs. It also appears that Prothonotary Warblers at Dyke Marsh set up territories exclusively around nest boxes and made no nesting attempts in natural cavities. Realizing



Photograph by Jane Agac

Nestling Prothonotary Warblers in a natural nest cavity at Manassas Battlefield Park, Virginia.



that complete success is rarely achieved the first year of any project, the program will continue in 1997. We remain hopeful that Prothonotary Warblers can make a comeback both at Huntley Meadows and Dyke Marsh, Virginia.

Prothonotary Warblers in riverine habitat in Tennessee by Lisa Petit in *The Wilson Bulletin* 101(1):51-61. See also Nest-box use by Prothonotary Warblers in riverine habitat in *The Wilson Bulletin*, 99(3):485-488. ■

For additional reading on Prothonotary Warblers, see *Breeding biology of*

3532 S. Stafford St.  
Arlington, VA 22206

Figure 1. Construction of a milk carton nest box for cavity nesting passerines. a,b) Dashed lines show the separation of components cut from milk cartons; c) Part B is forced into E by bowing the sides of B; d) Part C is taped to A to form a roof cap which is forced over Part E, a fastener is not needed; e) attachment to tree with strapping tape.

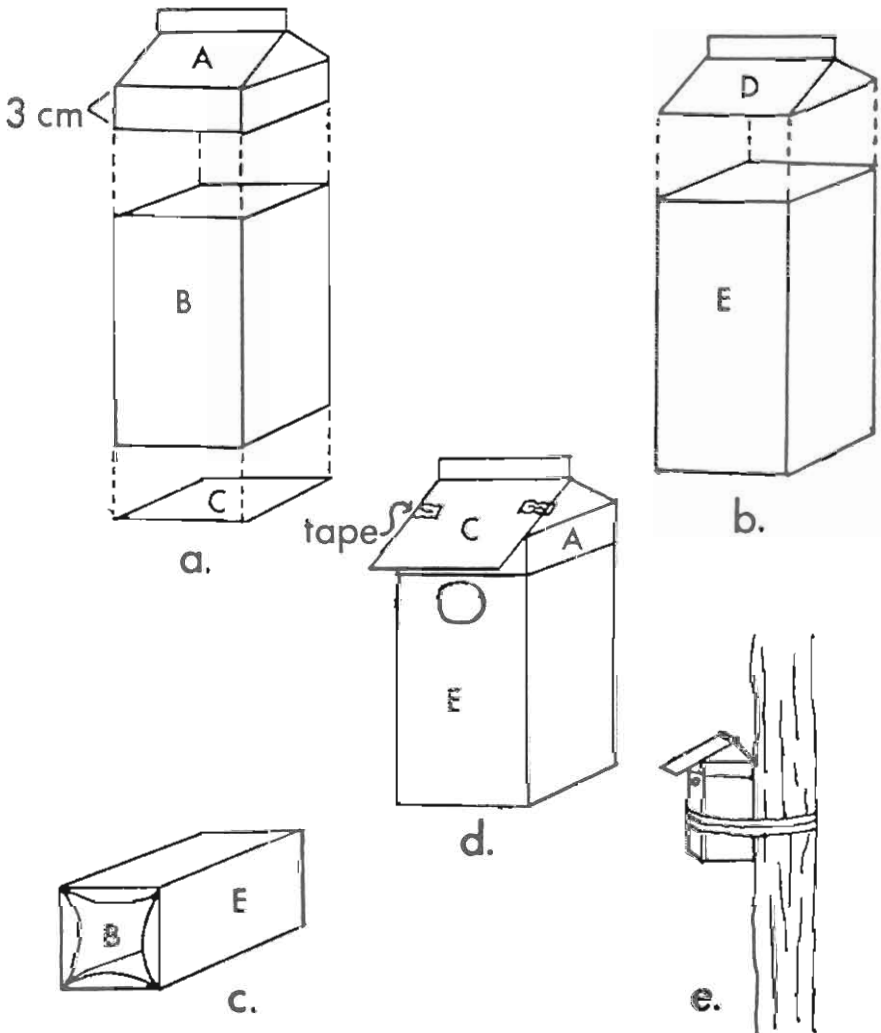


Diagram from Autumn 1986 Journal of Field Ornithology, p. 314.

Construction of Prothonotary Warbler nest boxes from milk cartons is extremely easy. One half-gallon milk cartons are recommended since they provide the breeding pair with adequate space, are surprisingly durable, and the birds accept them as readily as they would a more expensive wooden box. (The shaded habitat prevents overheating.) The Petits use two cartons to construct one box. An entrance hole 1-1/4 inches (3.1 cm) was cut into the box with a sharp pointed knife or scalpel. Larger holes may permit entry by female cowbirds. The hole was centered roughly 2-1/2 inches (6.3 cm) from the top of the box after removal of the lid. A few small drainage holes were cut into the bottom of the box. A climbing trellis for the young is unnecessary because Prothonotary Warblers fill the box with moss to the bottom of the entrance hole. See Figure 1, courtesy of W. James Fleming and Daniel R. Petit from *Journal of Field Ornithology*, 57(4):314. Strapping tape was used to secure the assembled boxes to the tree by wrapping the tape around both the box and the tree. The box was then lightly spray-painted with a non-toxic flat gray or brown paint. A small amount of paint was also sprayed into the entrance hole to prevent reflection and darken the cavity.

Milk cartons are best used to establish a trail or where predation is low. A gradual change to wooden boxes can be made if the warbler breeds. (Predation in the Tennessee study was 2% or less, probably because most boxes were mounted over water.) Do not use bluebird boxes because they are too large. Prothonotary Warblers attempt to fill the available cavity with nesting material. Filling a bluebird box wastes valuable energy and time.

[Editor's Note: The wooden box used by Lawrence Walkinshaw in his Prothonotary Warbler studies in Michigan and Tennessee (*Sialia* 3(1):8-9) consists of a 5 x 4 inch top and bottom, 6 x 4 inch front with 1-1/4 inch opening an inch from the top, 6 x 3 inch sides, and an 8 (or more) x 4 inch back.]

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## That Remarkable Peterson Entrance

Wayne H. Davis

When given a choice, Eastern Bluebirds (*Sialia sialis*) have a strong preference for the Peterson box over various other styles (Bernier, 1995; Davis and Kalisz, 1995; Palahniuk and Bakko, 1995). I have shown that an important component of this preference is the unique Peterson entrance 2 1/2 inches (55 mm) high and 1 3/8 inches (35 mm) wide, made by drilling two overlapping holes with a 1 3/8 inch bit. I alternated boxes with slot entrances and Peterson entrances and found a tendency of bluebirds to choose the Peterson entrances and House Sparrows (*Passer domesticus*) to take the boxes with the slot entrances (Davis, 1995).

To improve the experimental design

and give the birds a sharper choice, I modified this experiment for the 1996 season. In October 1995, I cleaned out all the boxes and moved boxes so as to have one of each style, facing opposite directions mounted on a conduit. Thus, instead of 100 stations, I now had 50, each with two boxes. To avoid bias from the previous usage, I alternated which style of box was to be moved.

I checked the boxes in March and began monitoring at two week intervals in April. A box was recorded as used when it contained a nest and one or more eggs. Bluebirds used eight of the Peterson entrance boxes and four of the slot, a ratio similar to that of the previous year. House Sparrows used 27 slot boxes and

Table 1. Choice of entrance style

	used by bluebirds	used by sparrows	used by swallows
Peterson	8	2	0
slot	4	27	1

only two with the Peterson entrance, a sharper difference than the previous year.

House Sparrows and Eastern Bluebirds show a striking difference in preference of entrance style. Sparrows prefer a round hole to a slot (Davis, 1989), and the slot to the Peterson entrance, whereas bluebirds prefer the Peterson entrance to the slot, and the slot to the round hole (McComb, *et al.*, 1987). These differences are so striking that anyone building new boxes should consider making the Peterson entrance.

A potential problem with the Peterson entrance is that it is readily accessible to European Starlings (*Sturnis vulgaris*). Starlings explored my boxes but did not use any of them, probably because they are rather shallow (5 inches; 12.5 cm) with a small floor (4 x 3 1/2 inches; 10 x 8.8 cm). With a deep, roomy box you can expect problems with starlings. Kridler (1990) built six deep, roomy boxes with Peterson entrances and had all of them used by starlings. To make a Peterson type of entrance that is not accessible to starlings you would need to use a 1 1/8 inch (30 mm) bit. ■

#### Literature Cites

- Berner, K.L. 1995. Comparison of use of several styles of nest boxes by cavity nesting birds. *Sialia* 17(4):127-135.
- Davis, W.H. 1989. House Sparrows prefer a circular entrance. *Sialia* 11(1):8-10.
- ..... 1995. Testing the features of the Peterson box. *Sialia* 17(4):135-136.
- ..... and P.J. Kalisz 1995. Tests of the Peterson box and Zuern's tree branch box *Sialia* 17(1):18-19.

Kridler, K. 1990. Starlings find Peterson box no challenge. *Bluebird Monitor* 3(2):1.

McComb, W.C., W.H. Davis and P.N. Allaire 1987. Excluding starlings from a slot entrance bluebird box. *Wildlife Society Bulletin* 15:204-207.

Palahniuk, D.P. and E.B. Bakko 1995. Nesting activity on a box-paired trail. *Sialia* 17(1):3-6.

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### Instructions to Authors

Authors planning to submit articles for publication in *Sialia* are encouraged to obtain "Instructions to Authors," a page which summarizes manuscript requirements.

Address requests to the editor at 10617 Graeoch Rd., Laurel, MD 20723.



*This feature extracts items from the newsletters of bluebird organizations and the periodic reports of groups with bluebird or cavity nester projects. Please be sure this editor or NABS is on your mailing list. We want to include your material*

### **ALBERTA--Calgary Area Trails, 1996 Results**

Overall, 1996 was a poor year for bluebirds and a good year for Tree Swallows, mostly because of weather. While the early spring was cold, the first two weeks of June were warm which benefited Tree Swallows in particular.

Bluebird fledging was down to 3,988 in 1996 compared to 4,813 in 1995. Bluebirds fledged per box at 1.45 was the lowest ever. Several monitors reported abandoned nests early in the season due to the cold. Tree Swallows, on the other hand, fledged 6,963 compared to 6,568 in 1995. Tree Swallows fledged per box was the highest ever at 2.53; percent of eggs eventually fledging young was also the highest ever at 84.3%.

