Slalla means bluebirds. Hence the title of this journal. Technically, slalla is the Latinized, neuter plural version of the Greek word σαλλής, 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 slalla, 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 Slalla which he simply adapted from the species name slalla which Linnaeus had used. Therefore, the scientific name for the Eastern Bluebird is Slalla sialla (pronounced see-aht'-ee-ah see-aht'-iss). Similarly, the Western Bluebird and Mountain Bluebird, the two other species within the genus, were named Slalla mexicana and Slalla currucoles (koo-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 juvenile bluebird for its logo. Since bluebirds almost always choose to raise their young in small enclosed cavities, a young bluebird sitting near a nesting box seemed to symbolize our mission. The hope of any species resides in its young. Because of bluebird nesting preferences, the survival of their young may depend on the nesting box, especially since natural cavities, for a variety of reasons, are disappearing rapidly. The theme of bluebird young nurtured in man-made structures will be a recurring one in our art and literature. We hope that this theme will remind all about the plight of the bluebird, and will stimulate action which will allow this beautiful creature to prosper.

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SIALIA 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 considered. 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 Graeloch Road, Laurel, Maryland 20810.
I would like to thank the membership for the honor of being your President for the coming year.

I also wish to thank Jeanne and Walter Price and the staff of Gunston Hall Plantation for a most memorable setting for the Third Annual Meeting of the North American Bluebird Society. The weather was lovely, bluebirds were conspicuous, and the food and service were excellent.

What would I like to see accomplished in the next twelve months as your President? Though things are looking good at the present time, we cannot afford to be content with the status quo. Our success depends on our membership. We need a sufficiently large membership to keep the printing of *Sialia* from becoming prohibitive and to help provide the necessary funds to carry on some of the projects and goals that have been mandated by the Board. We, therefore, must continue to work to expand our membership.

We need to obtain publicity in any part of the media that is willing to publicize the plight of the bluebird. Our members across the continent can help in order to reach more of the public.

As I noted above we need a strong financial base to ensure not only the daily operation of the Society but also to pursue other projects that need attention. One major area that I would like to see considerably more effort put into is that of finding a solution to the problem of the House Sparrow. This introduced species appears to be one of the most serious threats to expanding the bluebird population. This problem appears to be fairly universal and to date has frustrated most attempts to come up with an effective means of control. Control means more than attempting to kill or exclude a few sparrows here and there. Some people are having limited success, but it is time consuming and is definitely not the final answer for the general bluebirding public.

*Somehow, some way, there must be a more effective way to control or exclude these pests. I think control must come in a nesting box design that will be reasonably effective in excluding the sparrow. Although we have had several promising leads, so far no design has been as effective as we had hoped. More on the House Sparrow problem in a future column.*
This survey is a cooperative project of the North American Bluebird Society and The Nature Society. A similar summary has been prepared by Dr. Zeleny for publication in Nature Society News (formerly Purple Martin News).

Winters present many hazards for most of our wild birds. Those species that remain with us during the winter frequently suffer and sometimes perish from the effects of severe weather and shortages of food. Birds that migrate to tropical climes to avoid other hazards during the course of their migrations and even these birds are sometimes caught by frigid storms in the early spring when the urge to return to their summer homes is so great that they cannot wait for settled weather.

Bluebirds usually remain throughout the winter in the southern half or two-thirds of the United States. Those that spend their summers farther north generally move southward for the winter, although a few of them sometimes remain in our northern states where their chances for survival are not very great.

Bluebirds are not among our hardiest winter birds. Over most of their winter range they depend almost entirely on berries of various kinds for food. When these berries are covered with ice or snow the birds may perish from the combined effects of starvation and cold. During periods of extreme cold accompanied by bitter winds they may succumb to the weather alone even when food supplies are adequate.

The Nature Society for the past four years has conducted annual surveys among bluebird trail operators to determine the occupancy of their nesting boxes for first broods of the season as compared with the preceding year. For the past two years this survey has been a joint effort with the North American Bluebird Society. The results of these surveys depend on a number of factors, of course, but are believed to provide at least a fair indication of the winter survival of the bluebirds, since the greatest mortality of the birds usually occurs during the winter months.

