

Sialia

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Of
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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-ahl'-ee-ah see'-ahl-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. Their species names are descriptive of their locations. 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 15, Number 3
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CONTENTS

Presidential Points	82
Charlotte Jernigan	
Use of the Mayfield Method to Predict Daily Survival for Eastern Bluebirds in Jackson County, Michigan	83
Therese M. Schmidt	
Bluebird Nest Box Seasonal Conversion	91
Don Macbeth	
The Effects on Bluebird Produc- tivity of Not Monitoring Boxes	93
Wayne H. Davis	
Steve Gilbertson's Universal House Sparrow Trap	96
Speakers' Bureau Report: Florida	99
Ron Kingston	
Portraits: Brandenburg	100
C. Roost Slot Box	102
Monitoring Backyard Boxes	104
William C. Harrie	
Response to "Myths": Miller	105
News from Two Canadian Bluebird Trails, 1992	106
Bullding for the Future	108
Alicie Campbell	
"Blue" Story with a Happy Ending	109
Mercy Hoepfner	
Bluebirds Promoted in Northwest Indiana	110
Joseph A. Kujanik	
Rookie Season	111
James R. Kunz	
Bluebird Trail Established at Riverside Power Station Near Jenks, Oklahoma	113
Bluebird Express	114
Bluebird Tales	116
Mary O. Janetatos	
"The Seeker"—Stevenson	119
Poetry: Willis	120

COVER

An adult Mountain Bluebird feeds a nestling in a natural cavity as depicted by Art Editor M. Suzanne Probst.

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 Graeloch Road, Laurel, Maryland 20723.

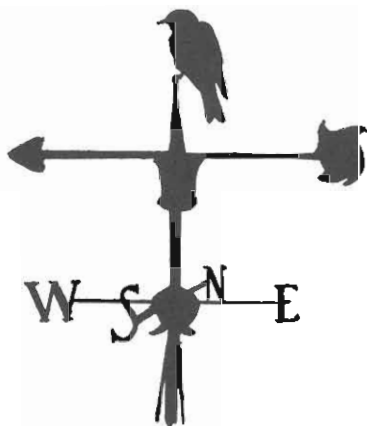
Presidential Points

Charlotte Jernigan

When I think about the significance of our membership and the importance of our varied contributions, many things come to mind: the importance of our mission, the creative approach that so many apply, the lessons learned—both positive and negative—and most especially the dedication that literally is extended the width and breadth of North America and Bermuda.

We have been effective promoters of harmonizing the special needs of nature with the needs of man and his activities, and we share the excitement of good results regardless of where they take place. Comparing what has been accomplished however, with what must be, is minimal. Again I'd like to focus on a situation in south-east Arizona.

In late summer of 1991, Eared Trogons (*Euptilotus neoxenus*) accepted Southwestern hospitality and became celebrated winged tourists from the mountains of western Mexico which is their only range. They are so rare and reclusive that some of Mexico's most avid birders have never seen them. Although their arrival delighted birders, it had biologists scratching their heads. For the first time in history, Eared Trogons were nesting in the United States! Take a bow, Arizona. We hope it was because something was done right, but no one knows with any certainty. Could deforestation or food shortages have prodded a Mexican exodus? Or had good rains that



year and wildlife crops in Arizona lured them? We really don't know.

We *do* know that the excitement of seeing a rare bird can, and sometimes does, overwhelm people, so steps had to be taken to be sure that the birds were comfortable with the decision that they had made. The trogons selected a cavity in a dead maple located in the Huachuca Mountains. These beautiful, bright, red-breasted birds were observed by birders as they flew to the hole in the tree carrying food for their nestlings.

There are 35 species of trogons in the world, but Mexico has only eight of them. The Eared Trogon is 13 1/2 inches long. Every inch from the top of its head to the bottom of its long, squared tail is exquisite tropical beauty. If beauty is in the eye of the beholder, I choose to think that the dead maple that extended its leafless limbs in welcome is also beautiful and will be protected. It had served the purpose nature intended. Its very existence gives it a rightful place in history. Aren't we glad that dead tree was still standing?

Spring means "trail time," and to all who have put out nesting boxes, I wish you bluebirds always. ■

Use of the Mayfield Method to Predict Daily Survival for Eastern Bluebirds in Jackson County, Michigan

Therese M. Schmidt

Abstract

Long-term studies are essential for the measurement of trends in populations. Given the relative scarcity of such studies, data were collected over a six year period on the nesting activities of Eastern Bluebirds (*Sialia sialis*) in Jackson County, Michigan. Nest boxes meeting dimensional specifications of the North American Bluebird Society were placed in suitable habitat by the Dahlem Environmental Center "Bring Back the Bluebird" project. Nest boxes in this study were predominantly contained within a 20 square mile (44 sq km) study area and were monitored by wildlife biologist Interns. Nest boxes were placed in pairs with a minimum of 15 feet (4.6 m) between boxes and 100 yards (91.4 m) between pairs.

Utilizing the system of statistical analysis developed by Harold Mayfield, probabilities for nest, egg and nestling survival were calculated for Eastern Bluebirds nesting within the study area. The rate of hatching success was also calculated. The product of egg survival, nestling survival, and hatch rate gives an overall probability of survival from the time of nest building to the fledging of at least one nestling. The Mayfield method accounts for the variability in data gathered by many observers and presents a method for incorporation of statistical analysis into long-term field studies.

Over the six year period, overall survival probabilities ranged from a low of 68.72% in 1992 to 96.87% in 1990, with a mean overall survival probability of 83.52%. The relatively high probabilities of daily survival were most likely influenced by the protections afforded to the birds from the provision of the artificial nesting cavities as well as measures taken to control predation and parasitism. Until appropriate control areas are well-established, it will be difficult to predict precisely how these protections affect overall Eastern Bluebird survival.

Introduction

Many conservation programs are initiated by community volunteers who carry out the valuable but largely overlooked project of monitoring the breeding activities of selected populations. The hope is that such data will lead to actions which will conserve habitat or afford protection so that population numbers increase. The use of monitoring data to aid in the development of longitudinal studies is currently one of the more active areas of long-term bird studies in the United States.

The mention of the word "monitoring," however, has connotations among many ecologists of unscientific, amateurish techniques which generally produce data seen as having little merit or significance. Some ecologists express concern that monitoring populations is a poor use of time and resources since the monitoring data may prove to be useless to the study at hand (O'Connor 1992). Additionally, it is argued that monitoring populations is politically popular, but

essentially meaningless unless one is committed to pursuing long-term studies to which the power of rigorous statistical analysis may be applied (Krebs 1992). The task at hand, then, is not so much to elicit public sympathy for a species "in trouble," but to quantify where the problems of survivability of a species lie and then make appropriate interventions.

When the nesting success of birds is studied, observers want to know with as much certainty as possible, how many of the nests built produce eggs and how many of the eggs laid produce young that survive to fledging. In order to record data with maximum accuracy, a nest site would need to be under observation before the birds began using it. Although Mayfield contends that this is possible when nest boxes are employed as a means of studying a population, the reality is that even a nest box trail program is susceptible to the same types of variability in data as programs which do not rely on the provision of artificial nesting cavities. Often, nest boxes are

monitored not daily, but at intervals ranging from 7 to 14 days, with once weekly monitoring being the norm (Zeleny 1976).

This gives rise to the dilemma that Mayfield speaks to in his method of how to account for the fact that nests are often discovered at various stages in the nesting cycle. Prolonged periods of cold or inclement weather which prevent monitors from opening the nest boxes for observation also contribute to the discovery of nestling activity at various stages. The alternative would be to monitor nest boxes on a daily basis, risking the abandonment of nests due to human interference or loss of nests to predators attracted by activity at the nest box. Given these constraints, what one ends up with is productivity calculated from nests and eggs *found* which has the possibility of differing significantly from productivity calculated from nests *built* and eggs *laid*. For example, within a seven day observation period, it is entirely possible that a nest partially built could be taken over by a competing species, or a nest which appears to be inactive may actually have contained eggs which were removed by a predator (Mayfield 1961). Other factors contributing to the variability of data in this and other studies are the number of individuals responsible for gathering data, the time period in which monitoring occurs, and the stage of the nesting cycle at which nests are found.

In order to account for the bias inherent in field data, particularly that collected by many observers of varying skill levels, a method of estimating daily survivorship was developed by Harold Mayfield. This method allows for estimation of parameters which are functions of the daily survival probabilities. Subsequently, derivation of the corresponding variances and statistical comparisons of these parameters are then possible (Hensler 1985). Mayfield uses the concept of exposure to arrive at these parametric estimations. His method recognizes that the number of nests lost will depend on the number of nests being observed as well as the time period for which the

nests are under observation. Exposure is simply the combination of nests and time, with the total exposure for a group of nests being the summation of all the days spanned by observation at each individual nest (Mayfield 1975). Additionally, the concepts of egg days, nestling days and hatch rate are used in the calculation of the overall probability of daily survival. The egg day is calculated by dividing the total number of eggs lost by the number of exposure days where the nest contained eggs. Nestling days are calculated in a similar fashion, and the hatch rate is calculated from the number of eggs hatched divided by the number of eggs present at hatching. The product of egg survival, nestling survival, and hatch rate gives the overall probability of survival of a bird from the time the egg is laid until the bird fledges from the nest.

Materials and Methods

Nest box monitoring data were collected for a six year period from 1987 to 1992 from the "Bring Back the Bluebird" project administered by the John and Mary Dahlem Environmental Center in Jackson, Michigan. Although volunteer monitors contributed much of the data, this study was comprised of data predominantly confined to a 20 square mile (44 sq km) study area for which wildlife biologist interns conducted monitoring and banding activities. Although this project was established in 1985 (Hodgson 1986), consistent monitoring of nest boxes did not begin to take place until the establishment of the study area in 1987.

All nest boxes used in the project were made of 1/2 in. (1.27 cm) thick white pine, constructed in accordance with the dimensional specifications of the North American Bluebird Society (Zeleny 1976). Nest boxes were painted with a light grey exterior paint to prevent overheating and to provide protection against damage from the elements. All nest boxes in the study area were placed in pairs with a minimum of 15 ft. (4.5 m) between boxes and 100 yds. (90 m) between pairs. Although most of the argument for pairing of

boxes is anecdotal (Shantz, Stiles, Dupree, Pitzrick 1986), the rationale for pairing was the belief that it lessened competition with other cavity-nesting species, particularly Tree Swallows (*Tachycineta bicolor*).

Several protections were afforded to bluebirds utilizing the nest boxes. Each nest site was checked at least once every seven days. As soon as an Eastern Bluebird nest was discovered, a liberal coating of automotive grease was applied to the supporting pole of the nest box to discourage raccoon, snake, and housecat predation. The use of a 1/2 in. (1.27 cm) predator guard kept the nest out of reach of predators that may have succeeded in climbing the pole. Loss of nestlings due to parasitic blowfly (*Protocalliphora sialia*) infestation was formerly prevented by the addition of 1 teaspoon of 1% rotenone powder to the nesting material prior to the eggs hatching (Zeleny 1976). Out of concern for the unnecessary use of pesticides, the use of rotenone was discontinued in 1990. Instead, nesting materials were checked for blowfly larvae at each monitoring. If evidence of larvae were present, the nestlings were removed to a safe place, a new nest was built out of dry grasses, and the nestlings replaced in the new nest. Observational evidence indicates that no abandonment of nestlings occurred as a result of this practice (unpublished observation).

Monitoring of nest boxes began in mid-April and continued through the end of July. Each nest box was checked on a weekly basis and the number of eggs or nestlings present at each visit was recorded. Evidence of predation or parasitism was also recorded. Nest boxes were not opened during inclement weather or when the ambient temperature was less than 50° F (28° C). Nest boxes were also not opened when nestlings were known to be more than 15 days old to prevent early fledging. After a nest had either failed or fledged young, the contents of the nest box were removed in order to provide a clean, parasite-free cavity for subsequent nestlings (Zeleny 1976).

Nesting success can be measured

In five basic stages: (1) survival of the nest during building; (2) survival of the nest while eggs are being laid; (3) survival of the eggs during incubation; (4) hatching success, which is calculated from the day the first young hatches, and (5) survival of the young to fledging, in which a successful nest is one that fledges at least one young (Mayfield 1975).

In this study, nesting success was viewed in three stages: (1) survival of the nest from the time it was built until the first egg was laid; (2) survival during the combined period of egg laying and incubation; (3) survival of the nestlings from the hatching of the first egg to the fledging of at least one young.

Survival rates and mortality rates were calculated for the egg (Fig. 1) and nestling period (Fig. 2) by summation of the total number of egg and nestling days. Dividing the total number of losses during each period by the total number of days spanned by that period gives the mortality rate for each of the three stages of the nesting cycle. An egg which survived to hatching was given an egg day value of 14 days, which is the mean incubation time for Eastern Bluebird eggs. Accordingly, a nestling which survived to fledging accounted for a nestling day value of 21 days (Zeleny 1976).

Separate calculations were made for nest days and the hatch rate. Nest days were used as a unit for measuring exposure, with one nest surviving one day accounting for one nest day (Fig. 3). For example, nest boxes were monitored every seven days. Two nests under observation during this period accounted for 14 nest days. Even though the nests were observed only once during this period, the time span is the crucial factor in the calculation of nest success. The hatch rate (Fig. 4) is simply calculated by dividing the number of eggs successfully hatched by the number of eggs present at hatching. The percentage of successful nests (Fig. 5) was calculated by dividing the total number of nests producing at least one fledgling by the total number of nests observed and

Figure 1. Daily survival rate for eggs from the time the first egg is laid until the first egg hatches.