Some large Tree Swallow clutches were found. George Loades had four pairs with eight young and 26 pairs with seven young. Don Stiles had four nests of eight eggs and 15 nests with seven eggs. The clutch size of 6.47 on his East Didsbury Trail was the highest ever. Len and Jean Marshall had nine eggs in one nest; they watched a third adult swallow helping to feed the young.

Both House Wren and House Sparrow nests were down significantly: wrens from 150 nests in 1995 to 112 and House Sparrows from 111 to 67. Pat Mitchell reported a Black-capped Chickadee nest with eight eggs of which six fledged.

Paul Michaud found bluebirds nesting under a deck at his son's, west of Turner Valley. The nest was built between the floor joists on top of a piece of plywood. The pair chose this location over any of the 13 nest boxes in the vicinity and fledged six young.

George Loades recaptured an eight year old and a seven year old Tree Swallow. The older was banded in 1988 as a nestling and was recaptured in the same box in 1994 and 1996.

Jan and Len Marshall found a bluebird nest with six eggs. Interlaced around the entire circumference an inch below the rim was a bright red band. Afraid the plastic strip might prove hazardous to the nestlings, they carefully removed it and noted it was a strip from a tobacco product imported from the United States. The print on the band declared "Alberta--Canada Duty Paid." The Marshalls whimsically concluded, "Proof enough our bluebirds do indeed cross the International Border and also obviously abide by the laws of the land."

*--Calgary Area Bluebird Trails*

### **---Ellis Bird Farm, Ltd. Fall 1996**

Ellis Bird Farm (EBF) was visited by a record number of people in 1996. Two summer highlights were the Mountain Bluebird Trails Conference in Lethbridge (co-hosted by EBF) and a butterfly workshop. Much was accomplished thanks to a site manager and four summer assistants.

Ellis Bird Farm's conservation and educational work was recognized with the 1996 Emerald Award.

Among the trail reports was that of Mountain Bluebird Trails which reported 1,219 boxes used by bluebirds, 6,371 eggs laid, and 5,267 young fledged. Tree Swallows used 823 boxes and wrens 55. One band was recovered from a female in Great Falls, Montana.

Mountain Bluebird Trails (U.S.) reported 3,076 boxes used by bluebirds out of 4,596 with a total of 13,682 Mountain Bluebirds and 3,590 Western Bluebirds fledged.

The 1996 Ellis Bird Farm Environmental Award was won by Nadia Contant of Ponoka. Marie Pijeu of Sylvan Lake looked out of her kitchen window on 9 May 1996 to see a cat atop a nest box. She shoed the cat and opened the box. Inside were 14 Tree Swallows--piled three layers deep. They made a safe and hasty exit.

Arnie Gerlach of Rochester reported an albino nestling in one of his boxes.

Art Aylesworth of Ronan, Montana, reported that, for the second year in a row, trail monitors watched young elk rubbing their noses on nest boxes containing young bluebirds. They then held their ears next to the entrance hole, listening to the soft chirps of the nestlings.

Erwin Lischewski of Calahoo has had great success luring House Sparrows into his traps by baiting the traps with white feathers.

The Stadel of Pigeon Lake observed crows entering Common Goldeneye boxes and predated the nests.

--*Ellis Bird Farm, Ltd.*

#### **IOWA--WINGS...**, Late Fall 1996

Jim Walters' President's Column relates an incident with a young Chimney Swift that did not have a happy ending. When a young swift dropped to the bottom of his chimney, Walters rescued it and returned it to the upper part of the chimney. The following day fluttering alerted him to the bird at the bottom of the chimney again. Later that same day, when he discovered the bird once again, he propped a rough piece of cedar plywood against the wall of the chimney--hoping to provide better footing for the nestling. The next morning the young swift was found dead at the bottom of the chimney. As Walters turned the bird over in his hand, he noticed the problem. Each tiny claw was encrusted with a small polished ball of creosote so that the swift could no longer hold onto the interior of the chimney. The moral to the story is that chimneys should be cleaned by 1 March so that this kind of tragedy is averted.

Bernie Knight highlights swallows in her column "Are You Listening? Are You Watching?" Most swallows are cavity nesters, but few species utilize manmade nest boxes. Rough-winged and Bank Swallows use burrows they excavate, while Cliff Swallows construct jug-shaped mud nests with an entrance hole at the end of a short neck.

Barbara Boyle reviews the Sherman Project. No site has yet been determined for the Chimney Swift Tower although exploration is ongoing. Jim Tade has almost completed a Sherman documentary and a fund raising video. They should be available soon.

--*Johnson County Songbird Project*

#### **MARYLAND--Nest Box News**, September 1996

It was another good year for bluebirds in Calvert County. In 1995 the first Tree Swallow nesting was recorded in the county. In 1996 there were three nests; all successfully fledged young. The nests in the two boxes used on the Cammack Trail contained Barn Owl feathers! There are plans to construct seven new trails by the spring of 1997 to provide even coverage in the county. In 1996 Calvert County trails fledged 884 Eastern Bluebirds from 1,162 eggs. The total fledged represents a 48% increase from 1995.

--*Calvert County Bluebird Trail Monitors*

#### **MINNESOTA--BLUEBIRD NEWS**, October 1996

The Bluebird Recovery Program's (BBRP) Sixteenth Conference is scheduled for 19 April 1997 in Marine.

Four BBRP research grants were awarded in March 1996. Reports from the recipients

were as follows: Jason Smith--no details yet received. Kevin Berner--testing oval- and round-holed Peterson and standard (NABS) boxes. Berner's research found that the box style most often selected was the oval-holed standard box. There was a possible bias in that these were the lightest in color, made of new pine with an unweathered light stain. [Editor Dorene Scriven notes that David Hampton of Ontario, Canada, has tried oval versus round holes on Peterson and PVC boxes and found a bluebird preference for oval holes. Dr. Wayne Davis of Kentucky also believes it is the oval hole more than the slanted front which attracts bluebirds to the Peterson box.] Bob Hursh--sent in his report in which he paired standard nest boxes with eight Zuern Tree Branch boxes; all boxes had Peterson oval entrances. Bluebirds nested four times in standard boxes, zero in Zuern; Tree Swallows nested in four standard and one Zuern. Hursh noted that "Sparrows show preference to the Zuern tree branch box." Tom Wille's bluebird Eagle Scout project was plagued by wren problems, at least in part because weather-related factors did not enable him to erect boxes until after bluebirds had begun nesting. He and his dad intend to monitor the boxes again in 1997.

The trail notes summarized two trends: (1) people who have been trapping House Sparrows over the years are seeing a marked population decline nearby, and (2) most bluebirders have been diligent in keeping the male House Wren's sticks from blocking bluebird use of boxes. Pairing boxes in the presence of Tree Swallows was overwhelmingly endorsed.

Michael Wells at the Kalamazoo (Michigan) Nature Center watched a Downy Woodpecker excavate a cavity in a snag of a birch tree which bluebirds used. When the tree broke off in a rainstorm exposing the nest with five eggs, Wells placed a nest box over it and three nestlings fledged.

Peter Meyer of Mound enthusiastically expressed a reason that bluebirders stick with monitoring year after year. "Sunday, July 28th was one of the most wonderful days I've ever had in birding; it was a beautiful summer day, warm, sunny and nearly calm, so the bluebirds' song really carried. As I monitored my trail; I heard and saw bluebirds nearly everywhere, individuals and families. It was pure delight."

Several corporations in the Twin Cities area have bluebird trails. The West Publishing Company near Eagan has a trail initiated by Dave Ahlgren. Data keeper Roxanne Schenzel coordinates the 18 monitors and collects results. General Mills Corporation has boxes along I-394 just west of Minneapolis, and Cenex Corporation is reported to have a trail also.

Allen Bower of Britton, Michigan, has made the job of monitoring flicker, owl, and Wood Duck boxes easier by designing a tilt-down pole. [He has promised *Sialia* some construction diagrams when he feels he has the pole perfected to his satisfaction.]

BBRP's continuing educational outreach will provide bluebird books to Minnesota schools. A single copy of *A Bluebird's First Summer* for elementary schools and a copy of *Bluebird Trails--A Guide to Success* for state high schools will be donated at the suggestion of individual BBRP members.

Dick Hjort is increasingly busy assembling "The Kids Page" (or pages) for each issue of the newsletter, so his job of gathering workshop information for spring workshops is being taken over by LeVerne Williams.

Guest columnist Jack Hauser of Bloomington made the case for being careful in placement of boxes. He says that despite discussions of box and pole designs, the three most important factors to successfully fledging bluebirds are habitat, habitat, and habitat.

The summary data for 1996 shows a 12% increase in fledged bluebirds in Minnesota over 1995. As of 20 November, 349 state reports had been received. A total of 9,876 bluebirds were fledged from 12,425 eggs from 2,535 successful broods. The compilers



remain confident that pairing can benefit bluebirds when Tree Swallow occupancy approaches 50% or more of the boxes on a trail.

--*The Bluebird Recovery Program*

**NEBRASKA--Bluebirds Across Nebraska Newsletter, Fall 1996**

The Third Annual Conference of Bluebirds Across Nebraska (BAN) is planned for Saturday, 5 April 1997 at Norfolk High School in Norfolk, Nebraska. Keynote speaker will be noted author and ornithologist Dr. Paul Johnsgard of the University of Nebraska.

Steve Eno presents the second of a three part series entitled, "House Sparrows." In this segment, he describes sparrow control on a bluebird trail. Control can be divided into passive control (taking preventive measures when placing a box) and aggressive control (taking measures after the box is in place).

Passive control requires some luck but mostly a good choice of box and box location. Avoid sites near farmyards, feedlots, barns, abandoned buildings, junked machinery, towns, and cities. Checking boxes on a regular basis is important. Use of the Gilbertson PVC box where sparrows are (or might be) a problem is highly recommended. No box is a total deterrent, but sparrows seem to prefer wooden boxes.

Although consistent monitoring is the method most often used by bluebirders for sparrow control, there are risks involved in repeatedly removing sparrow nesting material. Because the male sparrow bonds with the box, disturbing his nest may antagonize the bird into attacking nearby bluebirds' nests. Eno has had success with pairing tree branch boxes with Peterson boxes. The sparrows occupy the tree branch box and the nearby bluebirds fledge. Early in 1996 he replaced the tree branch boxes, which were attracting sparrows, with PVC boxes and has had no sparrow attempts in them.

