

Sialia

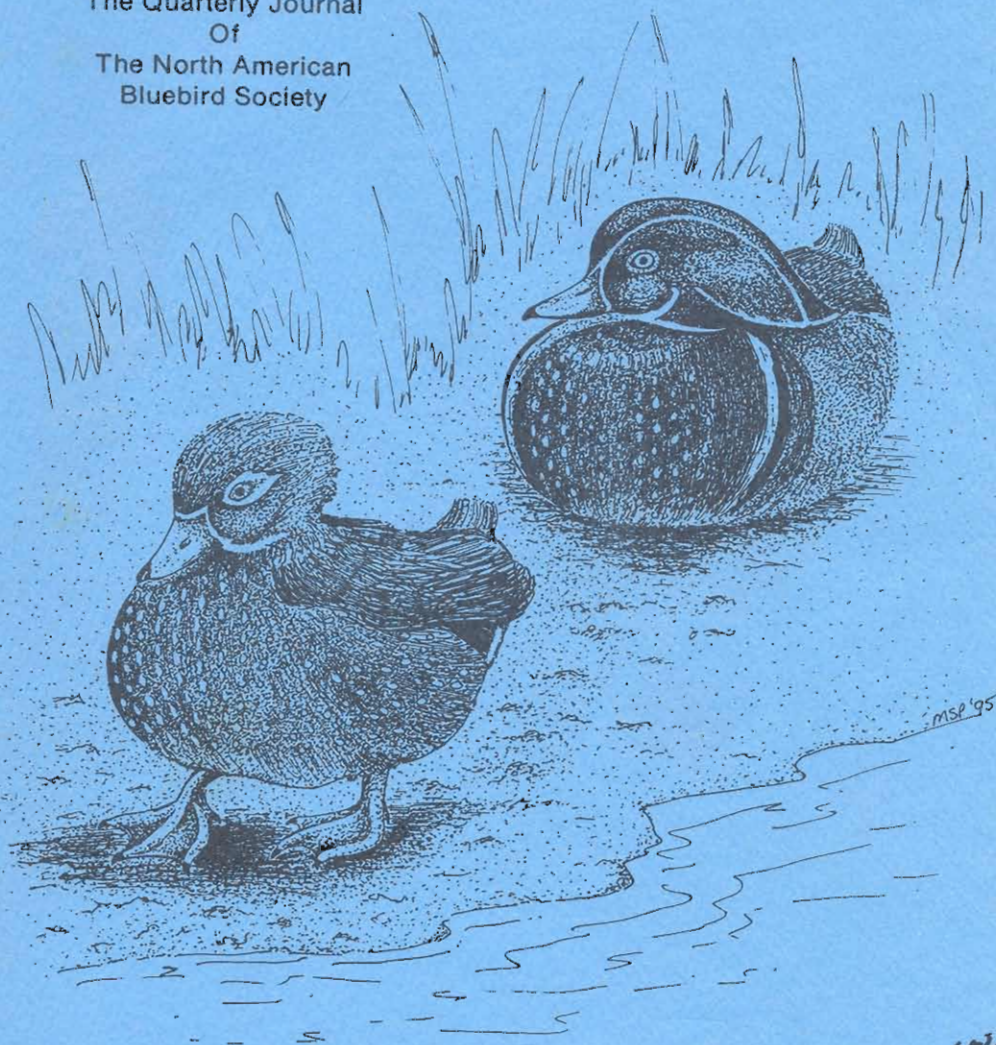
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The Quarterly Journal
Of
The North American
Bluebird Society



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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 juvenal 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

Volume 17, Number 2
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Joanne K. Solem

CONTRIBUTING

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M. Suzanne Probst

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COVER

Art Editor M. Suzanne Probst depicts a pair of Wood Ducks, one of the few ducks that nest in cavities. See article on page 49.

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.

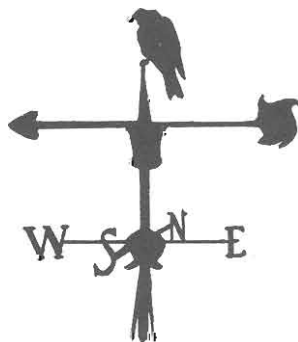
Presidential Points

Charlotte Jernigan

Most of us have experiences that stir us to think that we want or need to do a specific thing...before long. We might even be surprised to realize that many of those good ideas never get done. The reason for that is that we don't "time activate" our good intentions, or go far enough to determine exactly what it is we want to do and then schedule a time to accomplish it.

One of our most important skills is the ability to manage our priorities and identify their values, and then "time activate" in order to reach those goals. The lifeblood of the North American Bluebird Society is the faithfulness of members and lovers of bluebirds who continue their memberships and make extra contributions of various types whenever possible. In this issue we wish to express our most sincere appreciation for a bequest from Maybelle Vassbinder of New York. It takes many ingredients to daily fulfill requirements to successfully accomplish NABS' mission. Ms. Vassbinder had an appreciation for nature as a whole, and her world was enhanced by the magnetism of bluebirds. We are grateful that she believed us to be well qualified to protect the gains of the past and to ensure them for the future. She recognized that helping to educate others and extending a hand in doing so requires a financial budget, and to that end she made our organization a priority in her life. Yes, money, staff, a reliable program, and committed bluebirders are all necessary ingredients. Her generosity will touch us all! The specialness of her efforts to "time activate" her intentions is enriching, and I hope it will be contagious.

You may want to consider the advantages of making a planned gift to the North American Bluebird Society. Such gifts have been a crucial source of support, and regardless of their form or size, they help to ensure the future of our objectives.



"Teach me, Great Spirit, within my time,
What truly makes the Earth to rhyme?"
At sunset's silence the voice came clear,
Listen quietly, so all may hear:
"Your question's answer is hard, my child,
For the Earth will rhyme if we treasure
it...wild." ■

American Birders Exchange

The American Birders Exchange is dedicated to serving the needs of birders with computers who use the commercial information service America Online (AOL).

The people in this group are diverse ranging from novices to professionals and include varied bird-related interests--including bluebird preservation. There is no cost for the activities beyond the standard monthly charges for access to AOL.

I would be happy to answer any questions you might have. As a member of NABS, BBRP, and the newly-formed BAN (Bluebirds Across Nebraska), I can think of no better place for all of us to get together than on AOL.

I can be reached in any of the following ways:

U.S. mail:

ABE--James McLochlin
8 Columbia Way
Plum Island, MA 01951

or

America Online screenname:
JimMCL

or

Internet: JimMcl@AOL.COM

--Jim McLochlin

Observations of a Pair of Eastern Bluebirds Raising Black-capped Chickadee Young

James M. Zingo, Kathleen Murphy, and David Rosgen

There are several records of Eastern Bluebirds (*Sialia sialis*) as naturally-occurring interspecific helpers or adoptive parents for seven other species (Zingo 1994). These records, however, contain little detail. In a previous paper (Zingo *et al.* 1994), we briefly reported a pair of Eastern Bluebirds which apparently evicted a pair of Black-capped Chickadees (*Parus atricapillus*) from an active nest and then raised two chickadee young before producing their own offspring. In this paper, we present additional observations along with our interpretation and discussion. While a single unusual occurrence not part of a systematic study might not allow well-grounded conclusions, we felt that the situation was sufficiently interesting and unique to warrant an attempt at interpretation, especially considering the lack of similar detail in the other published records. Despite numerous assumptions, we feel we provide some plausible speculation, but recognize that this situation is open to varied interpretations.

Study Area and Methods

This situation occurred at a nest box in Farmington, Hartford County, Connecticut. The habitat surrounding the box was described by Zingo *et al.* (1994). The box was inspected almost weekly from late April through August 1992, and observations were made on 14 and 15 June from a distance (about 33 feet [10 m]) which did not seem to affect the bluebirds' behavior.

Results

We reported the results of the nest inspections in the earlier note (Zingo *et al.* 1994), but in reviewing our field notes, we felt it appropriate to add the following observations. On 4 June, the pair of chickadees, seemingly agitated, remained nearby during the nest check. On 11 June, a pair of bluebirds had constructed a nest almost entirely of pine needles around the nestling chickadees; the new "walls" of the nest rose as high as 4 in. (10 cm) above the center of the old nest. During the inspection, Murphy and

Rosgen saw the male bluebird calling agitatedly from a perch about 50 feet (15 m) away, so they watched the nest box for about 20 minutes from 65-80 feet (20-25 m) away. During this time, the male bluebird fed a caterpillar to the young chickadees, and a female bluebird fed four caterpillars to the young and removed three fecal sacs. Adult chickadees were not seen in the area on this date, but were seen nearby as late as 15 June.

Murphy observed the nest box from 8:25 to 10:35 a.m. on 14 June. The bluebirds spent much of their time perched, mainly in nearby pine trees, but each made several foraging sallies to the ground. The only recognized food items were small caterpillars. Each adult fed the chickadee nestlings five times. The bluebirds fed the young at the entrance hole, and did not enter the box with food except twice when the female entered to remove fecal sacs. The male also fed the female once after a sally to the ground, dove toward a squirrel that was foraging on the ground below the box, and also flew at Murphy as she opened the box to

check the two nestlings. A pair of chickadees was seen in the area, occasionally giving the "fee-bee" call.

On 15 June, Murphy observed the nest box from 10:40 a.m. to 12:50 p.m. The bluebirds perched in the nearby pines, made several sallies to catch worms, caterpillars, moths, and other invertebrates, and fed the chicks 15 times. One time the male flew to the ground, picked up a worm or caterpillar, flew to the female in a pine tree near the box, and gave her the food which she then fed to one of the nestlings. Later, after feeding an insect to a nestling at the entrance, the female entered the box and remained inside for a few minutes with only her tail protruding. During that time, the male landed on top of the box with another insect but failed twice to feed the nestlings because the female blocked the entrance. Finally, he forced his head through the opening to feed the young.

The male also fed his mate once (the female begged with quivering wings), removed three fecal sacs (eating one; the female removed another), twice sang an abbreviated song, and dove toward a Blue Jay (*Cyanocitta cristata*). A few minutes after the attack, the jay displaced the male bluebird from its perch in a nearby tree. Chickadee adults were heard only once, briefly.

During these short observation periods, both members of the bluebird pair contributed approximately equally to feeding the chickadee young and removing fecal sacs. They exhibited similar activity patterns, except that only the male behaved aggressively in defense of the nest. The only foraging strategy observed was capturing prey on or near the ground by sallying forth from a perch.

This represents the first interspecific feeding recorded by the Connecticut Bluebird Restoration Project (CBRP) since its inception in 1984. The CBRP began with 21 nest boxes and grew steadily to about 2200 across the state by the end of 1993, each year maintaining these nest boxes in a program of research and management for the conservation of

Eastern Bluebirds and Tree Swallows (*Tachycineta bicolor*) (Gros and Rosgen 1991, Rosgen and Zingo 1993). Chickadees occupied, at most, only 4% of the nest boxes in any given year.

Discussion

In the following sections, we discuss chronology of nest box use, parental performance of the adoptive parents, and presumed proximate and underlying causes.

Nest box use-- a reconstruction of events

The courtship songs of the male bluebird on 28 April, and the fact that a female was not seen in late April or early May, suggest that the male had not yet found a mate, although it is possible that a female might have been present initially and was killed or taken by a predator. Although females generally build most or all of the nest (Bent 1949, Ehrlich *et al.* 1988, Pinkowski 1977, Zeleny 1976), male bluebirds have been known to construct nests by themselves (Naber and Naber 1990). Therefore, we believe that the male was unmated, claimed a territory, and was building a nest while trying to attract a mate. Alone, he was unable (or perhaps unwilling to expend the effort) to prevent the pair of chickadees from taking over the nest box. Between 4 and 11 June, the bluebird found a mate and the pair then presumably evicted the chickadees. Chickadees have been known to outcompete bluebirds for nest sites (Goldberg 1969, Murphy 1968), but they generally lose out in such confrontations (Bent 1949, de Waard 1984, Rosgen, unpubl. data). Because Black-capped Chickadees, especially those attending young, generally display very high tolerance of human disturbance, we feel that our inspections would not have caused the chickadees to abandon the nest. It seems unlikely that both adult chickadees might have died or been taken by predators, so we assume that at least one of them was present when the

bluebirds usurped the nest box. We also assume that the male bluebird was the same individual seen earlier, based on the former territorial claim and the limited number of suitable nest sites. The bluebirds then began their own nest but halted before egg-laying, apparently stimulated by the presence of begging nestlings to feed and raise them. The bluebirds presumably had removed the unhatched chickadee eggs from the nest, possibly a not uncommon aspect of removing competitors from a nest site or territory (Acopian 1990, Bent 1949, de Waard 1984, Hamilton 1943, Rosgen, pers. obs. and unpubl. data).