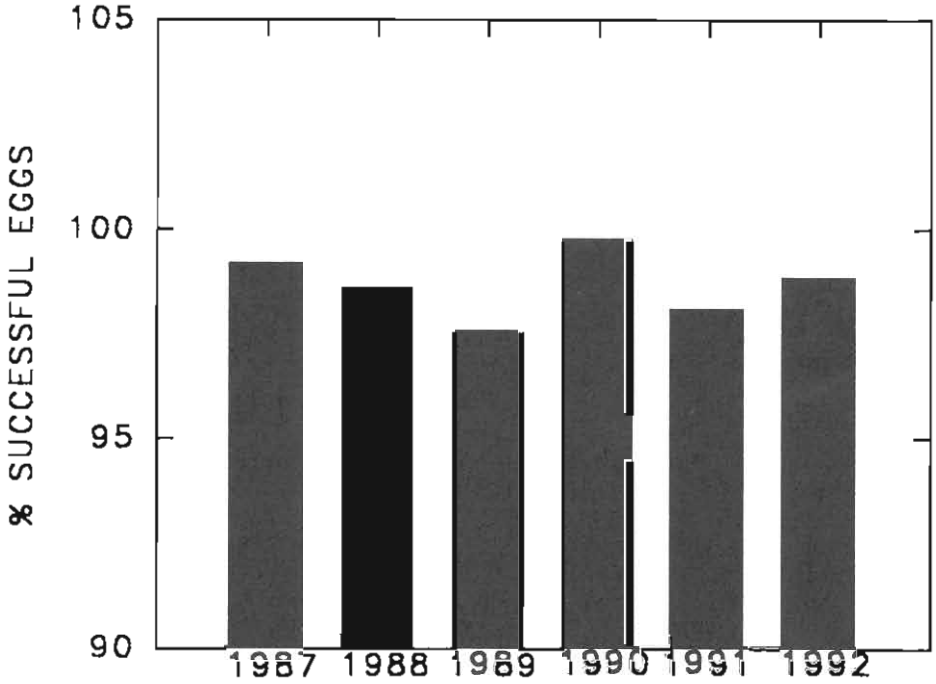


Figure 2. Daily survival rate for nestlings from the hatching of the first nestling until the fledging of at least one young from the nest.

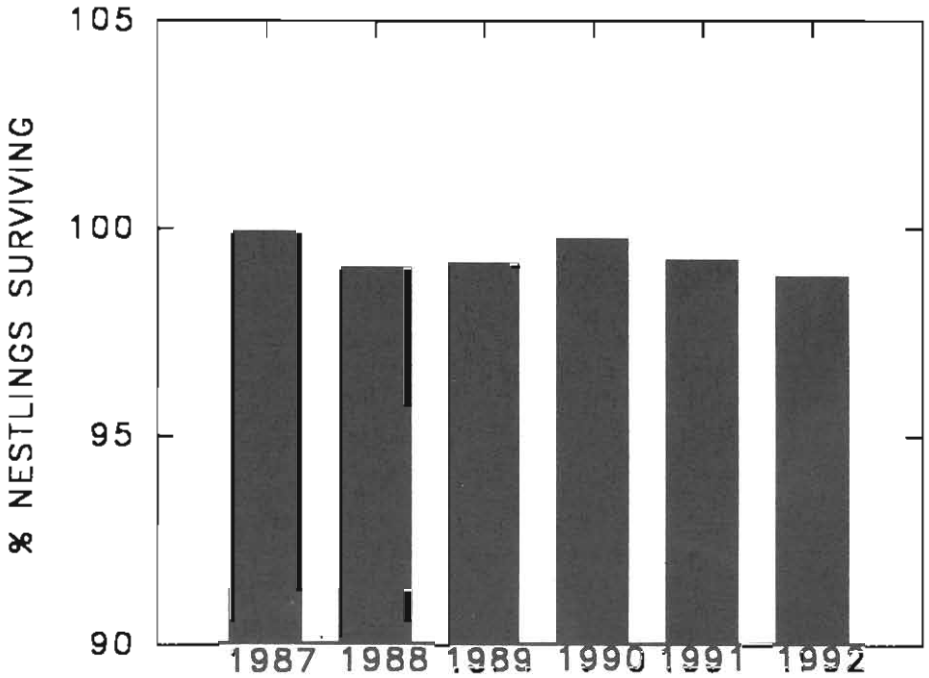
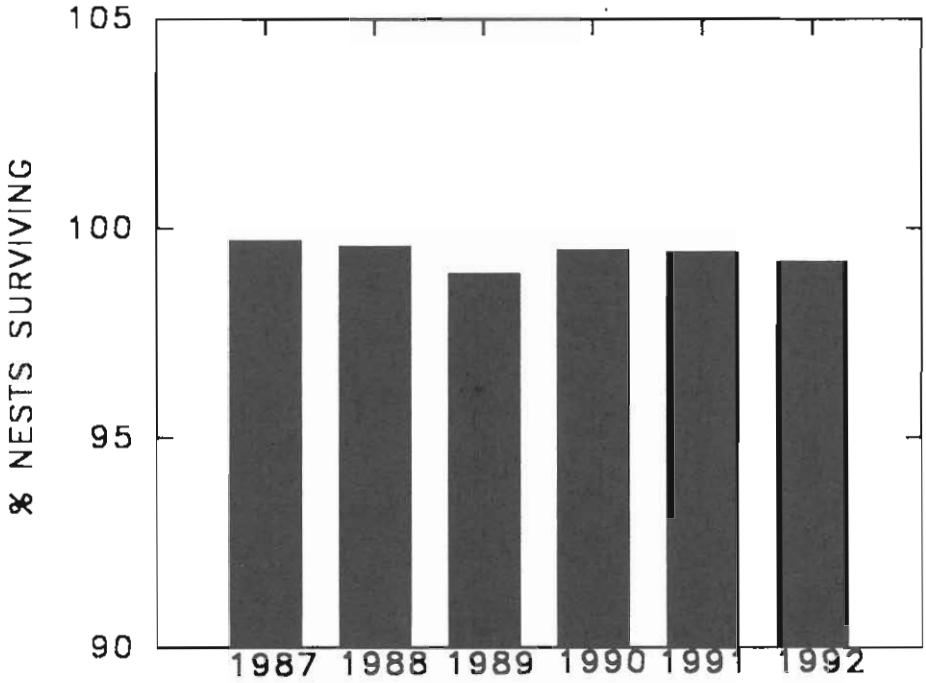


Figure 3. Daily survival probabilities for nests from the time of nest building until the fledging of at least one nestling.



multiplying the resulting number by 100 (Mayfield 1961).

The probability that an egg present at the start of incubation will produce a fledgling was calculated by multiplying the probabilities of egg survival, nestling survival, and the hatch rate. This gave a rate of overall daily survival (Fig. 6). If a nest, egg, or nestling was lost, the loss was calculated as occurring at the midpoint of the observation period. For a seven day observation period, a loss was considered to have happened on day four of the interval between observations.

Results

The daily survival rates for nests (Fig. 3) ranged from 98.92% to 99.71%. However, the percentage of successful nests (Fig. 5), that is, nests that survive until at least one young is fledged, ranged from 62.9% in 1989 to 91.7% in 1987.

Daily rates of egg survival were based on calculations for all eggs laid

(Fig. 1), and ranged from 99.71% in 1990 to 98.06% in 1991. Hatch rates (Fig. 4) were calculated according to the percentage of eggs hatched from the number of eggs present at hatching. These data range from 70.1% in 1992 to 97.67% in 1990. This is due to the fact that the 1990 observations comprised primarily second nesting data, thus resulting in a greater rate of hatching.

Nestling daily survival (Fig. 2) remained consistent throughout the six year period, ranging from 98.6% in 1992 to 99.89% in 1987. Overall probabilities of daily survival indicate the percentage of eggs which survive to become nestlings which successfully fledge from the nest (Fig. 6). These probabilities ranged from 68.27% in 1992 to 96.87% in 1990. Again, differences are attributable to the availability of a smaller amount of data for the 1990 nesting season. The mean daily survival probability based on the six years of observation is 83.52%.

Figure 4. Percentage of eggs hatched from the total number of eggs present at the time of hatching.

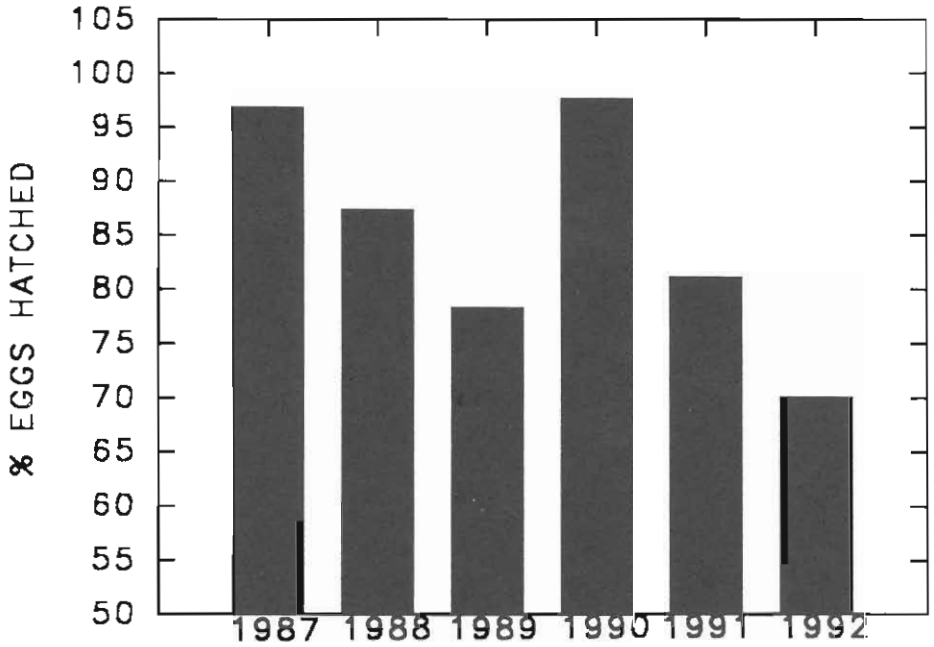


Figure 5. Percentage of nests producing at least one fledgling from all nests observed.

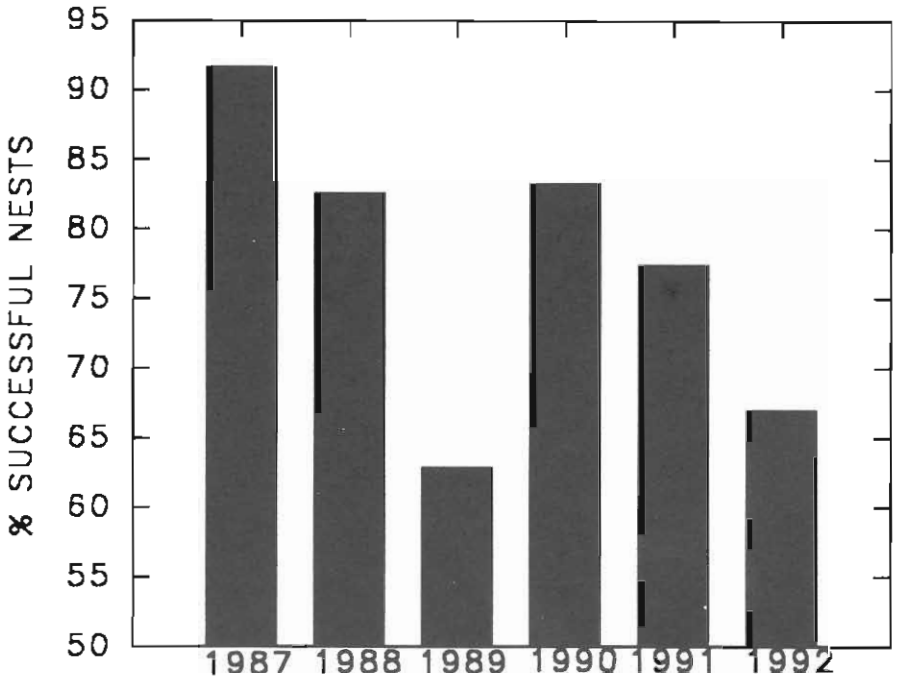
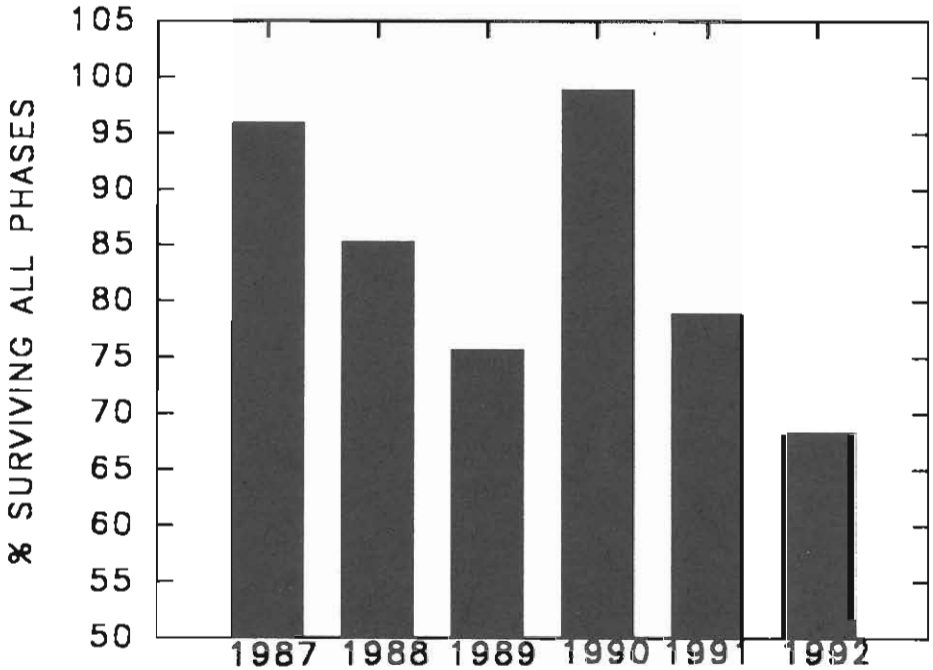


Figure 6. Overall daily survival probability for Eastern Bluebird young based upon egg survival, nestling survival, and hatch rate.