During the winter if there is a chance that sparrows will use a box as a roost, leave the box open or plug the entrance hole. If sparrows are not a problem, leave the boxes for use as bluebird roosts in the winter.

Aggressive sparrow control is not for every bluebirder. It is *not* necessary to use aggressive control if you do not feel comfortable with it, but extra vigilance is necessary if passive control is the sole choice. Most monitors have had the unfortunate experience of opening a box with a nest and finding a female and/or nestlings dead and mutilated by a House Sparrow. Six authors of bluebird books are quoted. They are unanimous in urging that sparrows be trapped and *not* released elsewhere.

BAN's current membership is 349.

S.C. Downs says Wachiska Audubon's trails fledged 379 Eastern Bluebirds and 665 Tree Swallows. A cold spring with late spring rains caused abandonment of many early nestings. The last fledgings were in early August. House Wrens were a major problem.

Jackie Howe notes that Omaha Area Trails fledged 362 bluebirds in 1996, an increase from 304 in 1995.

June Papst was extremely fortunate. On her initial experience with monitoring a bluebird trail (during 1996) she had bluebirds use five out of eight boxes and fledged 26 (all eggs hatched and fledged). It will be difficult to top the experience of finding two albino nestlings (which she photographed). Her trail also fledged five Tree Swallows and three Great Crested Flycatchers.

Cecilia Antholz, Nemaha County, had a Red-headed Woodpecker use a slot box, laying five white eggs on the bare floor of the box. Two eggs hatched. Nemaha County won the free picnic BAN provided for having the greatest percentage increase in bluebird fledgings. The picnic was held on 17 August at Coryell Park with a total of 62 in attendance. BAN received some great coverage from the *Nebraska City News Press* on the events of the day, many bluebird items were sold, and 15 new members were enrolled.

Jim McLochlin summarized the 24 August 1996 Iowa Bluebird Conference in Atlantic, Iowa. [Ed. Note: If material had been received from that group, the conference would have been summarized under Iowa instead of Nebraska.] Chairperson Donna Rourick presented an introductory program entitled "Where Have All the Bluebirds Gone?" It was designed for beginning bluebirders and covered many basics. Katy Sheley presented a program on Iowa snakes oriented to understanding snake behavior so predation prevention methods could be incorporated into trail monitoring without harming snakes.

Pat Slaurbaum of the Iowa Department of Natural Resources spoke on the importance of supporting the proposed federal wildlife diversity program that would raise money for wildlife programs by levying a small tax on gear for birders, campers, etc.

Greg Schmitt, an Iowa County Roadside Management manager, spoke of efforts to convert roadsides from high maintenance brome grass to low maintenance prairie grass and wildflowers. He also incorporated an American Kestrel nest box program into his roadside management program in Greene County.

Predator guards were another topic for discussion with several people demonstrating successful guards.

BAN had good success in publicizing the organization and telling people about bluebirds by participating in a number of events. Under Patsy Ahlman's enthusiastic direction, they maintained a booth at the Farmer's Market during the season which reached many people. For the first time this year, the group had a booth at the Nebraska State Fair. More than two dozen BAN members staffed the exhibit for six days. The last major outreach was at the Festival of Color at Mead which was a daylong event attended by thousands. Again, it was an outstanding opportunity to present the bluebird/cavity nester conservation story.

An article by Gerald Pattee is reprinted from *Nature Society News* which graphically describes the author's sad experiences with House Sparrows' predation of Eastern Bluebirds and Tree Swallow nests. Despite a rigid sparrow control program, he found it a continuing battle to prevent the native species from being killed by aggressive interloping House Sparrows.

Dwane Zimmerman outlines BAN's new approach to promoting bluebirds in the state. Instead of the current six large geographic areas, they are adopting the Ohio Bluebird Society's idea of using county coordinators. They are now actively seeking volunteers to serve in this capacity.

--*Bluebirds Across Nebraska*

#### **NEW YORK--*Bluebird News*, Fall '96**

The fall meeting of the New York State Bluebird Society (NYSBS) was held again in Arrowhead Lodge in Brewerton. Outgoing President Ray Briggs hosted the meeting. An informal poll of those attending indicated a significant drop in bluebird production in 1996 from the all-time high levels of 1995. The spring meeting will be held 10 May 1997 at the Audubon Society in Jamestown.

The new president is Rich Wells. Ray Arendt was elected first vice president and Dean Robie second vice president. Pay Lynch and John Ruska were elected to the Board of Directors.

Joe Therrien and Denise Moore provided an update on the Route 20 Bluebird Research Trail; with its 1,800 boxes it is 95% complete. Boxes have been erected in all 15 counties through which the trail runs.

Professor Kevin Berner presented the latest results of his 1996 research with Peterson and standard boxes with both round and oval holes. Of 18 successful nesting attempts by bluebirds, 14 were in standard (NABS) boxes with oval holes.

Genevieve Harrington was presented with a plaque honoring her for her tireless efforts on behalf of bluebirds as well as her work over the years as recorder of annual survey results.

The address for the NYSBS web site has changed. It is now:  
<http://www.geocities.com.rainforest/2414/nysbs.htm>

Kevin Berner, research chairman for both NABS and NYSBS, was the recipient of the Elon Eaton Memorial Award presented at the annual meeting of the Federation of New York State Bird Clubs held in Albany. The award was presented in recognition of his outstanding research in the field of bluebird nest boxes and habitat preferences.

An article entitled "Winter Friendly Plantings for Bluebirds," spotlights half a dozen native shrubs that are valuable sources of persistent winter fruit for bluebirds. The list includes northern bayberry, flowering dogwood, staghorn sumac, American highbush cranberry, nannyberry, and common winterberry.

--*New York State Bluebird Society*

---*BLUEBIRD BOOSTER*, Fall 1996

To help bluebirds survive the winter, plug ventilation holes and put grass in the bottom of bluebird boxes providing a roosting site for cold winter nights.

Joe Therrien, who served as fulltime intern in 1995 and part-time in 1996, is analyzing data relating to habitat around House Wren nest sites. Preliminary data indicate that distance from the nearest hedgerow is still the most important variable. The farthest wren nest from a hedgerow was 55 yards. It appears that wrens are moving into the open. More information will be forthcoming when all data are statistically analyzed.

The Schoharie County Bluebird Society (SCBS) held their most successful single day fundraiser ever. It was an informational meeting and raffle held at the SUNY Cobleskill recreation center lodge in April 1996. SCBS also participated in the Cobleskill Sunshine Fair for the first time; the display received a significant amount of attention.

It is impressive that of the 11,217 households in Schoharie County 1,700 are on this newsletter's mailing list. That's 15% of all county households!

The SCBS has achieved non-profit status through the work of President Nancy Davis-Ricci and Treasurer Wesley Stuart. For 11 years the group has survived--even flourished--without any membership fees, funded solely through donations and sales of t-shirts and nest boxes.

Jeanne Ayers writes about "Native Plants for Native Birds." She encourages the use of native trees and shrubs and lists some non-native invasive species to avoid: Japanese barberry, common barberry, crown vetch, Russian olive, autumn olive, Tartarian honeysuckle, multiflora rose, and Norway maple.

--*Schoharie County Bluebird Society*

**NORTH CAROLINA**--*BLUEBIRD NOTES*, September-November 1996

Historian Bea Mansfield summarizes the significant people and events in the first decade of the North Carolina Bluebird Society (NCBS). Much has been accomplished and the active group is well launched in its second decade of helping bluebirds and other native cavity nesting birds.

Editor Helen S. Munro lists some basic information for an inexperienced individual who may be "Setting Up a Bluebird Trail." A page of "Bluebird Hints" modified from a Bowater publication is included. It touches on some basics of box placement and the bluebird life cycle.

NCBS was represented with a display at Wing Ding, a festival of birds, held at the Natural Science Center of Greensboro on Saturday, 14 September 1996.

--*North Carolina Bluebird Society*

**OHIO**--*Bluebird Monitor*, Winter 1996

President Doug LeVasseur gratefully acknowledges the gift of the two volume set of



books entitled *The Birds of Ohio* by William Leon Dawson published in 1903. The section on the Eastern Bluebird contains a description of one of Ohio's "Bluebird Pioneers" as LeVasseur dubs them--one Will Schmidtcons. The Ohio Bluebird Society (OBS) would like to learn more about him and would eventually like to find a suitable way to honor the early bluebirders.

At the Ninth Annual Meeting of OBS on 19 October 1996, the following officers were elected: President Doug LeVasseur; Vice President Bill Davis; Treasurer Chris McOuillen; Secretary Joan Davis; and Trustees Mark Mohr, Mona Rutger, and Duane Ferris. Membership stands at 650. The increase in membership is credited to the County Coordinator Program.

Presentations at the meeting were varied. Dr. Wayne Davis presented data on his research at the University of Kentucky. Dan Best and Andrew Fondok presented a fascinating program about their efforts to aid the Prothonotary Warbler. Darlene Sillick headed a lively and informative round table session, "Trail Success--The Why's and Why Not's." Veteran bluebirder Dick Tuttle took the group through "Three Decades of Bluebird Conservation."

The Wildlife Conservation Award went to Ed Smith of the East District Office of Ohio State University for his conservation efforts in several counties in southeastern Ohio. The coveted Blue Feather Award for 1996 went to Joan and Bill Davis of Dayton. Their efforts to promote the cause of bluebird conservation and enlist members have been exemplary.

Bob Orthwein relates his success in 1996 with experimental House Wren guards. Each is a thin piece of wood (attached to the front edge of the box roof) which extends just below the bottom of the entrance. This guard blocks view of the entrance but allows birds to maneuver behind it. Current efforts are designed to prevent House Wrens from disrupting chickadee nests. Orthwein attached guards to three boxes occupied by chickadees in 1996. One box was in his yard. The guard was placed after incubation began. The female adjusted in eight minutes; the male took nearly four hours. Four chickadees fledged with a singing House Wren in the area.

Jeff Davis attached a guard to a box during chickadee egg laying. Six chickadees fledged. The same box (with guard attached) fledged seven young in 1995. Once the chickadees fledged and the guard removed, wrens had a nest and eggs in the box within a week.

In late spring a chickadee laid two eggs on an almost bare box floor and abandoned the attempt. A guard was put on the box and the eggs were still there in September with no sign of wrens.

In 1996 Darlene Sillick fledged six chickadees from a guard-equipped box, and Dick Tuttle fledged seven titmice. He used a two inch space between the guard and the entrance hole for the titmice. No guards were used on bluebird nests. Chickadees were observed to fly under the guard and up to the hole. The results of use of this wren guard have been encouraging.