We believe the young chickadees left the nest on their own because 1) they seemed to have been growing well, 2) there was no evidence either of predation at the nest box or that the bluebirds had removed any dead young, and 3) there was enough dander and fecal matter to suggest survival up to fledging. The nest box was protected from terrestrial predators by grease on the pole and a section of PVC pipe mounted beneath the box, a combination which to date has proven very effective (Rosgen and Zingo 1993). If the young had died in the nest, the bluebirds would have been more likely to abandon the nest site rather than either renest on top of the carcasses or remove the nearly full-sized chickadees from the box (Rosgen, unpubl. data). The bluebirds probably would not have been able to carry the bodies very far in any case, and there might have been some evidence nearby if that had occurred. Bluebirds, as do many passerines, typically stop removing fecal sacs from their nests a day or so before their young fledge (Pettingill 1985, Zeleny 1976), so the presence of fecal material in the nest box suggests that the young chickadees survived to that stage. We suspect that the young flew into the nearest stand of trees after leaving the nest, fledging by the criterion of Ehrlich *et al.* (1988), Gill (1990), and Pettingill (1985) for altricial species. The chickadees presumably fledged from the nest at about 17 days, within the normal range of fledging ages



Photograph by James M. Zingo.

Male Eastern Bluebird perched above a nest box with a spider for its young.

for the species (Bent 1946, DeGraaf and Rudis 1987, Ehrlich *et al.* 1988).

Assuming at least a one-day interval between the laying of the first two eggs (Bent 1949, Hamilton 1943, Pettingill 1985, Pinkowski 1977, Zeleny 1976), a female bluebird laid her first egg by 17 June in the presumably empty nest. Because the eggs were laid so soon after the young left the nest, we assumed the same bluebird pair renested, but we do not know for certain because the adults were not individually identifiable. It seemed unlikely to us that a different pair of bluebirds would have acquired the territory and begun laying eggs during such a short span of time, although this may have occurred. Eastern Bluebirds often raise two or three broods in the same season, and begin to lay a second clutch from only a few days to a few weeks after the first brood leaves the nest (Bent 1949, Hamilton 1943, Pinkowski 1977, Rosgen, unpubl. data). In this case, the female began her clutch within only a day or two, at the most, after the chickadee young left. Since breeding seems to reduce the physiological condition of adults (Pinkowski 1978), one might expect this

female to have been in relatively good condition after feeding the chickadee young for less than two weeks and not having incubated the eggs or attended the fledglings, especially if she had not yet laid eggs or experienced a nest failure earlier that same season. The presumably good physiological condition of the female might account for such a rapid "re-nesting."

Parental performance

The young chickadees seemed to develop normally, suggesting that there was little interruption of parental care and that parental performance of the foster parents was similar to that of same-species parents. One would expect that the quality of food brought to the nestlings would have been comparable to that normally brought by chickadee parents, given the species' similarity of diet (Bent 1946, 1949, DeGraaf and Rudis 1987, Ehrlich *et al.* 1988, Forbush 1929, Pinkowski 1978). The foraging technique, prey items, and relative contributions of the sexes toward feeding nestlings, nest sanitation, and nest defense observed on 14 and 15 June were consistent with that reported in the literature for presumably normal bluebird nesting efforts (Bent 1949, Forbush 1929, Goldman 1975, Pinkowski 1978, Zeleny 1976).

The bluebirds each averaged only about 3 feeding trips per hour, however, approximately half the average determined by Pinkowski (1978) for broods of three to five, the rate irrespective of brood size. A number of factors might explain this difference: occasional disturbances due to activity on the golf course might have influenced the observed feeding rates; the relatively short observation time (approximately four hours total) might not have been a representative sample; there may be a difference in average prey size between species and compared to Pinkowski's (1978) study; the relative sizes and thus feeding requirements of nestlings of the two different species may differ; a low feeding rate may have indicated the approach of fledging (Gill 1990, Pinkowski

1978, Plissner *et al.* 1987); and/or the seemingly low feeding rate might have been simply a matter of individual variation. Also, the adoptive parents may have discriminated between care of adoptees of a different species and care of same-species nestlings, equivalent to the proposal of Plissner and Gowaty (1988) for same-species adoptions in Eastern Bluebirds. The incubation and nestling periods of the bluebird young were typical for the species, and the number of young fledged was at or above average (Bent 1949, DeGraaf and Rudis 1987, Ehrlich *et al.* 1988, Forbush 1929, Hamilton 1943, Pinkowski 1975, Zeleny 1976), suggesting that the bluebird pair provided normal or better parental care for their own young.

Chickadee and bluebird parents normally attend and feed their young for at least a few weeks after they leave the nest (Bent 1946, 1949, Ehrlich *et al.* 1988, Forbush 1929, Hamilton 1943, Pinkowski 1975, 1977, Zeleny 1976), but the bluebirds were not seen with the chickadee young after they left the nest and we do not know if the adult chickadees remained in the area. Unless the chickadee fledglings were attended by the adults, their survival prospects were undoubtedly far less than those of young reared by their natural parents so that they may not have survived more than a few days on their own. Also, even if they did survive to independence, their future reproductive success might have been compromised by having had bluebird foster parents. Being raised by foster parents of a different species could lead to future reproductive error (Shy 1982). Brood parasites apparently do not encounter such problems, but perhaps behavioral differences between parasitic and non-parasitic species might account for that.

Proximate and underlying causes

Several factors might lead to accidental cases of interspecific feeding in birds (Shy 1982, Skutch 1987). This particular case of

interspecific feeding and adoption began with the initial accidental contact. In our interpretation, one proximate cause was limited nest sites; the competition for a site brought the bluebird pair into contact with the begging young of another species. The other proximate cause was the presence of nestlings which presumably begged and stimulated the adults to feed. The presence of unfamiliar eggs or young can invoke a variety of responses, including indifference, adoption, and infanticide (Plissner and Gowaty 1988). Skutch (1961) stated that accidental contact while an individual is in an appropriate hormonal state may release parental activity, so the timing in this case was critical; the hormonal state of the bluebirds presumably was conducive to feeding young and made them particularly susceptible to the visual and auditory cues of hungry young in the usurped nest.

The feeding of younger birds develops early in many species, e.g., immature bluebirds feeding younger siblings of later broods of their parents (Skutch 1935, 1961). In an unusual case in captivity, a well-fed six-week-old female Eastern Bluebird fed 15 young of six different species; she later helped to feed and brood a nestful of young Eastern Bluebirds (Skutch 1961). Such strong motivation has led to some unusual adoptions, such as an Eastern Wood-Pewee (*Contopus virens*) attempting to feed Killdeer (*Charadrius vociferus*) chicks (Powell 1990), and a Northern Cardinal (*Cardinalis cardinalis*) feeding goldfish (Lemmons 1956). ■

Acknowledgments

We thank the contributors and participants of the Connecticut Wildlife Atlas' Connecticut Bluebird Restoration Project for helping to maintain a statewide network of bluebird boxes, and especially Peter and Rick Lewis of the Country Club of Farmington for their participation in the CBRP. We also thank Peter Capainolo, George Clark, Jay Kaplan, and Jeff Spendelow for reviewing various drafts of the manuscript.

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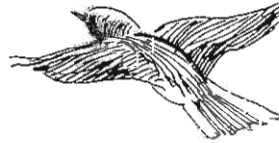
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Massachusetts Cooperative Fish and Wildlife Research Unit, Box 34220, Holdsworth Natural Resource Center, University of Massachusetts, Amherst, MA 01003-4220 (Zingo); 274 Morningside Drive East, Bristol, CT 06010 (Murphy); Connecticut Wildlife Atlas, 72H Leigh Avenue, Thomaston, CT 06787 (Rosgen).

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 memory of Junius Birchard*
Beatrice Birchard
- In memory of Melvia D. Hamilton*
C. Michael Hamilton
- In memory of George W. Kershner, III*
Jeanne Callaway
Marsha Jester
Kathie Latourette
Carolyn Lazar
Kim Rolph
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Mary Brannon
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Employees of Kensington Garden Builders Corp.
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Mr. & Mrs. W.R. Smith

- In memory of Laurance Sawyer*
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- In memory of Violet Vicars*
Barbara Guido

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.

Raising Wood Ducks in the Backyard

Richard A. Sims

My house is located on five acres bordering a 70 acre lake in Jones County, Mississippi. In January 1991 I put up five bluebird boxes on the property, and two of these were on the lakefront. In March I noticed a pair of Wood Ducks (*Aix sponsa*) attempting to enter one of the boxes near the lake. After several attempts at entering the bluebird box they left, and since then I have noticed other Wood Ducks attempting to enter bluebird boxes in my yard, some within 30 feet (9.14 meters) of my house.

After watching that first pair trying in vain to enter the bluebird box, I built a Wood Duck box and placed it near the area where the attempt was made. After about two weeks, the box contained six Wood Duck eggs, and soon the female was incubating about 25 eggs in it. Since then, I have built and placed 10 Wood Duck boxes near the edge of the lake, and have had very good success at rearing Wood Ducks in them. I estimate that 200 young Wood Ducks fledged from my boxes in 1993, and 183 fledged in 1994.

The pattern that I used for building Wood Duck boxes came from the April 1991 issue of *Outdoor Life*. I used scrap sheet metal and tin for the predator guards and landscape timbers for the posts; one post even has a bluebird nest box and a Wood Duck box on it. I placed each box near the edge of the water so the fledgling ducks would fall in the water as they emerged from the box. I used 1 x 12 western red cedar lumber to build the boxes. This lumber is fairly expensive, but it has held up very well over four nesting seasons and has required only a minimum of maintenance. I used about six inches (15.2 cm) of sawdust in the bottom of each box for nesting material. (I clean this out and replace after each hatching.) I also used a 4 x 6 inch (10.1 cm x 15.2

cm) piece of hardware cloth stapled inside the front just under the hole for the fledglings to climb on when they escape from the box. Total cost of the box, post, and predator guard is about \$14.00.

Each box is about five and one-half feet (1.7 m) from the ground, providing easy access for monitoring the eggs. I check the boxes about once a week. The best time for monitoring is in the evening, just after the incubating hens leave the nests to feed and exercise. Although they will return to the box if they are frightened off, it is not a good practice to continually disturb them.

Wood Ducks begin nesting in southern Mississippi in early February. One hen began laying on 3 February 1993; generally they are in "full swing" about mid-March. They nest through June.

I encourage anyone who lives on or has property near a body of water to erect at least one Wood Duck box. Wood Ducks are surprisingly easy to attract and they provide hours of entertainment in the spring as they gather outside the boxes. Like bluebirds, they need our help as nesting sites have become very scarce. ■

Route 1, Box 165-H
Ellisville, MS 39437

NABS SLIDE SHOW

The NABS slide show is available for rental at \$10.00 or purchase at \$65.00. The show consists of 141 collated, cardboard-framed 35 mm slides and a printed script (no slide tray). If a cassette narration is desired, add \$5.00 to the purchase price.

To rent or purchase the bluebird slide show, write to the following address: NABS Slides, Box 6295, Silver Spring, MD 20916-6295. Please allow one month for delivery and, if possible, specify several dates for rental.

Colored Streamers Did Not Deter House Sparrows

Wayne H. Davis and Beth Blankenship

Various people have tried hanging streamers from boxes to deter House Sparrows (*Passer domesticus*) and anecdotes reporting success have appeared several times in the literature. For example, Shirley Adams reported that ribbons fluttering from the top of a dowel mounted on the back of her nest boxes discouraged sparrows but not bluebirds (*Bluebird News*, MN, July 1993, p. 2). The method is reported to have worked for some people and not for others. Thinking that the idea might have promise we decided to run a controlled experiment to test it.