Discussion

While a mean overall probability of daily survival of 83.52% could suggest that the Eastern Bluebird population is beginning to make a recovery in the southern lower peninsula of Michigan (Brewer, McPeck and Adams 1991; Campbell 1992), the argument for recovery cannot be made on numbers of fledglings alone. Without further banding and return studies of adult bluebirds, one cannot unequivocally argue that the population is indeed recovering. To base the argument for species recovery on nestling and fledgling data alone is faulty logic and risks premature abandonment of interventions aimed at a species which may still be in great need of assistance.

Although protections afforded to Eastern Bluebirds utilizing the nest boxes were uniform throughout the six year period, they must still be taken into account when looking at probabilities for daily survival. As of yet, control areas have not been well-established. Future research goals include

establishing a control study area where no attempts will be made to protect nesting birds from predation or parasitism. For the purposes of attracting bluebirds to the area and ensuring continued use, nest boxes would have to continue to be cleaned between nestlings. Comparisons of mortality and survival rates could then be calculated to give a specific indication of how the provision of nest boxes and protection from predation and parasitism impact upon Eastern Bluebird productivity.

Fluctuations in the rates of survival between years must also be accounted for. Higher survival rates in 1987 and 1990 may be due, in part, to the fact that monitoring activities did not start until late April to early May and continued through the first week of August. In 1989 and 1992, monitoring started several weeks earlier, beginning in early April and stopping in late July. It is plausible then, that there was enough variation in time to affect results obtained. Colder temperatures in

the early spring months could account for significant elevations in observed mortality (survival rates of 68.27% in 1992 vs. 99.89% in 1990), whereas observations spanning the warmer spring and summer months could account for significantly higher rates of survival. Overall survival probabilities for the 1991 and 1992 seasons are the lowest observed during the six years of this study. This is consistent with data submitted to the Michigan Nestbox Network for these years (unpublished data, Michigan Nestbox Network). During the three years that nest boxes were monitored from mid April to late July, overall survival probabilities do not differ significantly, suggesting that there are critical periods for both losses and increased chances of survival. ■

Acknowledgments

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Bluebird Press Release Provided to Ohio Newspapers

Earlier this year NABS Historian Jane Williams sent a press release to all newspapers in the state of Ohio. The material was prepared by Secretary Douglas LeVasseur and was timed to coincide with the beginning of the nesting season. It asked readers to join in the effort to save the bluebird and invited them to obtain more information by writing to the Ohio Bluebird Society or the North American Bluebird Society.

Previously, Mrs. Williams has sent similar press releases to newspapers in the states of New York and Pennsylvania.

Inquiries about this press release should be directed to the North American Bluebird Society, Box 6295, Silver Spring, MD 20916-6295.

NABS SLIDE SHOW

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

The NABS slide show is available for rental at \$10.00 or purchase at \$55.00. 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.

Bluebird Nest Box Seasonal Conversion

Don Macbeth

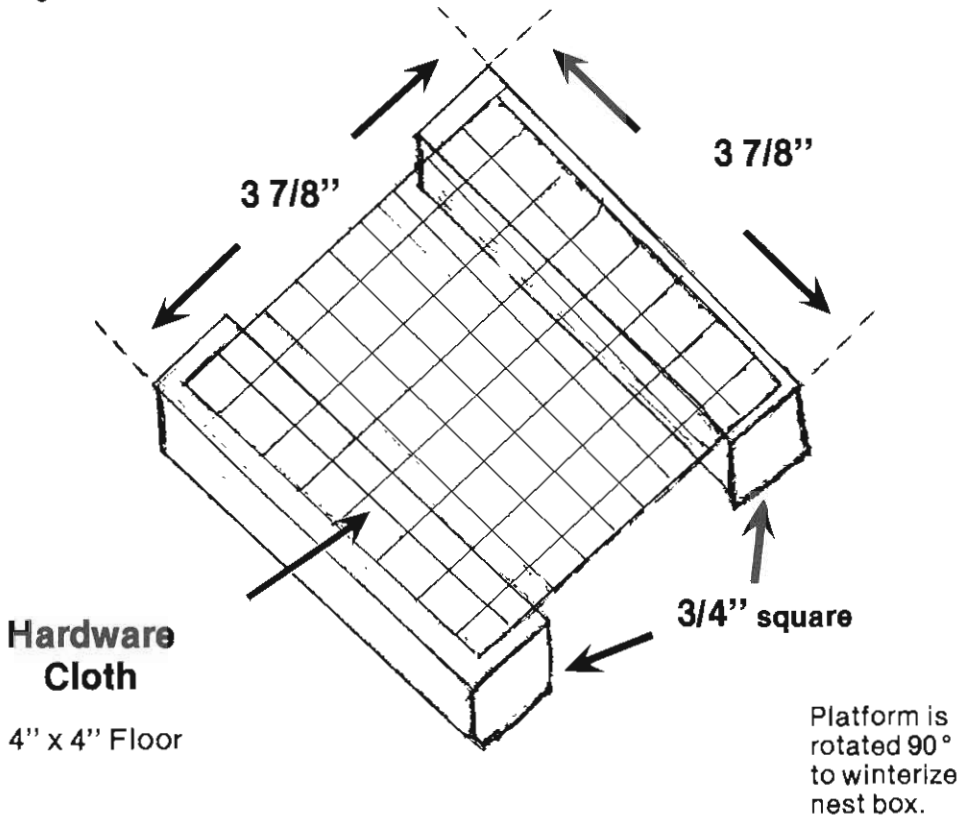
I am a new volunteer in Brandywine Creek State Park, a Delaware park just north of Wilmington. I was asked to assist in the bluebird program which included building some new boxes and upgrading others with materials supplied by the park superintendent. I read books by Lawrence Zeleny as well as Donald and Lillian Stokes. Instead of building roosting boxes (as well as nest boxes) it appeared that winterizing boxes would be the best way to help wintering bluebirds. Armed with information from the books and from several articles in *Sialia*

(Bullerman's box 14(4):125-127 plus Darling and Thompson-Delaney's recommendation of hardware cloth platforms beneath nests to reduce blowfly infestation from 87 to 32 percent 15(1):13-16), I set about building nest boxes.

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

The nesting platform was

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



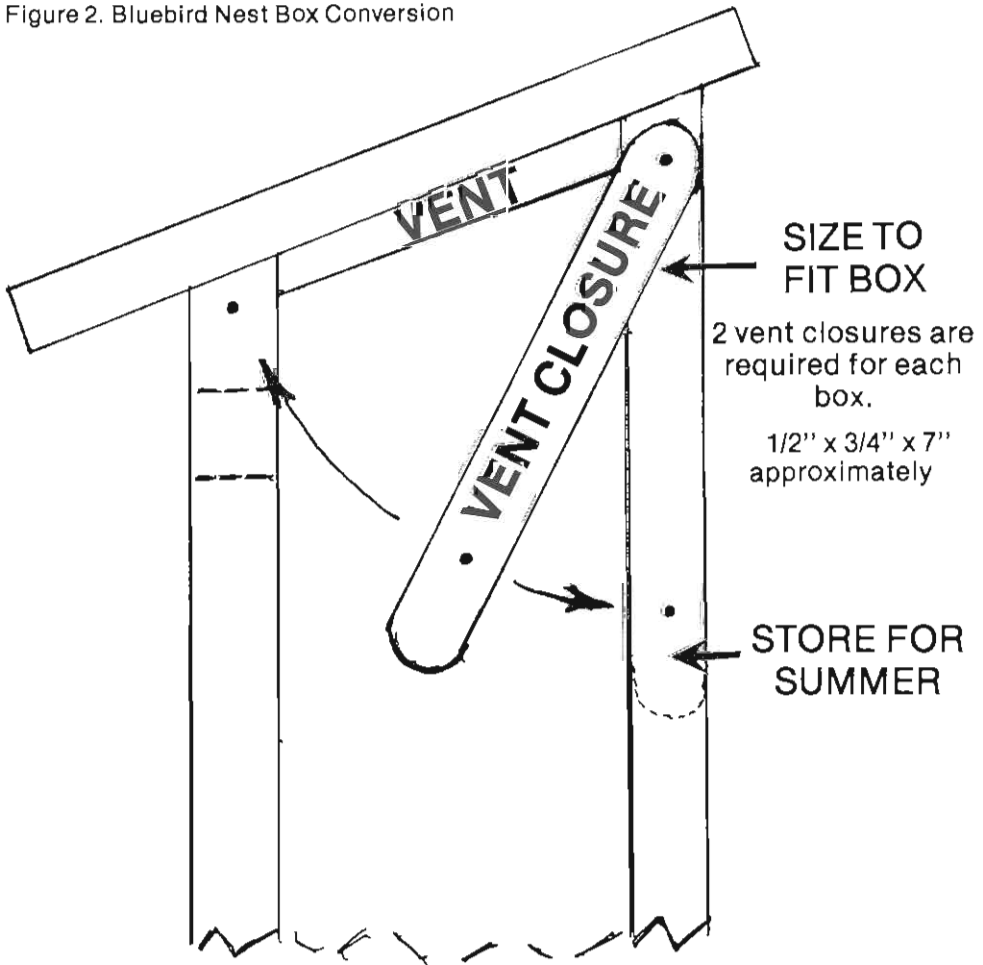
next. Two pieces of 3/4 x 3/4 x 3 7/8 inch wooden strips with hardware cloth attached between them formed the platform (Fig. 1). The raised platform serves to provide extra ventilation under the nest during the summer. In the fall, it is rotated one-quarter turn (90°) which closes off the 3/8 inch slots in order to winterize the box.

Additional ventilation in summer is provided by 3/8 inch open-

ings at the top of each side under the roof overhang. By installing a 1/2 inch thick x 3/4 inch wide x 7 inch long wooden strip over each vent opening and using a screw at the rear as a pivot, the strip can be moved to winterize the box (Fig. 2). It is fastened in front with a second screw. The dimensions of the vent closure can be altered to fit the box style being built. I have recently built two Peterson boxes and the

(Continued on page 95)

Figure 2. Bluebird Nest Box Conversion



The Effects on Bluebird Productivity of Not Monitoring Boxes

Wayne H. Davis

Everyone with experience on a bluebird trail recognizes the importance of monitoring boxes to maximize their efficiency for production of bluebirds. If a dead brood or abandoned nest is cleaned out, the bluebirds will likely nest again. If a House Sparrow (*Passer domesticus*) is destroyed and its nest removed, bluebirds are likely to move in. For both the pleasure of bluebirding and to increase the effectiveness of our work, checking each box throughout the nesting season is important.

Every summer since 1958 I have spent a week or more in northwestern Minnesota where I have access to a farm and several cemeteries. Over the years I have placed various nesting structures for Eastern Bluebirds (*Sialia sialis*) in these locations. These nest sites are heavily used by bluebirds and are, generally, successful; the flattened nests indicate that bluebirds have probably fledged the previous summer. Northwestern Minnesota is especially conducive to success; there are no black snakes, and I have never seen those little biting ants that are such a problem in Kentucky.

There probably are many trail operators who spend part of each summer someplace away from home and either have, or have thought about having, boxes at that location. Without being able to monitor boxes, one might wonder what the result might be. If the boxes raised House Sparrows, it would be better not to erect them, for we do not want to have an evolutionary selection for House Sparrows that prefer to nest in our boxes.

To measure the effect of infrequent visits, I have established lines of boxes along several major highways and parkways in central Kentucky and subjected them to different treatment schedules. Boxes were placed on the right-of-way fences which belong to

the state highway department. The boxes have slot entrances. Most are 5 inches (12.5 cm) deep; those that have had House Sparrows in earlier years had received wooden blocks to make them more shallow (3 1/2 inches; 8.7 cm). I placed the boxes on the wire fences instead of the steel T posts so that I could treat them with ant barrier (see Fig. 1).

On one line I cleaned the boxes and treated the access wires with Tangle Trap® in January 1992. Another line was treated with Tangle Trap in July 1991, and the boxes cleaned out in February 1992. A third line was treated in February 1991 and the boxes cleaned out in August 1991. The fourth line consisted of boxes that had not been tended in any way in either 1991 or 1992.

All boxes were inspected 25-27 July 1992, and their contents and condition recorded. A wide variety of situations was found. The most common findings were boxes that had fledged bluebirds and boxes that contained ants, mice, or both. Other findings included nest starts, unused nests, abandoned eggs, dead young, and active nests of bluebirds. Three boxes had wasps, one had bumblebees, and two had been raided by raccoons. Several boxes had become unsuitable for bluebirds because of encroachment of weeds or vines. In addition to bluebirds, the boxes fledged House Wrens (*Troglodytes aedon*), Carolina Wrens (*Chryothorus ludovicianus*), Tree Swallows (*Tachycineta bicolor*), Carolina Chickadees (*Parus carolinensis*), and House Sparrows. Eight of the boxes that had not been tended since 1990 contained nests that had fledged bluebirds in 1991 but not in 1992. The 1992 fledglings were easily recognized by the feces on the sides of the box and on the nest as well as the fragments of beetles and grasshoppers.

The most important findings are summarized in Table 1. The few bluebird nests that were still active have been lumped with those that had fledged.

Discussion

Tangle Trap is effective as an ant barrier throughout the season when applied in January. Ants had obtained access to a single box via an ironweed that had grown up and lodged in the entrance. Tangle Trap was not effective as a mouse barrier. Mice could reach the corners of the box and bypass the Tangle Trap. They also would go through it and wear it off, however, making a box accessible to ants. Ant barriers applied in August of 1991 were generally effective through the 1992 season if they were not worn by mice or bypassed with weeds. No trace remained of the ant barrier that had been placed in February 1991.