The author hopes to try guards on bluebird boxes in 1997 but wants to be able to observe responses by the birds. He feels that further testing and observation is necessary before recommending this deterrent for species other than chickadees.

Dean Sheldon, Jr. entitles his column "Sow's Ears" providing numerous suggestions for rejuvenating a bluebird box that is in need of assorted repairs. He suggests use of various fasteners, caulks, reinforcement pieces, and replacement parts. If after exercising great ingenuity a box cannot be reclaimed, it will at least be good kindling....

Wayne Davis in his "Notes From Kentucky" relates the good news that he had a Bewick's Wren nest in one of his boxes in central Kentucky. Bewick's Wrens used to be a common dooryard bird on rundown farms with poor soils on dry hillsides, but the past

decades have seen their numbers drop dramatically east of the Mississippi River. After not seeing any Bewick's Wrens in Kentucky for 30 years, in each of the last three years he has had a nest. There is hope that they might be helped in the hill country of southern Ohio. He describes the 1995 nest as in a squared piece of 2x4 (intentionally made small for Prothonotary Warblers) which was put up on an old hill farm with poor, rocky soil. It was placed near a barn to divert House Sparrows from bluebird boxes; instead, it fledged Bewick's Wren!

A page entitled the "Kiddle Korner" is designed to encourage younger bluebirders.

Doug LeVasseur notes that almost 100 Ohio bluebirders have registered their trails and, in 1996, fledged more than 2,500 bluebirds.

The membership form has been modified to include a three year renewal option, a lifetime membership category, and a line soliciting a donation above the amount of the annual dues.

William Davis reports on the year's activities with the County Coordinator Program promoting OBS in all parts of the state at numerous events.

--Ohio Bluebird Society

#### **OKLAHOMA**--*Bulletin of the Oklahoma Ornithological Society*, December 1996

Jack D. Tyler and F. Jane Bechtold use National Audubon Society Christmas Bird Count (CBC) and United States Fish and Wildlife Service Breeding Bird Survey data to analyze the "Statuses of four avian species in southwestern Oklahoma." One of the species discussed is the Mountain Bluebird which is a winter resident in western Oklahoma, recorded from 27 September to 22 April. This species is more strongly associated with mountains in summer than winter. In southwestern Oklahoma, CBCs recorded the species only at the Wichita Mountains Wildlife Refuge in Comanche County. Mountain Bluebirds were not recorded during 14 of 27 count years between 1965 and 1994. A high of 411 birds was recorded in 1991, for a mean of 44.10.

--Oklahoma Ornithological Society

#### **ONTARIO**--*Ontario Eastern Bluebird Society 1996 Fall Newsletter*

Early reports from 1996 monitors indicate that the number of bluebird pairs breeding may be down considerably from 1995, but those that did breed were often successful in bringing off two broods. After any cold winter, fewer pairs survive to return to breed. From November 1995 to May 1996, seven months of below average temperatures were recorded in Ontario.

For those attending the NABS conference at the Royal Botanical Garden in September 1996 who participated in the raffle of the Robert Bateman print, it was won by Michael and Elizabeth Shaw, longtime Ontario Eastern Bluebird Society (OEMS) members. The raffle raised \$378.41 which was sent to the Prothonotary Warbler Recovery Team at the Long Point Bird Observatory.

Based on a Cosewic (Council on the status of endangered wildlife in Canada) report by William F. Read and Robert Alvo, the Eastern Bluebird has been delisted from its previous category of vulnerable. The report recommended continued monitoring of the population on an annual basis and continued promotion of monitored, predator-proof nest box trails.

Leo Smith of Brantford was awarded the 1996 OEMS Conservation Award.

This newsletter included survey results from 1995 which saw 5,653 boxes produce 4,980 bluebirds.

Holiday Beach on Lake Ontario is a location where bluebird migration can be observed, particularly if the winds concentrate the birds. The peak day in 1995 was 4 November when 64 were counted. The best day ever was 27 October 1991 when brisk northwest winds concentrated 825 bluebirds at this location.

Editor Bill Read reprinted an article from the *Wilson Bulletin* 107(2):377-379 by Susan B. Meek and Raleigh J. Robertson entitled, "Time of day of egg laying by Eastern Bluebirds." Eastern Bluebirds in boxes near the Queen's University Biological Station, Chaffeys Locks, Ontario, were studied from April to July 1989 and 1990. Results were that no new eggs were laid before 06:30 (EST). A few eggs were laid before 07:00 and most new eggs were present by 09:00. Only three eggs were laid after 09:00. The proportion of nests with a new egg reached 50% between 07:01 and 08:00. The authors estimated that the mid-point of that hour, 07:30, was close to the median laying time for Eastern Bluebirds in eastern Ontario. This is consistent with observations in other parts of the continent that found the median time of egg laying was about two hours after sunrise. A grant from the North American Bluebird Society in 1989 and 1990 helped fund this research.

--Ontario Eastern Bluebird Society

#### **OREGON--***Western Bluebird Newsletter*, November 1996

Bluebird numbers were up. In 1996, 654 Western Bluebirds were banded compared to 543 in 1995. Credit for this increase is thought to be three-fold: a winter which allowed a good carryover of adult birds, more nest boxes are being put out, and more people are feeding bluebirds supplemental mealworms to get them through cold, wet springs.

Predation on trails rose in 1996 and raccoons replaced cats as the most dangerous predator. House Sparrows are a continuing problem, but Dan Brown has built sparrow traps which may be borrowed by anyone with a sparrow problem.

On 28 September 1996 the Hillsboro Backyard Bird Shop designated the Prescott Bluebird Recovery Project as the recipient of one day's sales receipts.

Elsie Eltzroth of the Corvallis Audubon Society reported banding 487 bluebirds in a successful season despite cold, wet weather during the first nesting.

Betty Gooding of Culver on the east side of the Cascades reported that all her boxes along Ridge Road were destroyed in the Ashwood-Antelope forest fire in September 1996. Fortunately, the fire occurred after the nesting season.

Thelma Medley of Condon reports that in 1995 bluebirds nested in her husband's old cowboy hat on the back porch. In 1996 her husband tacked the hat to an old board and put it up in a protected corner of the open porch--and bluebirds nested in it again.

The Barn Owls on the late Earl Gillis' property (where his nephew Gary now lives) fledged four young from six eggs.

Dave Fouts reports a banner year for Purple Martins along the Columbia River. The martin population had dropped in this area due to loss of cavities, increased use of pesticides, and competition from non-native species. When Fouts started working with martins, there were 80 breeding pairs along the lower Columbia River. Thanks to his hard work, there are now 400 pairs!

--Hubert Prescott *Western Bluebird Recovery Project*

#### **WISCONSIN--***Wisconsin Bluebird*, Fall 1996

Beginning with 1997, the individual/family membership dues have been raised from \$5.00 to \$8.00, primarily because of higher newsletter costs.

The bluebird trail at Hartman Creek State Park is being completely renovated by Waupaca County Coordinator Pat Stern, who found the neglected trail unproductive and the boxes poorly sited. Peterson boxes were paired with Hill Lake or Herman Olson boxes, replacement boxes were mounted on steel posts with predator guards, and boxes were spaced correctly. This resulted in 100% occupancy by bluebirds of the Peterson boxes. By early July, there was no predation reported. Amazingly, much of this trail renovation took place after a serious farm accident suffered by Pat Stern on 23 April.

The healing was a slow, painful process, but it appears to be successful.

Carol McDaniel in her "County Coordinator Column" spotlights activities of various coordinators who made presentations or arranged workshops: Nancy McFarland, Sauk County; Betty Refior, Walworth County; Dick Wanie, Jefferson County; and Harvey Hartwig, co-coordinator of Lafayette County. McDaniel also noted that Dodge County Coordinator Don Kopff received the 1996 Bronze Passenger Pigeon Citation of the Wisconsin Society for Ornithology for originating and continuing the nest box building project at the Beaver Dam Senior Citizen Center.

Butch Dietenberger of Allenton kept notes on a box in which the female disappeared three days after four nestlings hatched in a second brood. The male Eastern Bluebird was able to rear them and all fledged.

Joe O'Halloran, chair of the Data Analysis Committee, computer-sorted the 1995 data base to see that "Box Volume Affects Bluebird Use." The volume of three of the most widely used nest boxes in Wisconsin was computed: shallow Peterson 65.7 cubic inches, Herman Olson 186.7, and deep Hill Lake 257.4. Wisconsin counties were divided into five groups based on different ratios of Tree Swallows (TS) fledged to Eastern Bluebirds (EB) fledged. According to this calculation, the greater the box volume the lower the bird occupancy with percentages varying with Tree Swallow competition. The highest rate of Tree Swallow fledging (more than 4.5 TS fledged for each EB fledged) found EB occupancy rates as follows: Peterson 13.3%, H. Olson 11.1%, and Hill Lake 5.8%. At the other extreme, when there was virtually no TS pressure (none to 0.5 TS for each EB fledged), EB occupancy rates were Peterson 50.2%, H. Olson 38.5%, and Hill Lake 38.5%.

The Data Collection and Analysis Committee is seeking a better understanding about how nest boxes placed in proximity affect bluebird and Tree Swallow production. They have revised the annual survey summary to obtain this information.

The Bluebird Restoration Association of Wisconsin participated in Farm Progress Days west of Wausau 16, 17 and 18 July at the invitation of the Department of Natural Resources. Considerable time and effort went into producing an attractive display with nest box plans and predator guard plan handouts. It was staffed all three days providing an opportunity for bluebirders to talk to many visitors.