In September 1993 we mounted and numbered 150 boxes at the University of Kentucky Agricultural Experiment farms in Lexington. Boxes were placed 0.1 mile (160 m) apart and mounted on polished electrical conduit about 5 to 8 feet (1.3 to 2.5 m) above ground. The boxes were our standard slot entrance style 5 inches (12.5 cm) deep with a floor of 4 x 4 inches (10 x 10 cm). As this experimental setup was also designed to test one of the features of the Peterson box, alternate boxes were tilted forward 27°. We placed streamers on two successive boxes followed by two without streamers, etc. To make an equal number of experimental and control boxes we decided beforehand not to count the last two; thus we had 148 boxes in this experiment.

To avoid giving House Sparrows opportunity to become accustomed to streamers, we did not put them in place until sparrow nesting began in January 1994. With plastic flagging material and a staple gun we fastened streamers to both sides of the front of the roof so that to enter a box a bird would have to go

between streamers. We made the streamers one meter (39 inches) long and fastened one red and one yellow one on each place, thus having four streamers on each box.

Within two weeks the wind had destroyed many of the streamers. We therefore replaced them with streamers of half the length. As these also were destroyed by the wind we cut the length in half again to about 10 inches (.25 m). Finally, with our streamers tattered once again, we redesigned the experiment. On 1 April 1994 we cleaned out all boxes and for the experimental ones we stapled a single streamer inside the box at the middle of the roof. These streamers were 10 inches (.25 m) long and fastened at the midpoint so that two ribbons were hanging down to the floor. We added outside streamers that were only 6 inches (15 cm) long. With moderating winds these shorter streamers held up reasonably well.

We monitored the boxes weekly through July. A box was counted as used if it contained a nest and one or more eggs. House Sparrows were allowed to complete the clutch before the eggs were removed.

The streamers apparently had no effect on either the House Sparrows or the bluebirds. House Sparrows used 39 of the boxes with streamers and 41 of those without. Bluebirds used 24 of the boxes with streamers and 31 of those without. Chi square test shows this not to be significant ($P = .35$). ■

School of Biological Sciences
University of Kentucky
Lexington, KY 40506

Bluebird Exchange

To help our readers form connections with state and regional bluebird organizations, the NABS board has requested that annually the addresses of those groups supplying material to "Bluebird Exchange" be published. Names and addresses listed below are those groups which were included in the feature in 1994. If your bluebird organization publishes a newsletter and it is not included in "Bluebird Exchange," please make sure this editor or NABS is on the mailing list. For a complete list of all bluebird groups, consult *North America and Bermuda Bluebird Trail Directory*, a cooperative project of Ellis Bird Farm, Ltd. and the North American Bluebird Society published October 1993.

ALBERTA

Calgary Area Bluebird Trails
c/o Don Stiles
20 Lake Wapta Rise SE
Calgary, Alberta T2J 2M9

Ellis Bird Farm, Ltd.
Box 2980
Lacombe, Alberta T0C 1S0

Mountain Bluebird Trails Conservation Group
1831 -20th Ave., South
Lethbridge, Alberta T1K 1G3

BERMUDA

Bermuda Bluebird and Longtail Society
c/o Tommy Outerbridge
Box HS23, Harrington Sound
Bermuda, HSBX

GEORGIA

Bluebirds Over Georgia, Inc.
P.O. Box 53344
Atlanta, GA 30355

IOWA

Johnson County Songbird Project
2511 Hwy 1 SW
Iowa City, IA 52240

MAINE

Bluebird Association of Maine
RFD 4, Box 7600
Gardiner, ME 04345

MINNESOTA

Bluebird Recovery Program
Audubon Chapter of Minneapolis
Box 3801
Minneapolis, MN 55403

MONTANA

Mountain Bluebird Trails
Box 794
Ronan, MT 59864

NEBRASKA

Bluebirds Across Nebraska
P.O. Box 67157
Lincoln, NE 68506-7157

NEW YORK

Broome County Nestbox Network
c/o Joseph R. Sedlacek
28 Farr Ave.
Johnson City, NY 13790

New York State Bluebird Society
c/o Treasurer David Smith
15 Bridle Lane
Dryden, NY 13053

Schoharie County Bluebird Society
c/o Kevin Berner
SUNY
Cobleskill, NY 12043

NORTH CAROLINA

North Carolina Bluebird Society
Box 4191
Greensboro, NC 27404

NORTH DAKOTA

Bluebird Recovery Project
North Dakota Nongame Wildlife Program
100 North Bismarck Expressway
Bismarck, ND 58501

OHIO

Ohio Bluebird Society
20680 Twp. Rd. 120
Senecaville, OH 43780

OKLAHOMA

Oklahoma Nongame Wildlife Program
Oklahoma Dept. of Wildlife Conservation
1801 N. Lincoln
Oklahoma City, OK 73105

ONTARIO

Ontario Eastern Bluebird Society
2-165 Green Valley Drive
Kitchener, Ontario N2P 1K3

Willow Beach Field Naturalists
c/o Hazel Bird
Box 45
Harwood, Ontario K0K 2H0

OREGON

Hubert Prescott Western Bluebird
Recovery Project
c/o Patricia Johnston
7717 S.W. 50th
Portland, OR 97219

VERMONT

Bluebirds Across Vermont
c/o National Audubon Society
Box 9, Fiddlers Green
Waitsfield, VT 05673

WISCONSIN

Bluebird Restoration Association
of Wisconsin
Rt. 1, Box 137, Akron Ave.
Plainfield, WI 54966

ALBERTA--Calgary Area Bluebird Trails, 1994 Results

George Loades again recaptured his two oldest Tree Swallows: one is now eight years old, the other is at least seven. Loades was given an award for the best Bird Rejuvenation Project in the province for 1993 at the annual Alberta Fish and Game Conference in February 1994.

Near Bragg Creek a female Western Bluebird was reported to be mated with a male Mountain Bluebird. Les Stegenga banded and photographed the female. She produced two clutches of five eggs each; in each case two hatched.

Jean Moore summarized information from the 2427 boxes monitored by 45 people. Tree Swallows fledged were 5182 which was 454 more than 1993, but bluebird production dropped from 5217 in 1993 to 4164 in 1994, which is the lowest since 1988.

Esther Kanegawa and Pat Mitchell found a wasp nest which was increasing in size at weekly checks. The third week when they checked the box they found a Tree Swallow nest with no sign of the wasps. The nest fledged seven young.

Len and Jan Marshall checked a box with six young swallows and found that each nestling had a lump either on the back of the head or at the bend of the wing. When squeezed, a lump produced a yellowish maggot. They returned the next day with tweezers, peroxide, Q-tips, medication, and a magnifying glass. The maggots were successfully removed and eventually all nestlings fledged. Don Stiles identified the flies as botflies. They lay their eggs under the skin of an animal and the larvae feed until ready to pupate. Have other monitors ever had experiences with botflies on bluebirds?

--Calgary Area Bluebird Trails

Ellis Bird Farm, Ltd., Fall 1994

The Mountain Bluebird Trails (MBT) conference in July was attended by almost 150 people. Recognition awards were presented to Duncan Mackintosh of Mountain Bluebird Trails as well as to Don Stiles of Calgary, Pat McVean of Calgary, and Judy Clayton of Lacombe. The 1996 MBT conference will be held in Lethbridge, Alberta.

In conjunction with the MBT conference, the Ellis Bird Farm was the scene of special activities to open its new visitor center, *The Ellis Center*. Addressing the guests were Morris Flewellling, Winnie Ellis, and Zulma Buroughs. For those who may be in the area in 1995, Ellis Bird Farm will be open every afternoon (except Monday) from 15 June-15 August.

Orville Embree of Coronation reported a box containing three Tree Swallow and one bluebird egg. All hatched at the same time. Swallows raised the brood; they all appeared to have fledged successfully.

George Loades of Calgary reported Tree Swallows successfully fledging from a nest built by wrens. He also had a bluebird nest built entirely of white cattle hair. Even more creative was the bluebird pair near Lacombe who constructed their nest cup using the tape from a cassette.

In 1989 a cavity nesting duck conservation program was initiated in the Buffalo Lake Moraine area of eastern Alberta as part of the North American Waterfowl Management Plan. That initial year one brood of Common Goldeneyes and a dozen broods of Buffleheads were seen in the study area. By 1992 a total of 351 boxes had been set out which resulted in 30 broods of goldeneyes and 22 of Buffleheads. In 1993 the project expanded into the Pine Lake Moraine area where 80 boxes were placed and 240 existing boxes put out by individuals were inventoried.

Public education has been an essential component of the project and has been instrumental in obtaining public awareness and cooperation.

Because of the logistical difficulties of monitoring boxes in remote areas, boxes were often "twinned." This technique involves placing a Bufflehead box and a goldeneye box on the same tree, one above the other. There appears to be no territorial conflict. Starlings prefer the smaller Bufflehead box. It is interesting that starling use has declined significantly

since the beginning of the project, down to 8% in 1993 from 77% in 1989.

--Ellis Bird Farm, Ltd.

Mountain Bluebird Trails--Fifteenth Annual Report

Bluebirds fledged in 1994 totaled 4296 from 3307 boxes, a decline in fledging which cannot be fully explained. Second brood production was the worst ever. Sterile eggs and dead young totaled 1224. The average brood size was four compared to the usual six or seven. Mountain Bluebird Trails (MBT), founded in Lethbridge in 1978, went international in September 1980 with Montana coming under the MBT name. As of July 1994, they have separated from MBT and will take on a Montana state identity. During 15 years of published data, MBT has fledged 47,061 Mountain Bluebirds.

--Mountain Bluebird Trails Conservation Group

CALIFORNIA--California Bluebird Recovery Program Newsletter, undated

A new state organization for bluebird and cavity nester conservation has been formed. The California Bluebird Recovery Program is a non-profit group, sponsored jointly by the Western Region of the National Audubon Society (NAS) and the North American Bluebird Society (NABS). The organization's goal is to promote and aid in any way possible the increase in population of native cavity nesting birds, bluebirds especially, in California.

The initial newsletter, which was received in mid-January 1995, describes the founding process which has been a lengthy one.

Bob Barnes, NAS' Western Region Coordinator for Birds in the Balance and Don Yoder, NABS board member were the authors of several articles each in the newsletter. A "Readers' Forum" encourages comments from bluebirders. A Bluebird Report Form-1994 is included as is a request for county coordinators. Initially the organization is requesting donations from those who wish to receive the newsletter in order to make the group self-supporting. The Mount Diablo Audubon Society has offered to act as treasurer. All donations should be made out to MDAS-Bluebirds and mailed c/o Don Yoder, 2021 Ptarmigan Drive #1, Walnut Creek, CA 94595.

--California Bluebird Recovery Program

GEORGIA--The Georgia Blue Line, Fall 1994

Chattahoochee Nature Center has formed a Bluebird Guild as a means of increasing cavity nesting birds. Members meet once a month at the center to assemble pre-cut boxes, plan new trails, and exchange information.

The Champion Golf Club of Gwinnett, Snellville, Georgia, consisting of 160 acres with a 25 acre lake, installed 25 bluebird nest boxes around their golf course. The reasons for the boxes are to help control insect populations and to give support to wildlife in a natural setting. Only natural and organic fertilizers are used on the course. Boxes will be monitored.

A Bluebirds Over Georgia shirt is now available. Designed by Jeanne Mack, it shows a bluebird pair on their nest box with a rainbow in the background with the words "Help the homeless, put up a bluebird box."

Bluebirds Over Georgia received valuable publicity from William Cooper, owner of Cooper Seed and Feed, Lawrenceville. Cooper promoted the organization in the spring issue of his *Crabgrass Gazette* mailed to 10,500 people in Gwinnett and surrounding counties. The response was excellent.

Jeff Potter and Joe Frye monitor and maintain a bluebird trail on the grounds of the governor's mansion in Buckhead. At least 25 bluebirds were fledged in 1994.

Members were busy in October 1994. They staffed a booth at the Atlanta Botanical Garden's Fall Garden Festival on 8 October. The same date found other members at the opening of 650 acre Tribble Mill Park in Grayson. Bluebirders are working with the Department of Parks and Recreation to establish bluebird trails in the park. On opening day

they helped answer questions posed by some of the estimated 5,000 people present.

The organization's Fall Festival was held on 15 October and was a great success.

