

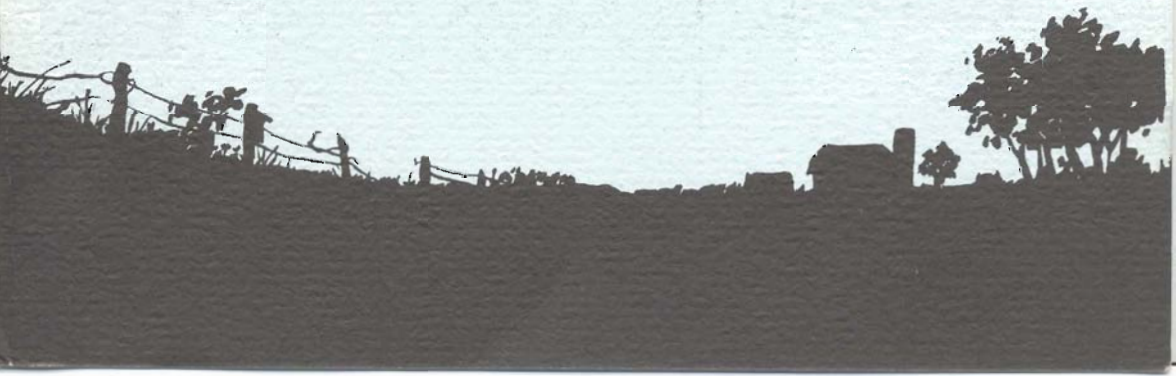
# *Sialia*

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Volume 2, Number 3  
Summer 1980  
Pages 89-128

The Quarterly Journal  
Of  
The North American  
Bluebird Society



## NORTH AMERICAN BLUEBIRD SOCIETY

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**S**ialia means bluebirds. Hence, the title of this journal. It is the word which the Swedish scientist, Carolus Linnaeus (1707-1778), used to name the genus grouping for bluebirds, a subset within the thrush family (Turdidae). Technically, *sialia* is the Latinized, neuter plural version of the Greek word *sialis*, a noun meaning a "kind of bird." Since the Eastern Bluebird was the first bluebird he classified, Linnaeus gave it the species name, *sialis*. Therefore the scientific name for the Eastern Bluebird is *Sialia sialis* (pronounced see-owl-lee-ah, see-owl-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, and their species names are descriptive of their locations. All three bluebirds are native only to the North American continent, although each inhabits different regions generally separated by the Rocky Mountains and by altitude preferences.

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

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# Sialia

The Quarterly Journal  
About Bluebirds

Volume 2, Number 3  
Summer 1980  
Pages 89-128

## EDITOR

Joanne K. Solem

## CONTRIBUTING EDITOR

Lawrence Zeleny

## ART EDITOR

Suzanne Pennell Turner

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## COVER

Suzanne Pennell Turner of Warrenton, Virginia, is our cover artist. Her subject is a Great Crested Flycatcher.

**SIALIA** welcomes the submission of articles, artwork and photographs for publication. Although this journal is dedicated primarily to the bluebird, material relating to native cavity nesting species will also be accepted for consideration. Manuscripts should be neatly typed and double spaced. All material submitted for publication is subject to editing or rewriting. Include a duplicate copy if you wish to proof the manuscript before publication. All manuscripts will be acknowledged. Black and white glossy photographs or negatives are preferred. Print the subject, names of any individuals pictured, photographer and return address on back of each photograph. Before preparing tables, graphs or other display material, please check with the editor about the requirements of our reproduction process. Art is welcome and should be in black pen and ink. The editor's address is 10617 Græloch Road, Laurel, Maryland 20810.

# Presidential Points

Marilyn Guerra

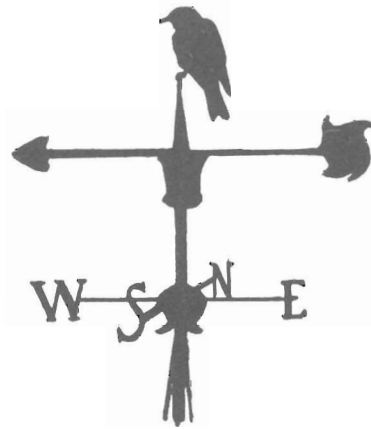
**W**e were sorry to learn that Hubert W. Prescott of Portland, Oregon, will be unable to continue serving on the Board of Directors of the North American Bluebird Society for reasons of health. We will surely miss his active involvement in the affairs of the Society. He has devoted many years to the study and conservation of the bluebird; his intense interest in them will surely continue.

Alan Prigge of Eugene, Oregon, has graciously agreed to serve the remainder of Mr. Prescott's term.

The annual meeting of NABS, scheduled for November 7-9, 1980, will be held at Gunston Hall in the countryside of Virginia outside of Washington, D.C. This is the beautifully restored house of George Mason, a signer of the Declaration of Independence and framer of the Bill of Rights for the Virginia constitution. Our hostess, member Jean Price, who is the wife of the curator of this historic site, has been successful in bringing the bluebird back to this lovely estate.

Additional information and a registration blank accompany this issue. Start making your plans now to attend.

Although bluebirds are the foremost concern of NABS, most native cavity nesting species face



similar problems in finding suitable nest sites. As many bluebirders know occasional trouble arises between such equally attractive species as bluebirds and Tree Swallows when they compete for nesting boxes. Research is being carried on in order to find ways to allow these valuable species to peacefully coexist.

Because the Society is aware of the increasing shortage of available cavities it is planning to sell nesting boxes which can be used by various species of woodpeckers, certain flycatchers, Wood Ducks, some owls, chickadees, and others. There will be more information forthcoming on this matter at a later time.

In light of the above information readers might be particularly interested in following a series which Larry Zeleny is beginning in this issue dealing with native cavity nesters. We hope that our members will come to appreciate their value and beauty finding them as worthy of active support as the bluebird. The four species of crested flycatchers are the subject of his initial article. ■

# HELPING BEHAVIOR OF THE JUVENILE EASTERN BLUEBIRD

Robert M. Schutsky

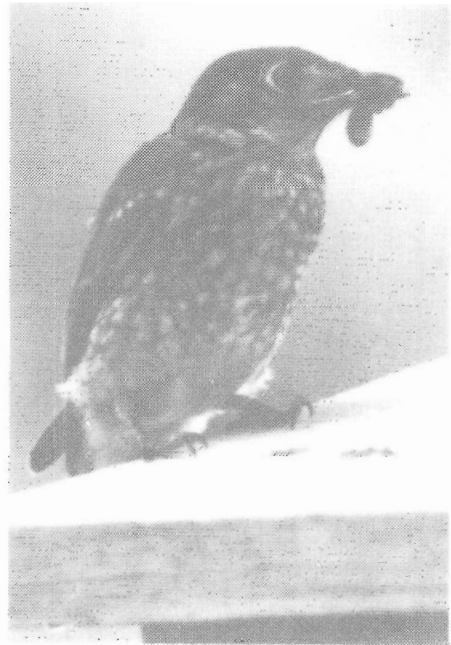
In his introduction to an account of unusual bluebird helping behavior, Pinkowski (1980) stated that young bluebirds from early broods frequently feed their siblings. Helpers are birds, other than the parents, which assist in rearing young. I first observed this behavior in August 1979 at the Muddy Run Bluebird Trail located on the grounds of the Muddy Run Recreation Park, Holtwood, Pennsylvania. The history of this trail is described in an earlier article (Schutsky, 1979). All observations were made from a blind positioned beneath a locust tree, 14 feet from nesting box #0201.

On 4 August I observed a juvenile Eastern Bluebird perched on the roof of the nesting box (Figure 1). It remained on the roof as adults brought food to five six-day old young inside the box. The juvenile remained on the roof for approximately one minute before flying to a nearby locust tree.

Three days later Charles Anjard entered the blind to photograph adults feeding the nestlings. Air temperature was 85° F, skies were clear and winds westerly at 5 mph. The first bird observed at the nest box was a juvenile bluebird that was banded on its left leg. This bird brought food items to the box four or five times during a two hour

observation period. Its usual behavior was to land on the roof, enter the box, feed the nine-day old nestlings and then leave. It did not remove fecal sacs. Adults also fed the nestlings during this time.

I returned to the blind the next day. Air temperature was 82°F with 50% cloud cover. Winds were westerly at 5 to 15 mph. The following observations are taken from my field notes:



Photograph by C.A. Anjard

Figure 1. Helper with insect on the roof of the nesting box.

- 12:57 p.m. - Entered blind.
- 1:07 p.m. - Juvenile landed on the roof of the box with an unidentified insect.
- 1:08 p.m. - Juvenile flew to a nearby tree with the insect.
- 1:14 p.m. - Juvenile returned to the roof of the box with the insect, now identified as a yellow soft-bodied caterpillar. Juvenile remained on the roof for 10 seconds, then flew away still holding the caterpillar.
- 2:02 p.m. - Juvenile landed on the roof with a grasshopper.
- 2:03 p.m. - Second juvenile, also banded on the left leg, landed on the roof with a grasshopper. First juvenile flew to a nearby tree, second juvenile entered the box.
- 2:04 p.m. - Second juvenile emerged from the box still holding the grasshopper.
- 2:11 p.m. - Juvenile landed on the roof with a grasshopper.
- 2:12 p.m. - Juvenile fluttered from the roof trying to locate the entrance hole on the side of the box. Repeated behavior. Then walked around the edge of the roof, looking for the entrance hole. Entered the box and emerged without the grasshopper.