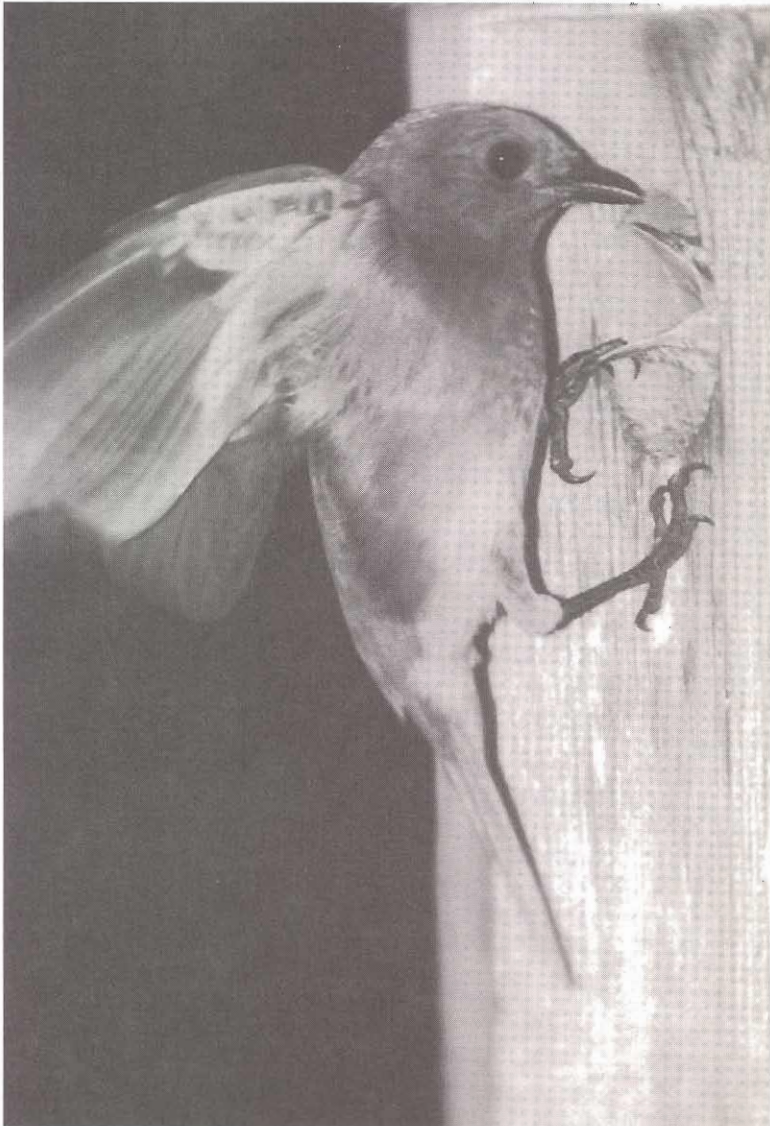
Editor Don Bragg highlights guards for boxes in "This Winter Make Better Predator Guards." Diagrams for Noel guards and the U.S. Fish and Wildlife Service's cone guard are included. Other guards mentioned include iron pipe rubbed with steel wool and carnauba wax,, square downspout, PVC pipe, and one-half inch electrical conduit over rebar (the latter for Gilbertson boxes). All of the pipes and conduits benefit from a coating of carnauba wax.

Carol McDaniel relates "A Strange Case of Eastern Bluebird Nestling Fatality" along one of her trails beneath electrical transmission lines. Eighteen bluebirds, four Tree Swallows, and four House Wrens died of causes that, so far, have not been determined. All nestlings were 12 to 14 days old. The deaths spanned a period from 3 June to 3 July 1995. No obvious predation or insect problems could be pinpointed. On 3 July the following were found dead in nests: five bluebirds, four Tree Swallows, three bluebirds, four wrens. Adult swallows and bluebirds were present. Spraying of Gerlon 4 and See 2,4,D on the brushy vegetation in the area had taken place on 25 June. (These herbicides are known to be toxic to fish.) Farmers in the area who were questioned had not sprayed. Someone suggested a virus might have killed the birds, another suggested mites. To date no explanation has been satisfactory. The author is interested in hearing from other bluebirders who have had similar experiences: 14953 Highway 23, Darlington, WI 53530.

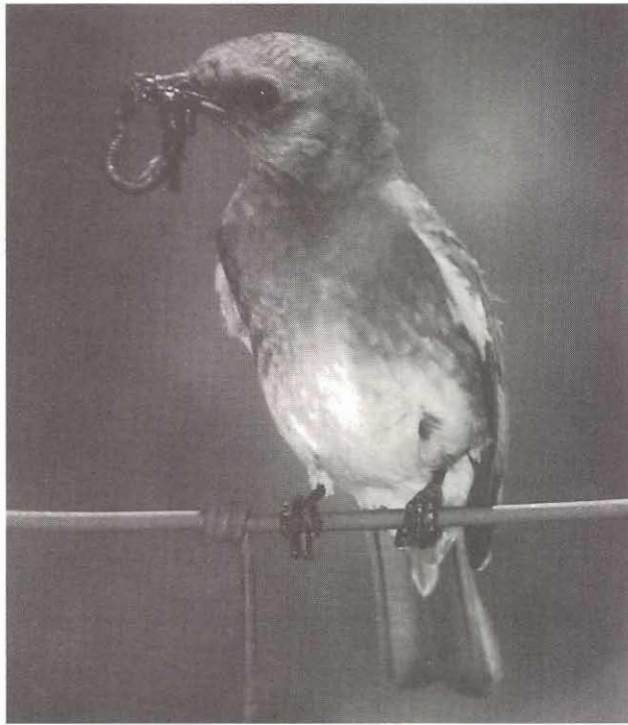
*--Bluebird Restoration Association of Wisconsin, Inc.*

## Two Cavity Nesters

Hubert Brandenburg of Hagerstown, Maryland, photographed cavity nesters near his home. Below: a male Eastern Bluebird brings food for a hungry nestling. Opposite page: above, a male Eastern Bluebird with a bill full of food pauses on a fence before flying to a nest box; below, a male Red-bellied Woodpecker comes to a stump for sunflower seeds.







## 1997 NABS RESEARCH AWARDS

The North American Bluebird Society is pleased to announce the presentation of the fourteenth annual research grant awards. The 1997 recipients are as follows:

### BLUEBIRD GRANTS

Dr. William Ehmann, Trinity College

*The James L. Williams Memorial Award*

Title: Improving Confidence in Predictors of Nest Box Choice: A Study of Eastern Bluebirds in Rural Virginia

### STUDENT GRANTS

Jeffrey Davis, University of Tulsa

Title: Costs and Benefits of Group-living in Purple Martins

David Arsenault, University of Nevada, Reno

Title: The Flammulated Owl in New Mexico: Effective Dispersal and Conservation of Fragmented Populations

Pamela Freeman, North Dakota State University

Title: The Use of Individual Voice Identification in Censusing of Barred Owls

Larry Wood, University of Memphis

*The Betty H. McIlwain Award*

Title: Densities and Turnover Rates of Cavities and Their Effect on the Breeding Biology of the Prothonotary Warbler

### GENERAL GRANTS

Dr. Frederick Gehlbach, Baylor University

*The Maybelle F. Vassbinder Memorial Award*

Title: Life History and Ecology of Three Syntopic Screech Owls Potentially Influenced by Ecotourism and Suburbanization

## NABS RESEARCH COMMITTEE

The North American Bluebird Society is most grateful to the Research Committee for their efforts in choosing the recipients of the annual research grant awards. Each committee member reads and evaluates each grant application. Awards are made after careful review and are a pooled consensus. The Research Committee consists of Chairman Kevin Berner, Dr. Jeffrey Brawn, Dr. George Hurst, and Dr. Theodore Gutzke.

Individuals wishing to endow a named grant can do so as a one-time donation, on an annual basis, as a memorial to loved ones, or as a planned bequest. If you are interested in helping to further bluebird and other cavity nester research, please contact Treasurer Glenn Funkhouser, Box 6295, Silver Spring, MD 20916-6295.

# My Experience with Paired Boxes

Steve Eno

*To pair, or not to pair, that is the question. Whether 'tis wiser on the trail to suffer the slings and arrows of swallow overpopulation, or to take arms against a sea of swallows and by pairing, end them.*

Do I have a computer full of figures, statistics, and data analysis? No. Am I an expert statistician? No. Did I pass my basic high school math courses? Barely. What I want to share with you is four years of trail experiences and observations of Tree Swallows with paired boxes on Wachiska Audubon's bluebird trails in southeast Nebraska. Please keep in mind that this is not, by any means, any type of research project, nor do I consider myself to be an "expert" bluebirder.

These trails were originally put up in 1986-1987 by Nebraska Game and Parks Commission on wildlife areas in the Salt Valley recreational areas around Lincoln, Nebraska. Because of a lack of staff by Game and Parks, Wachiska Audubon (the local Audubon chapter) took over the monitoring of these trails.

I became chairperson of Wachiska's Bluebird Recovery Committee in 1993 and was in charge of their trails through the 1995 season. Sanford Downs took over my position in 1996, but I have remained actively involved with the trails.

The original boxes on these trails were all NABS boxes mounted on fence posts three to four feet from the ground. After taking over the trails, reviewing the records, and seeing the decline in the bluebird numbers in recent years, it became obvious that a major trail renovation was in order.

In early March of 1993, the renovation began. Most of the old NABS boxes were in poor condition and had to be replaced. The majority of the boxes removed were replaced with Peterson boxes with some being replaced with Gilbertson PVC boxes. The Peterson boxes were mounted

on 1-inch pipe and the PVC boxes were mounted on a 1/2-inch conduit placed over 1/2-inch rebar. Many of the original boxes on the trails were already paired; after the renovation, *all* boxes on the trails were paired, approximately 15 to 20 feet apart. Some of the box locations were relocated because of an overgrowth of cedars and/or sumacs.

Before the 1993 trail renovation began, there were 278 boxes on 10 trails. After three years of work and expansion, there are now 355 boxes on 14 trails. Wachiska Audubon is very lucky to have a good number of volunteer trail monitors. There is a standard form filled out and mailed to the chairperson after each weekly trail walk. I set up a record system where each box has a separate sheet with that box's data recorded on a weekly basis. This became a tremendous educational experience for me, as it allowed me to follow the progress of each box on a weekly basis without having to actually walk each trail myself (The weekly report form also provides a space for the trail monitor to indicate any problems or "unusual activity" happening in or around a specific box.) I do walk some of the trails on a regular basis and occasionally substitute on some of the rest, so I do manage to stay very familiar with these trails. The 52 boxes on my own trail are also paired (with a high occupancy by Tree Swallows).

As the table below shows, there was a dramatic increase in *both* Eastern Bluebirds and Tree Swallows fledged prior to 1993.

The Tree Swallows had a 10% increase, compared to the 68% increase in bluebirds in that same four-year period.

Table 1. Number of Eastern Bluebirds and Tree Swallows fledged from Wachiska Audubon's bluebird trails.