All over the state bluebird banners (which had been sold at the Spring Festival) flew on 22 October celebrating the date in 1993 which Governor Zell Miller had proclaimed as "Georgia Bluebird Day."

--*Bluebirds Over Georgia, Inc.*

IOWA--*Wings...*, Fall 1994

Lon Drake poses a provocative question in an essay entitled "What Is Natural?" He decides there are few black and white answers, only shades of gray. Each individual must act, even in small ways, to build a link to the natural world.

An article summarizes a study from the *Journal of Field Ornithology* 65(2):250-253 by Wayne Davis, Paul Kalisz and Rick Wells. Their work examines the conventional wisdom of removing bluebird nests immediately after the nestlings fledge. Their 1993 experiment at the Bluegrass Army Depot paired boxes at 50 sites. One box in each pair contained a nest from the 1992 season that had fledged bluebirds, while a second box made of weathered wood was empty. Bluebirds chose the box containing the nest in 38 of 41 instances. In addition, single instances of other species choosing boxes with nests included House Wren, White-breasted Nuthatch, and Carolina Chickadee. Tree Swallows at two locations nested in one empty box and in one containing a nest. There did not appear to be any relationship between the initial depth of the entrance to the top of the nest and the tendency to reuse some of the old nest material. Because wasps that parasitize blowflies overwinter in the nest material, choosing boxes with nests from a previous season might be an advantage for bluebirds.

Bernie Knight features the Pileated Woodpecker in his article. It is an attractive bird which is one of the largest cavity nesters.

Newsletter editor Jim Walter answered Tommy Outerbridge's light-hearted request in *Sialia* 16(4):131 for recipes using House Sparrows in order to interest Bermudians in bluebird conservation. Walters found a book in his late mother's library which discussed birds and bird houses. The book also contained several recipes describing House Sparrows as tasting like squab and comparing in flavor with the best kinds of small game. One recipe noted that "Sparrows may be cooked by any of the methods employed for reedbirds [Bobolinks] or quail." It was suggested that a boy setting traps could catch thousands of sparrows a year both ridding the area of pests and cutting the family's living costs. The book was published in the 1920s as part of a series put out by the Southern Cypress Manufacturers' Association.

--*Johnson County Songbird Project*

MAINE--*Downeast Bluebird*, Fall 1994

The census form for 1994 is enclosed with the newsletter and members are encouraged to complete and return it promptly.

June Ficker describes the bluebird trail at Webhannet Golf Course at Kennebunk Beach, Maine. Twenty boxes were erected during December 1993. By 21 May 1994, 95% of the boxes were occupied. Most were used by Tree Swallows, two by bluebirds, and one by a Black-capped Chickadee pair. House Sparrows were a persistent problem.

Steve Gilbertson's PVC boxes are given publicity as is Connie Toop's book *Bluebirds Forever*.

--*Bluebird Association of Maine*

MINNESOTA--*Bluebird News*, October 1994

More than 165 bluebirders came to Princeton on 10 September 1994 for the 13th Annual Bluebird Conference for a full day of presentations, displays, and a field trip. Pete Meyer was named 1994 Bluebirder of the Year and Brad Van Essen, 16, received the Young Bluebirder of the Year award.

Compilation of 1994 Bluebird Recovery Program (BBRP) nesting statistics indicated that, with incomplete results, at least 9131 bluebirds fledged in the state. Wren problems (in 50% of reports) now vastly outnumber those caused by House Sparrows. There is no easy solution, for wrens are a protected species. Moving boxes from the vicinity of trees and shrubs has become less valuable advice as wrens seem to be adapting. Box height had no effect on box attractiveness to the wrens in an experiment tried by Robert Chapman of Minneapolis.

A description of methods used to prevent climbing predators from reaching boxes noted several cases where material relying on sticky substances has trapped bluebirds and possibly other protected species.

An article entitled "Pesticides Persist--Good or Bad?" describes problems associated with chemical use. Although the use of chemicals is not routinely encouraged, 10% pyrethrin in *Flys Away II** is suggested in cases of severe blowfly infestation (50 or more larvae). Some BBRP members are experimenting with various plant substances, especially species in the *Artemisia* genus. Sprays containing varieties of *Bacillus thuringensis*, especially when used on extensive areas, depress all species of butterfly and moth larvae.

Minnesota is establishing a system of county coordinators. Volunteers for counties not yet covered are welcome.

On 15 July 1994 the Gerhard Alexis Memorial Bluebird Trail was dedicated at the Linnaeus Arboretum at Gustavus Adolphus College in St. Peter. The trail was a gift of BBRP in honor of the late board member. Jane Thompson reports on the trail.

--Bluebird Recovery Program

NEBRASKA--*Bluebirds Across Nebraska Newsletter*, Fall 1994

Mary Zimmerman addresses ways to spend winter hours when there are no bluebirds around. There is always work to be done in anticipation of the next breeding season: walking your trail, building and repairing boxes, planning a new trail, planning a birdbath, and feeding wintering birds.

Bluebirds Across Nebraska (BAN) has divided the state into six regions. Volunteers to be regional representatives for several regions are still needed.

Reports from some monitors describe trail experiences during 1994: Gary and Margo Larson, "Our First 'Trail' Success"; John Sullivan, "Stagecoach Lake"; Leland and Elva Osten, "Twin Lakes (North)"; Phil Marvin, "Wagon Train Lake"; and Andrew Pitcher, "Nine-mile Prairie."

--Bluebirds Across Nebraska

NEW YORK--*Bluebird News*, Fall 1994

The New York State Bluebird Society's (NYSBS) fall meeting was held on 15 October 1994 in Brewerton, New York.

Ray Arendt is the author of three articles: "Fall Is a Good Time for Nest Box Housekeeping," "Route 20 Trail Begins Producing Results," and "Cowbird Parasitism Threatens Songbirds." Information about the Route 20 Bluebird Research Trail (in its first year) will be more completely reported on at a later time. Fortunately for bluebirds, cowbird parasitism is a relatively minor problem for those birds nesting in boxes. Natural cavities with large openings pose the greatest risk.

--New York State Bluebird Society

The Bluebird Booster, Fall 1994

Kevin N. Berner summarizes activities of this active New York county group. The Route 20 trail, which will eventually span the state, had its beginning in Schoharie County where an existing trail was expanded in 1994. Because this is, in part, a research trail, box designs are being tested. Individuals and groups have produced boxes, but there is a shortage of mounting pipe.

Joe Therrier, a student at SUNY, Cobleskill, served the county as a bluebird intern supported by several grants. In addition to box monitoring and nestling banding, he was involved in developing a network of individuals statewide to band bluebirds and Tree Swallows for Cornell University's Nest Box Network. He also made innumerable contacts with local residents providing professional advice.

Berner continued his research into nest box designs. In 1994 he added Zuern's tree branch box to the study.

Winter feeding of bluebirds is a controversial practice. Planting trees and shrubs that bear late fall and winter fruits is an excellent way to assist those bluebirds that may choose to attempt to winter. Vince Schneible of Princetown says that bluebirds seem to relish a commercial mix of ground suet, grains, peanuts, and raisins made by C & S Products. Their address is Box 848, Fort Dodge, IA 50501.

—Schoharie County Bluebird Society

OHIO—Bluebird Monitor, Winter 1994

Dean Sheldon, in his regular column, outlines some of the basics he uses when building nest boxes. He particularly encourages cutting kerfs in the wood inside the box below the entrance hole or roughening the wood with other tools. He warns against using hardware cloth, metal or plastic screening which offers the potential for trapping nestlings' feet. He recommends several tools which he has found helpful and praises the qualities of clear silicone caulk as a water seal.

In another brief article Sheldon describes the usefulness of monitors carrying a 3 1/2 in. x 5 3/4 in. flexible piece of plastic (designed for applying "Bondo" filler). The piece can be slid beneath a flimsy nest and withdrawn slowly holding the nest with eggs while necessary maintenance is carried out. The device slips easily into a pocket.

The 1995 convention will be held 21 October at the Wilderness Center near Wilmot in Stark County.

Wayne Davis in "Should You Clean Out Old Nests" summarizes a paper he co-authored in the *Journal of Field Ornithology* 65(2):250-253. See Iowa summary.

Tom Barber details a successful use of the Noel guard in saving a nestling bluebird from a raccoon.

Dick Tuttle was named Environmental Educator of the Year by the Ohio Alliance for the Environment.

The Ohio Bluebird Society has adopted a new logo created by Marc England, a student at Ohio State University.

—Ohio Bluebird Society

OKLAHOMA—Watchable Wildlife News, Fall 1994

Two designs for wildlife license plates have been chosen. One is the Scissor-tailed Flycatcher in flight as previously reported; the other is a white-tailed deer in autumn foliage. Of the \$25.00 above the regular registration fees, the Nongame Wildlife Program will receive \$20.00 of the annual fee. The Nongame Program receives no state monies and is supported primarily by private checkoff contributions on the state tax form. The plates can be personalized for no extra fee.

A new activity for youth will begin in the spring of 1995 sponsored by the Nongame Wildlife Program. "Cans 4 Critters" is intended to involve young people in wildlife conservation by raising money for wildlife. Groups of many types are encouraged to participate in collecting aluminum cans during April and sending the money raised to the Nongame Program. Money raised will be dedicated to a specific research project. This year biologists would like to concentrate on Texas horned lizards which are a species of concern in Oklahoma. All participating groups will receive frameable bluebird certificates and the knowledge that they have helped the state's wildlife.

—Oklahoma Nongame Program

OREGON—*Western Bluebird Newsletter*, November 1994

The 1994 nesting season was the most successful in more than 20 years. Of 440 bluebirds fledged, 363 were banded. A mild 1993-1994 winter helped carry over breeding pairs. During a cold, rainy period the end of May, many nests failed. Supplementary mealworm feedings were valuable and most adults re-nested with the arrival of good summer weather.

Vaux' Swifts are being reported in increasing numbers in chimneys in May and June. With the disappearance of old forests, chimneys are being more frequently used.

Interest remains high in helping Barn Owls whose diet consists largely of small rodents.

Pat Johnston, Brenda McGowan, and Earl Gillis are instrumental in providing leadership in this group which is attempting to save the remnant population of bluebirds in the northern part of the Willamette Valley. They are carrying on the work that the late Hubert Prescott began.

--Hubert Prescott *Western Bluebird Recovery Project*

VERMONT—*Bluebirds Across Vermont*, Fall 1994

Angela Shambaugh resigned as director of Bluebirds Across Vermont (BAC). Craig Scharf has accepted the directorship.

In the interest of financial survival, a survey was mailed in July to those life members who had not returned nest box surveys to inquire whether they wished to be removed from BAV's mailing list.

Steve Parren describes his battle with House Sparrows in "Stones and Sparrows." He leaves the sparrow nests but removes the eggs. This year he tried swapping smooth, round stones for sparrow eggs. In two nests, the stones were removed (it is thought by the sparrows) and no more eggs were laid. In the third nest, the female incubated the stones for about 17 days. (Sparrow eggs usually hatch within 14 days.) After 23 days the male was singing again; the stones were still present but not warm. After another eight days, four eggs were present with the warm stones. Parren removed the eggs. The stones were again incubated for at least another six days but were cold after 19 days. By this time it was late June. Tree Swallows were fledging from a dozen boxes. Sparrows tried to nest in a few of these newly empty boxes, but monitoring and egg removal continued.

Information about Frank Zuern's tree branch nest box, including construction diagram, is reproduced.

--*Bluebirds Across Vermont*

WISCONSIN—*Wisconsin Bluebird*, Fall 1994

Don Bragg examines the significance of blowflies in bluebird nests by reviewing the book *Bird Blow Flies in North America* by Curtis W. Sabrosky, Gordon F. Bennett and Terry L. Whitworth. The authors of the book note that there is much anecdotal evidence based on assumptions. After reviewing material from many sources, they conclude that they believe that (blowfly larvae) do not ordinarily kill nestlings or fledglings, but under certain conditions they may do so, or they may so weaken the young that other factors will be lethal or will combine with larval feeding to cause death.

Bragg also reviews the paper by Davis *et al.* concerning the value of leaving old nests in boxes. See Iowa summary.