During the next three days at least two juveniles were observed displaying behavior similar to that described above.

Through subsequent inspection of Anjard's color photographs, five additional food items brought to the nest box by the helpers were identified as an ant or wasp, earthworm, spider, tree cricket and click beetle. Other food items could not be positively identified, but may have been insect parts taken from a nearby macadam roadway. On past occasions, I have observed juvenile bluebirds drop from utility wires and obtain dead insects in this manner.

Because of band position, juvenile plumage and acceptance by the adult birds, I presumed that the helpers were young of the first brood fledged by the same parents at the same box. To prove this I inspected color photographs of the juveniles for legible band numbers. Careful examination revealed that at least one juvenile was from the first brood. This bird and its presumed nestmates were approximately 51 days old when first observed feeding the nestlings of the second brood. They had been out of the nest approximately 30 days and had been obtaining their own food for a shorter period. Thus the helpers were relatively inexperienced at capturing prey and especially inexperienced at feeding prey items to their younger siblings.

Helper behavior such as that described above may be the result of juveniles imitating adult birds. Fledglings learn to obtain food by watching adults and imitating their behavior. When adults begin feeding a second brood, this behavior may also be imitated.

Juvenile inexperience was apparent in some of the observed behavior such as interactions with adults when approaching the

nesting box and their occasional inability to locate the entrance hole. Adult bluebirds rarely get in each other's way when feeding nestlings. Vocal and visual communications are used to avoid such interactions. This was not true of the helpers. Frequently a helper attempted to enter the box while an adult was inside, resulting in the helper being forced from the entrance hole or having the food item taken away by the adult.

One instance of a helper being unable to locate the entrance hole was mentioned above in an excerpt from my field notes. On several other occasions similar behavior was observed. This behavior led to the helper looking over the edge of the roof, visually locating the

entrance hole, then entering the box.

This account describes just one of many fascinating behavioral phenomena open for study. As more is understood about bluebird behavior we will be better equipped to assist this species in its fight for survival. ■

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- Schutsky, R.M. 1979. Utility companies can help bluebirds. *Sialia* 1: 146-147.

RMC Ecological Division  
Muddy Run Ecological Laboratory  
P.O. Box 10  
Drumore, PA 17518

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## THE EASTERN BLUEBIRD AT GREAT SWAMP NATIONAL WILDLIFE REFUGE

Theodore W. Gutzke

New Jersey, like most states in the Northeast, has experienced an extremely low Eastern Bluebird population for many years. This was dramatically illustrated when the New Jersey Division of Fish, Game and Shellfisheries conducted a bluebird nesting survey for the state and could locate only 45 nesting pairs in 1978 and 54 in 1979.

In 1977 when I was assigned as Assistant Refuge Manager at the

Great Swamp National Wildlife Refuge I found few nesting bluebirds. The refuge, which is located in northern New Jersey, (only 25 air miles from New York City) contains approximately 6,000 acres of diversified habitat ranging from grassland, marsh, and swamp to climax forest. Although there are several hundred acres of excellent bluebird habitat throughout the refuge, the species was an

uncommon nester. The reasons became apparent once an inspection was made. As far back as 1969 some work had been done to provide nesting areas for bluebirds. Because of manpower shortages and budget limitations management for bluebirds had been gradually abandoned or neglected. What existed in 1977 were approximately 30 nest boxes of varying sizes which had been donated primarily by Boy Scout groups. They were randomly erected throughout the refuge and were generally placed in poor bluebird habitat. Some had two boxes attached to one pole, while the majority had entrance holes with a diameter greater than 1½ inches. The result was that only two boxes were being used by bluebirds; the remainder were utilized by House Wrens, European Starlings and Tree Swallows.



Photograph by Theodore W. Guizke

The Great Swamp National Wildlife Refuge in northern New Jersey is home for the largest population of breeding bluebirds in the state.

It was evident that changes were needed so I was assigned to develop a plan to manage the bluebird. I began by reviewing as much of the current literature as possible. During the summer of 1977 I initiated changes to correct the existing unproductive situation. The majority of the old nesting boxes were removed or relocated in good habitat. A trail system was developed to allow easy access to the boxes. New nest boxes were constructed of rough-cut cedar following the specifications of Zeleny (1976). These were attached to 4 inch diameter cedar posts spaced approximately 100 yards apart situated in early successional fields and annually mowed areas. A 36 inch diameter metal guard (USFWS 1976) was attached to all nest box poles to inhibit raccoons and other predators.

Nest boxes were added each year to bring the 1979 total to 100. An inventory system was developed so that nest boxes as well as natural nesting areas were checked biweekly. Those boxes which contained active bluebird nests were examined weekly to follow the development of the young, document mortality, and band nestlings with U.S. Fish and Wildlife Service leg bands before they fledged.

Natural nest sites were located whenever possible; however, many times they could not be found even when a singing male and a female were sighted. A successful nesting often was confirmed at a later date when fledglings were observed in the same area with adults. These individuals were much harder to



capture for banding, but a few were successfully caught with mist nets.

An active management program for the bluebird has really paid off as Table 1. illustrates:

Table 1. Eastern Bluebird Nests -- Great Swamp Refuge 1969-1979.

Year	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Successful Nests	0	0	2	4	3	3	3	3	6	11	26

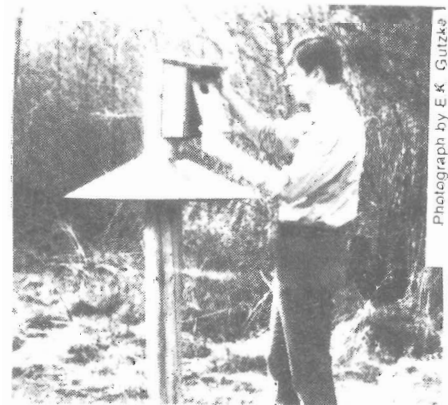
The 1979 breeding season was very rewarding for an estimated 18 nesting pairs fledged 84 bluebirds on the refuge. This number includes eight pairs which double nested. Great Swamp National Wildlife Refuge has had the largest breeding population of bluebirds in New Jersey for the past two years, a distinction we at the refuge view with pride.

Bluebird management has not been confined to the summer months as I have also taken into consideration the species' winter needs. Areas within the refuge that contain winter food sources such as bayberry, blueberry, Multiflora Rose, Autumn Olive, etc. have been maintained and enhanced. Roosting boxes have been placed throughout the refuge to provide shelter during the cold winter months. I do not know the full extent of food and roosting sites on the refuge at this time, but our program appears to be working as evidenced by continuous observations of bluebirds all winter long.

The increased bluebird production and their visibility on the

refuge have been well received by the general public. Numerous visits are made each year just to view bluebirds -- a species most people in this area have not seen in years.

What the success of the Eastern Bluebird program at Great Swamp National Wildlife Refuge illustrates is that possibly there is a shortage of good nesting sites for the species in New Jersey and perhaps the whole Northeast. It seems that bluebirds were always present on the refuge, but their numbers were depressed due to a lack of nest sites. When proper nesting sites were provided in good habitat, and predators and competitive species eliminated, the bluebird population quickly rebounded.



Photograph by E. K. Guizak

The author inspecting one of the 100 bluebird nesting boxes provided at Great Swamp.

The work that is being done at Great Swamp has helped to educate the public to the fact that a National Wildlife Refuge is managed for all forms of wildlife and not just game animals. Refuges play an important role in providing habitat for non-game animals and management for species, like the bluebird, which are in trouble. With over 400 National Wildlife Refuges nationwide totaling more than 34 million acres, the prospect for management programs for the bluebird is promising. Although not all refuges contain proper habitat, many do. As the bluebird's plight becomes widely known and with the anticipation of increased funding for non-game programs in the future, there is a good possibility that other refuges could develop management

programs similar to that initiated at Great Swamp. This can only benefit the genus and perhaps provide National Wildlife Refuges with a leading role in restoring the bluebird to its once abundant numbers. ■

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- Zeleny, L. 1976. The bluebird: how you can help its fight for survival. Indiana University Press, Bloomington, Indiana.

Assistant Refuge Manager  
Great Swamp National Wildlife  
Refuge  
RD #1, Box 148  
Basking Ridge, NJ 07920



Photograph by Theodore W. Gutzke

A managed grassland unit provides excellent habitat at Great Swamp.

# BLUEBIRD BOOKS DONATED TO LIBRARIES

Jon Belisle

My interest in helping bluebirds goes back about a decade. At that time I was living in a rural western Wisconsin area where I established a bluebird trail of 15 boxes. Several years ago I wrote a brochure entitled "Bluebird Trails" for the St. Paul Audubon Society. Most recently I decided to encourage the return of the bluebird by supplying copies of Lawrence Zeleny's book to libraries in the Upper Midwest. I feel that by making the plans and other information available individuals could build boxes. The box that a person builds himself will usually be of greater interest and is likely to be more carefully maintained than a free or cheap one that may soon be forgotten. Libraries seemed to be a logical way to reach many people.

My first step was to send the following letter to each prospective library. I chose towns that had a population of under 25,000 which were located in the southern half of Minnesota, southern half of Wisconsin, and the entire state of Iowa. Since the bluebird is primarily a rural resident I concentrated on those communities in the 750-2,500 population range.