YEAR	1986	87	88	89	90	91	92	93	94	95	96
TOTAL BLUEBIRDS FLEDGED	234	270	194	199	131	160	148	225	321	309	379
TOTAL TREE SWALLOWS FLEDGED	----- Records Not Available -----							317	491	627	665

The largest yearly jump for both birds was 1993-1994, with a 42% increase in bluebirds, compared to a 54% increase in Tree Swallows

I believe that if your trail consists of single boxes and your Tree Swallow numbers increase to where they are in direct competition with bluebirds for a box, the only solution is to pair the boxes on your trail. Richard Tuttle's article on Tree Swallows and paired boxes (*Sialia* 13(1):3-13) talks about how the bluebirds actually benefit from having Tree Swallows in the neighboring paired box. His theory is that Tree Swallows will defend the territory around *both* of the boxes, protecting them from usurpation by House Wrens and House Sparrows. When I am walking a bluebird trail and find a pair of boxes occupied by Tree Swallows and bluebirds, I feel good knowing that there are two pairs of birds defending the nesting territory.

In the past four years, I know of only three times that Tree Swallows nested in both boxes, and in one instance, one of the Tree Swallow nests was abandoned. In order to discourage Tree Swallows from nesting in both boxes, I believe that 25 feet should be the maximum distance between paired boxes. On the other hand, I would keep a minimum distance of 15 feet between paired boxes because of the natural competition between the two species.

I believe there are numerous benefits to pairing boxes. But there are certain circumstances when box pairing won't eliminate conflicts and competition between these two birds. When the

bluebirds' first nesting attempt is delayed due to weather conditions, the bluebirds' and Tree Swallows' first nesting attempts coincide. If the bluebird hasn't laid claim to a nesting box before the Tree Swallows arrive, there may be direct competition for a particular box. Nest failure by one or both birds can also affect the compatibility of these two birds, as well as nest usurpation by both species.

As pointed out earlier, what I have shared here is simply four years of observations from established bluebird trails in Nebraska. For more detailed information on the compatibility of the bluebird and the Tree Swallow, refer to the previously cited article and another by the same author (*Sialia* 9(1):3-7,34).

Remember, also, that we should be helping cavity nesting birds such as the Tree Swallow. They are always a pleasure and add an extra dimension to walking a bluebird trail. ■

2500 W. James Dr.  
Raymond, NE 68428

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### Historian's Request

Please send newspaper and magazine articles about bluebirds to Historian Shirley Adams, 3484 Torch Club Rd., Alton, IL 62002. Be sure name and address of publication, volume and date are included. Photographs of members engaged in publicizing bluebirds are always welcome. These items will be added to scrapbooks kept as a permanent record of activity on behalf of bluebirds and other native cavity nesting birds.

## IN MEMORIAM

Each year the spring issue of *Sialia* carries a list of memorial gifts which have been received by the North American Bluebird Society during the preceding year. Contributions can be made as general donations to the Society or can be specified for research, education, or gift memberships.

*In honor of Bernice Allison*

Laura Schaller

*In memory of Mildred Beaver*

Paul & Bernice & families  
Sharon, Bud, Phil, and Jean  
Dorothy Boyer  
Lance Boyer  
Colleen Fetters  
Jamie Henne

*In memory of George Frederick Holler*

Katie & Wallace Knapp

*In memory of Ravenel Lucas*

Dr. Shirl Brunell

*In memory of Edith Lund*

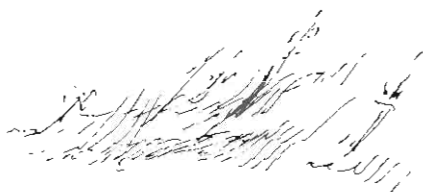
Richard & Thelma Files  
Mr. & Mrs. Edward Norris

*In memory of Herbert Moses*

Mrs. Garnett T. Tunstall

*In memory of Col. William R. Robertson*

Dorothy & Lincoln Brudno  
Ginny & Hank Wheat



*In memory of Delos "Chuck" Dupree*

Jon Boone  
Gisela M. Brown  
Martha Chestem  
Margaret D'Anna  
Malcolm & Sadie Dorber  
Donald F. Dupree  
Raymond Dupree  
Glenn & Sarah Funkhouser  
Mary D. Janetatos  
Ron & Priscilla Kingston  
Katie & Wallace Knapp  
Nancy & Lucy MacClintock  
Marjorie Mountjoy  
George P. Noble  
Frieda Plaski  
Mark & Jean Raabe  
Michael L. Smith  
Robert P. & Joanne K. Solem  
Mrs. Garnett T. Tunstall  
Frank & Theresa Vecchiarello  
Dorothy L. Wensil  
Donald E. Yoder

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### NEW NABS SLIDE SHOW

The new NABS slide show is available for rental at \$10.00 or purchase at \$75.00 + \$7.50 shipping and handling. The show consists of 110 collated, plastic framed 35 mm slides and a printed script (no slide tray). If a cassette narration is desired, add \$10.00 + \$1.50 shipping and handling to the purchase price.

To rent or purchase the bluebird slide show, write to the following address: NABS Slides, P.O. Box 6295, Silver

Spring, MD 20916-6295. Please allow one to two weeks for delivery and, if possible, specify several dates for rental.

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### Getting to Know...Bluebirds!

See the enclosed picture catalogue for information concerning the 36 page educator's packet produced by the NABS Education Committee. Designed to be used in grades four through six, the material can be adjusted for use with younger or older students.



## Trapped Bluebird Is Set Free

*Linda and Ray Stephens of Denton, Texas have a ranch in southeastern Oklahoma. They shared a bluebird "experience" they had that turned out well for everyone--especially the bluebird!*

I'll never forget that morning. Ray and I were enjoying a leisurely breakfast when we heard a strange noise. To our surprise, we soon discovered the sounds were coming from the fluttering of a frightened bluebird inside the fireplace.

After deliberating on how to best free the bird, the challenge began. Eventually, Ray caught the bird. While he was holding it carefully in his hand, it abruptly escaped into the wide open space in the big living room. The following moments would have fit into any circus act. It was hilarious trying to recatch this free-spirited bird.

I will always remember the colors in that male bluebird, a brilliant and vivid blue. It was an unbelievable sight. After observing its awesome, gorgeous colors for a few minutes, and then taking its picture (you can see that Ray has a gentle, but firm, hold on the bird's legs), the little creature was released outdoors and flew merrily away. ■



*The above item was submitted by Dr. Bill Williams of Denton, Texas.*

## Mountain Bluebird Depicted on Patch



Each year a patch is produced with a bird native to the Ben Delatour Scout Ranch. This is the site of summer camps for the Longs Peak Council of the Boy Scouts of America. In 1996 the patch depicted a Mountain Bluebird. --Terry Dunn, Program Director, Longs Peak Council BSA, Box 1166, Greeley, CO 80632.

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## Ohio Bluebird Society Offers Trail Registration to Its Ohio Members

During the 1996 bluebird nesting season the Ohio Bluebird Society (OBS) offered its in-state members the opportunity to make a commitment to bluebirds by registering their trail with the Society. Early in the spring members were sent a registration form asking the participant the location of their trail and the number of boxes monitored. As part of the registration, participants agreed to monitor their trail on a regular basis, to take reasonable precautions to protect nest boxes from predation, and to fill out a short survey form at the end of each nesting season.

Seventy-five of our members responded to the OBS offer with more than 1,800 nest boxes registered. The largest trail registered was more than 200 nest boxes and the smallest was a trail of a single nest box. The number of bluebirds fledged from Ohio Bluebird Society-sanctioned trails has yet to be determined.

In exchange for this commitment to the bluebirds, participants received an Ohio Bluebird Society Certificate. It is custom-printed and is in color. We feel it is handsome enough to be prominently and proudly displayed in any home or office or at a trail location. [See sample certificate on following page.]

Perhaps other state bluebird organizations would be interested in initiating a similar program for their members. If so, please contact me.

---Doug LeVasseur, *President, Ohio Bluebird Society*  
20680 Twp. Road 120, Senecaville, OH 43780

# Ohio Bluebird Society



This is to certify that

**Mary & John Bluebirder**  
maintain an officially-sanctioned Bluebird Trail  
of 9 nestboxes registered with the society.

On an Ohio Bluebird Society Sanctioned Trail-nestboxes are monitored on a regular basis and reasonable precautions are taken to protect nestlings from predation. A nestbox survey is sent to the Ohio Bluebird Society seasonally.

*Mary & John Bluebirder* Aug 24, 1996  
President, Ohio Bluebird Society, Date



Extract from Research Committee Report for Annual Meeting,  
Burlington, Ontario, 12 September 1996

This summer I attempted to discern why bluebirds have overwhelmingly selected Peterson boxes over all other styles in my research. I tested equal numbers of oval- and round-holed NABS and Peterson shaped boxes. All possible combinations of paired boxes with only one of the two features (hole or box shape) differing were tested in equal numbers. Box pairs were randomly placed in all five of my study areas regardless of past style of boxes present at the site.

The box style that was selected by bluebirds the most often was the oval-holed NABS-shaped box. One possible

bias in the study is that these boxes were the lightest color being new pine wood with an unweathered light stain. The round-holed Peterson boxes were new but appeared slightly weathered or were at least a little darker. The regular NABS and Peterson boxes were all weathered for at least one year. As a result, the box holes showed a greater contrast to the boxes in the oval-holed NABS boxes. Still these boxes were chosen over their immediately adjacent neighbors. This preferred box was also slightly deeper than other boxes.--Kevin Berner, *Chairman*

**Table 1. Number of nesting attempts for each style of box in 1996 field trials.**

Box style	Bluebird	Swallow	Wren	Sparrow	Total
NABS-Round	1	14	0	3	18
NABS-Oval	14	8	1	0	23
Peterson-Oval	1	13	1	2	17
Peterson-Round	2	20	1	2	25
<b>Total</b>	<b>18</b>	<b>55</b>	<b>3</b>	<b>7</b>	



Photograph by Shirley Adams

The Illinois license plate on Lloyd Wilson's pickup truck identifies him as an enthusiastic bluebird supporter.

## THANK YOU, VOLUNTEERS!

Each quarter the Society has help in sending out *Sialia* which is provided by the good-natured folks from Rossmoor Leisure World. Pictured is the group from July 1996. They are Helen Tunstall, Blanche Kendrich, Harriet Shapiro, Lillian Warfield, Mary Jo Bromall, and Barbara Wyckoff. NABS Executive Director Mary Janetatos is showing them what is involved. Not pictured, but frequent volunteers, are Alice Hagerty, Barbara Enagonio, Eloise King, Chychy Bauer, Bernice Moses (with whom we mourned the recent death of her volunteer husband, Herb Moses), Kathy Mallon, Rosalyn Peart, Florence Defever, and Alice Saathoff.