The Beaver Dam Senior Citizen Center erected hundreds of boxes along Highway 151 on highway posts after permission was received from the Department of Transportation. Don Kopff reports that 20 senior citizens constructed the boxes and aided in the project. The 462 boxes will be monitored by young people from Grace Presbyterian Church Sunday School and Cub Scout Pack 3772 according to an article in the 12 November 1994 edition of the Beaver Dam *Daily Citizen* furnished by Kopff.

Frank Zuern makes some suggestions that are useful for any bluebird group in the article "How to Publicize BRAW." Among his suggestions are adopting a brochure rack at

a library, DNR office, bird supply store, or sporting goods store; creating a bluebird display for National Wildlife Week; distributing literature (maybe also selling boxes and feeders) at local craft shows; adopting a local nature center; contacting the county parks director, environmental specialist in the school district, and the county 4-H director.

--Bluebird Restoration Association of Wisconsin, Inc.

QUIET, PLEASE!

John Findlay, III

The worldwide media was focused on the Greystone Country Club (the second week of June 1994) close to Birmingham, Alabama for the Bruno P.G.A. Senior Tour. Professor Dan Holliman of Birmingham-Southern College focused his attention, however, on the 11 active bluebird nest boxes placed on the championship golf course as an estimated 132,000 fans and players swarmed over the 18 holes.

In 1993 the P.G.A. Senior's Classic was held in August. It adversely affected the results of the third brood on his trail. Moved up to June in 1994, Holliman was concerned about the impact it would have on his second brood. Some nests had eggs being incubated, others had nestlings needing to be fed regularly. With the cooperation of the Greystone Club

staff, Holliman placed a small, but conspicuous sign on each active box which read:

"Quiet! Baby bluebirds may be inside.
Do not open box, or approach within
20 feet!"

The warning sign plus the bluebird's amazing tolerance for people, and, of course, their strong parental bond must have worked. Dr. Holliman reported, after a post P.G.A. check of the boxes, that almost all was well. Only one desertion was noted. He optimistically says that it could have been coincidental.

Bluebirds and golf are doing well in the South! ■

2749 Millbrook Road
Birmingham, Alabama 35243

John Findlay, III 1913-1995

John Findlay, III of Birmingham, Alabama died on January 30, 1995 after a courageous battle with cancer. Long known as "Mr. Bluebird" in his area, John and his wife Harriet had been members of the NABS Speakers' Bureau. As they gave their bluebird presentations, they used their own beautiful photographs to illustrate their points. In this way they were able to stimulate much local interest and support for the cause of bluebird conservation. John served on the NABS Board of Directors and was the recipient of bluebird awards, including a plaque from NABS recognizing his "outstanding contribution to the field of bluebird conservation." He and Harriet were veteran attendees at the NABS Annual Meetings, even sharing their expertise as popular speakers on the program. John was honored by having the main road in Oak Mountain State Park near Montgomery named JOHN FINDLAY III DRIVE in recognition of his establishment of the bluebird trail there. His 180 nest boxes will continue to be monitored by people he trained. With Harriet and their children and grandchildren, we mourn the loss of John even as we continue to be beneficiaries of his devotion to the cause of preserving bluebirds.

--Mary D. Janetatos

A Bird in the Bush

Karen Blackburn

Long-time members of NABS may recall that several years ago we asked readers of this column to report their observations concerning interaction between bluebirds and Northern Mockingbirds. At that time, many members responded with reports which indicated that mockingbirds were indeed interfering with both the feeding and nesting activities of Eastern Bluebirds.

More recently we have received yet another report on this subject from Marvin Kemp of Alachua, Florida. His letter begins, "The mockingbirds did it to me again!" Mr. Kemp goes on to describe how he has witnessed mockingbirds "chasing bluebirds away" from his nest boxes, and he believes, as many of us do, that this continual harassment by mockingbirds prevents bluebirds from nesting in otherwise suitable habitat.

For the benefit of readers who may have missed our bluebird/mockingbird discussion as previously printed in this column (*Sialia* 12(2):63-66), we offer again the following suggestions which may be of help in reducing conflicts between these species:

- Attempt to determine the location of mockingbird nests and move nest boxes as far as possible from these sites.
- Observe mockingbird perching preferences (utility wires, fences, rooftops, etc.) on the property. Favorite perches will be within the mockingbird's defended territory. Move nest boxes away from these areas.
- In some cases, it may be necessary to relocate nest boxes from the open areas preferred by both species to more secluded sites. Try placing boxes at the edge of a wooded area. If the property does not include such an area, try attaching boxes to the trunks of isolated trees and provide as much protection from predators as possible. (Note: Observations here indicate that as long as unoccupied nest boxes are available in



open areas, bluebirds will continue to attempt to claim them despite mockingbird interference and despite the availability of boxes in more secluded areas. If boxes in the open are occupied by other cavity nesters or are removed, bluebirds will then seek out the less desirable sites at woods' edge where mockingbird interference seems to be less of a problem. Therefore, in areas where mockingbird aggression is a serious threat to nesting bluebirds, it may be necessary to remove all nest boxes from open areas in order to entice bluebirds to nest in the safer sites that they would otherwise find less desirable.)

On a brighter note, an entirely different report concerning mockingbirds was received from James Kennedy of Bridgeport, Texas. In July of 1994, Mr. Kennedy discovered that a pair of mockingbirds had taken up residence in a hanging basket full of English Ivy. House Wrens, House Finches, and American Robins are among the many species of birds known to take advantage of these man-made nest sites, but this is the first I've heard of mockingbirds nesting within the foliage of potted plants. Mockingbirds generally prefer to nest in dense shrubs and thickets, yet one can readily see the benefit of a suspended nest site which is difficult for climbing predators to reach.

We thank Marvin Kemp and James Kennedy for sharing their observations, and, as always, we welcome your reports and comments concerning plant use by bluebirds and other wildlife.

Please send your reports to Karen Blackburn, 185 Mica Hill Rd., Durham, CT 06422. ■

License Plates



Kenneth Schar of Libertyville has SIALIA on his Illinois license plate. It is attached to a 1962 blue Corvair. He has had the plate since 1987 and has been a bluebirder since 1986.



NABS President Charlotte Jernigan's plate looks identical to Schar's, but her tag is from Oklahoma. The background is blue; the letters are black. Below the front bumper hangs another tag which, although not a license, advertises a particular bluebird trail. —>



In addition to Illinois SIALIA 1 which Marcy Hoepfner of Metamora submitted earlier, the plate on her car says BB LADY 7, leaving no doubt where her interests lie.



Share your vanity plate with our readers. Send a photo and eventually we'll print more.

1995 NABS RESEARCH AWARDS

The North American Bluebird Society is pleased to announce the presentation of the twelfth annual research grant awards. The 1995 recipients are as follows:

BLUEBIRD GRANTS

Laura R. Lee, University of Illinois

The Maybelle F. Vassbinder Memorial Award

Title: Environmental Effects of the Reproductive Ecology of the Eastern Bluebird

Michael H. Kesner, Indiana University of Pennsylvania

The James L. Williams Memorial Award

Title: Influence of Prior Box Occupancy by White-footed Mice and Subsequent Parasitism of Nesting Eastern Bluebirds on Nesting Success

STUDENT GRANTS

Paul E. Allen, Cornell University

Title: A Baseline Population Estimate and Feasibility of Nest Boxes as a Conservation Tool for the Bahama Swallow

Susan M. Hitchcock, University of Montana

Title: A Comparison of Abundance and Nest Success of Cavity-nesting Birds in Salvaged, Logged and Uncut Patches Within a Burned Forest

GENERAL GRANTS

Richard L. Bonar, Foothills Forest, Alberta

The Betty H. McIlwain Award

Title: Pileated Woodpecker Habitat Ecology in Boreal Forests

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 Delos C. Dupree, NABS, Box 6295, Silver Spring, MD 20916-6295.

Art Credits

Jon E. Boone 42, 74
Suzanne Pennell 48, 76
M. Suzanne Probst 59

Unusual Eggs on an Oregon Trail

Elsie K. Eltzroth

Many nest boxes on the Audubon Society of Corvallis Bluebird Trail are used by Tree Swallows (*Tachycineta bicolor*) and Violet-green Swallows (*T. thalassina*). Some resident Western Bluebirds (*Sialia mexicana*), which remain through the winter, and others from natural cavities or boxes not monitored on this bluebird trail, select nesting territories before swallows arrive in March.

The 1994 breeding season began in earnest when I banded the first six bluebird nestlings on 1 May. Between that date and 14 May, volunteers and I had inspected 60 nest boxes to determine occupancy. Western Bluebirds were active at 43 sites, White-breasted Nuthatches (*Sitta carolinensis*) at three, Tree and Violet-green Swallows at nine, wasps in one, and four were empty.

The first bluebird egg was laid 1 April; the first egg of the last brood to fledge was laid 19 July. Four hundred and fifty-one Western Bluebirds were banded and fledged. Twenty-five others fledged

unbanded; two of these came from a cavity near the top of a utility pole which Red-breasted Sapsuckers (*Sphyrapicus ruber*) had drilled and used earlier in the year.

In 1993, Western Bluebirds on this trail produced ten clutches of seven eggs each. Seven eggs hatched at four nests; none fledged seven. A total of 316 nestlings were banded and fledged. In 1994 nine clutches of seven eggs were laid, again with mixed results (See Table 1).

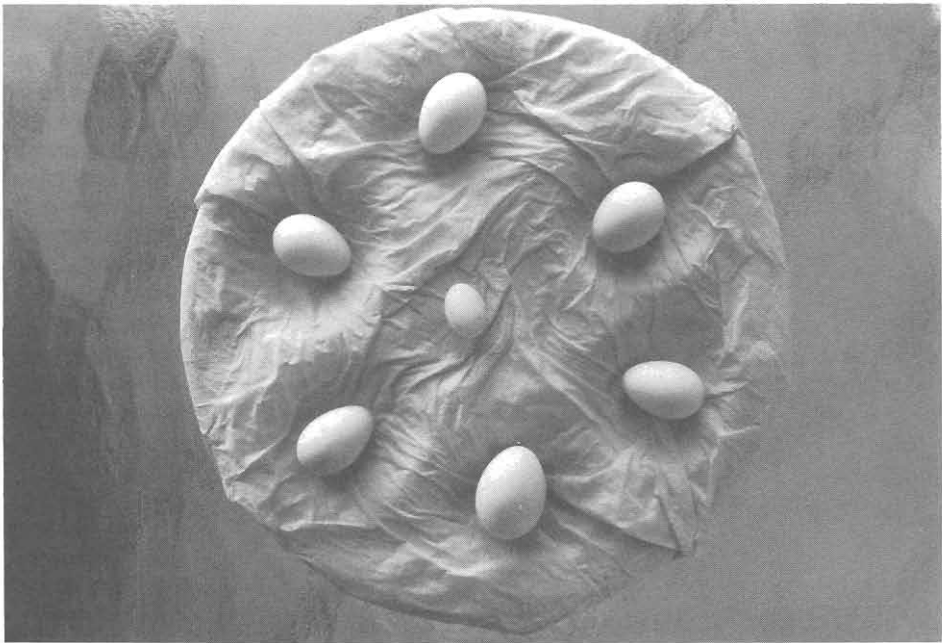
The female bluebird at box 8529 (See Table 1), nested in the same box in 1992, 1993, and 1994, and each year laid two clutches of five to seven white (albinistic) eggs. She was identified by reading her band numbers using a 45x power birding telescope. She was banded in 1991 by Chester E. Kebbe[®] for the Hubert Prescott Bluebird Recovery Project near Sherwood, Oregon, 50 mi. (80 km.) north of Corvallis. Each year her mate was an unbanded

Table 1. 1994 Western Bluebird Clutches of Seven Eggs

Brood Nr.	Eggs Laid	Hatched	Fledged	Comments
1	7	0	0	Pair disappeared, swallows nested.
1	7	5	3	Two nestlings died in nest box.
1	7	5	5	Fledged unbanded.
1	7	6	5	One missing, one fledgling died later.
2	7	7	7	! [Hallelujah]
2	7	0	0	Female died in box on eggs.
2	7	7	7	Took 2 days to fledge all.
1	7*	4	4	Removed 1 white egg, 2 missing.
2	7*	7	7	White eggs, six** fledged from this box.

* Eggs of female at box 8529

** One nestling, weighing 9.0 g. less than siblings when banded, was fostered into another nest where it fledged successfully.