August 10, 1979

Dear Librarian:

I am making an effort to increase public awareness of our native songbird, the

bluebird. The construction and maintenance of bluebird houses is known to be an effective help in their survival.

The book, **The Bluebird** by Lawrence Zeleny is an excellent reference text. Also available is a brochure on pertinent bluebird information (published by the North American Bluebird Society).

If you do not have this book, I will donate a copy and copies of the brochure to your library if you will feature the new book and make the brochures available to your library patrons.

Sincerely yours,

Jon Belisle

The purpose of this letter was to locate willing libraries. Only if a favorable reply was received would I send the materials (one book and 25-100 brochures, depending on the population served). It is no problem to give books away, but I wanted the volumes and materials to go only to libraries that were cooperative. Approximately 40% of the 246 letters I sent received a favorable reply (31 in Iowa, 23 in Minnesota and 50 in Wisconsin). If the library had the

interest and initiative to answer my inquiry I then sent a second letter.

September 18, 1979

Dear Librarian,

Please find enclosed the authoritative book on BLUEBIRDS to add to your library circulation. I have also included some brochures to be given to those interested in knowing more about bluebirds.

I am hopeful that some people in your area will put up and maintain bluebird houses. Nesting habitat has been shown to be an effective help for this desirable and colorful native songbird.

Sincerely,

Jon Belisle

If the books and brochures encourage people to put out properly designed boxes and would motivate just one person per town to establish a bluebird trail, I would consider my time and money well spent. ■

2594 Brookview Drive  
St. Paul, MN 55119

#### Editor's Note:

Mr. Belisle is still canvassing regional libraries. In late February 1980 he ordered another 100 books and 2,000 brochures in order "to finish some towns I didn't get to." His enthusiasm and initiative in spreading the word about bluebirds is most commendable.

## Nominating Committee To Propose Slate

The Society's Nominating Committee will be proposing nominees for Officers and six new Directors to be elected at the next annual meeting in November. The Committee is chaired by Edwin T. McKnight.

Members willing to volunteer their own service, or wishing to suggest the name of someone else to serve for the next year are urged to contact one of the following Committee members:

Allen A. Prigge  
283 E. 38th Avenue  
Eugene, OR 97405

Irene K. Ritch  
6 Delphinium Court  
Rockville, MD 20853

Edwin T. McKnight, Chairman  
5038 Park Place  
Washington, DC 20016

The nominees proposed by the Nominating Committee, a ballot, and specific details about the annual meeting will be published in, or with, the autumn issue of **Sialia**.



# THE JACKSON BLUEBIRD PROJECT

R.B. Layton, Chairman

**B**ird lovers of central Mississippi proved themselves eager to help the bluebird make a comeback as they lined up on January 26 at Riverside Park Clubhouse to obtain 1817 houses and 1146 poles.

The Jackson (MS) Bluebird Project was co-sponsored by the Jackson Audubon Society. It was to be an "at cost" project with nesting boxes selling for \$2.00 and a two piece metal pole with hardware selling for the same amount. Industrial arts classes of the local junior high schools were willing to make the boxes free of charge. Detailed plans were approved by both sponsoring organizations in September 1979. Plans were made so that the publicity would break during January 1980. The NABS-approved box plans were used with slight modifications in order to accommodate ease in construction and monitoring while retaining the inside dimensions. The top was nailed on. One of the sides was fastened with only two nails, at left and right top, to permit the side to open easily from the bottom edge.

Lumber was procured from a local fencing company that used 1/2" cypress boards to fence yards. The chairman and helpers were permitted to hand select pieces from a special stack at a reduced price. Poles were designed in two

sections: a 3/4" diameter 5' length of electrical conduit pipe and a 1/2" diameter 40" length of the same type. The shorter piece was supposed to be driven halfway into the ground to hold the 5' section of pipe erect for the house mounting. Both pipes came in 10' sections only, so they had to be cut to size. The pipe vendor, a large wholesaler, not only gave us a special price on the pipe, but also agreed to machine cut it at no extra charge. One pipe bracket with two screws was provided with each pole purchased. Not every individual who bought a box bought a pole; some planned to erect their houses on existing posts and poles.

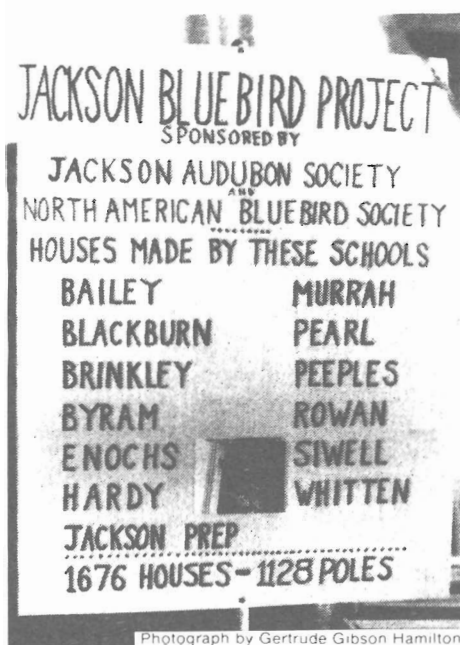
Two local businesses agreed to pay for \$300.00 quarter-page single insertion advertisements in the state's two largest newspapers. Each paper agreed to run accompanying news stories at the same time. An advertisement was also placed in a city regional paper. Among the essential information included was the reason for erecting bluebird boxes, prices, ordering deadline, address to which orders and payment were to be sent, and the pickup date and location. A clipout coupon was provided requiring the person's name, address and telephone number as well as the number of boxes and poles desired.

A calendar was established. The ads were to run during the week of Wednesday, January 2. Both advertisements and news stories declared January 2-11 to be the ordering period. Public service announcements were prepared and submitted to all radio and television stations. Full cooperation was received from all of them. All purchasers were asked to pick up their orders on Saturday, January 26 from 9:00 a.m. to 4:00 p.m. at a location which had been approved by the city park and recreation department.

January 2 arrived. The advertisements appeared and the waiting began. What would the response be? We had set what we thought was an ambitious goal of 500 boxes, but we could not purchase any materials until we had orders in hand. The first day's mail brought 25 letters, on the second day 55 arrived, and by the weekend we had requests with payments for 823 boxes and 578 poles. By the closing date of January 11 the total had reached 1654 boxes and 1128 poles. We were anxious to see the cutoff date arrive for the project was beginning to look larger than our capabilities. Envelopes (more than 100) received after the closing date had to be returned because the schools had made a commitment to construct only a specified number of boxes. Once we passed the deadline it was necessary to pick up the lumber from the fence company, take it to the schools, purchase the pipe, and get the pipe cutting started in order to have the boxes and poles ready for delivery by January 26.

The larger schools were each asked to construct 150 houses; two

smaller schools promised 100 each. The nine participating junior high schools did not constitute a sufficient number to complete the orders so we appealed to two adjoining counties for one school each. A senior high school also agreed to join the effort. Each of these additional schools was to complete 150 boxes.



Students from these schools constructed bluebird boxes in their industrial arts classes.

The original plan had been to have 10 volunteers pick up the boxes from 2:00-4:00 p.m. on Friday, January 25 and take them to the distribution center. If we had followed this plan each volunteer would have had to pick up 50 houses. Unfortunately, this would have required 32 people which was too many to find in such a short time. Although 19 individuals had

volunteered we needed them for the final pickup date activities. We returned to the schools to ask if they could possibly deliver the boxes that they had made and, with one exception, all were willing to make the delivery on the designated date. The interest in bluebirds that had grown in each school on the part of pupils, teachers and administrators was truly amazing.

Another period of waiting began with the chairman worrying through several sleepless nights. What if the schools were unable to make the promised number of boxes? What would the weather be like on the delivery and pickup dates? The community house that was being used had large screened porches with accessible interior heating if necessary. Luckily, the weather both days was cool and cloudy with no precipitation. Deliveries arrived as anticipated. Each school had met its quota; a few had even produced extras. The boxes were stacked at one end of the porch according to a carefully diagrammed plan. Together with the stacked poles they made a most impressive sight.

Pickup day procedures were well-organized. As letters had been received the person's name and the number of houses and poles ordered were written on the outside of the envelope with the original order form inside in case some question arose. These envelopes were alphabetically arranged in two boxes: one box was divided from A-L and the other from M-Z so that two lines of people formed across the long porch.

Two shifts of eight persons each were used, one for the morning

and one for the afternoon. Two individuals served as "processors" to pull the envelopes as the purchasers reached the table. The number of houses and poles needed was given to the "go-getters" behind the counter who brought them forward from the stacks. While the boxes were being procured, the processors filled a paper bag with literature and materials: two sheets of bluebird information from the North American Bluebird Society, one sheet from the Jackson



Photograph by Gertrude Gibson Hamilton

A young bluebirder carefully carries a box just purchased as part of the Jackson Project.

Audubon Society, a monitoring card for each box which was to be mailed back in September, and a metal bracket with screws to attach the box to the pole. Three additional persons served as "rovers" to assist those in line who might have questions.

Two lines of about 20 persons each continued almost steadily throughout the day. At the end of the day there were about 300 houses and a like number of poles left. We had anticipated that, for various reasons, all would not be claimed even though all had been prepaid. Additional pickup days were established until all were gone.

By using extra lumber belonging to one Audubon member more boxes were made available for

the additional pickup periods. This brought the final number sold to 1817 boxes and 1146 poles. We could have sold bluebird boxes forever--or so it seemed.