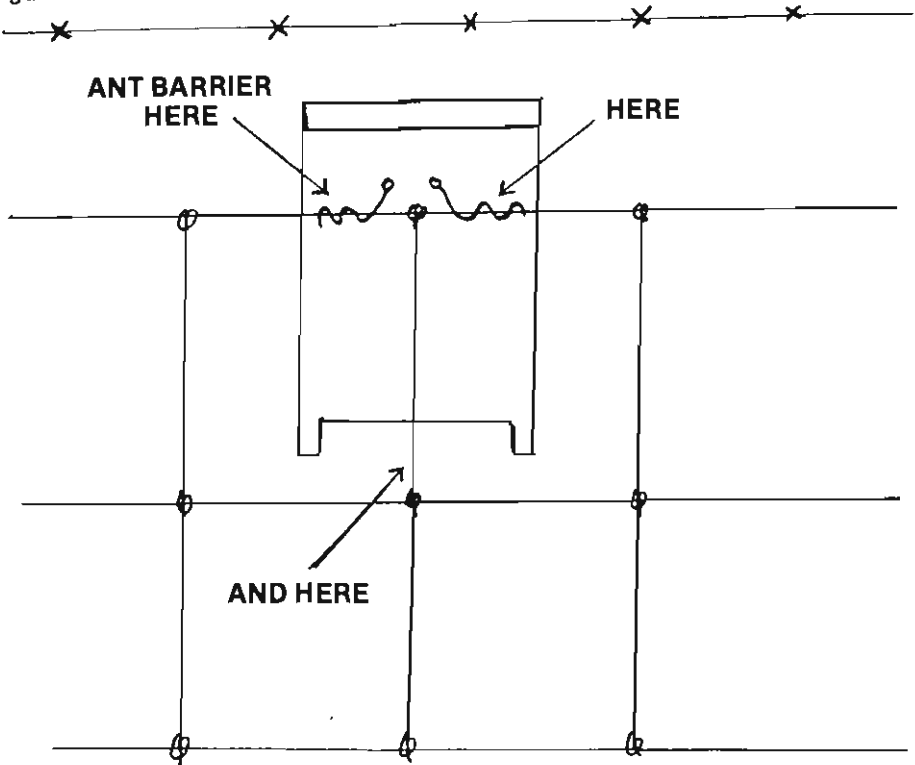
Mice generally use boxes in winter; few mouse nests appear in summer

If boxes are cleaned in early spring. Thus, boxes cleaned and treated for ants in January were generally available for bluebirds. A high percentage of boxes that were not cleaned were unavailable to bluebirds.

Roughly a third of the boxes on all four lines studied fledged bluebirds in 1992. This was surprising because in some areas of Kentucky all of our boxes get filled with mouse nests in winter. The apparent explanation is that this experiment was done in what is known as the Central Bluegrass of Kentucky. Much of the roadside here is mowed on both sides of the fence, providing no cover for mice or ants. The mice that use our boxes (*Peromyscus leucopus*) must have some sort of cover—brush, trees, logs, rocks, etc. Since ants (*Crematogaster clara*) leave the boxes in autumn to spend the winter under cover in the ground, the clean fence rows are also unsuitable for these insects.

House Sparrows were a minor

Figure 1. Rear View of Box Mounted on Wire Fence.



	#	fledged bluebirds in 1992	percent that fledged bluebirds	fledged House Sparrows	had ants	had mouse nests	percent with mice and/or ants
Treated and cleaned Jan. '92	46	17	37%	3	1	4	11%
Treated In July '91; cleaned Feb. '92	44	19	43%	0	7	7	32%
Treated in Feb. '91; cleaned Aug. '91	66	22	33%	0	16	12	38% *
Not treated or cleaned '91 or '92	58	17	29%	1	17	12	43% *

*A few boxes had both mouse nests and ants.

problem. Only four boxes fledged sparrows and in a few others sparrows started nests but didn't finish them.

Should you put up boxes in an area that you visit regularly but once a year? That probably depends upon the House Sparrow situation. The worst thing that could happen would be for your line of boxes to degenerate into a House Sparrow slum. There are, however, many areas with good bluebird habitat and no House Sparrows. There

are no sparrows on the mines in eastern Kentucky where we have done experiments with bluebirds and European Starlings (*Sturnus vulgaris*). In northwestern Minnesota I have had boxes for 30 years during which time I have raised lots of bluebirds and have had only two nests of House Sparrows. ■

School of Biological Sciences
University of Kentucky
Lexington, KY 40506

(VENTS—Continued from page 92)

closure works well. The vent closure is self-storing. During the summer it is swung down and placed parallel to the back of the box fastening it with the second screw.

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

bluebirds depending on the seasonal needs. ■

814 Shavertown Rd.
Boothwyn, PA 19061

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 Graeloch Rd., Laurel, MD 20723.

Steve Gilbertson's Universal House Sparrow Trap

Steve Gilbertson has been building a simple and inexpensive House Sparrow trap which may be attached inside any wooden or PVC nest box. Not only is it easy to use, but the trap recycles some items which might be in your workshop—including that broken steel tape measure you can't quite bring yourself to discard.

The materials needed are few: a small piece of flat oak trim, some 12-gauge wire, a scrap piece of retractable steel measuring tape, construction adhesive, electrical tape, and two sheet-rock screws.

1. Cut the piece of scrap tape measure to size. Note that 3/4 inch steel tape has the correct flexibility to spring back; 1 inch tape is less flexible.

2. Cover the piece of tape measure lengthwise with electrical tape to soften the sharp edges.

3. Secure the tape measure to the flat oak block with construction adhesive and electrical tape.

4. Drill two 7/64 inch holes in the flat oak trim piece with a drill press. In lieu of a drill press, channel a groove under the tape on the back of the oak trim to accommodate the hook mechanism and trip assembly. In either case, make certain that both pieces turn freely. Drill two holes in the front for attachment screws to be used with wooden nest boxes.

5. Cut 12 gauge wires to length. The top wire is the hook assembly and is needed only if the trap is to be used with PVC nest boxes. That wire should be cut to 6 inches and shaped for the hook assembly. The trip wire should be cut to 8 inches, bent, and inserted as illustrated. This is the most difficult part of the construction. The wire must be measured, cut, and bent precisely in order to have the trap work correctly.

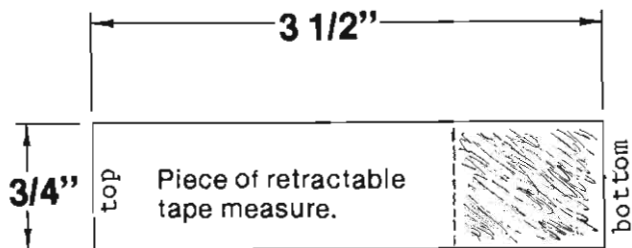
6. Attach a red (or other bright-colored) 3/4 inch dot to the tip of the piece of measuring tape. This dot is a great help as it enables a monitor to determine whether the trap has been tripped. Wax at the contact point between the end of the measuring tape and the trip assembly wire will lighten the trip load.

7. Mount the completed trap inside a PVC nest box using the hook assembly or inside any wooden box using the two 1 1/2 inch sheet-rock screws.

If the construction of this trap is more complicated than a reader is willing to tackle, contact the inventor at the address shown for purchase information. Please include a stamped, self-addressed envelope for a reply. ■

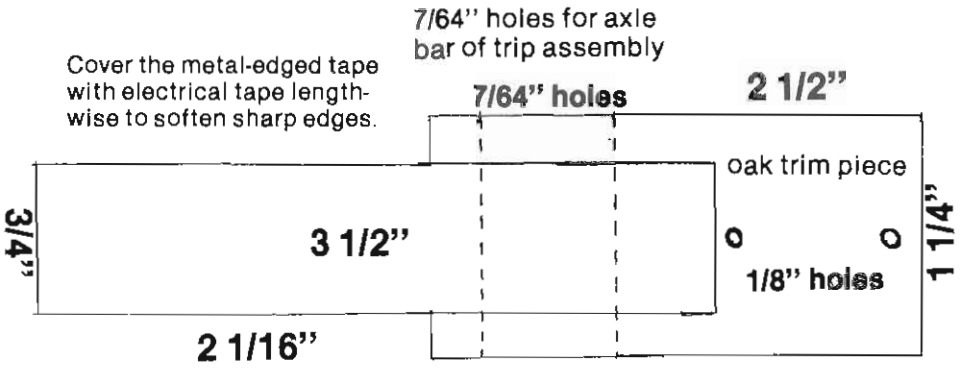
3521 - 135th Lane, N.W.
Andover, MN 55304

This material is adapted with permission from Bluebird News, the quarterly publication of Minnesota's Bluebird Recovery Program 4(3):9-10 with additions by Steve Gilbertson.



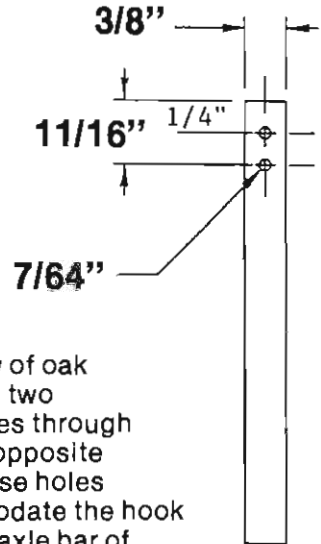
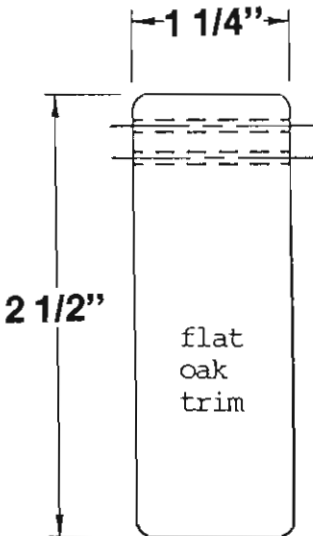
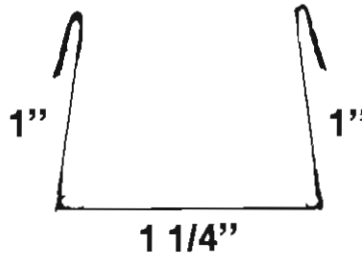
Secure tape measure with construction adhesive and electrical tape.

Cover the metal-edged tape with electrical tape length-wise to soften sharp edges.



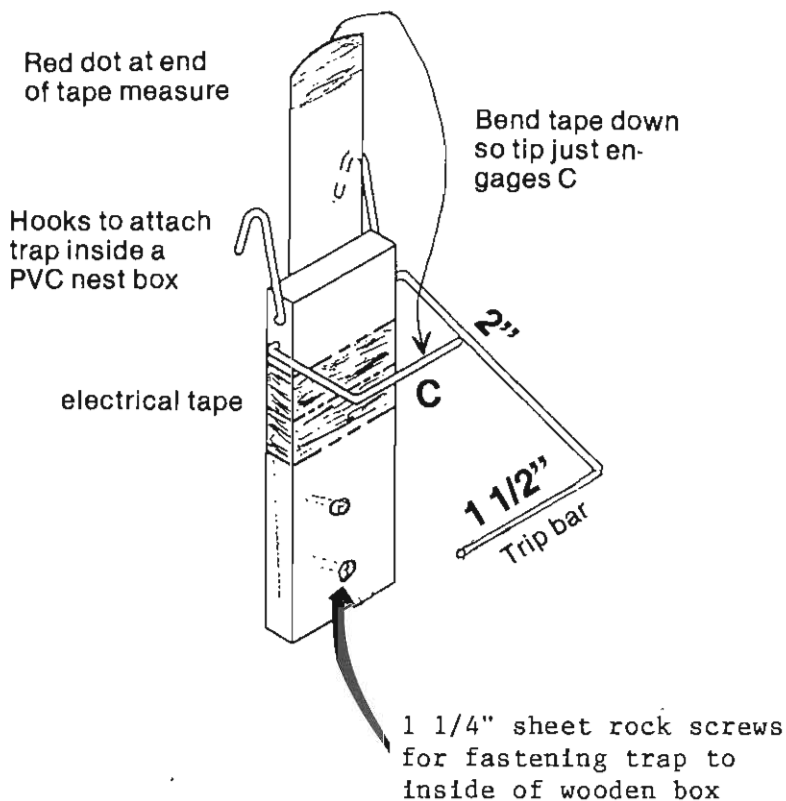
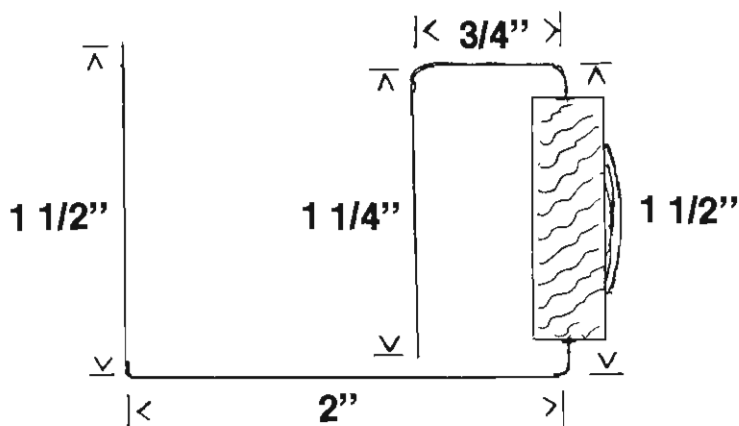
Tape measure piece extends $2\frac{1}{16}''$ above top of oak trim piece

Hook Mechanism
(for use with PVC box)



Side view of oak trim. Drill two $7/64''$ holes through wood to opposite side. These holes accommodate the hook axle and axle bar of the trip assembly.

Trip Assembly



The Sunshine State's Bluebird Speakers

Ron Kingston

Many of Florida's indigenous land mammals are disappearing as the human population increases. These animals include the black bear, deer, wildcat, gray fox, and Florida panther. The Eastern Bluebird, on the other hand, is doing well thanks to good monitors and outstanding speakers in central and northern Florida.

In Winter Haven, which is about halfway between Orlando and Tampa, **Gene Miller** uses a variety of nesting boxes and trail maps of areas in the Green Swamp. She uses NABS' slides and the video "Bluebirds Up Close." She would like to have done more for bluebirds last year but because she works for a large insurance company she hasn't had time to do "bird things" since August when Hurricane Andrew hit.

Jim Cox, a nongame wildlife biologist with the Florida Game and Fresh Water Fish Commission in Tallahassee, says that the Breeding Bird Atlas and annual Breeding Bird Surveys show the bluebird population on a slight downward trend statewide, but many local Audubon chapters have bluebird projects. He has seen bluebirds nesting in old snags in pine woods areas as close as 150 yards (157 meters) from the coast. He sees the possibility of a comeback for the bluebirds. Also in Osceola County, west of Melbourne, bluebirds are doing well in the Three Lakes Wildlife Management Area.