Photograph by M. S. Elzroth

The mini-egg in the center of the photograph was laid by a Tree Swallow in May 1994 in nest box 8504 located south of Philomath, Oregon. The other typical eggs came from abandoned nests of Tree Swallows or Violet-green Swallows and were salvaged with proper permits.

bird, but we were unable to determine if he was one and the same male.

On 13 May, when I checked box 8504 south of Philomath, Oregon, Tree Swallows had laid four smooth, white, non-glossy, slightly elongated eggs and one tiny white egg shown in the photo. I removed it and one other to measure later. The eggs left in the nest box were not measured; they hatched and the young fledged. Fearing breakage, the contents of the mini-egg was not drained after the normal egg broke. Tiny black spots of mold, not present on the fresh egg, developed on the shell before the pictures were taken. The small egg measured 8.9 x 12.7 mm.

The swallow eggs, pictured here with sizes shown in Table 2, were from abandoned nests taken with the proper United States Fish and Wildlife Service salvage permit for the Audubon Society of Corvallis. They are displayed whenever educational slide programs are presented. The mini-egg is the first found on this trail

during 19 years of monitoring nest boxes. ■

Table 2. 1994 Typical Tree and Violet-green Swallow Egg Sizes Shown in Photo

	Length	Diameter
	12.5 x 20.1 mm. *	
	12.2 x 17.8 mm.	
	13.2 x 18.3 mm.	
	13.7 x 18.8 mm.	
	13.3 x 19.0 mm.	

Mini-egg	8.9 x 12.7 mm.	

* Typical size egg from box 8504.

☛Chester Kebbe died in 1993.

6980 NW Cardinal Drive
Corvallis, OR 97330

I assisted Elsie Eitzroth when she banded the last brood of Western Bluebirds (*Sialia mexicana*) on the Audubon Society of Corvallis Bluebird Trail on 15 August 1994. The Earl Pederson Christmas Tree Farm south of Philomath, Oregon, in the foothills of the Coast Range, is at an elevation of approximately 550 ft. (203 meters).

When we parked in the lane next to the nest box, four vocal nestlings, three females and one male, were demanding to be fed. The adults were perched nearby, the female with a grasshopper (genus and species unknown) in her beak. Neither she nor her mate exhibited much fear or apprehension at our being so close with our equipment on the tailgate of the Blazer.

We proceeded to band four nestlings, three females and one male, all with good weights for 12-day olds. When larvae of the blowfly (*Protocalliphora sp.*) were found in the skimpy nest, the box was scraped out and two of the young were placed in a clean substitute nest while we banded the others. Only a few bites were apparent from the 22 large larvae counted later. Cascara seeds (*Rhamnus purshiana*) were also found in the bottom of the box; these seeds are often found in boxes in late July and August. While we watched, the female with a grasshopper cautiously approached the box and fed the insect to the two audible nestlings inside. We saw the male perched nearby on the leader of a five foot Christmas tree and moved the birding scope around to get a better look at his bands which indicated he had been banded in 1992. To our astonishment he had a small smooth-skinned, olive-brown lizard approximately 1-1/2 in. (3.8 cm) long. The head and legs were sticking out one side of his beak, the tail and hind legs out the other. He hesitated to approach the box, but before we could move the car he flew off. When we saw

him again, he was hunting farther away perched in the young Douglas firs (*Pseudotsuga menziesii*). We suspect he downed the fleshy morsel himself.

We saw the lizard so briefly that we were unable to determine which, of the three species of lizard commonly found in Oregon, was the most likely prey species in this habitat. We were banding at a site with overlapping ranges of the Northern Alligator (*Gerrhonotus coeruleus*) and Southern Alligator (*Gerrhonotus multicarinatus*) Lizards. We could not completely rule out the Western Fence Lizard (*Sceloporus occidentalis, occidentalis*). The habitat, on the edge of coniferous forests and within the Christmas tree farm, pointed most likely to the Northern Alligator Lizard which is born alive in August and September.

The male and female at this nest box had parented here in 1993 and again in 1994 for a successful first brood. The second brood failed when a predator took five nestlings, leaving one crushed 10-day old dead in the nest. The female, banded in 1993, was a new mate for broods two and three. As we packed up to leave we wondered aloud whether the fledglings would acquire the same taste for lizard cuisine as their father. ■

4460 Goldview
Corvallis, OR 97333

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 Grae Loch Rd., Laurel, MD 20723.

Cat and 'Coon Guard Update

James E. Fitzgerald

This is a follow-up to the article I wrote about the metal "varmint" guard published in the Summer (16(3):113-114) issue of *Sialia*. The guard was made from a sheet of metal roofing material.

During the spring of 1994, I equipped 29 bluebird boxes with a metal "varmint" guard. This guard was used to keep raccoons, house cats, snakes, and mice out of the boxes which were mounted on six and one-half foot (2.0 m) steel fence posts. I inspected these bird boxes each week during the months of April, May, June, July, and into August. I had no losses to the predators named above as I have had in the past when the posts were not equipped with this guard.

The guard was anchored near the center and in the middle of each side with a wire tied to the post about one foot (0.3 m) below the guard. It looked a bit like a parachute. The wire is intended to hold the guard in place during periods of strong winds. I used baling wire on all of my guards (soft iron wire about .075 inch in diameter) obtained from farmers that had used it to wrap square hay bales. I started out with smaller wires, but it broke in the wind.

My bluebird boxes were located on a 400 acre farm with most of the boxes mounted in hay meadows and cow pastures. The guards prevented the cows from rubbing on the posts as they have in the past. About 160

acres did not contain boxes as it was in farm crops and timber.

My bluebird boxes are on a trail I walk. A slot entrance hole is used on all the boxes.

There was a hazard that showed up which I had not noticed before. Birds removed from one to five eggs from the nest. One egg in six of the nests was replaced with an egg that looked like a sparrow egg. These birds even removed three eggs from the five that had been in a House Sparrow's nest. Two bluebird nests with five eggs each had all the eggs removed. A hole was poked in the egg in the nest and the egg deposited on the metal guard. The broken eggs stuck to the guard and that is where I found them. This same thing (one egg removed and one added) happened in my back yard in Topeka to a bluebird nest and to two House Finch nests. I am not sure but believe this was the work of cowbirds. I did see a cowbird in my back yard. There was one bluebird nest destroyed by a House Wren when it built a nest on top of the bluebird nest.

I did not use the greased post that year but did have good luck with Diazinon® granules placed at the base of the mounting post to control ants. I am a believer in the "varmint" guard. ■

2910 SW Arvonnia Place
Topeka, KS 66614

Hank Coleman

We had a bluebird triple this year (three broods). I attribute our success, in part, to the use of a mealworm box.

In mid-April, the box was placed on a fence post. The sides were clear plastic; the top remained open for visibility. After discovery by a bluebird pair, I replaced the plastic with wood to avoid exit confusion and closed the top.

A bell was used to announce the filling of the box (normally 6 one-inch worms twice daily). The pair was responding by early May.

Once fledging occurred, parents' use of the box for feeding the fledglings enabled me to follow the baby birds as they moved along the treetops. Otherwise, it would have been extremely difficult, if not impossible, to monitor their whereabouts at this time.

Fledglings from all three broods returned to the vicinity of the box at various times after fledging (14 days for the first and second broods and five days for the third brood). For several days parents and fledglings would congregate at the box feeding. On rare occasions, a fledgling would enter the box; however, taking the mealworms was clearly the parents' function and responsibility.

Suddenly, any use of the box ceased. If a fledgling approached the box, it was driven away by one of the parents. On one occasion the male, with four fledglings nearby, entered the full box, emerged without a worm, and flew away.

The parents began landing on and hunting from the perches I had placed in the fields. Almost immediately the fledglings landed on the perches and began imitating their parents. I did not observe much success from the hunting, but the teaching technique was fascinating to observe.

The fledglings never returned to the box. On one occasion, a fledgling appeared headed for the box and, in an uncharacteristic manner, changed direction and flew to a perch. In my estimation, the fledglings were taught that developing skills in hunting were essential to survival.

At certain times, I would recognize the male's call for mealworms and would find him patiently perched at the box. I could approach within ten feet of his perch before he flew to a nearby fence post, allowing me to refill the box. With more time and patience, my goal is to successfully hand feed a bluebird.

I never felt that the bluebirds developed a dependency on the mealworm box. Even the male, shortly before the final brood fledged, stopped using the box. A male from the second brood actually assumed some parental duties at this time. Occasionally, he would feed third brood fledglings from the box; however, this practice ceased and all bluebirds disappeared from the fields by mid-September.

In conclusion, the box provided supplemental feeding utilized at peak periods of demand: inclement weather, prior to and following fledging. And, it provided me with opportunities for firsthand observation I had never thought possible.

By mid-November, a flock of ten bluebirds enjoyed bittersweet in our yard. Each morning one male in particular would fly around our field singing, I hope, not a farewell, but a promise, to return in the spring. ■

183 Wheeler St.
Rehoboth, MA 02769

Close Encounters with the Spotted Kind

Don Yoder

Because the majority of NABS members are neither biologists nor part of an academic community, some of them may find the style of research articles unfamiliar or awkward. Addressing this feeling, board member Don Yoder plants his tongue firmly in his cheek as he writes a story about one of his recent bluebird experiences.

The greater part of my bluebird (*Sialia*) trail is on a golf course (*Cohors di golf*), considered by many as only fair habitat. Boxes are hung from trees which is not a favorite arrangement, but driving stakes in a golf course for mowers to encounter would not increase trail popularity or endear me to maintenance crews. I am able to travel fairway paths with a golf cart (*Carrozza di golf electricus*), a fast and easy way to carry tools along with an occasional interested guest. Such monitoring can be done on the one day a week when there is no play.

One nest box is surrounded on three (3) sides by tennis courts (*cohors di tenni*) and buckeye (*Aesculus californica*) trees. Upon seeing nesting activity by Western Bluebirds (*Sialia mexicana*) beginning in this box, I attached a raccoon (*Procyon lotor*) guard (*guard di Noel*), modified to 8 inches (20.3 cm) or more in length, to head off another very likely loss to these ravening beasts.

Returning to the cart I watched the adult pair make short flights to and from the box, trying to fathom the new obstacle to their plans. Within 20 minutes (.333 hrs. P.D.T.) both had solved the puzzle and returned to their routine. Over time, the nest was completed, five blue eggs were laid, and, eventually, five youngsters were gaping at noises at the door.

On S.C. 26 June 1994, it nearly became necessary to scrape bluebirds off of the golf cart. Upon arriving for an inspection Momma Bluebird was sitting inside the "porch" (*guard di Noel*) facing out. Youngsters were making true bluebird noises--not the hungry cries of hatchlings calling for food. Fearing premature fledging, most monitors would have said avoidance would be the wisest choice. I regularly block the entrance hole with a

mirror, and slide the lid (operculum) sideways. With only a narrow slit open, peering inside with the help of a good flashlight transfixes their attention and the lid still prevents unexpected eruptions. Only three youngsters could be seen; the idea that two had already fledged certainly seemed reasonable, though they were not in evidence in the vicinity. I replaced the lid, removed the mirror and returned 13.75 yards (12.573152 m) to the cart to watch, and eat my apple (*Malus* sp.--Golden Delicious). Shortly one youngster (number three?) exited the box, trampolined once off the porch, and flew smartly to a nearby tree. (Three down, two to go.) Finishing the first half (50%) of my apple, number four followed his sibling out the door, off the porch, and into a tree. About the same time, something struck the windshield of the cart. I looked down at a speckled-breasted, black-eyed fledgling bluebird, clinging to the nameplate of the cart--peering in and looking me over intently. Deciding that I didn't look much like Pop, he flew off to a better perch in a buckeye tree.

By then number five was poking a head out of the box hole. Something--I thought it to be a leaf or twig from overhead--dropped into the cart, just as number five left the box and porch. I looked down to see a speckled-breasted, black-eyed fledgling bluebird, sitting on the scorecard holder in the middle of the steering wheel, 18 inches (45.7 cm) from my nose. Again, since I wasn't made up to look like Pop (or Mom either) he took off for a better perch overhead, kindly going without leaving a calling card.

Well, I reasoned, if the last of the five youngsters has fledged, maybe Mom could be inveigled into building a new nest, if the box were cleaned out

immediately and made ready for her.