A great interest in bluebirds was evident. We realize that we benefited from the fine story in **Parade** magazine which ran just a few weeks before this project was announced. When we finally closed this successful venture an official report was made to the co-sponsoring organizations. The endeavor was described in detail so that others might benefit from our experience if similar projects were undertaken elsewhere. ■

P.O. Box 12157  
Jackson, Mississippi 39211



Photograph by Gertrude Gibson Hamilton

Project chairman R.B. Layton chats with two purchasers who appear to be starting a small trail.



# ENCLOSED NEST SITE ADAPTATIONS OF BARN OWL NESTLINGS

Hubert W. Prescott

**N**est platforms or open-top nesting boxes provide Barn Owl nestlings with ample room for wing exercise in the days just prior to fledging. But how could they possibly find sufficient space to exercise in the cramped confines of a natural cavity or in an enclosed nesting box? I was extremely puzzled about the matter until personal observations provided the answer.

I spent a number of five-hour sessions (approximately 9:00 p.m. to 2:00 a.m.) in a photographic blind a few feet from a closed-top Barn Owl nest box located in the peak of a barn. The box was 26 inches long, 18 inches high, and 12 inches wide with a 6 inch diameter entrance hole located 5 inches above the bottom of the box. The box contained eight nestlings of which the older two or three showed fairly advanced development of their primary and secondary wing feathers. My camera, outfitted with electronic flash, was focused on the nest box entrance in order to photograph the adult owls as they arrived with prey for the nestlings. The darkness in the peak of the barn concealed much of their activity from human eyes, so I set up a flashlight with half-spent batteries on the barn floor 17 feet below which cast a dim beam on the nest box entrance. With



this arrangement I hoped to give myself enough light to observe events without disrupting the normal routine of the adult owls. Though the birds may have been disturbed initially, they soon adjusted to the faint light and continued bringing in a rodent about every forty-five minutes.

While I was sitting in the blind awaiting the return of an adult owl, one of the nestlings suddenly thrust a wing through the entrance hole. It fanned the air vigorously for several seconds before withdrawing it. Because I was not expecting anything like this my camera tripod was not set in such a position that I could get the full sweep of the wing in a picture. I was, however, able to obtain two photographs of the event: one with a wing partially

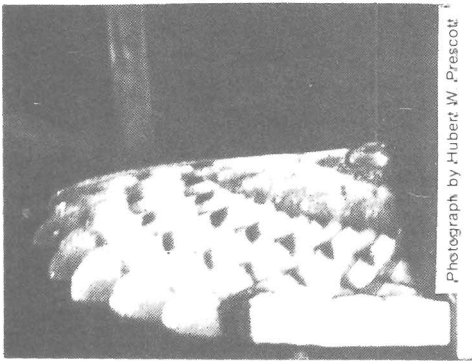
extended from the nest box and the other with a wing fully extended fanning the air, though a portion of the feathers projected out of the picture. During other nights in the blind I witnessed this single-wing method of exercise on several occasions.

The ability of the Barn Owl nestlings to obtain essential wing exercise despite the confined space of their nest box was not the only surprise that the birds had in store. In any brood of owl nestlings a large amount of debris, composed of the indigestible remains of the prey, rapidly accumulates on the bottom of a nest site. Before the owlets are ready to leave the nest the pellets may be three or more inches deep over the entire floor, becoming even deeper approaching the entrance until an incline may be formed reaching the lower edge of the hole. Thus the living space in the nest box or cavity progressively diminishes, not only as a consequence of the

nestlings' growth, but also as a result of the increasing amount of space being occupied by the accumulating detritus. Care must be taken to make closed-top owl nest boxes sufficiently spacious, but if boxes sometimes present a problem imagine the cramped quarters that often must confront broods in natural cavities. I discovered how burgeoning Barn Owl nestlings attempt to solve this problem. This disclosure also came during the night periods that I spent in the blind.

While I was sitting beside my camera I would periodically hear something raining down on the barn floor. It had the sound of gravel or some other loose material. My ears detected this sound occasionally during several of my night watches before I finally discovered the cause. At one point I had directed the beam of a penlight at the box when suddenly a volley of debris was catapulted out of the entrance hole. As it fell to the floor it produced the same sound that had mystified me. The nestlings were taking measures to prevent the pellets from accumulating to intolerable proportions. Subsequent inspection of the ground beneath other Barn Owl nest sites showed this debris expulsion behavior to be routine practice by nestlings in their later pre-fledging state of development.

How was the material removed? I made no direct observation, but from the force with which the pellets were ejected I presume the owlets used their feet. ■



Photograph by Hubert W. Prescott

Nestling Barn Owl in enclosed nesting box exercising a wing by thrusting it through the entrance hole and fanning the air.

13505 S.E. River Road  
Portland, OR 97222

# QUESTION CORNER

Lawrence Zeleny



The bluebird box plans do not show a perch under the entrance hole. Does this indicate that a perch is not desirable?

**Otto McCary**  
Birmingham, Alabama

Bluebirds enter nesting boxes with ease and have no need for perches in front of the entrance holes. Perches are not recommended because House Sparrows find them very useful. The male sparrow will sit on such a perch by the hour and prevent any other bird from entering the box.

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Should a bird house be cleaned out thoroughly every year? Is it washed with anything special when it is emptied?

**Robert W. Berry**  
Denver, North Carolina

All of the contents of a bluebird house should be removed as soon as possible after the young birds have left the nest. It is not necessary to wash the house, but if mites are present it is advisable to dust the inside of the house lightly with 1% rotenone powder or spray it with a pyrethrin spray.

---

I have had a problem with wasps in nesting boxes. I have tried insect repellents and have also coated the inside top of the boxes with a heavy layer of wax but have had little success in getting rid of them. Can you suggest a solution?

**A.V. Emmott**  
Houston, Texas

If nesting boxes are monitored weekly any wasps' nests found are usually very small and contain not more than one or two wasps. These can be easily removed by hand. But be careful! If a large nest with many wasps is found in a box the safest procedure is to spray the inside of the box with an aerosol pyrethrin spray. This is best done in the evening when all of the wasps are in the nest. The spray should be directed through the entrance hole without opening the box. The hole is then promptly plugged with a wad of paper or cloth. The next morning the nest and its contents can be safely removed.

# THE DEE JAYS' BLUEBIRD TRAIL

Dora Jo Mahan

Our class is enjoying student membership in the North American Bluebird Society. The school furnishes our membership in conjunction with our amateur bird study activities. I teach the Educable Mentally Retarded (EMR) children in the Ava elementary school system. Ava is located fifty miles from Springfield, Missouri.

When our classroom was moved to the south wing of the building, it proved to be an ideal bird study area. I tried valiantly to continue teaching by the usual methods, but there were constant interruptions, "Oh, Mrs. Mahan, there's a bird! What is it?" I finally decided to let the birds do the teaching. It has worked wonderfully and each year we have been allowed to expand our activities. We are attempting to organize our county into one big bluebird trail; eventually our trail will spread over Douglas County and into Ozark County.

In order to set up our bluebird trail we need the cooperation of many people. Educators, concerned bird lovers, a few shut-ins, and some elderly people have given us permission to furnish them with bluebird boxes in return for information on their nesting success. We have had the help of a Green Thumb crew who is producing over 100 nesting boxes, standard and experimental, all built to bluebird specifications. (The

Green Thumb program is federally funded and is designed to provide jobs and income for persons over 55.)

Each student in class is being allowed to sponsor a certain number of short trails. He will be responsible for handing out boxes, nesting cards, and bluebird information and will collect nesting results on each box. We are putting the location of all boxes on county maps. Any individual who participates in our bluebird program is provided with a packet of information. This includes the following items: a welcoming letter, a brief informational article about bluebirds and trails, Lawrence Zeleny's "Tips for Blazing the Bluebird Trail," and a nesting box report form for individual box records along with code explanations.

Our trail will be known as "The Dee Jays' Bluebird Trail." Each winter I write a series of high interest-low vocabulary articles for our county paper. They are entitled:



The caption is read, "Dee Jay's Easier Reading -- Bird Watching."

Parts of these articles are written on a beginning reading level with EMR and slow readers especially in mind. (We subscribe to the county paper for the classroom.) I work bluebird information into the material in order to help the students as well as encourage and recruit interested adult readers. A portion of one of the columns follows:

Do you want to know more about us Dee Jays ?

The letters for my name are D.J. My kids are like blue jays. They are into everything; so I call them de Jays. They call me Mama; so that is how I got to be Mama de Jays.

We know a lot about the bluebirds. They are in trouble.

Other birds are bad to them. The sparrows and starlings get all the holes to put nests in.

The rain and cold is bad to them. Some bluebirds stay here all winter. Some go south and come back so soon that a big ice, or snow, or cold kills them. They have had three bad winters. Lots and lots of them have died.

Man is bad to bluebirds, too. He cuts all the trees with nest holes in them. There are no berries to eat in winter. If they cannot eat, they cannot live. The Dee Jays want to help the bluebird. We can do it. You can help us do it.

Make a bluebird trail. Put up a bluebird house. Go 100 big, long steps and put up one more house. Go 100 yards again and put up another house. Keep going, then take care of them.

Pull the sparrow nests out

300 times if you have to. Put something, maybe foil, in the hole. Keep your eyes peeled for the bluebirds to come in early March.