A very heavy loss in the population of the Eastern Bluebird throughout most of the northern part of its winter range was indicated by the 1977 survey (Purple Martin News, Vol. 12, No. 7, p. 15), and a somewhat more moderate loss in 1978 (Purple Martin News, Vol. 13, No. 7, pp. 1-2). These losses in both cases were believed to reflect the effects of the preceding winters which in the affected areas were among the most severe in weather record history. Bluebirds disappeared almost completely from some previously
productive trails, especially in Illinois and Indiana. A modest population recovery was indicated by the 1979 survey following a more normal winter (Sialia, Vol. 1, No. 4, pp. 141-143). Since last winter (1979-1980) was relatively mild, except for a late but brief very cold snap in the Carolinas, a further recovery of the Eastern Bluebird was anticipated.

Trail operators were asked to report how many of the nesting boxes (or their replacements) that were on their trails in 1979 were occupied by bluebirds for first brood nesting in 1979 and how many in 1980. Since some of the trails were enlarged in 1980 operators were also asked to report the total numbers of their boxes occupied for first broods in 1980. In cases where exact figures were not known, operators were asked to report estimates.

Reports were received from 103 bluebird trail operators in 33 states or provinces who maintained an estimated total of 4,089 nesting boxes in 1980. The results obtained in the 1980 survey are summarized by states and provinces and by bluebird species in the accompanying tabulation.

The data indicate probable significant increases in the populations of all three species of bluebirds between the spring of 1979 and the spring of 1980. Calculations were based both on the same numbers of available nesting boxes in both years and on the total numbers of available boxes, the latter being greater in 1980 than in 1979 due to the expansion of some of the trails. The overall percentage increases in nesting box occupancy in 1980 over 1979 for each species and for each method of calculation is as follows:

<table>
<thead>
<tr>
<th>Basis of Calculation</th>
<th>Percentage Increase in Box Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E.B.</td>
</tr>
<tr>
<td>A. Same number of boxes both years</td>
<td>8.4</td>
</tr>
<tr>
<td>B. Total number of boxes each year</td>
<td>35.1</td>
</tr>
</tbody>
</table>

(E.B. = Eastern Bluebirds, M.B. = Mountain Bluebirds, W.B. = Western Bluebirds, A.B. = All Bluebirds)

The increases shown in line A probably reflect the true increases in population in 1980 over 1979 more closely than those in line B. However, if no additional boxes had been added to any of the trails in 1980 a somewhat greater occupancy of the original boxes probably would have occurred. The true increases in population, therefore, probably were somewhat greater than those indicated by line A.

It should be understood that the data obtained in this survey apply only to the bluebird trails for which reports were received, and that they do not necessarily reflect the true situations in the states as a whole in which the trails are located. This is particularly true for those states from which reports were received on only one or two small trails. We hope that in future surveys reports will be received on much larger numbers of trails in which case population

(text continued on page 6)
First Brood Nesting Survey -- 1980
Summary of Results

<table>
<thead>
<tr>
<th>State or Province</th>
<th>No. of trails</th>
<th>No. of boxes on trails</th>
<th>Boxes used for 1st broods in 1979</th>
<th>Total boxes on trail in 1980</th>
<th>Boxes used for 1st broods in 1980</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1979</td>
<td>1980</td>
<td>1980</td>
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<tr>
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<td>1</td>
<td>30</td>
<td>11</td>
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<td>112</td>
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<td>5</td>
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<td>12</td>
<td>2</td>
<td>3</td>
<td>15</td>
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<td>8</td>
<td>2</td>
<td>2</td>
<td>12</td>
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<tr>
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<td>57</td>
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<td>1</td>
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<td>139</td>
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<td>155</td>
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<td>7</td>
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<td>27</td>
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<td>8</td>
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<td>10</td>
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<tr>
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<td>76</td>
<td>17</td>
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<td>69</td>
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<tr>
<td>Texas</td>
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<td>17</td>
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<td>13</td>
<td>17</td>
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<tr>
<td>Virginia</td>
<td>11</td>
<td>321</td>
<td>219</td>
<td>223</td>
<td>404</td>
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<tr>
<td>West Virginia</td>
<td>3</td>
<td>43</td>
<td>16</td>
<td>15</td>
<td>65</td>
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<tr>
<td>Wisconsin</td>
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<td>2</td>
<td>0</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103</strong></td>
<td><strong>3103</strong></td>
<td><strong>741</strong></td>
<td><strong>603</strong></td>
<td><strong>4069</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Mountain Bluebirds</th>
</tr>
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<tbody>
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<td>Idaho</td>
</tr>
<tr>
<td>Saskatchewan</td>
</tr>
<tr>
<td>Washington</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Western Bluebirds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
</tr>
<tr>
<td>Colorado</td>
</tr>
<tr>
<td>Washington</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