Robin Will, of St. Mark's National Wildlife Refuge (located 25 miles south of Tallahassee on

Highway 98), has an annual bluebird day in mid-February at which she uses the video from NABS and also builds nesting boxes. This year 50 people participated despite pouring rain. Robin also does offsite programs at schools and the children really love them.

Donna Legare, of Native Nurseries in Tallahassee, uses a combination of her own slides and NABS' along with the movie "Bluebirds—Bring Them Back." Four times a year she presents this material in a format for young people she calls "Bluebird House Build." Children bring their parents and for an \$8.00 fee learn "all there is to know" about bluebirds.

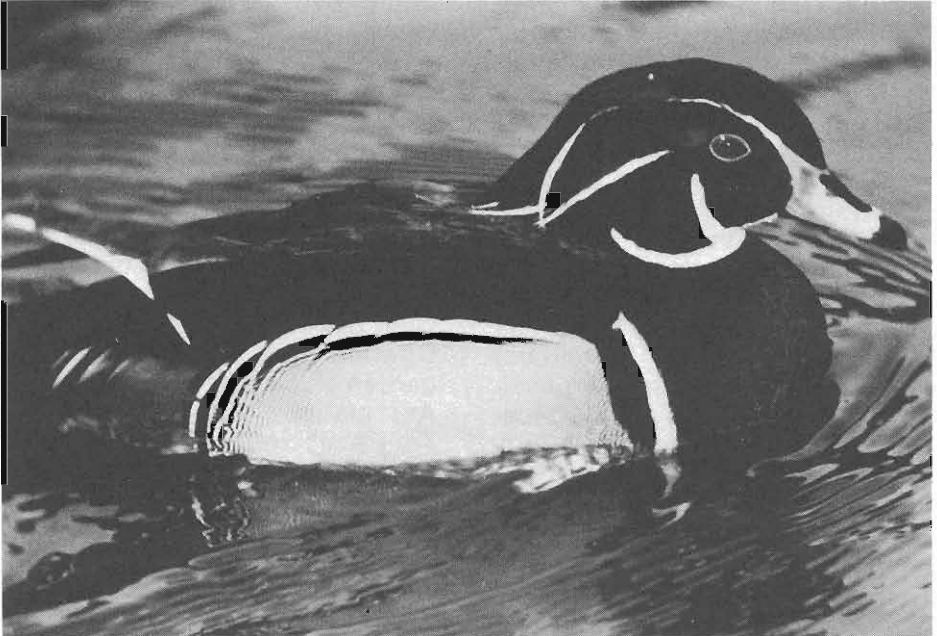
To find our final speaker, we travel east from Tallahassee 65 miles to Live Oak, Florida where **Lorna Beasley** has a farm with many acres for bluebirds and other wildlife. She says that three broods are common in the boxes on her trail. She travels extensively to present programs using slides from NABS along with some of her own of bluebirds and other cavity nesters. The audience especially likes her slides of bluebirds in her bird-bath. She has given programs for Cub Scouts, AARP groups, the Dowling Park Retirement Village, garden clubs, and the Florida Trail Association. She says that the Trail Association is a large group of hikers that have become interested in bluebirds—no doubt due to her friendly and persuasive manner.

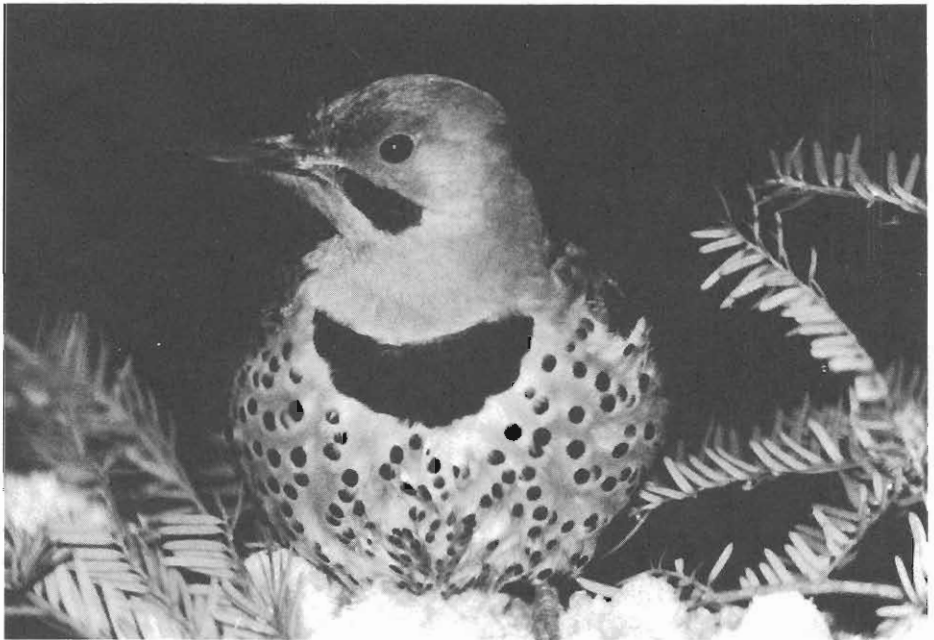
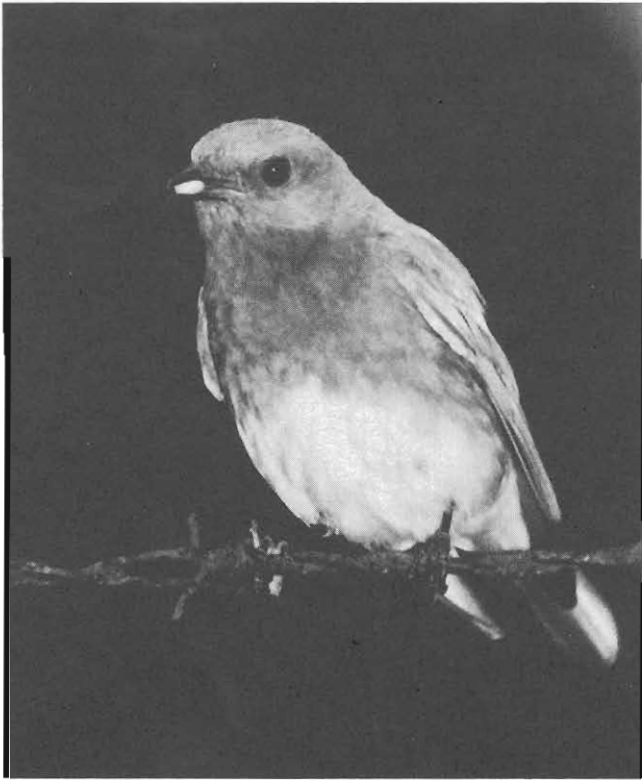
Eastern Bluebirds were prob-
(Continued on page 112)

PORTRAITS

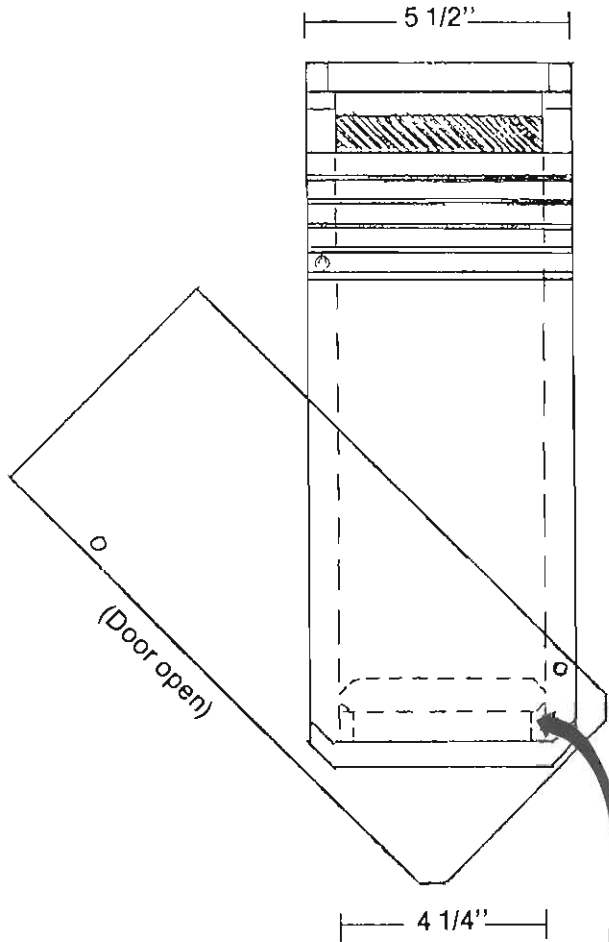
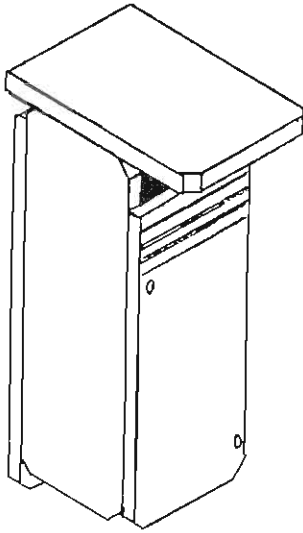
Hubert Brandenburg photographed the cavity nesting birds shown on these two pages in central Maryland. The female Eastern Bluebird (top left) is feeding her third brood in August. The male, at the top of the facing page, has removed a fecal sac from the nest.

The strikingly handsome male Wood Duck (below) is normally a wary species. The male Northern Flicker (note his mustache) at the bottom of the opposite page, came within camera range during the winter. Woodpeckers are valuable primary excavators creating cavities that bluebirds and many other species use.





C. ROOST SLOT BOX



Metric Equivalents

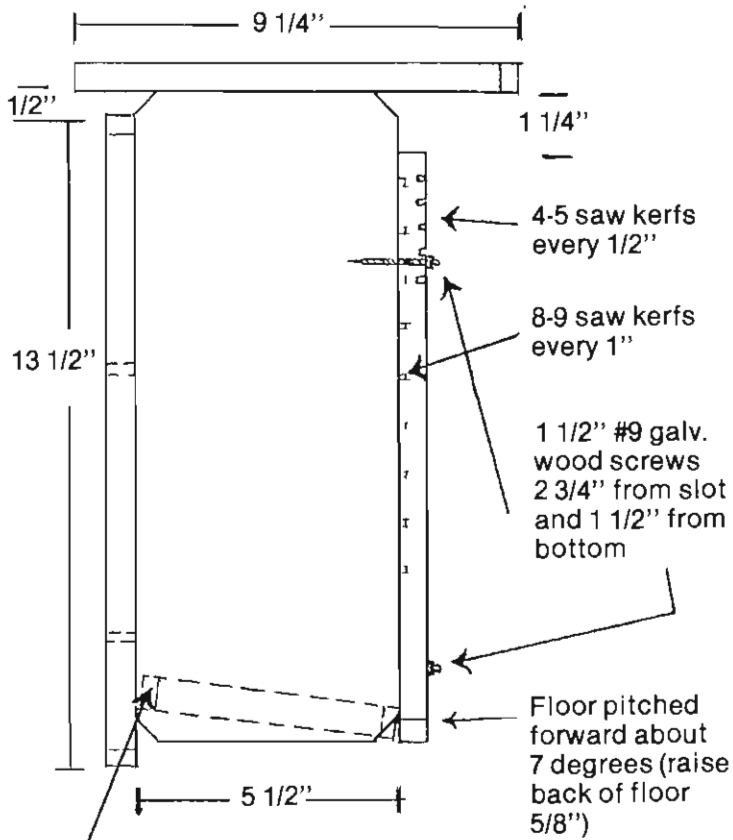
5/8 in.	(1.6 cm)
3/4 in.	(1.9 cm)
1 1/8 in.	(2.9 cm)
1 1/4 in.	(3.2 cm)
1 1/2 in.	(3.8 cm)
4 1/4 in.	(10.8 cm)
5 1/2 in.	(14.0 cm)
9 1/4 in.	(23.5 cm)
12 1/4 in.	(31.1 cm)
13 1/2 in.	(34.3 cm)

Material List

Front: 5/8" x 5 1/2" x 12 1/4"
 Sides: 5/8" x 5 1/2" x 13 1/2"
 Back: 5/8" x 5 1/2" x 13 1/2"
 Top: 5/8" x 5 1/2" x 9 1/4"
 Bottom: 5/8" x 5 1/2" x 4 1/4"
 Nails: 4-6d galv. and 12-4d galv.
 Screws: 2 - 1 1/2" #9 galv. wood screws

Cut corners off
 bottom for drainage
 and air circulation

Craig Roost
 P.O. Box 134
 Whitewater, WI 53190



Cut corners off bottom for drainage and air circulation

This nest box was designed to be made out of recycled California grape crate ends (5/8" x 5 1/2" x 13 1/2"). Three-quarter inch exterior plywood, standard 1 x 6 boards, or rough sawed lumber could also be used, but some dimensions and screw lengths would have to be changed to compensate for the thicker lumber.

The front is set so that a 1 1/8" - 1 1/4" slot entrance is allowed. The front is fastened to the sides with 2—1 1/2" #9 galvanized wood screws at the lower right and upper left-hand corners. The nest box is opened by removing the upper left-hand screw halfway and swinging the front to the left and down, allowing it to pivot on the lower right-hand screw. ■

Monitoring Backyard Boxes

William C. Harris

Most *Sialia* readers and individuals caring for extensive bluebird trails do not question the merits of checking the activity in their boxes. It is still amazing to me, however, to realize how many people will have no part of monitoring and will even go so far as to condemn it.

Over the years I've given boxes to people who seemed to have perfect habitat for bluebirds or, if not bluebirds, then chickadees, nuthatches or titmice. I've placed side-opening boxes in four New England states and in Santa Barbara and Paso Robles, California. In most cases I've asked these people later if they had checked the boxes. Most have said yes.