When you see the bluebirds, run 55 miles an hour to open up the holes. Hide and look at them. They may go in your house.

Make little round doors in the boxes to keep the starlings out.

Read about bluebird houses and bluebird trails.

Let's help the best bird of all.

Let's help the bluebird.

Mama and all de Jays.

c/o Ava Elementary School  
Ava R-1 School District  
Ava, MO 65608

#### Editor's Note

We thank the Douglas County **Herald** for permission to use portions of Mrs. Mahan's column which originally appeared in the January 17, 1980 edition.



# NATURAL PERCHES FOR BLUEBIRDS

Tom Betts

**W**e have been erecting bluebird houses for five years. By faithfully following Dr. Zeleny's instructions, we have enjoyed many successful broods. Quite by accident last summer we discovered something that other bluebirders might find helpful.

Our four acres were almost treeless in 1958 when we first moved here. Particularly during the last six or seven years we have planted numerous berry-bearing shrubs and some young trees: Tulip Poplar, Pin Oak, hickory, dogwood and White Pine. To protect these plants from sledders in winter and baseball players in summer, we began carefully marking each small tree with a three to four foot high tomato stake. We presently have 112 of these stakes on our property. They are spaced 25 to 30 feet apart except for those marking the raspberry plants which are much closer together.

Last summer we realized that our two families of bluebirds seemed to find these stakes a real attraction. They perched on them to watch for ground-dwelling as well as low-flying insects and flitted from one perch to another constantly. Often one bird simply exchanged lookouts with another. They obviously found them so useful that we wondered how they had ever gotten along without them.

Other birds used them too, particularly the American Robins and Tree Swallows. We have many swallows thanks to a large nearby pond. Because they are so friendly and playful we cherish them almost as much as the bluebirds.

The swallows perch on the tree stakes and wait patiently for our Miniature Schnauzer to trot by. Then they dart at her in a kind of dive-bombing swoop and excite her into pursuit. When one bird tires of the game, his place is taken by another until poor Patsy is exhausted.

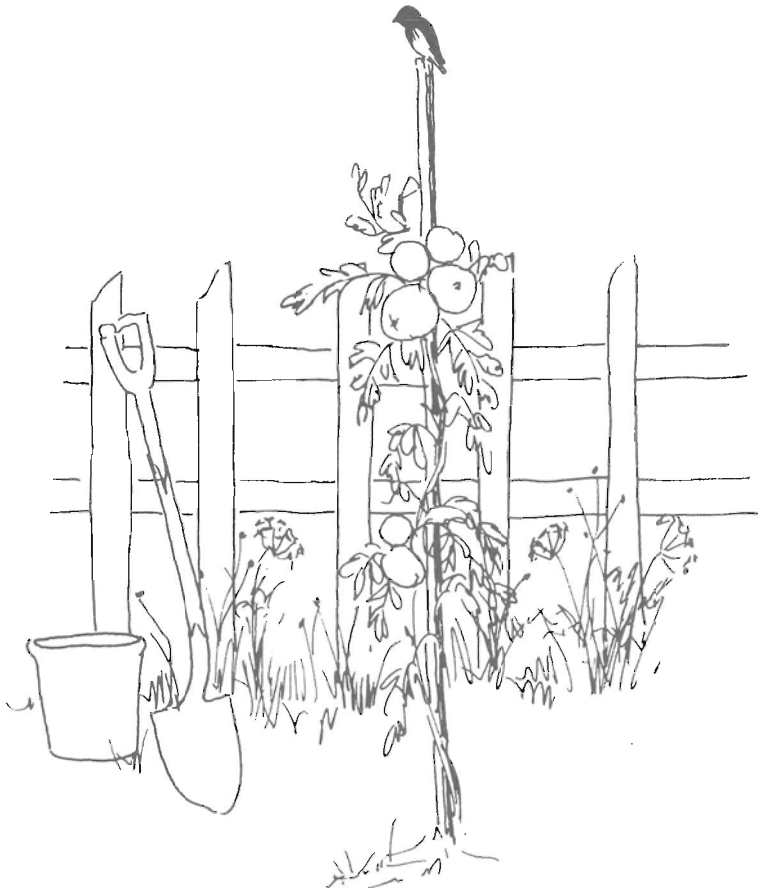
In addition to the stake perches, we have erected poles on which we have mounted the nesting boxes. We attach the boxes, not to metal posts or to telephone poles, but to dead or uprooted trees which we have dragged from the housing development sites nearby. Although we trim these trees of their branches, we leave numerous stubs of different lengths in order to keep them scraggly and offer a variety of perches. We want them to look like dead trees, which they are, rather than installed posts. Because Indiana County in western Pennsylvania where we live is the "Christmas Tree Capital of the World," most of the trees we secure are Scotch Pine, but we also get some Black Locust and Tulip Poplar. Those that we use are about

six inches in diameter; by the time we have them trimmed and "planted" 2½ feet deep, they stand 10-12 feet high. The only tools needed to accomplish the transplant are a shovel and a tamping bar. Soon the trees, though clearly dead, appear natural and look as though they had been there all along. So far I have installed 12 of these trees on our property. A nesting box is mounted 3-5 feet from the ground on each trunk.

We also bring in old decaying

logs and strew them around. In short we work to make the land appear wild. We still do a good bit of mowing, weaving in and out among the stakes because the robins, Killdeer and, of course, the bluebirds prefer the cropped lawns and fields. The whole effect is rugged and natural with a dash of something special in those stakes.■

Route 6, Box 73  
Indiana, PA 15701



# BLUEBIRD HONEYMOON

Come along with me, my love,  
And we will roam the sky;  
We'll fly across the meadows,  
And soar o'er mountains high.

We'll drink of streams' pure waters;  
Chase butterflies and bees;  
And when we tire of this, my love,  
We'll rest in shady trees.

Then we will search in earnest,  
Each nook and cranny wide;  
Where we can raise our family  
Together, side by side.

There it is, my dearest love.  
Well, goodness! Bless my soul!  
Just waiting there for us, dear one,  
Our house upon a pole.

A kind and careful craftsman  
Has built it strong and true;  
Do enter into it, my love,  
And I will follow you.

Katharine M. Braun

## AT EVENTIDE

Oh, have you heard the bluebird's lovely song at eventide?  
When shadows fall, he softly calls his mate with ardent pride;  
She listens, as she gently gathers nestlings 'neath her wing;  
With tender loving care they'll grow and fly and sweetly sing  
The song of joy and happiness that bluebirds bring to earth,  
To lift our spirits and our minds -- to help us find rebirth.

The bluebird serenades his love 'til moon is shining bright,  
And stars hang out their lanterns to give their heavenly light.  
A quiet hush falls o'er the earth, as peace and rest I find;  
And as I lay me down to sleep, this prayer is on my mind:  
That bluebirds will return again, and he will sing with pride;  
I'll hear his lovely song once more -- his song at eventide.

Katharine M. Braun



# CRESTED FLYCATCHERS NEED HELP TOO

Lawrence Zeleny

**B**luebirds and crested flycatchers are not closely related, but they do have much in common in their efforts to survive in an increasingly hostile environment. Both are cavity nesters, and neither of them have powerful enough bills to excavate their own nesting cavities. Hence, in nature, they both depend on old woodpecker holes or rotted out dead trees or posts in which to build their nests. Shortages of such cavities and competition from alien birds for the cavities that do exist have created severe hardships for both birds.

There are four species of crested flycatchers in North America, all of the genus **Myiarchus**. These are the only cavity-nesting flycatchers on the North American continent. The Great Crested Flycatcher (**M. crinitus**) is found throughout the eastern half of the United States. The Ash-throated Flycatcher (**M. cinerascens**) is rather widely distributed in the southwestern third of the country and up the west coast as far as the state of Washington. Wied's Crested Flycatcher (**M. tyrannulus**) and the smaller Olivaceous Flycatcher (**M. tuberculifer**) breed in the extreme southwestern corner of the country and in Mexico.

In earlier times the Great

Crested Flycatcher nested close to human habitations wherever there were natural cavities and large trees, even in the residential sections of cities. With the coming of the House Sparrows these flycatchers, like the bluebirds, were forced to compete with them for cavity nesting sites. Unlike the bluebirds, however, the flycatchers could often defend their nesting sites from the marauding sparrows. But later, with the advent of the European Starling in America, the flycatchers found themselves in serious trouble. They can almost never compete successfully with the starlings. Consequently wherever starlings are abundant, crested flycatchers, like bluebirds, tend to disappear unless human help is forthcoming. The only exceptions to this rule occur in those rare areas where there are more than enough natural cavities to satisfy the needs of all the resident starlings.

The crested flycatchers have one important advantage over the bluebirds in their confrontation with the starlings. They simply retreat to more heavily wooded areas to nest. Starlings as well as House Sparrows usually shun the deep woods. Thus the flycatchers are not critically threatened by the alien birds, but they have had to abandon most of the areas near our homes where they formerly brought great

pleasure to many people. If the starling population continues to expand, these undesirable birds may eventually invade the wooded areas that now provide the only safe havens for both crested flycatchers and woodpeckers. The result could prove disastrous.

Crested flycatchers readily accept nesting boxes, but can flycatcher boxes be made starling-proof? It now seems that this may be possible.