* Number of boxes on trails in 1979 (or their replacements) that were occupied by bluebirds for first broods in 1980.
trends by states should be reflected more accurately. In any event the survey indicates a very encouraging trend. And it is unlikely that two consecutive catastrophic winters such as those experienced in 1977 and 1978 will occur again during the lifetimes of any of us. We hope that our bluebirds will have a brighter future, and they probably will if enough of us will help provide them with suitable places to nest where they will be protected from their enemies.

Perhaps the brightest spot in this year's survey was the report received from Jess and Elva Brinkerhoff of Richland, Washington. They reported that all of the 500 nesting boxes on their trail last year were occupied by bluebirds. So they expanded their trail to 590 boxes this year and again bluebirds occupied all of them. The Brinkerhoffs said that while they were working on their trail this spring the bluebirds seemed to have a waiting line. They hovered overhead in pairs and any new nesting boxes placed on the trail were occupied immediately. The birds were mostly Mountain Bluebirds but there were also some Western Bluebirds among them. Surely the Brinkerhoffs are envied by all the rest of us bluebirders!

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A NOTE ON NESTING BOX ENTRANCE HOLES

We hope that all Sialia readers have read the thrilling article "Our Success Story" by Jess and Elva Brinkerhoff in Sialia 2:143-145. Surely their bluebird trail is the envy of all of us!

The Brinkerhoffs believe that Mountain and Western Bluebirds prefer a 1-5/8 inch entrance hole to the usually recommended 1-1/2 inch hole in their nesting boxes. This is probably true since most of the natural cavities that bluebirds have used throughout the years before the starling invasion have quite likely had entrances larger than 1-1/2 inch round holes. However, starlings are able to enter 1-5/8 inch holes and, wherever these alien birds are numerous, they will usurp most or all nesting boxes with openings that large. For that reason, we continue to recommend strongly the 1-1/2 inch entrance holes wherever there are starlings. Experience has shown that these holes are large enough for all three species of bluebirds and that they will effectively exclude the unwanted starlings.

Lawrence Zeleny

---

Correction

A correction should be made in the article, "Causes of Decline of the Western Bluebird in Oregon’s Willamette Valley," 2:4. The first sentence under "Habitat Destruction" on p. 134 should read as follows: it is conceivable that white settlement in the Valley, beginning around the mid-1800's, actually created more good bluebird habitat than it destroyed.

---

FIRST REGIONAL MEETING

The first regional meeting of the NABS will be held June 26-28, 1981, at Brandon, Manitoba. Brandon University will be the host. Additional information concerning the meeting will appear in or with the Spring 1981 issue of Sialia.
In early June 1980, I observed an instance of unusual behavior exhibited by a family of Eastern Bluebirds (Sialia sialis) near the Maryland University Agricultural Research Farm in Upper Marlboro, Prince George's County, Maryland.