Whenever I was in an area containing one of my boxes, I would stop in and ask how things were going. What an array of answers I've received over the years. A frequent answer would be "Nothing—no activity." Most of the time these good people would ask me to check the box or boxes. Imagine their surprise when we'd find an adult chickadee or a titmouse sitting on eggs or perhaps there would be nestlings.

Sometimes the box opening wasn't a happy one. Occasionally, a chickadee's green, mossy nest would be buried under a rough grass nest. Many a time the buried nest contained unhatched eggs, dead babies or even the adult bird, also dead. Gruesome, yes, but it is a reality.

I'm not talking about monitoring long trails, but rather about the hundreds of scattered single boxes across the country that

could (or should) be producing bluebirds, chickadees, titmice, or nuthatches. Attention to these boxes could be important for cavity nester production.

Let me give you two examples close to home here in Nashua, New Hampshire. A lady with a yard full of wren boxes wanted a bluebird box. I put one up. Some time later she called and asked if I'd check it because there seemed to be birds in the box. Upon opening the box, well-feathered baby House Sparrows flew out in all directions. She managed to catch one and wanted me to put it back in the box. You know, I wasn't able to catch a single one!

On a more somber note, last spring I checked three boxes for a lady who lives near by. She was curious about one box in particular. I opened it and found that it was completely filled with long coarse grasses. "House Sparrow," I said in reply to her quizzical look. In the bottom of the nest were five eggs. While I was checking that box I was also eyeing a nearby box where a lot of Tree Swallow-House Sparrow squabbling was going on. As soon as I could finish cleaning out the first box, I went over to the box in question. Holding one hand over the opening, I carefully slid the other hand up the side opening. Imagine my surprise when my fingers closed around a fluttering bird. When I withdrew my hand I found I was holding a male House Sparrow. Still curious, I returned to the box and slowly opened it. To my horror there was a dead Tree Swallow. The head was black and blue and featherless. The body was still warm and limp. Right

under our eyes a Tree Swallow had met its death.

Backyard monitoring of bird

boxes? You bet your life!

15 Clovercrest Dr.
Nashua, NH 03062

Response to "Myths"

This past year I had one bluebird nest in my Peterson box. The bluebirds were around all winter and began nesting on 27 March 1992. One thing I observed on this date was that the female on two occasions took material inside and the male immediately brought it out. The third time it stayed in: On 7 April both went inside and nest building continued.

The front of the nest was rather fragile, especially the area forming the cup, so rather than risk damage to the nest I used a mirror to discover six eggs on 23 April. The front wall was also higher than the rest of the nest making it harder to see inside the cup. All six nestlings fledged on 23 May between 2:30 and 3:30 p.m.

The bluebirds seemed to enjoy the Peterson box as much as I enjoyed watching them use it. European Starlings, of course, can change this. I read the article by Wayne Davis in *Sialia* 14(4):123, 142 saying there is reason to believe that starlings won't interfere with nesting bluebirds. I was surprised to read it because it had happened to me. A starling showed up at the hole, with the male bluebird unusually absent. It paused for a moment, and, for whatever reason, gave no indication of intent to enter, and left. The starlings have shown up several times before, but they usually are attacked by the bluebirds long before they get to the hole. Sometimes they are attacked 50 feet away and chased another 50. I've thought about going back to the round hole in my box, but the bluebirds like the oblong hole. The dowels inside also seem to assist the bluebirds by raising them above the nest to see and reach all six babies. When I would watch from the house, all I could see were the adults' feet on the dowels and the tail feathers outside of the hole. There was one moment when I worried when it appeared that a baby had its head stuck between the dowels and wasn't getting fed, but everything was fine. I think it was more a result of the crowding of the five other babies thus keeping the one up front.

It certainly seemed that six babies was a full house for the Peterson style box. I was concerned that the nestlings wouldn't all get fed equally. Late in the nesting I started counting the number of trips the parents made to judge if all the babies were fine. The trips fluctuated from 20 to 25 times per hour to 10 to 12 times in the same period.

I also read in the same article by Wayne Davis about premature fledging. He felt that opening a box late in the nesting cycle wouldn't cause them to leave. Personally, over the last 13 years or so, I have checked between day 1 and day 22 depending on the length of the nesting. During the last few days you *do* have to be careful with a Peterson box because with six large nestlings the nest becomes compacted and some lean against the front. So long as you open the box slowly you shouldn't have to worry, though do make sure their feet are inside the box when you close it. When I check the babies I always either make bird noises, tap on the box, or stick a finger in the hole. They have always crouched down every single time. Even with the Peterson box, they crouched down though there literally wasn't

much room left. With this style box I would advise people to open the front slowly, though there's no real reason not to look. Be careful, get your look, and don't take very long. The first couple of years I was repeatedly attacked by the bluebirds, but since then I can check whenever I wish and all they might do is get a little vocal. The later it gets in the nesting cycle the more vocal they get. I know I have only one box, but I am sincere when I say that the babies crouch down every single time. Just exercise a little care.

Brian Miller
5528 Tallow St.
Fredericksburg, VA 22407

News From Two Canadian Bluebird Trails, 1992

Calgary, Alberta Trails

Don Stiles and Jean Moore

The year 1992 was a good one for bluebirds, particularly for second broods, but it was a disastrous year for Tree Swallows. Rains were heavy at times, starting on the 14 June weekend, and seemed to hit when the Tree Swallows were trying to feed their young. Losses were greatest south-west of Calgary where rains were heaviest.

A total of 1,463 Mountain Bluebirds (116 adults, 1,347 young) and 857 Tree Swallows (172 adults, 700 young) were banded. Banding of both species was well down from 1991 as our most prolific bander, George Loades, did only a limited amount of banding this year due to business priorities.

The oldest birds recaptured were five years old (or more). For the first time two Tree Swallow band recoveries were made out of province. The first bird was banded as an adult on 30 June 1990 about 27 miles northwest of Calgary, near Madden. It was shot 28 July 1992 near Webster, South Dakota. The second bird was banded on 25 June 1988 as one of a brood of seven in a nest box 13 miles east and two miles north of Didsbury. The band was found in a Barn Owl pellet on 23 Aug-

ust 1991 at the Rockefeller Wildlife Refuge near Grand Chenier, Louisiana.

Jennifer Coulson, who recovered the band, had been doing a study of pellets of Barn Owls living in southern Louisiana marshes. In the pellets she found skeletons of 500 vertebrates and 344 birds, of which 18 were known to be Tree Swallows. Since Barn Owls are crepuscular (active at dawn and dusk), it is thought that the owls captured the swallows when they were roosting. It is less likely that the owls could catch the swift, highly maneuverable swallows on the wing. Two other bands were found in the pellets, both from Canada: one from a Tree Swallow banded near Edmonton and the other a Marsh Wren banded near Diefenbaker Lake in Saskatchewan.

The two Alberta Tree Swallow band recoveries support the conclusion of an article in the autumn 1988 issue of the *Journal of Field Ornithology* that prairie province populations of this species migrate along the Mississippi River drainage basin.

On the morning of 21 May, after a snowstorm and freezing temperatures the previous night, Jack Haynes

checked his trail west of Olds. He found one nest box where 10 Tree Swallows were huddled together to keep warm and two or three others with five or six swallows in each. One box contained a bluebird sitting on top of two swallows. Beneath these birds were bluebird eggs. Later in the day Haynes found another nest with two dead Tree Swallows.

Al Gillis reported a partial albino bluebird, a first for Calgary area trails. The bird was gray, rather than pure white, with a pink bill and was much lighter than its nest mates. Unfortunately, the bird was found dead near the nest box at a later date.

Kay Morck saw something sticking out of a box early in the spring. It turned out to be the feathered shaft of an arrow which had been shot at the box.

Isabelle Orr and Susie Spent found all the newly hatched Tree Swallows in their backyard dead except one. It revived with the heat of their hands. They fed it a bit of hamburger, then placed it in a nest box with swallow young of a similar size from which it fledged successfully.

Andrew and Mavis Holder reported a bluebird nest with four pinkish eggs, all of which fledged successfully. Ruth LeRoux reported a Tree Swallow successfully fledged eight young.

Bob Rhodes reported an interesting progression of species using one of his boxes. In a box about one-half mile south of Priddis' store, there was a chickadee's moss nest when he monitored it on 1 and 26 May. On 7 June a new very deep grass nest was in the box and two chickadee eggs were found on the ground. On 21 June a Tree Swallow was sitting on two eggs; on 25 July the young were ready to fledge. In September, when the box was next monitored, a House Wren had filled the box and indications were that it had raised a brood.

20 Lake Wapta Rise SE
Calgary, Alberta
Canada T2J 2M9

Mountain Bluebird Trails

Duncan J. Mackintosh

Forty-eight monitors reported on 2,706 nest boxes in southwestern Alberta and British Columbia. Total bluebirds fledging was 8,232, another increase of almost 2,000 birds over the previous year. This was in spite of an extremely high loss of 1,021 nestlings due to heavy rains during the second broods. At least half of the 1,241 sterile eggs could be attributed to abandonment as a result of cold, wet weather.

The Kimberley, B.C. Bluebird Conference 20-21 June was attended by some 120 bluebirders from six states and five provinces. ■

1831 - 20th Ave., So.
Lethbridge, Alberta
Canada T1K 1G3

Correction: Bullerman Box

In the article entitled "Easy-to-Clean Nest Box" 14(4):125-132, I would like to change a word which has caused confusion for a few box builders.

On page 125, under 2, the fourth sentence reads, "I make my tops..." The word "tops" should be "inserts." Since the diagram on page 131 was correct, I did not think it would be troublesome. Beginning with the fourth sentence the remainder of that section should read: "I make my *inserts* 1/4 inch smaller than the inside dimensions of the box and have no problem at all. For example, instead of a 5 x 5 inch *insert* on a box with those *inside* dimensions, my *insert* would be 4 3/4 x 4 3/4 inches. (Changed words are in italics.) Also, correct the zip code to 61957.

Once again, I would like to state that I don't believe there is such a thing as one *correct* or one *best* bluebird box. What *is* important is to get them out there and maintain them!

—Harold Bullerman
520 N. Pine, Windsor, IL 61957

Building for the Future

Alicia Campbell

One day in January 1992 as I approached the Dow Corning Corporate Center for a meeting, I noticed the open, grassy acres with scattered trees surrounding the complex. It was the perfect breeding and feeding habitat for Eastern Bluebirds.

After the meeting I approached Scott Seeburger, public relations and community relations specialist for Dow Corning, about the possibility of placing bluebird boxes on their corporate center acreage. It was the beginning of a project that would branch out and blossom to include industry and school personnel, parents, students, and 60 bluebird boxes.

I had no idea where that large a number of bluebird boxes could be made when I asked about placing them on Dow Corning's land. Then I remembered that the third grade classes at Chippewassee Elementary School, where I am school counselor, had built bluebird boxes the year before. Laurie Stevens, media specialist at the school, agreed to spearhead the project as she had the previous year.

Laurie and I met in March with Seeburger and Mike Kayzak, security and environmental issues specialist for Dow Corning, to coordinate the project. Tom Venman, ENDOW (Effective Nurturing Develops Optimum Worth—a program for individual study and experience in areas of special interest) teacher at Chippewassee, screened students for those near the third grade level interested in birding. He also contacted Bill Dinsmore, Dow Corning's employment center manager, who had earlier ex-

pressed an interest in helping to fund educational projects.

In April, Laurie, Mike, and I hiked Dow Corning's grounds and plotted the placement of 60 bluebird boxes.

Before any box construction, I talked with the students about the purpose and need for their project and why things were done as they were. I discussed the need for helping bluebirds, as well as box requirements, placement, and mounting. I found throughout the project that informing both students and adults about the reasons behind each step resulted in more enthusiasm for the project—and in better bluebird housing.

The building materials were premeasured and precut by Chippewassee parent Dan Jeffries of Homes by Jeffries and Strouse. On 28 April third graders and ENDOW students walked the two blocks to Mrs. Stevens' home where they assembled their bluebird kits.

In early May, armed with hammers, nails, and their own bluebird boxes, students traveled to the Dow Corning Corporate Center. Two adults and a group of students were bussed to each of four drop-off areas. The boxes were then placed throughout the landscape. Because the Center was a 25 minute ride from the school, there was no monitoring during the nesting season. I am hoping to make arrangements for monitoring this year.

In October, ENDOW students returned to clean out, repair, number, and record what they found in the boxes on this bluebird trail, hopeful that their partnership with Dow Corning and the environment

would help the Eastern Bluebird continue its comeback.

What they found was as follows: 16 bluebird nests, 5 House Wren nests, 16 Tree Swallow nests, 2 mouse nests (both with mice present), and 11 unused. You may notice that the numbers do not total 60. Ten boxes that were mounted near the highway were stolen within the first three days of erection. As a result, I moved any boxes that were close to roadways. Fortunately, House Sparrows were not a problem.

The opportunity to form partnerships within a community can be found in many places: schools,

youth groups such as 4-H and Scouts, church fellowships—both adult and youth, service organizations, retirement homes, senior citizen groups, businesses, clubs, and organizations. Fellow bluebirders can be found in all walks of life. Their specific skills can be harnessed to help coordinate or build or inform or supervise in the partnership process.

The more people that become involved—as well as informed—the more we can do to build a future for the bluebird. ■

2405 Woodland Estates Dr.
Midland, MI 48642

“BLUE” STORY WITH A HAPPY ENDING!

Marcy Hoepfner

I would like to share a story which happened in the summer of 1991. My husband and I have a 300 foot wide piece of land where we live in rural Metamora, Illinois. We erected two Peterson boxes, on metal posts, 5 feet high, each facing a tree approximately 50 feet away.

In the south box, Mrs. Bluebird was in the process of laying her eggs; the north box had a pair of bluebirds with five 6-day-old nestlings. One morning in June a little voice told me, “Go out and check the box with the babies.” Before opening the box, I observed long scratch marks on the side. While opening the box I held my breath, hoping they’d still be inside. My heart broke when I observed that they had been snatched from their nest the night before. Mr. and Mrs. Bluebird kept coming back to the box for hours with mournful cries.