On a weekly basis as we need her help, Marjorie Mountjoy helps in the mailing department. She is one of our *Stalwarts*, having been with us for *many* NABS years.

To ALL of you, we say a heartfelt, "Thank you SO much for your good-humored generosity!"

--Mary D. Janetatos







## BAN'S Top 10 List

You know you're a "Bluebird Nut" when:

1. You spend your entire vacation picking up bluebird souvenirs.
2. Your monthly long distance phone bill is in triple digits due to bluebird calls.
3. Your new nickname is "Mr. (or Mrs. or Ms.) Bluebird."
4. You've developed a technique for trapping people in a corner so that they can't escape when you're talking bluebirds.
5. There is a bluebird-related item in EVERY room of your house.
6. You realize that the only books you've read in the past five years are about bluebirds.
7. Your kids want to move out of the house because they've heard that "B" word one too many times.
8. Mealworms escape the container and they infest your house--exterminator is required. (Extreme "Bluebird Nut" if the worms are simply relocated rather than banned from the house.) (Lonely "Bluebird Nut" if they get out again!)
9. There are more bluebird plates in your house than dinner plates.
10. You suffer "empty nest syndrome" whenever your nestlings leave one of your bluebird boxes.

*This is reprinted from the Spring 1996 issue of Bluebirds Across Nebraska newsletter.*

# BLUEBIRD EXPRESS

*SIALIA welcomes the correspondence of its membership Bluebird Express should become a forum for all who are interested in communicating their ideas and actions concerning bluebird conservation. We will attempt to publish a wide range of views in a responsible manner. Keep your letters coming!*



Dear Editor:

I very much enjoy *Sialia!* It is nice to know others who share my love of native birds. Keep up the good work. Enclosed are my dues for the next three years.

Karen L. Blake  
Naturalist  
Huron-Clinton Metroparks

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Dear Editor:

I had a great nesting season [1996]. It was cold and wet in the spring, but the bluebirds held off nesting about two weeks--most of them that is. The weather turned dry from mid-May through August. It didn't get that hot in July or in August. As a result, I had 49 successful nestings out of 70 attempts, 192 bluebirds fledged and 40 Tree Swallows. I topped 2,000 bluebirds fledged this summer for my 13 years of bluebirding.

I was at the Guernsey County Fair all day yesterday (12 hours) talking about bluebirds. It was a lot of fun.

Tom A. Barber  
60406 Stewart Rd.  
Cambridge, OH 43725

*Earl Gillis, of Newberg, Oregon, who died 11 November 1995, was a man of many interests. After the NABS meeting in Red Deer, Alberta in July 1985, he sent the following letter. Although he never got around to sending a publishable photograph, the item is interesting.*

Dear Editor:

As we drifted home from Red Deer, we spent some time in the Wallace, Kellogg, Idaho mining area especially to visit the Big Sunshine Silver Mine and to do a little "junking." I found what I presume was a soft drink bottle labeled in raised letters "BLUEBIRD" on each side with a raised bluebird on each side. It was also lettered 6 fl. oz. PAT. APR. 14-1925. The man found it in an old dump in this mining area the previous day.

The Mountain Bluebird is the Idaho state bird so that is probably the connection. Don't know if this is significant or not. The bottle is in excellent shape. Will try for a better photo.

Earl Gillis

---

Dear Editor:

After reading the article by Tom A. Barber entitled "Predator Relocation" 14(4):153, I would like to comment on

my own experiences with black snakes. I have lost several broods to snakes in past years. To me, there is nothing as sad as losing a family of young bluebirds (and sometimes also the female) to a snake.

Now I build each house with an entrance in the front and another in the back. If a snake enters one hole, the female, and possibly several of the young, may escape. If the female escapes, she will probably build again. Two entrances also provide better ventilation during hot weather. Perhaps the bluebirds just enjoy the option for I often see the parents enter one hole and exit the other.

I make snake guards by cutting 18 inch (45.7 cm) lengths of lattice and then driving 1 inch (2.5 cm) wire nails about an inch apart each way the full length of the piece of wood. I fasten three guards around each post with the nails facing outward. They are positioned about two feet (60.9 cm) below the house.

This year I had no trouble with snakes. A total of five broods fledged from three of my five houses. My houses are front-opening. I believe they are easier to clean than the top-opening style.

Wally C. Kalbfleisch  
Rt. 1, Box 374  
Warrenton, VA 22185

## House Finch Alert

Feeder watchers should be alert to House Finches with red, swollen, crusty eyes. This condition is caused by *Mycoplasma gallisepticum*, a bacterium that usually infects poultry. It has been reported since 1994, mostly in the eastern states, but it has been noted as far south as Georgia and as far west as Iowa and Missouri. In some areas it is being detected in American Goldfinches and Downy Woodpeckers.

The Cornell Laboratory of Ornithology, Ithaca, New York, has the following suggestions.

"If you see infected birds in your yard, do not become alarmed. The disease is not a threat to humans, and it's safe to continue feeding birds. But you can take some steps to keep the disease from spreading. Clean your bird feeders regularly--at least once at the start and again at the end of the winter feeding season--with a mild bleach solution (one part bleach to nine parts water). Dry the feeders well before filling them. Prevent overcrowding by adding extra feeders to your yard; the disease spreads when birds are in close contact. And report sick birds to your state wildlife agency. By law, only licensed wildlife specialists may handle wild birds"--Editor

---

## Bluebird Boosters

*Appearing on the inside back cover is a list of those individuals who have made a financial commitment to bluebirds and cavity nesters over and above their annual dues. Such support is essential in maintaining a stable dues structure. We thank the individuals, organizations, and businesses for their generosity.*

*You, too, can become a Bluebird Booster. For a donation of \$25.00 per issue or \$75.00 per four issues, you can*

*be designated as an Eastern, Western or Mountain Bluebird Booster (your choice); for \$15.00 per issue or \$50.00 per four issues, be a Fledgling Booster; while \$10.00 per issue or \$25.00 per four issues makes you a Nestling Booster.*

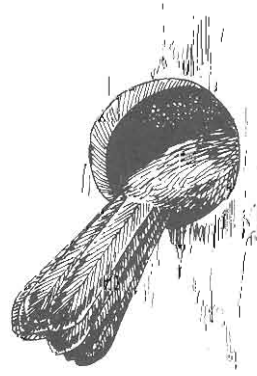
*All contributions are tax deductible. Mail your check to NABS Boosters, P.O. Box 6295, Silver Spring, MD 20916-6295.*

# Bluebird Tales

Mary D. Janetatos

"If those worms aren't here by Tuesday, my wife (Audrey Pettingill, of Fallston, Maryland) goes ballistic!" Stan Pettingill was referring to *mealworms*, of course, and to his wife's dedication to winter feeding the local bluebirds using "mail order" worms. While not all bluebirders agree that winter feeding is a good idea, here in "borderline" Maryland, it does not seem to have the harmful side effects of luring the birds to tarry in their summer breeding grounds, only to have their food supply dwindle just when the frigid weather sets in. We have been blessed this year with a *mild* January, with the memory of January '96 still *very* fresh in the memory. And other areas of the continent are having a *very cruel* winter. But, spring is all the sweeter, with such a contrast! Before I forget--many of you have asked about a bluebird calendar for '97 to follow the lovely one we had last year from Connie Toops. I found a way to "recycle" mine: I took a new '97 calendar without pictures and stuck it over the month page from last year, so the stunning bluebird photo still shows, but the month is the current one!--Not exactly "sparrow control," but fun anyway!

From Goshen, Kentucky, Charles and Shela Diamond asked about winter feeding of bluebirds and roosting boxes--via the Internet. In my reply, I relied upon what NABS' late founder, Larry Zeleny always said: "The bluebirds will just as soon roost in their nesting boxes as in roosting boxes." But they still got the plans for making the feeders and the roosting boxes. Bernie Daniel, Cincinnati, Ohio, was searching for a 1-9/16" hole saw, which NABS recommends for Mountain Bluebirds. Art Aylesworth, NABS' consultant for Mountain and Western Bluebirds, had provided valuable input with the paper entitled "Mountain and Western Bluebird Nesting Box Plans and Instructions." We referred him to Art's



Montana source: Hanson & Granley, 608 Hwy 93S, Ronan MT 59864; tel (406) 676-2740. Precision is important here, because even a 1/16 inch larger hole would permit the invasively competitive European Starling to enter a box.

It's great to hear from "bird and nature" stores, as we did when Louise Dawson of Grand Blanc, Michigan, asked for a *Sialia* reprint of bluebird wing thrusts for use in her J.J. Cardinal's Wild Bird Store! So, the cardinals are helping the bluebirds...? Bill Benner of Anaheim Hills, California, runs the Wild Birds Forever store, and, in answering his e-mail, I pointed out that the NABS 20th Annual Meeting will be held in nearby Newport Beach at the Sheraton hotel, May 15-18. Here's hoping many bluebirders will find their way to the Benner's store!

The Internet is becoming very productive of inquiries and of memberships. We've lost count of the former, and, to date, we are nearing 50 new NABS members, right from the Internet! NABS website is: <http://wsd.com/nabluebird> and we have quite a collection of new links! The e-mail address is: [nabluebird@look.net](mailto:nabluebird@look.net)

Lloyd Greenwell of Franklin, Indiana, via the Internet said, "I'm just about to launch into a bluebird box building frenzy, but I do not know the recommended diameter for the entrance to the box. Can you e-mail me a recommendation? We are blessed with an abundance of bluebirds, but presently have only one box for them (it's not really a bluebird box, but they don't seem to mind too much!) It is my hope that the bluebirds will someday feed

profusely on the unwanted critters in our garden." Needless to say, I used his mailing address, and sent him a *whole lot more* than the diameter of the entrance hole!

Educators are finding NABS also, and we can offer them the very fine NABS Educational Package. Getting to Know Bluebirds, compiled by Sadie Dorber. It is newly enhanced with Suzanne Pennell Turner's paintings of all three species of bluebirds and juveniles and the charming allegory. *The Return of the Bluebird*, by Andre Dion. We hope that Daniel Greenfield of Akron, Ohio, who teaches fourth grade in Stow; Tim O'Halloran, teacher in Holland Hall School in Tulsa, Oklahoma, and Christi Guptill at Mathew Patterson Elementary School in Patterson, New York, all find much help in bluebird conservation for their students from the educational package.