Several years ago I experimented with different size entrance holes in nesting boxes to determine the minimum size that would permit starlings to enter. (See **Atlantic Naturalist** 24: 158-161 (1969)). Starlings were able to enter a 1 $\frac{1}{8}$  inch diameter hole, but only with considerable difficulty. When the hole size was reduced to 1-9/16 inch the starlings tried long and hard but were unable to enter. Since that time several reports have been received of Great Crested Flycatchers using bluebird nesting boxes presumed to have the standard 1 $\frac{1}{2}$  inch entrance hole. Careful measurements, however, showed all of these holes to be slightly oversized. They were at least 1-9/16 inch in diameter.

Based on these observations it appears that nesting boxes with 1-9/16 inch entrance holes can and will be used by Great Crested Flycatchers but not by starlings. Further tests should be made since the 1-9/16 inch hole will barely accommodate the flycatchers. Holes 2 inches in diameter are usually recommended for these birds and are probably more acceptable to the flycatchers in any area where European Starlings are not a problem.

The Ash-throated Flycatcher of the western states is a little smaller than the Great Crested and according to Hubert Prescott of Portland, Oregon it can readily enter the 1 $\frac{1}{2}$  inch opening of the standard bluebird nesting box. These birds sometimes occupy a few of the nesting boxes on bluebird trails in the West.

Bluebird trail operators and suburban or rural property owners in the eastern half of the country may wish to try a few nesting boxes with 1-9/16 inch entrance holes. These should preferably be located near the borders of deciduous woodlands or in other areas where tall deciduous trees are rather numerous. Box design may be similar to that used for bluebirds. Although the flycatchers will use boxes with 4 x 4 inch floors, 5 x 5 inch floors are better since flycatchers are somewhat larger than bluebirds and they often have larger broods. Flycatchers often nest at considerable heights, but they also seem quite willing to use rural mailboxes within four feet of the ground so mounting height does not seem to be an important consideration.

Since the use of starling-proof crested flycatcher nesting boxes is still in the experimental stage, readers who may try them are urged to report their results to the Society. Perhaps through the use of such nesting boxes flycatchers may be induced to return to the vicinities of our homes to nest, and we may again experience the thrill of awakening in the morning to the haunting calls of these beautiful and fascinating birds. ■

# REDSTONE ARSENAL BLUEBIRD CAPER

Dave Dooling

When Bill Friday was caught redhanded by the Redstone Arsenal game warden, everyone was glad he had been found -- including Friday -- because then he was given official sanction to carry on as before. Unlike occasional poachers that the warden must watch for, Friday was putting something back: bluebird houses.

Friday, physicist with the U.S. Army Missile Command, started the project after reading an article in the **Purple Martin News** about some bird lovers who were encouraging the return of the bluebird by building nesting boxes for them. It seemed like an excellent idea for his Boy Scouts (Troop 15 of the First United Methodist Church of Huntsville, Alabama) because it could serve several merit badges at one time.

Starting with a 4 by 8 foot sheet of plywood Friday figured that 15 bluebird boxes could be built from one sheet. The Boy Scouts sold sponsorships for \$1.50 to cover the cost of the materials, allow for replacement of damaged boxes, and provide additions to the trail.

Because a beekeeper earlier had been denied permission to set up hives, Friday decided to install the bluebird boxes without going through official channels. That left many arsenal workers wondering

who the mysterious benefactor was until the day the game warden caught Friday and told him even the commanding general liked the idea.

In the first year (1977) with 137 boxes, 15 nesting pairs of bluebirds were counted. By the second year that almost doubled to 28. Last year 56 nesting pairs were located.

Friday said that he hopes to expand the nesting project to golf courses off the arsenal, but added that this time he'll let the owners know he's coming. ■

## Editor's Note:

Most of the foregoing was taken from a lengthier article which originally appeared in the December 2, 1979, edition of The Huntsville **Times**. We thank the **Times** for permission to reprint Mr. Dooling's material along with the Tony Triolo photograph.

Mr. Friday reports that the Scouts are adding 30 boxes to the Arsenal grounds this year. They have also installed about 40 boxes on city golf courses, including 10 of the experimental open-top design in an attempt to reduce competition from House Sparrows. The Scouts will use the bluebird trail for their display at the District Scouting Exposition to continue to bring the problems of the bluebird in the Huntsville-Madison County area to the attention of the public.



Photograph by Tony Trilo of The Huntsville Times

Scouts Dwight Potter and Doug Brewster assemble bluebird nesting boxes.

## BLUEBIRD BONANZA

Walter D. Plummer

Watching a pair of bluebirds flitting back and forth feeding their young provides a great deal of satisfaction, especially when they are occupying a box that you built yourself. Our experience has been that if you follow the recommended rules and specifications you are bound to attract these beautiful and beneficial birds. When you consider the number of "bugs" bluebirds devour daily, they are well worth the little time and trouble it takes to attract them.

About fifteen years ago I built my first bluebird house and placed it

in the orchard. It was constructed from old barn boards, has had occupants from the time it was erected, and is still in good condition. My experience has been that bluebirds seem to choose the weathered wooden boxes over those made from newer lumber although almost any type of wood can be used. I prefer not to paint the boxes.

Over the years I have added boxes for House Wrens as well as a few more for bluebirds and have been successful in attracting both of these birds to our farm. Although we

have put up many nesting boxes they are well spaced because each pair needs a certain territory.

Last year I erected several more bluebird nesting boxes, one of which was located just outside the front sliding door to our little red barn. The box was attached to the electric company powerline pole that also holds the outdoor night light. For a time I didn't think it was a suitable location because traffic and machinery created a lot of activity. It apparently made no difference to the pair of bluebirds that occupied the box and tolerated all the commotion. There are now four bluebird boxes around our Victorian farmhouse: two near the big pond and two more in the barn area.

We clean out all our bird boxes each spring. Mrs. Plummer and I generally take at least half a day to do this chore with heavy copper wire hooks that I make for this purpose. Once that is done all we have to do is wait. In our area of northwestern Pennsylvania the bluebirds arrive during the latter half of April while we look for the House Wrens on one of the first days in May.

Because we have several ponds

along with open areas we have Barn and Tree Swallows in numbers. They are, I should add, most welcome. We find it interesting that the bluebirds and Tree Swallows sometimes share the nesting box that is located outside the tack room of the barn. Last summer a pair of swallows raised their young. They were closely followed by a pair of bluebirds. When those young birds were on the wing a pair of bluebirds raised a second family in that same box. That's the first time that has happened here and, at first, I couldn't believe it. Because the box was so close to the tack room door and windows I observed it closely and know it happened. I wonder if other bluebirders have had a similar experience. ■

Pennhurst Acres  
Rural Box 59A  
Leeper, PA 16233

#### **Editor's Note:**

Walter and Eleanor Plummer live on a certified Pennsylvania Century Farm in Clarion County. They are avid waterfowl conservationists as well as supporters of bluebirds, swallows and wrens.



## A BLUEBIRD INCIDENT

We live on a 126 acre farm and have been enticing bluebirds here for six to eight years. We have placed 30 nesting boxes along the fence rows; each year 17 to 20 bluebirds fledge. At present there are active nests in three boxes; one has eggs in it while the other two contain young.

One nesting box is located very close to the vegetable garden. Recently on a typical "bluebird day" of sunny, warm, windless weather, my husband was disking the garden when he noticed the bright blue flashes of the bluebirds' wings as they flitted to and fro behind his large disk and 460 diesel tractor. They were feeding on the worms and insects which were being surfaced. When he came to the house to tell me I immediately grabbed my binoculars and ran for the garden. I sat on an overturned bucket for nearly an hour watching the antics of this pair of bluebirds as they swooped from the fence posts again and again, their brilliant blue feathers flashing in the sunlight. After obtaining several worms they would disappear for a few minutes returning to the nest to feed their hungry young. Soon they would be back and start the whole procedure over again. Those nestling bluebirds, with just a tinge of blue on their wings, must be the fattest in the area.

It seemed a shame that the other two pairs of bluebirds were too far away to enjoy the feast. As soon

as my husband finished working the vegetable garden, he went out to the other nesting box which contained young and disked up a nearby area so that that pair too could glean fresh fat worms!

No one who has had the thrill of observing a spectacle such as I had seen will ever forget it. It makes all the trouble that goes into caring for the nesting boxes worthwhile. ■

Lucille K. Beale

Bluebird Farm  
16309 Four Points Bridge Road  
Emmitsburg, MD 21727

### SPECIAL NOTE FROM THE EXECUTIVE DIRECTOR

As **Sialia** goes to press, the Founder of the North American Bluebird Society, Lawrence Zeleny, and his wife, Olive, are planning to celebrate their 50th wedding anniversary. On June 19, 1930, Olive Lowen and Lawrence Zeleny spoke their marriage vows at Gethsemane Episcopal Church in Minneapolis, Minnesota. All those who know this wise and loving pair extend congratulations on this joyous occasion and wish them many happy returns!

# PLANTINGS FOR BLUEBIRDS AND OTHER WILDLIFE

## Firethorn for Birds and Beauty

George N. Grant

**M**y first report of bluebirds this spring came from friends who notified me that a small flock was feeding on Staghorn Sumac near their home. On my own trail on Saturday, May 17, I observed a female leave a nesting box with eggs to feed on a nearby stand of sumac. I hope readers realize the importance of sumac for bluebirds.

Suppose you live on a small lot with little space for sumac. What could you put in that would be a fine landscape plant, provide valuable winter food for bluebirds, and attract other birds to your area? *Pyracantha* or firethorn would be an excellent choice. Although bluebirds may not nest in your yard, during the colder months you may observe them feeding on berries of this and other shrubs you have planted.