Ha! Let's not rush her! Removing the lid with the box yet in place, who should still be at home but two youngsters cowering in the right front corner, showing few signs of being ready to see the world outside. By the time I visited a couple of days later, they were gone. The buckeye

trees were alive with twittering young bluebirds, at least two of whom probably thought they should have had a ride on a golf cart. ■

2021 Ptarmigan Dr., #1
Walnut Creek, CA 94595

Solving a Birdbath Problem

Dean Sheldon

Some years ago, with the help of a local monument works, we fashioned a birdbath from a section of sandstone column. The column was one of many which had held up the portico of the Butler-Harten House, a magnificent mansion, in Sandusky, Ohio. The house was razed in the 1950s to make way for a new building for the Ohio Bell Telephone Company.

The column section measured fully 20 inches across. The monument works dished out a 16 inch circle which is 2 inches deep at the center with sides sloping gently to the top edge.

We brought it home and set it on the column base in front of an Arnold crabapple tree just outside our kitchen window--and filled it with water.

Some hours later we noticed that the water level had receded considerably without any birds having used it. We refilled the birdbath, only to have continued water loss, at an even faster rate. After about three days of refilling, the whole exterior of the column section looked "sweaty" and water was oozing over the base. What should we do?

Oil? No, too messy. Wax? No, too slippery. Paint? No, it would destroy the unique ambiance of the piece. Ta da! Thompson's Water Seal® to the rescue! We moved the birdbath to our asphalt driveway and let it "bake" in the hot summer sun for about a week, carefully covering it each night so the dew would not delay our efforts.

We then applied (actually dumped)

about a pint of Thompson's Water Seal into the birdbath and daubed it all over the inside and top of the piece until it was absorbed into the stone. Then we dumped some more in and worked it around until it, too, was dampened.

We left the treated birdbath to dry for a couple of hours before moving it back into place on the column base. We began pouring water into the recessed basin in the stone. At first, the water splashed and skipped around like mercury from a broken thermometer, but it rose to the top of the dish and over the top. Most important it stayed brimful then as it has for the last ten summers.

Each spring, we scrub the dry depression and top with a stiff wire brush to remove any dirt or algae remaining from the past season. We then re-coat the birdbath as described above with Thompson's Water Seal®. The annual applications take a smaller amount than did our initial anointing of the sandstone.

There are no apparent harmful effects to our birdbathers, either. We now drip water into the basin from a copper pipe covering a one-quarter inch plastic tube which carries water from the house to the birdbath.

Fresh sparkling water in a handsome, safe historic birdbath--all thanks to Thompson's Water Seal® which really made the project possible for us. ■

4569 Greenwich-Milan Townline Rd.
Greenwich, OH 44837

Cavity Nesters on My Property: Bluebirds, Chickadees and Vultures

Henry M. Ditman

Bluebirds: As always, the only one of my four bluebird houses that successfully produced baby bluebirds was the one located just 20 feet from the side of our house. Perhaps they instinctively know that animals are wary of humans and thus feel safer near a human dwelling, or perhaps the box is just situated properly with respect to nearby trees and open ground. In any event, the parents produced two broods of five young, the best ever for that box. A storm blew the top off the box several days before the second brood fledged. I didn't notice it for at least a day, but the parents continued to feed the young and none were lost.

Chickadees: For the first time, one of my boxes produced baby chickadees. Every other year, the chickadees would start a nest, and then the wrens would kick them out and build their nest on top of the chickadees' nest. I didn't see any wrens this year.

The chickadees always build their nest in the side-opening box, which is very fortunate because they have a layered nest of down at the top and moss at the bottom. It's interesting to see the cross section of their nest when the side of the box is pulled down.

Vultures: For seven years, Black Vultures nested in the attic of the old unoccupied farm house on our property, until one year raccoons stole their eggs. The vultures did not return to the attic, but this year they nested in the barn. Baby vultures are hatched early in the year because they need all spring and summer to mature. I used to see the eggs in our attic in February, and they wouldn't fledge until late August. They start out looking



Photograph by Henry M. Ditman

Deer mice using an abandoned Carolina Chickadee nest in a nest box, Westminster, Maryland.

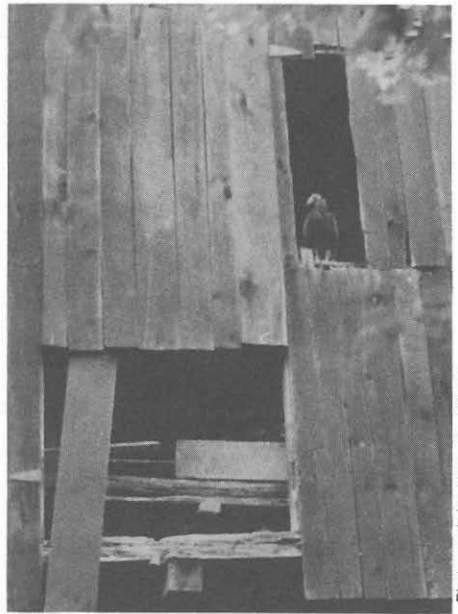
like plucked chickens with white fuzz all over and then gradually become black as their feathers grow in. The mother flees when someone enters, but the babies defend themselves by hissing and raising their wings in a threat display. After they fledged from our farm house attic, I would sometimes see the young taking flying lessons above our meadow, flying wing tip to wing tip. Like its larger relative, the Turkey Vulture, the Black Vulture is one of the largest cavity nesting birds.

2800 Sykesville Rd.
Westminster, MD 21157



Photograph by Henry M. Ditman

Down-covered young Black Vultures on hay in Ditman barn, Westminster, Maryland.



Photograph by Henry M. Ditman

Black Vultures in Ditman barn, Westminster, Maryland.



Joe Kujanik of Gary, Indiana, with the approximately 80 bluebird boxes he made and donated to the Lake County Parks Department in early 1994.

"I'm a Fanatic Bluebirder"

Gloria Jansma

I live about 13 miles southwest of Billings, Montana. Our home is located in the hills. Our altitude is higher than Billings, but the area is not as mountainous as it is farther west. We have almost 30 acres of land and have placed five bluebird boxes on it. Mountain Bluebirds have nested here for the last three years. It truly is an experience that changes the way one looks at birds.

What a thrill it was on 6 March 1994 when I stepped out on my deck and recognized the familiar call of the bluebird. I looked around and found the male. It amazes me how they can find us!

The box they chose is one my son built about four years ago; it is not a standard design. The box is located close to our home so I have been able to share all the nesting experiences. I watched daily hoping the pair would set up housekeeping. They seemed to be having a difficult time making the decision as to what site they would choose. They flew from box to box, but the male kept enticing the female into the box close to our house.

25 March 1994-Six inches of snow on the ground this morning. I worried about the bluebirds, but it was a sunny day and not too cold. The female finally went into the box.

10 April-*Finally*, the female is building her nest. It seemed to take so long to get to that point this year.

23 May-Both bluebirds were seen feeding their newly hatched young.

10 June-Four fledglings left the box. They were so plump, large, and fluffy.

Shortly after these young fledged, we found a pile of bluebird feathers

in the barn. I was heartsick because I knew how the bluebird had died. My husband, Jer, and I had nursed four motherless kittens. They became our cats that stayed in the barn to keep the mice away from the hay. The kittens had become attached to us and had begun coming closer and closer to the house. One day they were all climbing up a tree--trying to get at the bluebirds.

I knew I had to do something and do it fast. My husband chased the kittens back to the barn, but I knew they needed a new home because I wanted our place to be a safe haven for my bluebirds. (I feel like a mother hen.) I arranged to take them to a rancher friend. I am a medical technologist at the hospital in Billings. On the appointed day I traded shifts in order to make the delivery. I really got teased at work. My boss said he thought he had heard all the possible excuses for not coming to work, but this was the best--protecting my bluebirds from cats! You know I'm a "fanatic" bluebirder. Once they capture your heart, things are never the same.

By the middle of July four more bluebirds fledged, the second brood of the season. One nestling had left too soon we thought, so my husband crawled under a large shrub to rescue it as it chirped. Suddenly, out of nowhere, two fledglings from the first brood and the adult parents began swooping at Jer, protecting their family member. It was amazing. He could not believe they would be so aggressive. I was concerned that they would succeed in hitting him on the head. As you might imagine, he

got out of there quickly.

It is 7 September as I write this. I have had the pleasure of watching five bluebirds bathing in our bird bath. What a sight, especially when two or three were in the bath at once. We had a very hot and dry summer. Temperatures were in the high 90s most of July and August. During that time I did not see much of the bluebirds so they must have

gone down to the coulees below us where there is more shelter from junipers and cedars.

I am hoping that I will have the privilege of enjoying these beautiful creatures a few more weeks since they usually don't leave until October. It is such a pleasure to have them here that I had to share my story. ■

7583 Keller Rd.
Laurel, MT 59044

The Growth of Bluebird Tending at Bryan Park Golf Courses and What Happened After

John Murray

The analogy here is the acorn that grows into a big oak, that gives birth to many other oaks over a larger area as time goes by. Using Dick Faucette's and Linda Phillips' words, this is how three boxes on a golf course in 1976 grew into a statewide bluebird organization that encompasses over 3,600 boxes and more than 700 people.

Dick Faucette grew up north of Greensboro at Browns Summit when there were many bluebirds in the area, but in the 1950s and 1960s he saw fewer and fewer birds. In 1976 he became Greens Superintendent at Bryan Golf Course near his home. He saw three boxes that a local naturalist, Harold Draper, had put up on nature trails and on the course; he also saw a few bluebirds in the area.

In 1978, he observed a nest in the telephone box at the number one tee with the mother bird feeding her young between groups of golfers teeing off. During the next year Dick built and installed 45 boxes at 150 yard intervals on the course—had them up in time for the 1979 nesting season and fledged between 180 and 200 bluebirds. This number continued at about the same level until well into the mid-1980s.

In 1987, the golf course was redesigned and a new course was built; as a result, Dick lost quite a few boxes. With the assistance of Eagle Scouts in 1988, enough new boxes were put up

on the new course and replaced on the old course to bring the total up to 103.

In 1982, Linda Phillips began working at the course. She had never heard of an Eastern Bluebird. Dick gave her the extra duty of putting up 20 boxes on the course along with her regular duties (which included using a push mower around the course—hard work!) This led to watching the progress of the birds in the nests and then to actually monitoring the trail.

To return to Dick's story. By 1990, the bluebird population began increasing and he began losing many nests to predators. In 1991, he installed cone-shaped guards below all 103 boxes and cut losses (mostly by raccoons) by 90 to 95%.

In 1992, he had a total of 127 successful nests and fledged 461 young bluebirds. The first two cold and rainy weeks of May accounted for the loss of six nests, and two were lost to snakes. Linda joked that the snakes must have stood on their tails and jumped to get over the guards.

From this background Linda was involved in the formation of the North Carolina Bluebird Society with its widening of bluebird interest and knowledge all through the state. ■

This article was reprinted with permission from Bluebird Notes, the newsletter of the North Carolina Bluebird Society 7(3):7.

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'm very excited about the 18 baby bluebirds that I had the pleasure of monitoring this summer in Toledo's Metro Parks. The summer months went by very fast and the birds kept me very busy. I had seven boxes to keep track of and in between wrens and Tree Swallows we did see 18 baby bluebirds that made it out of the nest.

I wish more people could know the joy of helping such beautiful birds!

Kris Foster
2653 Castleton
Toledo, OH 43616

didn't fall out. That made several young bluebirds flying around the garden and in the trees until four hawks from the woods swooped in and either killed some or scared them off as we haven't seen any bluebirds since August 10th. We are hoping they come back next spring, as they are our favorite bird.

Mrs. Lowell Zentz
356 E. 14th Rd.
Etna Green, IN 46524

Dear Editor:

Early last spring we had a pair of bluebirds build a nest in a house on the clothesline post next to the house. The female laid five eggs, but just before she started to set something took four of the eggs--no broken ones, but they disappeared. So they abandoned that house. Then they made a nest in an old three pound coffee can out by the corn drying operation. She laid four eggs and on June 9th four birds fledged. Next, they built a nest in an old house out by the garden. She laid four eggs and on August 1st four birds fledged from there. The birds got so big we didn't see how they stayed in the nest. We had to be very careful when checking them that they

Dear Editor:

Late last spring I refurbished and erected a 12 apartment Purple Martin house on a 16 foot steel pole. Although never occupied by martins, I did notice in early July that a pair of bluebirds and two offspring were perching on the roof and ledges of the house. After entering and carefully examining every available opening in the house, the four finally selected one and proceeded to build a nest. Upon completion of the nest, the two young birds disappeared and were not seen again.