We have heard from some new corporate entities in which bluebird enthusiasts contacted NABS for information about helping bluebirds and other native cavity nesting birds. Lee Jolly wrote from Camden, South Carolina, telling us that he is chairman of Wildlife Habitat for the DuPont plant nearby. They have 50 boxes out and will be doubling that in the coming season. He plans to keep us posted on their success. Owen Walters of Loveland, Colorado, said that he is a member of the Larimer Land Trust project team. They plan to build and place 100 bluebird nesting boxes this spring, again pledging to share the results with us.

From the "novices" we turn to the "heroic" and the "veterans." Jonathan Beaver of Middlebury Center, Pennsylvania, has done awesome work on behalf of bluebirds (he cares for 100 boxes with the Army Corps of Engineers on the Ives Run Recreational Area), as well as other wildlife and he's only 10 years old! Fred Sahl of Church Road, Virginia, has a long history of promoting bluebird conservation as well as NABS memberships. He has built literally thousands of nest boxes and, under the

auspices of his Ruritan Club, has *saturated* his area of rural Virginia over the past years. He generously donates the proceeds of sales of nest boxes to NABS, thus assuring that his efforts will benefit the wider "bluebird world." Recently he lamented that his NABS logo print was getting shabby from so much use--he has received a new set of logos! Since he also functions as a member of the NABS Speakers' Bureau, Fred is *really* one of our stalwarts! Marcy Hoepfner, of Metamora, Illinois, is another *awesome* bluebirder. She was featured in the October issue of *Birds & Blooms* and chose to give her home address instead of the NABS address. Over 1,300 people wrote to her, sending her their self-addressed stamped envelope, and *she answered them all!* "It's just a labor of love for me, Mary," she explained recently. All of this--I *think*--was done so that Marcy and her husband Bob wouldn't have a boring winter--which sadly it could never be, because Bob fought a spell of poor health the whole time. He is in our thoughts and prayers. Marcy carries a FULL schedule in spring and summer of setting out her nest boxes, carefully crafted by Bob, monitoring her trails, and functioning as a member of the NABS Speakers' Bureau. She completed a term on the NABS Board of Directors at the 1996 Annual Meeting. Our congratulations to *all* of these formidable bluebirders!

A new recent mention of bluebird conservation with NABS' address has resulted in a great flurry of inquiries, with the SASE, etc. I had to tap the nearest volunteer source, and *this* time, it was my three East Coast grandchildren, Leila, Sara and Alex BenAbdallah, of nearby Falls Church, Virginia. They eagerly sealed the hundreds of envelopes as we reminisced about the times bluebirds nested in the backyard of NABS' headquarters, my home. The twins are 9, and Alex 7, so they are the *youngest* volunteers I know of. (And the cutest, smartest,...*stop it, Grandma! Give the "West Coast" three a chance! Maybe I will! Stay tuned!*)

(Concluded on page 80)



A wide-ranging network of observers will peer into the lives of cavity nesting birds in backyards and communities this spring and summer. The nest box watching participants will launch the Cornell Lab of Ornithology's newest citizen-science project--the Cornell Nest Box Network (CNBN). The Lab hopes that many of the first-year participants will be from the ranks of the North American Bluebird Society.

Funded largely by a four-year grant from the National Science Foundation, CNBN will help answer puzzling questions about the nesting biology of bird species that nest in bird boxes. Anyone who has access to nest boxes, from individual bird watchers to 4-H groups and others, is invited to join CNBN and work with Cornell Lab of Ornithology scientists on one or more of the following questions:

- Do birds in northern latitudes lay more eggs than birds farther south?
- How harmful are nest parasites, such as blowflies and mites?
- Do bluebirds prefer to nest in clean, empty nest boxes, or in boxes containing last year's nests?
- Is acid rain hurting bird populations?
- Where do young birds disperse and breed as nesting adults?
- Do Tree Swallows in different regions use different numbers of feathers to line their nests?

"We're interested in studying all species of cavity nesting birds for this project," says Pixie Senesac, research coordinator of the project. "We expect that most of the data we receive will be about common nest box inhabitants, such as bluebirds and Tree Swallows, but we'll encourage participants to collect data on any birds in their nest boxes. The more data we collect, the more we'll learn."

Lab biologists have several reasons for choosing cavity nesting birds as the newest focus of citizen science. First, these birds and humans share a long history. For centuries, Native Americans hung hollow gourds to attract cavity nesting species. And today, thousands of nest boxes are already in place throughout North America. CNBN aims to "network" these existing nest boxes and any new ones and have participants gather data in a systematic way.

From the scientific perspective, birds in nest boxes can be easily and closely observed so participants can collect large amounts of data and carry out experiments over wide geographic areas. Says Andre Dhondt, director of Bird Population Studies at the Lab, "Cavity nesting birds are model species for studying a wide range of important questions in the fields of population ecology, population biology, conservation biology, behavioral ecology, and population genetics."

Like the Lab's other citizen-science efforts--Project FeederWatch, Project PigeonWatch, and the Birds in Forested Landscapes Project--CNBN participants will receive research kits with instructions, data forms, and other materials, which they will use to collect information about birds and send it to the Lab for analysis and publication. The kits will include information on the biology, life history and identification of cavity nesting birds and instructions on how to build, install and monitor nest boxes. Results of CNBN's first year will be reported in *Birdscope*, the Cornell Lab of Ornithology's quarterly newswletter.

Participants can sign up to take part in CNBN until June 1, 1997. After that time, they will be added to the second year of study. An annual fee of \$15 for individuals and \$25 for groups such as 4-H, boys and girls clubs, and scouts helps to defray costs of materials, mailings, and data analysis. To sign up, write: Cornell Lab of Ornithology/CNBN/NAB, P.O. Box 11, Ithaca, NY 14851-0011. Or call: 1-800-843-BIRD (2473).

--Margaret A. Barker

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Prepared for *Sialia* by Lucy MacClintock

## Five Baby Bluebirds

Five baby bluebirds  
Sitting in a tree,  
Shivering and shaking,  
Cold as can be.  
Don't cry, babies,  
It'll be warm soon;  
It won't be long till  
The month of June

--Ruby Clodfelter

## Ode to the Bluebird

Quick and shy they  
dash through the air.  
When they stop on my line,  
I praise God in a prayer.  
Words can't be told  
for the happiness they hold  
for me.

--Barbara Hollister

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(TALES--Continued from page 75)

Meanwhile, back at the ranch, Frances Eger, of Ruxton, Maryland, wrote last fall, "I am pleased to report that I have finally succeeded in attracting bluebirds back to our Ruxton area. This summer (1996) we were thrilled to have a pair with us from 22 May to 14 July and they fledged four young. Yesterday a flock of nine or ten beautiful bluebirds arrived and stayed in our yard for half an hour. Four sat on the nest box and four sat in the walnut tree. The mockingbird kept them away from "his" holly tree. We feel (hopeful) that they will return in the spring....I had the satisfaction of knowing I was responsible in a very small way for "the return of the bluebird." *And so you are, Frances; may your number increase!* And may you, dear reader, have a bluebird-filled spring! Or chickadee...or titmouse...etc., etc. Keep in touch!

FLASH! BIRTH ANNOUNCEMENT! Joe and Tamra Sedlacek, of Endicott, New York, sent news of the birth of *triplets*. Will John, Mary Anna, and Rachel Alexandra were born 22 January, 1997. I trust that they will soon be monitoring bluebird boxes with their enthusiastic bluebirding father! ■

(BOOSTERS--Continued from inside back cover)

### Nestling

W.J. Barton Family  
Birdsong Nature Center  
William Brown  
Brenda J. Burnham  
Dr. & Mrs. Robert Collier  
Pat DeForno  
Charlotte Diedrich  
David Drake  
Sally Eller  
Steve & Cheryl Eno  
Mr & Mrs D. Everitt  
Richard Feindel  
Lisa Fenton  
T J. Freeman  
John H. Geckler  
Renee Goeltz  
J.E. Goforth Family  
Erna Hassebrock  
Robert C. Johnson  
Gerald & Frances Jones  
Robert & Mary Keedy  
Ann H. Kibler

Gale A. Kirk  
Margaret & John Lester  
M.W. Lewis, III  
Walter G. Lyon  
The Malison Family  
John S. McCall  
Teresa D. Mendenhall  
Kevin Montgomery  
Melva J. Parker  
Roger & Lynda Peters  
Susan Preiksas  
Lois M. Roberts, M.D.  
Anne Sander  
The Sanders  
Kenneth Schar  
Dolores V. Shaw  
Mike & Carla Shinn  
Kay Smith  
Mr. & Mrs. M.P. Swingle  
Mr & Mrs Ralph Smith  
Ms. Dannie Wall  
E.P. Williams

### Art Credits

Jon E. Boone 42, 72  
Suzanne Pennell 65, 74



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Russ Valentine  
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Michael Owen Willson  
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David Alpert, M.D.  
Arrow Wiring Contractors  
Augusta Bluebird Club  
Linda G. Baldauski  
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Carol A. Baugh  
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Ruth M. Coppedge

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Kristine Crutch  
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Dr. Wayne H. Davis  
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Marvin Dicker  
Dowling Public Library  
Stuart C. Farmer  
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Forest Garden Club  
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Kim L. Williams  
Dr. & Mrs. Robert Williams  
Jeannie Wright

(Continued on page 80)



Founded in 1978, THE NORTH AMERICAN BLUEBIRD SOCIETY is an incorporated non-profit organization determined to increase the populations of the three species of bluebirds on this continent. Inasmuch as the populations of these birds have diminished due to the maladroit actions of human beings, as well as natural disasters, the primary objective of the Society is to educate all who will listen about the importance of preserving these singular creatures in their native environment.

Toward this end, the Society will work, within the bounds of effective conservation, to study those obstacles impeding bluebird recovery; to publish results of those studies; to promote ideas and actions which might reduce the effect of those obstacles; and to obtain a more complete knowledge about bluebird ecology, in the hope of learning more about the ecology of humankind.

Membership: Student (under 21) \$10.00; Senior (over 60) \$10.00; Regular \$15; Family \$25; Sustaining \$30; Supporting \$50; Contributing \$100; Corporate \$100; Donor \$250; Life \$500. Three year rates: Student and Senior \$28.50; Regular \$42.00. Add \$2.00 per year for Canada and Mexico and \$3.00 per year for other countries (surface mail). U.S. funds only, please. In Canada, please use Canadian postal money order in U.S. funds. Do not use checks. Amounts over \$6.00 are tax deductible.

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