*Pyracantha* is widely planted for landscaping on the West Coast, in the South, and as far north as its hardiness will permit. The red to orange berries are a preferred winter bluebird food and are also eaten by several other desirable species. The berries persist until about March if uneaten before that time.

There are several species and varieties of firethorns so, depending on the part of the country in which you live, it would be wise to refer to a regional garden guide or to check with a local nurseryman to determine what is best for your specific area.

Because it is the most cold tolerant, Scarlet Firethorn (*Pyracantha coccinea*) is possibly the most popular and widely used species. Its cultivar "Mohave" is hardy to -10°F or lower and is even planted successfully here in central New York in protected areas.

These evergreen to semi-evergreen shrubs are versatile and useful in a variety of landscaping schemes. *Pyracantha* is responsive to pruning and can be espaliered against a wall or fence; other uses are as foundation plantings, hedges, and specimen plants. They are fast growing and fruit when still young. It is quite possible that the containerized plant purchased at a garden center will have a few berries the first fall.

For those desiring more information on wildlife plantings, an excellent book has recently been

published. It is entitled **Trees, Shrubs, and Vines for Attracting Birds: A Manual for the Northeast** by Richard M. DeGraaf and Gretchin M. Witman. It is a 194 page hardbound book covering over 160 species of Northeastern plants that provide food, cover, or nest sites for birds. The copyright date is 1979 by the University of Massachusetts Press. The volume retails for about \$12.95.



**Scarlet Firethorn**  
(*Pyracantha coccinea*)

**Native** - Western Asia to Italy. Introduced 1629.

**Hardiness** - Zones 6 to 10, but some varieties such as Mohave hardy in zone 5 in more protected situations.

**Habit** - Rather open if left unpruned with stiff thorny branches. Fast growing, 6 to 10 feet or more. Evergreen in temperate areas to semi-evergreen in more northerly portions of range.

**Flowers** - Rather showy, whitish ¼ inch flowers in clusters appearing in May or June with both male and female flowers on same plant.

**Fruit** - The ¼ inch orange-red berries are borne in dense clusters ripening in September and lasting until March.

**Habitat** - In some areas has escaped from cultivation along roadsides, fences, and thickets.

**Landscape Value** - Excellent and widely used within its hardiness range as a specimen plant or foundation planting; may be espaliered against a wall, fence or trellis. The abundant, showy fruits are its main attraction. Available at most garden or nursery centers.

**Culture** - Well-drained to dry soils in full sun with pH of 5.5 to 7.5. Difficult to transplant. Purchase containerized plant or move with soil ball only when dormant.

**Undesirable Traits** - Lack of hardiness is main fault for people attempting to grow it in marginal areas.

**Diseases and Insects** - Fireblight is its most serious disease.

**Propagation** - Current year's growth starts readily in a greenhouse or under mist propagation. Seeds need to be stratified for 3 months at 40°F.

**Similar or Related Species** -

- P. atalantioides** - Gibbs Firethorn
- P. fortuneana** - Chinese Firethorn
- P. koidzumii** - Formosa Firethorn



**Uses by Wildlife** - The fruit is eaten by at least 17 species of birds and is a preferred food of the BLUEBIRD, Pileated Woodpecker, Northern Mockingbird, Gray Catbird, Brown Thrasher, American Robin, Cedar Waxwing and Purple Finch. It is also used by the Common Bobwhite, Blue Jay, Wood Thrush, Hermit Thrush, House Sparrow, Northern Cardinal, White-crowned Sparrow, Fox Sparrow and Song Sparrow. It has some value for nesting and cover. ■

## HARDINESS ZONES

This hardiness map was developed by the Agricultural Research Service of the U.S. Dept. of Agriculture. The hardiness zones 1-10 are based on the average annual minimum temperature for each zone and divide the United States and Canada into areas where specific plants are winter hardy. Many factors such as altitude, length of growing season, exposure, moisture, soil types, etc., can create variations within zones, but adhering to your specific zone will generally give you the best results.

RD #3, Box 153B  
Canastota, NY 13032

ZONE 1	BELOW -50°	ZONE 6	-10° TO 0°
ZONE 2	-50° TO -40°	ZONE 7	0° TO 10°
ZONE 3	-40° TO -30°	ZONE 8	10° TO 20°
ZONE 4	-30° TO -20°	ZONE 9	20° TO 30°
ZONE 5	-20° TO -10°	ZONE 10	30° TO 40°

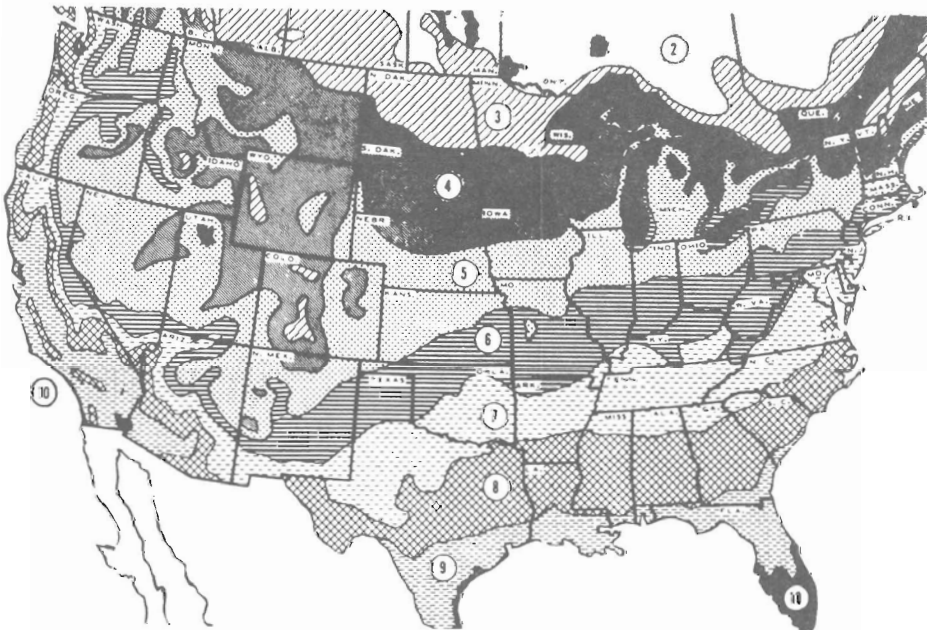
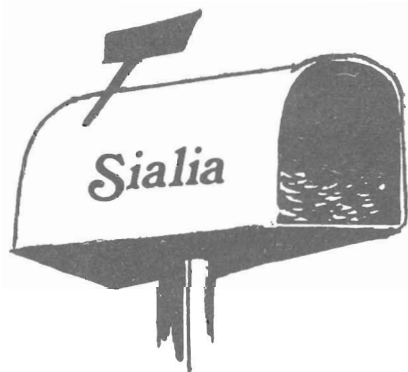


Figure 1. Hardiness Zone for the United States and southern Canada. When no zones are mentioned with the plant description, plants are hardy anywhere. If a zone is given, it indicates that plants are hardy within the zone and in all areas south of it.

# 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:

There was a portion of one sentence eliminated from the article, "Endoparasitism in Western Bluebirds of Oregon" 2: 69. The sentence beginning the 11th line from the bottom of the page in the second column should read: Although bluebirds may ingest infected *A. vulgare* throughout the year, they may be subjected to increased levels of infestation by *P. formosus* prior to and during the breeding season when they experience a great nutritional demand.

Early this spring, while accompanying Al Prigge and Aaron Skirvin on the Eugene Trail, Al retrieved five dead adult Western Bluebirds which he had found in one nest box earlier in the week. Although maggots had gotten to parts of the birds, a quick field inspection of the gut indicated that at least one bird contained acanthocephala. I turned these birds in to Lloyd Thompson-Cowley and the O.S.U. Veterinary Diagnostic Laboratory where they were necropsied on 3/3/80. The report states that the three females and the two males, all

similar, were characterized by heavy infestation of acanthocephalan parasites. The gut wall was thickened and hemorrhagic at the site of the heaviest infestation.

Do we have a special problem here in western Oregon? Only additional information and further study will tell.

Elsie K. Eitzroth  
Corvallis, Oregon

Dear Mrs. Eitzroth:

My apologies to you and your two co-authors for the error in your article.

Thanks for the additional information on what seems to be a more widespread problem than is realized. We hope that your study is a continuing one and will result in more complete information based on additional research. **Sialia** readers will look forward to hearing of further results.

Dear Editor:

The recent ash fallout from the eruption of Mount St. Helens in Washington has proven to be a disaster for the bluebirds in western Montana. We had a warm early spring and the bluebirds began nesting much earlier than usual. This resulted in an early hatch of the first brood. Nestlings were a few days to ten days old at the time the ash came down in this area. The abrasive powder seemed to coat all of the insects causing them to die. You could find two or three foot trails in the ash with a dead insect at the end. Steady, heavy rains after the fallout made it difficult for the birds to feed. It's my belief that rather than dying from exposure, many died from starvation. Occasionally we found one or two nestlings alive out of broods of five, six or seven birds. There were hardly any survivors among Tree Swallows. In virtually every nest examined dead birds were all we found.

We have been encouraging people to clean out boxes hoping that when the weather does settle down the bluebirds will re-nest. There is some evidence of them moving into boxes that hadn't been used previously.