The parents successfully raised three male offspring in the martin house. One interesting aspect of this experience is that the bluebirds selected the Purple Martin house over several other conventional weathered cedar bluebird houses. Also, it would appear to bring into question the specific hole size and mounting height requirements suggested by the experts.

Dan Booth
Route 3, Box 5044
Galena, MO 65656

Occasionally bluebirds utilize martin houses. They will nest in a wide range of cavities. Hole size and mounting height requirements are primarily to reduce predation and make monitoring easier.

Dear Editor:

I am one of a small group of people who is trying to restore the bluebird population to this area of Connecticut by using local golf courses on which to put out nest boxes. In the last two years we have been at it, we have seen about 50 bluebirds born and live to fly away from the nest.

Richard S. Lewis
154 Sleepy Hollow Rd.
New Canaan, CT 06840

Dear Editor:

I had something new during 1994 after having a box up for 30 years. A seven-day old bluebird nestling developed a huge blister almost as large as its body. It looked like it was full of air instead of fluid. The bird was missing the next time the box was checked. The other three were still there.

I thought about puncturing it. Would that have helped? Have other members had any experience like this?

Thomas A. Hayden
106 Linda Dr.
Collinsville, IL 62234

Dear Editor:

My husband and I are new members from central New York state. Last spring [1994] we put up 33 boxes. We will double them up for next spring to accommodate our large Tree Swallow population as well as the blues. All but four boxes were used.

The competition here isn't dire because the bluebirds arrive first (before the swallows and lastly wrens). We saw the first bluebirds March 26, 1994--there was still plenty of snow (we were up to our hips in it). And they blithely flew into their chosen nest box.

We had three nesting pairs of bluebirds who raised 12 fledglings. Our last nesting (a surprise) was started about August 6 and the four fledged August 25. We lost a brood to a frost on May 29--they were only a day or two from fledging! We have thought of somehow keeping the boxes warmer when there is a frost warning for the night (perhaps taping a hunter's glove warmer to the bottom outside?). The parents were there in the morning to feed the nestlings, but they had perished. If anyone has any ideas, please tell us!

A neighbor lost their bluebirds in that same frost and, as you know, the first clutch is the largest. In 1993 there was a frost in mid-June that killed a Tree Swallow with 12 eggs. We can't do much about a bad weather spell, but a sharp night, perhaps we can. With a clutch of five bluebirds *so close* to fledging, is there anything that can be done for a hard frost night?

For all those that are downhearted when the last bluebirds leave the nest--one word--hummingbirds! Yep, go to the nearest hardware or feed store, grab one of those feeders, mix up cane sugar and water (1 to 4 ratio), boil two minutes, let cool, and presto! The blues over the blues are gone. (If the weather is hot, clean and change every three days, otherwise every five.) Use hot water only, no soap. In this area the hummers will stay around until mid-September. It doesn't hurt so much after the nesting season is over if you have something to claim your attention.

Start early if you can (early May here) to attract hummingbirds and hold them to watch after all the nest boxes are empty.

Michele Skollar
RD 2, Box 127
Hamilton, NY 13346

Bluebird Tales

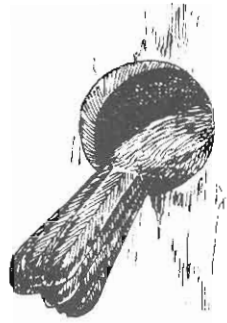
Mary D. Janetatos

Following months of convalescing from injuries sustained in an August 14, 1994 automobile accident, I was ready for some good (bluebird) news! It came in the form of an article in the premiere issue of *Birds & Blooms*, a beautiful new full color bi-monthly magazine which highlights both birds and flowers. (Interested? Contact them at P.O. Box 984, Greendale, WI 53129.) Entitled "Teen's 4-H Project Gives Golfers 'the Blues'," the article tells the story of NABS member **Jennifer Jones** of Kalona, IA.

The 18 year old senior at Mid-Prairie High School explains: "For almost 7 years I've been maintaining a bluebird trail on our local golf course as a 4-H wildlife project." The accompanying picture shows Jennifer inside a refrigerator carton where she hides with her camera. After a bluebird occupancy rate of 13 out of 18 nest boxes, Jennifer says she can't describe the pure joy she feels each time she discovers another clutch of bluebird eggs or sees a fledgling in a nearby tree. Jennifer was the first teen to receive a certificate of appreciation from the North American Bluebird Society.

And then came the blockbuster bluebird book by **Connie Toops** of Martinsburg, WV--*Bluebirds Forever*. This stunningly lovely book with color illustrations has been described by bluebird authority **Richard Tuttle** as "...the most important bluebird book." The author has exhaustively researched the biology of the bluebird and has presented many of the leading figures in current bluebird conservation. The result is an enchanting, fact-laden book with a can't-put-it-down approach. Many of the 120-plus color photographs are by the author. (See NABS catalog to order a copy for yourself or to give as a gift.)

Further impetus to my recovery was furnished by bluebird phone calls. One example was **Tom Lake** of Sac City, IA who called to announce that a \$10,000



grant from the state of Iowa had been given to the municipality of Sac City for use on bluebird trails and other forms of bluebird conservation. The generous grant was a challenge to Tom, who runs his own tree farm there. After a little pow-wow, he was pleased with some ideas, and I was buoyed by the thought of such a considerable amount to be used to benefit bluebirds--which is not even the state or county bird.

Mary Miller of Sharon, PA made me chuckle as she described the efforts of herself and **John Lapin**, nearby in Ohio. With John's 350 nest boxes and Mary's 50, in the cold spring of 1994 they purchased mealworms and fed them to their bluebird tenants. Mary stated that one bluebird female was so "hooked" on mealworms that she would pursue Mary relentlessly along the trail for more mealworms!

Tom Loveless of Glasgow, KY wrote, "We have just moved into a new house just on the outskirts of town with three acres on which there will be several bluebird boxes this spring. Please send all the information which you can to help me build houses for, attract, feed, and enjoy as many bluebirds as we can entice to live with us. I want to build houses this winter, to be ready for spring."

I've long known that in Montana bluebirders work on a grand scale. **Glen D. Rowland** of Stanford, MT wrote that he and his wife had received a crystal Bluebird of Happiness for Christmas, found our address, and had to write. "Our population of bluebirds was down here in

central Montana and some of us started making bluebird houses. I have made 407 bluebird houses, and each year give our third grade class in school here, each one house. They come over to my home and we have our lesson on the bluebirds. Then they take one home and are supposed to put it up, clean it yearly, and take care of it. I have erected lots of them myself and give others away."

Norman White of Florence, CO shared what he called a "funny tale." "I built a (not quite finished) workshop/boat storage building, 26 x 32 feet. Part of the 'not finished' is I haven't closed in under the eaves overhang. To keep the sparrows and starlings out, I put styrofoam blocks in the holes between rafters and top sill.

"One of them blew out and last spring we had a nasty, windy, sleety evening and night. A sizeable flock of bluebirds was hanging around and I felt so sorry for them. The next morning I went out to the shop and there were about 20 of them inside! I felt good that they had gotten in to get some shelter, but the poor little things, of course, couldn't figure out that, to get out, they had to go back out the way they got in, and were flying to the windows. I finally got them all out without any of them getting hurt.

"Well, with winter setting in again, they have apparently remembered that was pretty nice shelter and are using it again. Only thing is the dummies still haven't figured out how to get out so they pecked several holes in the styrofoam for their exits."

Wayne Johnson of Newport News, VA gave me encouragement in my trials as I read of his heart attack in the past year and his arthritis and gout for the past 15 years. He wrote, "This does not keep me from working with my bluebirds; I just keep on keeping on. One of my friends in our church has built about 100 boxes. We work together and love our bluebirds. Being late renewing his membership, he said, "I have also missed receiving my copies of *Sialia* and I love those books."

Several other letter writers remarked on receiving the captivating blue crystal bluebirds from Terra Studios. **Judith**

Dixon sat down on Christmas Day and wrote that she wanted to receive bluebird information as soon as possible to begin helping the bluebirds. "As a child in grade school years ago in North Dakota, I WAS a bluebird, so that makes me doubly interested in helping."

Perhaps we can minimize the destructive aspects of "progress." One way is through educating the next generation. This is done well in regard to bluebirding and, of course, nature in general by *Ranger Rick Magazine*. The February 1995 issue has a fine article "Wow! More Bluebirds" by **Maureen Fitzpatrick** as told to **Cathy Fitzpatrick** and photographed in color by **Kerry Fitzpatrick** and others. On the reading end of this article were my grandchildren, **Leila** and **Sara**, almost 7, and **Alex Ben Abdallah**, 5. **Xanth Stack** was among the many who wrote as a result of reading the article. "My name is Xanth Stack and my brother and I do are school at home. We have been studing and observing birds for two years. My mother reads us the article on Blue Birds in Feb. 95 *Ranger Rick* and we would like to have sent to us the bluebird box plans in the enclosed self-addressed envelope. We have a few questions we would like answered if possible. (1) We have Blue Scrub Jay birds and lots of White-crowed Sparrows along with many different kinds of Finch birds. Q. Would any of these birds use the bird house plan you have?"

We have welcomed all the inquiries from the aforementioned articles. We realize that the inquirers may vary in depth of attention they will give to the cause of bluebird conservation. One example of this was the following letter from a young correspondent, **Jenny Smith** of Gallitin, TN.

"How many Bluebirds do you have? I have two dogs, but I like bluebirds too. When I can get a bird I will get a bluebird and I will name it Bluey."

I surely hope, dear readers, that your "blueys" are now wending their way back to you and that you will begin a happy bluebirding season in the spring of '95! ■

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Prepared for *Sialia* by Nancy E. MacClintock-Indexes

Trail of the Bluebird Man

The undercover bluebird man
builds to blueprint
but always in the dark
then with bluebird boxes up his sleeves
and intending trespass
in the rains and slush of winter
walks, when landholders won't be around
to see
how he nails them up quick!
on the safe
and spying edge of woodlands:
Surreptitious bluebird boxes
which truly are nothing
but sides about a cavity
to hold the darkness
and budding eggs, the
undercover birdlings
growing to the first
flash of feathers on daylight.
Then, picking the fields of gray
and insects on the wing,
they'll swoop
on the whole wide stubbleworld
a secret of blue,
and it's spring.

—Taylor Graham

{BOOSTERS—Continued from inside back cover}

Fledgling Bluebird

John F. Adams, Jr.
Lea & Harry Allen
David Alpert, M.D.
Craig Andresen
Augusta Bird Club
Nancy Baron
Beaver Dam Senior Center
H. J. Blair
Judy Bland
Robert P. Bodine
George Boos
Robert J. Brown
Edward R. Bucklin
Mr. Lynn Burket
Joe H. Capley
Eclesia J. Cestone
Chemical Bank
Hank & Joyce Coleman
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G.R. Cook
Kristine Crutch
Robert T.H. Davidson
Mr. & Mrs. Robert Dennis
Mr. & Mrs. Malcolm Dorber
Steven G. Evseff
Susan A. Fisher Family
Jacqueline S. Fonticella
The Forest Garden Club
Dee & Odell Friar

Linda R. Gilchrist
Gail Hall
Betty Hamon
Gerald L. Hartley
Dana L. Heisey
Hombre Golf Club
James R. Hood Family
Charles & Jan Huthmacher
Barbara R. Irwin
Mrs. R.N. Jaspersen
Ron E. Kingston
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Joan Lane
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Woodbury Woman's Club
Jeannie Wright
Suzanne Wybraniec

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Donna R. Hagerman

Western Bluebird

Randy & Laura Jertberg Family

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Michael Owen Willson

Fledgling

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Betty Shaull
Dean E. Sheldon
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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 maladroitness 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. Add \$2.00 per year for Canada and Mexico and \$3.00 per year for other countries (surface mail). U.S. funds only, please. Amounts over \$6.00 are tax deductible.

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