The next morning I checked the north box and, again, observed scratch marks on the sides. When I opened the door, I actually started crying. Most of the beautiful eggs were gone; one was crushed in the nest. I feel reasonably sure that the animal that did this to both boxes was either a raccoon or one of the neighbor’s cats. If only we could get people to understand how many songbirds cats kill weekly—50. They need to be kept indoors so all of the songbirds stand a better chance!

I recalled seeing in the Spring 1991 issue of *Stalla* (13(2):58-59) a plan for a guard made out of hardware cloth. I asked my husband to make guards for both of these boxes. He got them done in no time flat and, with a little help from me, got them installed.

The very next day the male from the north box came over to investigate. He gathered enough courage to fly over to the top of the box. Finally, he dropped over the edge and sat inside the guard. He looked both left and right through the guard; then he decided it was safe enough to enter the box. He came out; went to the top again, and called to his wife, “Come on over, Honey. I’ve checked it out and it is safe.” She flew over to the top of the box, next to her mate, then she, too, sat inside the guard. Very soon she entered the house, came back out, and started gathering nesting material for the nursery. With lots of prayers from me, and the added safety

of the Noel cat-coon guard, the pair successfully raised four healthy babies who safely fledged!

This past summer, 1992, we made sure that we had guards on all 26 of our bluebird boxes and also used lots of lithium grease on all the metal mounting posts to deter raccoons from raiding the boxes.

I monitor all of our boxes every other day from April through August; I also use birdbaths in the shade of a tree if water isn't available nearby. And, I might add, I scrub out the birdbath with a brush and put in fresh water every other day!

With the help of my little Honda scooter, "The Bluebird Express" with a basket on the front and saddlebags on the back with nest box supplies, off I go to tend to my beloved bluebirds.

We were blessed with 93 bluebird babies who safely fledged from 20 boxes and 14 chickadee babies from two boxes. Twenty-six boxes is not a large number, but they are well taken care of. I always tell people when I give a program, "I'd rather you just put up one box and take care of it correctly than to put up 50 or 100 and not monitor them often! There are always problems to be taken care of besides the pure joy of watching your bluebirds raise their young! ■

Route 1
Metamora, IL 61548

Bluebirds Promoted in Northwest Indiana

Joseph A. Kujanik

On 6 February of this year, Jack Parry of the Gary *Post-Tribune* wrote an article entitled "Why Not Build [a] Bluebird Box?" He included material that I had provided about bluebirds, box plans, and membership information in the North American Bluebird Society. He offered readers a set of bluebird box plans plus tips for creating a bluebird trail by sending a business-size, stamped, self-addressed envelope to him in care of the newspaper.

Two weeks later, on 20 February, he stated in his column, "I received a virtual flood of requests for Joe Kujanik's bluebird house plans, how to set up a bluebird trail....Thanks to Joe for his plans and newsroom assistant Stephanie Young for stuffing the envelopes."

On 3 April 1993, the Hammond *Times* ran an article about bluebirds. I believe that we are making inroads in northwest Indiana in

helping our feathered friends.

During April, a friend and I, working with the Lake County Parks Department, installed five bluebird boxes on a trail. I donated 25-30 boxes last year; this year so far, 30. I have 25 more ready to go plus several more under construction.

I take discarded wood pallets apart and design the bluebird boxes accordingly. ■

2249 Crest Rd.
Gary, IN 46408

Historian's Request

Please send newspaper and magazine articles about bluebirds to Historian Jane Williams, Box 123, Ware Neck, VA 23178. Be sure name and address of publication, volume and date are included. Photographs of members engaged in publicizing bluebirds or those documenting some unusual occurrence are also welcome. They will be added to scrapbooks which are a permanent record of activity on behalf of bluebirds and other cavity nesters.

Rookie Season

James R. Kunz

In the late winter of 1992, my wife and I purchased two acres of land in the "country" where we plan to build a new home. Being a bird enthusiast and having been trying to attract Purple Martins to my house in Endwell since 1989, it was only natural that I got involved with attracting bluebirds now that I had sufficient property. I asked Ron Milliken, a birding friend of mine, if he could procure some plans for bluebird boxes. A few weeks later he handed me some information he had received from Sadie Dorber who lives near by. I became a member of NABS as well as the Upstate New York Bluebird Society.

Over one weekend I built 10 bluebird boxes. My plan was to put them up back-to-back on five 2 x 4 pressure-treated boards. The boxes were erected by my father-in-law and me during a break in the weather on 5 March 1992.

I checked the boxes periodically and looked for bluebirds but did not see anything until 10 April when I found a completed bluebird nest in one of the boxes. The following day I spotted two pairs of bluebirds, the first time I'd really seen a bluebird. It was really exciting to have nesting birds, especially since I have been trying (unsuccessfully) since 1989 to attract martins.

The bluebirds laid six eggs. Tree Swallows were now also in the area and eventually five pairs nested. House Sparrows started to nest in some of the boxes, so I put up a bird box trap to try to trap them. The bluebird babies hatched and things were going well; then disaster struck. In trying to force

sparrows out of a nest box into my trap, they instead found the bluebird nest and pecked all five bluebird nestlings to death. I felt really bad and somewhat guilty. I procured a Joe Huber in-house sparrow trap from Sadie Dorber and used that afterwards to trap sparrows. After this incident, my wife (who previously did not like the fact that I trapped European Starlings and House Sparrows) no longer cared what I did to the sparrows and starlings.

The bluebirds re-nested, forcing a pair of swallows to abandon their nest. The bluebirds built their nest on top of the swallows' nest. They laid five more eggs. The eggs were a few days from hatching when I noticed the male bluebird acting in an unusual manner. I checked the box and found that the eggs had been spilled from the nest. I removed the cold eggs and nesting material. It was another setback, but at least the five pairs of swallows were doing well, raising a total of 22 nestlings. Unfortunately, two weeks later we had a late frost and all the baby swallows died. The adult swallows left.

The bluebirds persevered and nested a third time, in the same box as the second attempted nesting. They laid five eggs; five young eventually hatched. All five nestlings survived to fledge. We eventually saw the parents a couple of times, once with four of the fledglings.

On the weekend of 11 July, we took our one month old daughter, Kelly, to Hobbie, Pennsylvania to meet her maternal great-grandmother. When we sat down to dinner, I heard the call of a bluebird.

Sure enough, there was a male bluebird on the powerline across the road. We watched him for a few minutes and then he flew off. Later, I heard him calling again. This time he was sitting on top of an open pipe which supported a basketball hoop, showing the hole to a female bluebird. (I later learned that open pipes or poles can trap bluebirds which then die in them.) Excited to see bluebirds in this location, I enlisted my father-in-law and uncle-in-law to help me build a bluebird box. We found an old pine plank (so old that it actually measured 1 inch in width instead of 3/4 inch). We laid out the box parts from memory. The wood was so well aged that it cut easily. The

hardest part was cutting out the 1 1/2 inch entrance hole. We got the house built and attached to the pole, all in about 45 minutes. We didn't get a chance to see if the bluebirds showed any interest in the box, but it was an enjoyable way to spend a Saturday afternoon. Now when we visit our grandmother on the holidays, I can check the box to see what's nesting.

Last year I learned a lot about attracting bluebirds and had a successful first nesting season. Now I'm looking forward to the 1993 season. ■

21 Carol Court
Endwell, NY 13760

(SPEAKERS—Continued from page 99)

ably in the area when the Spanish mariner Pedro Menendez de Aviles founded St. Augustine in 1565; with the enthusiastic help of these hard-working speakers, bluebirds will remain forever in the "Sunshine State."

The Speakers' Bureau currently consists of 290 bluebirders. These people are actively promoting bluebird conservation in the United States, Canada, and Bermuda. Not all areas, however, are covered. The following states are in desperate need of individuals willing to speak to groups: Arizona, Colorado, Delaware, Kentucky, Louisiana, New Hampshire, New Mexico, Rhode Island, South Carolina, and Utah. If you are interested and would like to help, please contact me at 3690 Country Lane, Charlottesville, VA 22903-7636. ■

Bluebird Boosters

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

You, too, can become a Bluebird Booster. For a donation of \$25.00 per issue or \$75.00 per four issues, you can be designated as an Eastern, Western or Mountain Bluebird Booster (your choice); for \$15.00 per issue or \$50.00 per four issues, be a Fledgling Booster; while \$10.00 per issue or \$25.00 per four issues makes you a Nestling Booster.

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

Bluebird Trail Established at Riverside Power Station Near Jenks, Oklahoma

Through its Habitat Enhancement Plan, the Public Service Company of Oklahoma (PSO) looks for cost-effective ways to improve wildlife areas around its power plants. During a visit to the Riverside Power Station, David Bouchard, PSO environmental specialist, suggested several actions to improve the site as wildlife habitat. Laurie McGrouty, maintenance supervisor, decided to act on one idea immediately: put up boxes for Eastern Bluebirds and American Kestrels.

PSO donated the materials for the boxes as well as the poles to place them on. McGrouty's wife, Renee, who teaches at Tulsa's Madison Middle School, got the shop teacher and his classes involved. Approximately 60 students participated in building 27 bluebird boxes which were erected on the station's grounds in March 1993.

Plans call for PSO to donate more materials so American Kestrel boxes can be built and installed. The kestrel is the smallest North American falcon.

"The bluebird is being destroyed, and we need to help them along. That's why we do these things. It's simple really; we've got to do something," said Laurie McGrouty. *[Adapted from the 1992 Annual Report of the Public Service Company of Oklahoma.]* ■



Shown with some of the boxes built for the Riverside Power Station, Jenks, Oklahoma, bluebird project are three students of the many from Madison Middle School who helped build the boxes. Behind them are the directors of the project: David Bouchard, PSO environmental specialist (*left*) and Laurie McGrouty, maintenance supervisor.

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 feel it is necessary to write a word of caution regarding the use of garden netting to entrap snakes as described in the article "Netting Saves Nestlings from Snakes" *Sialia* 15(1):22.

Those of us who are concerned about wildlife should be aware that garden netting is not only a deathtrap for snakes, but also for birds. Like snakes, birds can become hopelessly entangled in such netting. On one occasion last summer, it required a full 30 minutes of carefully snipping away (with manicure scissors) the netting which held a Blue Jay captive and immobilized. The open mesh netting was tangled around both feet, wrapped under and over both wings several times, and looped tightly around the bird's neck. Obviously, this bird had endured extreme torment as it struggled in vain to free itself.

My sister had just purchased this netting to protect her blueberry bushes from birds, but we quickly removed it and disposed of it. Disposal of plastic netting also presents a problem for consideration. Not only will it be a long-lasting "contribution" to the local landfill, but it may remain a hazard to wildlife there if any part of the netting is left exposed.

Thankfully, I can write a happy ending to the story of this jay, for he was discovered and cut free in time to save his life. Unfortunately, where garden netting of this type is used, many other

creatures will meet with an unhappy ending to their lives. Bluebirds could just as easily become ensnared by pursuing an insect within the very netting intended to protect their nest boxes from snakes.

NABS members should be aware that garden netting can be a deathtrap for wildlife, including the very species we are trying to assist!

Karen Blackburn
NABS "Plantings" Author
185 Mica Hill Road
Durham, CT 06422

Dear Editor:

In regard to the discussion of opening bluebird boxes after the twelfth day, I have a suggestion.

My boxes are all side-opening, with hinged doors and screen door hooks. When checking boxes containing older nestlings, I slide a sheet of light-weight clear plexiglas® inside the door before it is opened wide. This gives a clear view of the chicks. It is only one of the many useful articles carried in my tackle box.

This is the ninth year for my trail. Each year I add a few boxes till now they number 55. In 1992, 50 boxes fledged 190 bluebirds, 50 Tree Swallows, and 12 House Wrens.

Jean Rutan
2291 Bullard-Rutan Rd.
Mechanicsburg, OH 43044

Dear Editor:

Some years ago a female red squirrel chewed the entrance hole on one of my bluebird boxes large enough for her to crawl inside and raise her young. The following spring I nailed a raccoon guard over the enlarged hole. That didn't stop the squirrel. She chewed the 'coon guard opening larger and destroyed a bluebird nest with five eggs in it.

The bluebirds checked out another box about 100 feet away but apparently didn't like the 'coon guard. They moved into another box without a guard. In late June, two or three days after the babies hatched, mother and babies were devoured by raccoons.

The father bluebird spent the rest of the summer grieving for his mate and family.

Ruth Gilchrist
Rd 7, Box 76
New Castle, PA 16102

A metal washer with a 1 1/2 inch hole attached to the box coincident with the entrance should prevent most red squirrel predation, according to Dr. Zeleny. Whether red squirrels can enter 1 1/2 inch holes without enlarging them should be studied. He notes that red squirrels are much worse offenders than gray squirrels in regard to pre-dating bluebird nests.

Dear Editor:

As I checked my bluebird trail of 25 boxes (some on trees, some on poles), I became aware that the boxes on the trees were uninhabited by any species. When I looked inside these boxes, each one had gypsy moth caterpillars, feces, and/or cocoons plus egg masses later in the season. Those boxes on poles had no evidence of gypsy moths.

I moved all boxes that had been mounted on trees to free-standing poles. I discovered also that boxes which birds had begun to occupy were deserted as soon as the gypsy moths

began to accumulate in them.

These insects have not been a problem in previous years. I believe the gypsy moth has become a new enemy due to the spraying of the population. The moths find safety from the spray in the bluebird boxes.

This is one more reason to mount bluebird boxes *only on poles*.

Alicia Campbell
2405 Woodland Estates Dr.
Midland, MI 48642

Dear Editor:

P.T. Barnum was right—there is a sucker born every minute. When I was born, it was my turn.

A magazine, *Colorado County Life*, the publication of the Colorado Rural Electric Association, contained an ad by MYCO, Box 612, Springfield, MO 65801. It offered Bluebird Houses, \$5.00 each, 3 for \$12.00 with \$3.00 per order for shipping and handling. I am always on the lookout for new ideas so I responded. As I have reported to NABS, I have some 600 bluebird nest boxes scattered over 75-100 miles of roads in the Lake City-Gunnison, Colorado area and plan to erect 60 more this year. My boxes are made of wood, painted and repainted with linseed oil, wood preservative, and, finally, a good grade latex paint. The roofs are covered with asbestos shingles to retard weathering and they do produce—178 nestings (not nest/lings) in 1991.