It's a sad situation. Initially it appeared as though we were going to have a bumper crop of bluebirds this year. Now we find that we are fledging very few from the first hatch. The long term effects of this, of course, are still unknown.

Art Aylesworth  
Ronan, Montana

Dear Mr. Aylesworth:

Your comments are most timely. How distressing to have this occur just when conditions seemed to be right for excellent production. I'm sure bluebirders everywhere will be interested in the outcome of the breeding season in your area. We hope second broods will be especially successful.

---

Dear Editor:

I have read with great interest George Grant's article on "Plantings for Bluebirds and Other Wildlife" in the Winter 1980 issue of SIALIA. Mr. Grant's idea that more plantings should be made for bluebirds and other wildlife is splendid. I strongly urge such plantings; in fact, a large portion of the nursery I formerly owned was devoted to raising Amelanchier (shadbush).

Mr. Grant does name one plant, however, that should be stricken from the list-- Multiflora Rose. This plant was formerly recommended by the U.S. Department of Agriculture for bird feeding and for use as a "living fence." The Department has long since withdrawn its recommendation from this bramble. It is my view that Multiflora Rose should not be planted by anyone for any purpose.

It is a pernicious barbed briar which is spread by birds into farmers' fields, lawns, parks, orchards and tree plantations. Once started it is extremely

costly to eradicate. One of the major chemical companies has developed a special spray for the control of Multiflora Rose.

Thousands of acres of farm land in the United States have been taken over by this briar. In our own fields in Pennsylvania we have "lost" acres of land to Multiflora Rose; these acres can only be reclaimed at costs in excess of the value of any crops grown on them for years to come

How did the multiflora pest get started? When it first came to the attention of the agricultural world some thirty years ago it seemed to have certain desirable characteristics which warranted its propagation and use. It produced large numbers of white flowers which became fruit eaten by several species of birds. It appeared effective for erosion control. Its use as a "living fence" appealed to farmers. Agricultural authorities lauded it as "horse high and hog tight" and lasting indefinitely. Its strong sharp thorns and stiff stems made it almost impenetrable. Millions of these plants were set out as fencing all across the country....

Some states have found it necessary to legislate against multiflora rose. It is estimated that 300,000 acres of West Virginia land have been overrun by this pest. This land is rendered unusable for agricultural production unless huge sums are spent to remove

the bramble. The federal government has recognized the problem by paying part of the cost of control. The West Virginia Department of Agriculture has officially declared multiflora rose a detriment to agriculture and a "noxious weed." Planting it in that state is punishable as a misdemeanor. (p.5)

Similar legislation will be enacted in additional states. The Pennsylvania Game Commission and the Pennsylvania state nurseries have discontinued growing it.

We suggest that bluebird lovers plant many trees and bushes for bluebirds but avoid Multiflora Rose like sin.

**Raymond Nelson**  
DuBois, Pennsylvania

#### **Editor's Note:**

Since the point that Mr. Nelson raises appeared originally in an article by George Grant, *Sialia* 2: 40-42, the editor is providing an opportunity for the author to reply.

We thank the Pennsylvania Christmas Tree Growers' Association for permission to reprint several paragraphs incorporated in Mr. Nelson's letter. The material was taken from "Multiflora Rose, A Thorn in the Flesh" which appeared in Bulletin No. 143: March, 1979. The author was Raymond Nelson.

Dear Mr. Nelson:

Thank you for your response concerning Multiflora Rose. I agree that Multiflora Rose can be an extremely serious pest in some parts

(Continued on page 128)

# BLUEBIRD TALES

Mary D. Janetatos

"Are bluebirds known to be demented?" This near-frantic question almost popped out of the telephone on one recent spring morning. The questioner was **Sandy Halleck**. She and her husband **Robert** are new bluebirders who live just two miles away from me.

Sandy had seen her first bluebird when a brilliant male landed in the dogwood tree in her front yard. After we supplied several residents in her neighborhood with nest boxes, we waited to see which ones the bluebirds would nest in. But the birds were in a quandry. They were busy defending the new boxes against reflected intruders who refused to go away. They were trying to chase away their own images as seen in Sandy's picture windows. She reported them slamming into a window with great force and then flying to another to do the same. But the reflected birds were so tenacious that the battle raged on, victorious.

I suggested to her that cutting off the reflection would cause the birds to forget about the "intruders," so she taped newspaper over the outside of the window. This achieved the desired effect and the birds ceased to appear "demented."

Farther away, but still close enough for frequent inquiring phone calls, Roni Lampmann was also embarking upon her first bluebirding adventures. **Roni** and



**John Lampmann** had purchased some sort of nesting box purported to be a "bluebird house" sold by a local chain hardware store. Sad to say, the entrance hole was too small. The Lampmanns watched the male and female bluebird struggling unsuccessfully to enter. My recommendation to Roni was that she ask her husband to take the nesting box back to the store where it was purchased and request that the hole be enlarged to the required 1½ inches precisely. I suggested that she "hold the fort" by standing or sitting right at the site while the box was gone to prevent the birds from coming back and missing it.

She reported to me later that she was sure her neighbors must have thought her crazy because she sat down with a cup of coffee in the middle of her lawn on a rather chilly March day. When the box with the corrected hole was replaced about an hour later the bluebirds moved right in.

Sometimes the questions come by mail. **Virginia State Senator Clive** and **Mrs. DuVal** are Society members who hope to attract bluebirds to nest on their spacious

estate in McLean, Virginia. We soon put the DuVals in touch with **Mrs. J.E. Scott**, also a McLean resident, who has bluebirds nesting in her front yard. It won't be long now, Senator; McLean is one of those fortunate places with plenty of bluebirds. You'll soon have them, too, we'll bet!

Across the Potomac River at Montevideo, the lovely and historic manor owned by the **Austin Kiplingers**, hope runs high that the bluebirds can manage to nest where House Sparrows now hold sway. Would moving the nesting boxes farther away from buildings help?

These episodes are but a sample of how interest in bluebirding is burgeoning. Everywhere the experienced are helping the neophytes, and the prospects become increasingly bright for our beautiful blue feathered friends -- **Sialia**, in all its three species.

Across the land the information is being spread: Canada's **Norah Lane**, **Lorne Scott**, and **Fernand Robichaud**; Minnesota's **Jon Bellisle**; Montana's **Art Aylesworth**; Wisconsin's **Paul Romig**; Pennsylvania's **Bob Schutsky**; Ohio's **Clara Corogin**. The tried and true friends bring in the eager and new friends.

One of those tried and true is **Sam Hall**, of Ashton, Maryland who recently managed to garner an invitation to the very elegant and well attended Annual Flower Mart held by the National Cathedral of Washington, DC each May. There are many dignified social events to which exhibitors are invited. When Sam was invited first to a stylish

fashion show, and then to a Netherlands' Embassy tea party, he was nonplussed. He said that he didn't fully appreciate high style and didn't have time for the tea party. So Sam concentrated on presenting the bluebird story by assembling a very attractive booth resplendent with bluebird nest boxes, books, photographs, and stationery. He was assisted in monitoring the booth by **Florence Porter**, **Myron** and **Mabel Whitney**, all of Rossmoor Leisure World, and by his wife, **Elizabeth**. The weather was cooperative and the day was blessed with success. I still would like to have seen Sam in one of the little Dutch hats made for the occasion by Elizabeth....

The phone rings in the bluebird office while I am already on the phone. A man hurriedly says that he has some questions about his nesting bluebirds in Fairfax Station, Virginia. I ask the inquirer if I can call back, take his number, and go back to the first call. This call was to the phone company itself. The decision has been made by the Board of Directors to have the Society listed officially in the phone directory. After finishing with the plans to have a separate listing (under Bluebirds, and North American Bluebird Society: 301-384-2798), I returned the Fairfax Station call. As if in proof that bluebirds have managed to infiltrate high places and to touch important people, the voice answering my ring said, "Secret Service, may I help you?" So, dear reader, next time you see the President of the United States, carefully guarded by a husky Secret Service man, try to find the bluebird on his shoulder!

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

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of the country and in those areas is banned, perhaps rightfully so. It is, however, still strongly recommended as a wildlife planting in many areas. In central New York, where it is approaching the more northerly limits of its range, it is not particularly invasive. It excels as a wildlife planting for protective cover, nesting, and winter food. Possibly, thanks partly to the Multiflora Rose, Northern Mockingbirds have extended their range into central New York. I have the plant on my property and appreciate its wildlife value.

Certainly a degree of caution is necessary before planting Multiflora

Rose. Consideration for neighboring land and its agricultural use should be foremost.

George N. Grant

#### Art Credits

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Suzanne Pennell Turner: 103, 105, 107, (Tiger Swallowtail Butterfly), 109, 115 (Plummer Farm), 118.

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Founded in 1978, THE NORTH AMERICAN BLUEBIRD SOCIETY is an incorporated non-profit organization determined to increase the populations of the three species of bluebirds on this continent. Inasmuch as the populations of these birds have diminished due to the maladroit actions of human beings, as well as other 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: Students (under 21) and Senior (over 60), \$7.50; Regular, \$10; Sustaining, \$30; Supporting, \$50; Contributing, \$100; Corporate, \$100; Donor, \$250. Amounts over \$5 are tax deductible.

Address:  
North American Bluebird Society  
Box 6295  
Silver Spring, MD 20906