While I was on vacation, a friend monitored my trail during the week of 13 June 1980. As is his habit, he closed the hole of one of the bluebird boxes with a cloth while preparing to open the top to observe. In this case, a completed bluebird's nest. He became preoccupied with verifying the color marking of the young birds fledged from the previous brood and forgot to remove the piece of cloth which occupied the hole of the box. Upon returning on 16 June 1980, I discovered it still in the hole. As I removed the cloth, I noticed activity around a second and adjacent box about 30 m distant from the first box. I identified a male, a female, and four 40-45 day old color-banded young, fledged earlier from the first box. The female and at least one juvenile male and female were carrying and depositing dried grasses into the box. The male bluebird was not observed exhibiting this behavior, and remained perched on a fence post less than 2 m away. These facts confirm Zeleny's observation that "nest building is performed exclusively by the female bluebird, although the male may occasionally provide a small portion of nesting material." Upon approaching the second box in order to look inside, the immature birds took refuge in the nearby trees and the adult birds returned to the first box. Looking into the second box, I observed a partially built nest which consisted of a ring of dried grass around the sides, leaving the bottom of the box still visible.

Pinkowski had observed that occasionally nesting material had been placed by juveniles during nest inspection as part of the social interactions of maturing fledglings. From the quantity of nesting material, (more than the beginning of a typical nest), it was apparent that the nest had been under construction for some time.

The female returned to lay and hatch five eggs in the nest box used for the first brood. These same juveniles remained in the area and assisted the parents in feeding their five younger siblings. When the juvenile birds fed, an adult bird often accompanied the juvenile feeding. The adult bird would perch approximately 5 m from the box while the juveniles were involved in feeding the nestlings. Although the parents did feed alone, they did not interfere with the feeding activities of the juveniles at the nest box.

The most unusual aspects of these observations were the nest building by the juveniles and the male bluebird watching passively as the juveniles added material to the nest. Not once did the male exhibit any signs of aggression toward the juveniles.

Literature Cited:


I would like to thank Paul Jung, Ben Pinkowski, and Larry Zeleny for reviewing the initial draft of this note.

11817 Fairgreen Lane
Upper Marlboro, MD 20774
A PROTHONOTARY WARBLER NEST BOX

Lawrence H. Walkinshaw

The diagrammed nest box for Prothonotary Warblers has been very successful in both Michigan and Tennessee. Especially along Michigan's southern rivers the Prothonotary Warbler sometimes suffers from competition with large numbers of House Wrens. Farther north, on the Muskegon and White Rivers, this problem does not occur nor does it occur at Reelfoot Lake, Tennessee. I had 25 nest boxes in use on the Battle Creek River and about 10 on the Kalamazoo River near Battle Creek, Michigan, from 1936 until 1950. All houses were used at one time or another. In order to reduce wren competition 20 additional boxes were placed along the White River in Oceana County, Michigan, in 1951. Twenty-four houses were placed along the south end of Reelfoot Lake and the spillway in 1939 and 1940 and some were used by three pairs of Prothonotary Warblers in a single season. Several boxes had a pair which nested twice during a season. They laid five eggs for their first clutch and four eggs for the second. Nearly all houses were placed on trees or stubs facing the river or open water and were directly above the bank.

I found the most acceptable box was not too large. The front was 6 x 4 inches with a 1¼ inch opening set down 1 inch from the top. (They did nest in boxes in which the top one-quarter was left open, but Brown-headed Cowbirds parasitized them then.) The sides were 6 x 3 inches and the back 8 or more x 4 inches. The top (5 x 4 inches) protruded about 1 inch beyond the front. Normally, I used hinges to fasten the top to the back so that I could examine the nest and its contents. A hook or nail was used to secure the top to the front. The bottom (5 x 4 inches) completed the box. I nailed the box onto a tree or post placed for the purpose right on the river bank or in shallow water a few feet from the bank. In most regions the birds preferred fairly heavily wooded stream banks; or at least liked a good sprinkling of trees with some nearby shrubs.

5230 Timberlane Road
Lake Wales, FL 33853
Prothonotary Warbler Nest Box

Diagram by L.H. Walkinshaw
BRING BACK BLUEBIRDS TO VIRGINIA

Mary A. Marlar

In the spring of 1980, the Northern Neck of Virginia Audubon Society constructed and sold, through local merchants, 600 bluebird nesting boxes. This project, in addition to assisting the survival of the beautiful and threatened Eastern Bluebird, helped to increase chapter membership by over 20%, put the chapter treasury substantially in the black, and created a sense of friendship and team effort among chapter members.