Back to the MYCO story. I ordered 3 houses and they arrived. I was shocked! They were made of PAPER (cardboard). So I sent the whole mess back and requested a refund. We'll see how that turns out. I complained to CCL. Although the ad did not specify the material involved, I assumed something more substantial than paper.

Perhaps if you included the information in *Sialla* that the product put out by MYCO is paper, it might save someone else some grief.

Helmut G. Quiram
6095 S. Marshall Dr.
Littleton, CO 80123

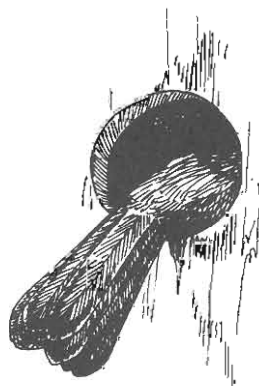
Bluebird Tales

Mary D. Janetatos

Quick! I need a bluebird nest box —ANOTHER one! To continue the tale begun in the last issue of *Sialia*, a fine pair of bluebirds came and expressed a deep interest in the backyard nest box. Chickadees, however, beat them to the nestling. A quick search around the garage revealed that the supply of transient boxes was temporarily exhausted. I know where to get a box quickly, so I think I can still please the investigating, but not yet nesting, bluebird pair.

The dearth of nest boxes at NABS headquarters is the result of a happy event which took place during the long Presidents' Day weekend in February. I was invited to install a bluebird trail in Washington, NJ, by my good friend **Father Frederick Miller**. He is director of the 100 acre Roman Catholic Blue Army Shrine. Fr. Miller recognized the shrine's beautiful grounds as potential bluebird habitat when I had described to him the plight of the bluebird.

My personal challenge of carrying out this project was the dual one faced by many bluebirders: how to erect the boxes and how to monitor them. I am not able to build boxes and am not close enough to monitor this trail. **Tom** and **Diane Grenchik**, of nearby Riverdale, MD, came quickly to mind. Tom, as a talented young architect, could solve the problem of finishing and installing nine nest boxes which I had lying around in various states of completion. Then Tom, Diane and their children could make an excursion with me to place the boxes in suitable locations on the shrine's grounds. What about monitoring? I checked the NABS membership list to see if any Washington, NJ, names were there. There were several. I successfully connected with **Robert** and **Grace Kocher** who met us on the ground mid-morning and observed what we had done. It was a happy and hopeful day as we reminisced about New Jersey's Mr. Bluebird—**Junius Birchard**. Before his death in 1988, he had singlehandedly



educated thousands of people in the middle section of the state about the needs of the bluebird, surely increasing the bird's population substantially in that location. Let's hope bluebirds will thrive at the peaceful Shrine of Our Lady of Fatima.

Another method of peace-keeping exists at Andrews Air Force base near Washington, D.C., where another new bluebird trail was erected recently. **Rich Dolesch's** efforts there resulted in a newly installed 90 box trail which went up in early March. Rich will be remembered by Maryland bluebirders as a former NABS board member who is currently employed as chief of interpretation and conservation of Prince George's County, Maryland-National Capital Park and Planning Commission.

Rich was invited to serve on a committee seeking ways to dispose of hazardous waste. The committee investigated possibilities for disposal on Andrews Air Force Base where Rich couldn't resist pointing out the potential for bluebird conservation existing on the base. The officials, in turn, couldn't resist Rich's suggestion—he can be very persuasive when extolling the virtues of bluebird conservation. Thus, Rich worked out all the details of the trail with base authorities. The trail was inaugurated with a rousing ceremony and luncheon to which Founder **Larry Zelony**, Treasurer **Chuck Dupree**, and I were invited. The bluebird was featured front and center, since it is the official bird of Prince George's

County—by Rich's account, the Bluebird Capital of the WORLD! County Executive **Parris Glendening** and Andrews Air Force base commander General **Billy Mitchell** pledged to promote bluebird conservation throughout the area. The icing on the cake for me was seeing the happy smile on the face of the General's wife, **Molly Mitchell**, as she accepted a copy of Larry's book *The Bluebird*. She immediately joined the society! Bluebirds will wing their way on the base with the help of the 89th Airlift Wing.

"Get out the bluebird-word" is the cry from many of those corresponding with and telephoning headquarters. **Jerry Hartley**, of Enterprise, AL, worked extensively with **Matthew Hersant** on his Eagle Scout project which was building, erecting, and monitoring a bluebird trail. Jerry said, "Even though I have helped Scouts in the past with bluebird projects in conjunction with their Eagle Scout awards, this was my first invitation to be a part of the award program. I was asked to help the audience understand Matthew's project. I elected to respond with a 'Letter of Appreciation and Commendation' and to present the 'Certificate of Achievement.' Both were well received."

Katherine Roberds Cox, of Monahan, TX, came up with a new angle. "I want to subscribe to your magazine which I've seen in our local library at San Saba, Texas. I don't believe that they subscribe, rather that some individual donates their copies. I've only seen three copies, so whoever is donating does not do so on a regular basis."

Don Kopff, of Beaver Dam, WI, has been assisting the efforts of the Bluebird Restoration Association of Wisconsin (BRAW) and recently requested a membership for the Senior Citizens' Center in Beaver Dam. He reported that more than 20 men are involved in building nest boxes at the center. "We go to construction projects for free cut-off lumber—no problem getting all the wood we want. We can sell very reasonably and [it] has proved to be a great fund raiser for the center. The money is used for various improvements: 60 new chairs, new TV and VCR,

new floors, two pool tables, etc. These species use the boxes: bluebird, wren, Tree Swallow, kestrel, owl, and squirrels."

The following tale indicates that bluebird conservation has proponents of varying ages and faiths. From the Lutheran Camping Corporation's "Bluebird Trails & Trails at the Wittel Farm," we learned that **Benjamin Lese** of Spring Grove, PA, started a bluebird trail through his 4-H group. "Ben is using 35 boxes with six styles of predator controls to study their control of predators and hindrance to bluebirds."

Dana Saluga, of Abingdon, MD, is another promoter of bluebird conservation through library displays at the Bel Air library. This year 325 copies of the NABS brochure, "Where Have All the Bluebirds Gone?" were picked up by patrons. This points out the value of library "advertising." Anyone else want to try this?

In joining NABS, **Bill Harmon**, of Whiting, NJ, reported, "I was recruited for bluebird monitoring early this year by the very same **Lola Morris** mentioned by **Rachel A. Williams** in her article in the Summer 1992 issue of *Sialia*. I may be a newcomer to bluebirds, but I'll bet not many members have a more appropriate mailing address than me." (He lives on Bluebird Lane.)

Longtime member **Ethelene Allen**, of Willow Spring, NC, wrote describing her joys and disappointments watching the ups and downs of bluebirding as she carries out her job delivering mail on a 17 mile rural route in her town. She reported being frustrated by many who erect bluebird boxes but permit sparrows to nest. Ethelene managed to assist several patrons in sparrow removal, and concluded with these words, "There are too many sad stories but many people continue to fight House Sparrows, and bluebirds are increasing."

NABS' audio cassette tape "Bluebirds, Fly" captured the fancy of **Lelani Gillespie**, of Wilmington, DE: "I wrote to tell you of the enjoyment the 'Bluebird, Fly' tape has brought me and my friends. It's very touching and a

lovely melody.

"I wrote before about the family we helped. So far there's one male and two females spending time around our yard. They eat the suet, mealworms, and waxworms I put out. It's funny to watch them go into their old nest box to keep warm. A lot of House Finches follow them. They don't seem to mind. The finches can't get into the diner."

A poignant letter from **Gene S. Miller**, of Winter Haven, FL. "I was so occupied with work caused by Hurricane Andrew (I work for a large insurance company) that I didn't have time for birds. If you have had any *Sialias* of mine returned, I would certainly like to have them. I suspect they (the publications) were more than likely stolen.


"The small trail that I set up in a closed area of the Green Swamp consisting of 20 boxes was occupied last spring by three families of bluebirds and one family of titmice much to my delight." Our hope is that good housing for humans will soon help all those afflicted by that terrible hurricane—and providing housing for birds may lift the human spirit.

Another disaster which had dire

consequences was the Blizzard of '93. In the NABS' headquarters area human needs were mostly met, and bluebirds did survive the snowy onslaught. An amusing photo was sent by **Otis** and **Kathryn Lee**, of Arvilla, ND. A wagon full of newly constructed Peterson nest boxes sat stationary in several feet of snow. The neatly printed caption read "Eastern Bluebird Express on the trek West bogged down in the winter of '93 near Arvilla, North Dakota."

In closing, I think about the eventful winter just past, the bluebird adventures just ahead—God willing—and I applaud the thoughts expressed by **Amy Polivka**, of Omaha, NE, who wrote: "I attended the 1992 meeting in Minneapolis and it was the first NABS experience [I had had]. It was very much worth it and [I] met very nice people.

"My husband is 'Into' bluebirding so am changing to a family membership. If he can't make it to Georgia this year, I'll go by myself. (I visited Callaway Gardens 20 years ago and remember how pretty it was.)"

Here's hoping we meet Amy (and the rest of you as well) at the NABS 16th Annual Meeting, October 22-24, 1993 at Pine Mountain, Georgia! 

SIXTEENTH ANNUAL MEETING OF THE NORTH AMERICAN BLUEBIRD SOCIETY

The 16th annual meeting of the North American Bluebird Society will be held in Pine Mountain, Georgia, October 22-24, 1993, at Callaway Gardens Resort, Inc.

Hosts for the meeting will be the Georgia Department of Natural Resources and Bluebirds Over Georgia, Inc.

Questions concerning the meeting should be directed to the following address:

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

The Seeker

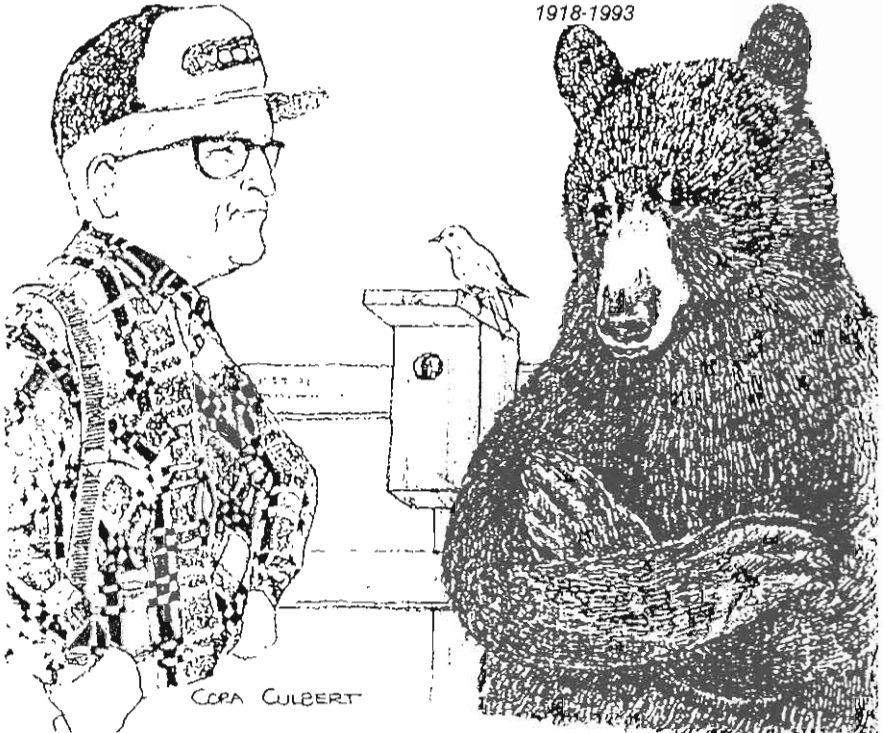
I sent my soul into the afterworld,
To seek an answer or reveal a sign.
"How shall I know the sound of angels"
I then cried?
And a voice from seeming nowhere now
replied,
"Listen closely and you will find."

Daily I listened for the sound of angels
from on high,
Yet ne'er the faintest answer could define.

Once more the voice, now echoed with a sigh,
"Thou seekest not closely;
Search within your own mind!"

And as I strove to catch and hold
That sense of strength that sweeps the
world along,
I listened for the beating of my heart
And lo, I heard a happy bluebird song.

—Robert A. Stevenson
1918-1993



Sialia readers will remember Robert Stevenson's three articles in the last few years about his ongoing battle of wits with a black bear he named "Buddy" near his home near Gheen, Minnesota. Attendees at the fifteenth annual meeting in Minneapolis will also recall that he made and donated the favors given at the banquet. Bob Stevenson died on 4 March 1993.

There for a Day

One morning I looked out my window
And much to my surprise,
I saw two birds on my clothesline
The color of cloudless skies.

I knew the moment I saw them
They were Mr. and Mrs. Bird Blue;
As they sat there side by side
In their coats of a heavenly hue.

I wanted to get a closer look
But I knew they would fly away,
So I admired them from a distance
That happy and lucky day.

I was so in hopes they would build a nest
And for a season stay,
But when I didn't see them again
I realized they were just there for a day.

Long live the bluebirds is my wish—
May they not be a bird of the past.
We need more bluebird houses and trails
And we need to build them fast!

—Edna B. Willis

Art Credits

Jon E. Boone: 82, 114
Suzanne Pennell: 116

(BOOSTERS—Continued from inside back cover)

Emerson Cullings Family	Barbara Moore Family
Steven DeMalo Family	Ralph R. Murphy, Jr.
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(Continued on page 120)

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

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

Membership: Student (under 21) \$10.00; Senior (over 60) \$10.00; Regular \$15; Family \$25; Sustaining \$30; Supporting \$50; Contributing \$100; Corporate \$100; Donor \$250; Life \$500. 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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