In three earlier years (1974, 1975, and 1976) a total of 800 nesting boxes had been marketed with excellent results. Changes made in 1980 reduced the cost of construction and broadened the marketing area which resulted in an even more effective and profitable campaign.

As a money-making project the sale of bluebird nesting boxes has one factor in its favor to which our chapter is extremely sensitive: it avoids competition in any serious way with local merchants. Those merchants who cooperated in the sale were surprised and pleased by the customers brought into their stores and became avid bluebird boosters. In 1980 it became apparent within days that the 400 boxes initially constructed and distributed would not meet the demand, so the construction crew built an additional 200 boxes.

Construction

Using L. Zeleny’s recommended design for bluebird nesting boxes, the construction chairman ordered the necessary materials. In his home workshop he and two crew members cut the wood into the correct sizes, bored the necessary holes, and reamed the parts for an efficient assembly line. Boxmaker’s “jigs” or templates (see accompanying diagram) devised by my husband made mass production easy. In six or seven hours, five or six reasonably handy craftsmen (and women) were able to assemble 400 boxes with all promotional materials in place and to stack them onto trailers or load them into station wagons for delivery while having a lot of fun doing it.

In 1975 and 1976 the material chosen for the boxes was redwood; in 1980 Western cedar was selected as being both cheaper and easier to work with. Our local suppliers provided all construction materials at cost.

Marketing

Local merchants were invited to participate in the project by selling the nesting boxes at no profit to themselves. In 1980, fifteen merchants in a seven county area participated. Many were “feed and seed” stores, but they also included two grocery stores, a plumbing and hardware shop, one large drug store, and the two outlets of our
building supply dealer. All were cooperative, but most initially underestimated the number of boxes they would sell. Within a day or two the chairman’s phone was busy with frantic calls from dealers for more boxes.

Boxes were delivered to the stores and displays set up in mid-February when bluebirds in Virginia are first seeking nesting sites. Each display was surmounted by an illustrated poster and accompanied by a generous supply of leaflets which explained why bluebirds need help and what type of terrain is suitable for the nesting box, along with other basic information. These were a good sales aid and enabled the purchaser to acquaint himself with bluebird requirements without tearing instructions off of a box. The selling price in 1980 was $4.50 with no Virginia sales tax required since all proceeds went to our tax-exempt chapter.

Promotion

The key to success for a campaign of this kind is a lively and sustained publicity drive. Each of our rural counties is served by a weekly newspaper. The first news article (with picture) announcing the Bring Back Bluebirds campaign and listing the cooperating stores was released the week the displays were set up. Follow-up articles were carried by the papers each week thereafter for three or four weeks until all boxes were sold. Three local radio stations were provided with a selection of short announcements.

The first news articles were quite lengthy to give maximum impact to the campaign. In the last couple of weeks brief releases stating that “a few boxes” were still available and listing the cooperating merchants sufficed. A suitably captioned picture was always included. Permission was granted by Jeanne Price and Virginia Wildlife magazine to reprint her article, “Bluebird Boosters Wanted.” This was carried by the newspapers during the second week with a “box” insert about our campaign. As soon as the newspaper publicity came out there was a rush to purchase boxes, much to the delight of the cooperating merchants.

Printed Materials

A sheet of instructions for placement and maintenance of the box and a registration card giving name and address of the box owner (for contact in the fall census) were stapled to the back of each box. The registration card could be left at the place of purchase or mailed to the chapter. Inside the box the purchaser found a letter inviting membership in our local chapter and providing meeting and field trip schedules, upcoming programs, etc., along with an Audubon membership brochure.

A few other items required reproduction: a letter to newspaper editors in advance of the campaign enlisting their cooperation; a sheet of instructions for each cooperating store giving price, tax-exemption information, and the name and telephone number of a chapter member to contact for additional deliveries; and a copy of all the weekly news releases. All of these materials were typed in “camera-ready” copy by our members and reproduced by photo-copying.
methods so that no costly typesetting or platemaking was involved

Registration and Follow-up

Purchasers were asked to fill out a registration card so that the chapter could contact them in the fall to determine the effect of the boxes on the bluebird population. In 1975 and 1976 a small box was attached to the display poster for deposit of registration cards resulting in a very high percentage of registration (254 boxes registered out of 350 sold in 1975). In 1980 this device was not included; cards could be given to the merchant or mailed to the chapter. The result was a smaller registration rate: 289 boxes registered out of 600 sold. Each registrant was sent our fall newsletter which contained a “Bluebird Census Report.” This form was designed as a self-mailer which could be folded, stapled, stamped, and dropped into the mail. The following statistics compare results from the 1975 and 1980 bluebird census.

<table>
<thead>
<tr>
<th></th>
<th>1975</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boxes sold</td>
<td>350</td>
<td>600</td>
</tr>
<tr>
<td>Boxes registered</td>
<td>254</td>
<td>300</td>
</tr>
<tr>
<td>Reports received</td>
<td>93</td>
<td>---</td>
</tr>
<tr>
<td>Boxes covered by reports</td>
<td>163</td>
<td>267</td>
</tr>
<tr>
<td>Bluebird nestings observed</td>
<td>59</td>
<td>164</td>
</tr>
<tr>
<td>Eggs laid</td>
<td>169</td>
<td>681</td>
</tr>
<tr>
<td>Eggs hatched</td>
<td>131</td>
<td>578</td>
</tr>
<tr>
<td>Bluebirds fledged</td>
<td>116</td>
<td>535</td>
</tr>
</tbody>
</table>

Of the 163 boxes covered by the 1975 report 34, or 21%, were used by bluebirds and 116 fledglings were added to the bluebird population. Some 43 boxes were used by other species, primarily sparrows (40%), chickadees (37%), titmice (14%), and wrens (9%). Most of the boxes that did not attract bluebirds were judged by their owners to have been poorly located or installed too late in the season.

Of the 267 boxes on which reports were received in 1980, 6 (2%) were not monitored as to bluebird activity; 94 (35%) had no nestings and were not part of a group that had nestings; 167 (63%) had nestings or were part of a group of boxes in which one or more nestings were observed. Most reports cited bluebird activity around the nesting boxes even where nestings did not occur. Only 20 reports said that no bluebird activity was noted or were silent on the subject.

Impact on Membership

According to preliminary reports, our chapter’s membership increased by over 20% from 1 July 1979 to 30 June 1980. Most of the increase was recorded during the period of the bluebird campaign and many of the new enrollees could be identified as box purchasers. A sustained recruitment effort was carried on during the campaign period using other methods; we are convinced, however, that our Bring Back Bluebirds campaign was our most effective recruitment tool.

Bluebirds appear to be making a slow comeback in Tidewater, Virginia. The placement of nesting boxes for their use is undoubtedly a factor; in many neighborhoods where nesting boxes are in place, residents report substantial (continued on page 40)
Bluebird Boxmaker's Jigs

Jig #1

1½" x 11½"

3½" high x 4" wide

Assembly Instructions

1. Place pre-cut side and back pieces in Jig #1, long sides up. Nail back panel (1 nail in bottom, 2 in each side).
2. Invert and move to Jig #2. Nail front panel (1 nail in bottom, 2 in each side).
3. Remove. Nail side pieces to bottom (one nail each side).
4. Add top support cleat.
5. Insert membership recruitment material in box.
6. Secure top with eye screw.
7. Staple instruction sheet and registration card to back of box.
My Triumphant Moment

Edward Mullins

In the days before bluebirds vanished from the city (and my backyard) I had the pleasure of teaching a male bluebird to eat from my hand—a feat that required three time-consuming lessons and much patience.

Bluebirds nested in my backyard for more than 30 years. In those days I did a little summer bird feeding, the menu being peanut hearts which is the portion removed before making peanut butter.

At the time I made an attempt to teach a bluebird to eat from my hand, my feeder was located in a redbud tree about 40 feet from a nesting box containing five bluebird nestlings. I first removed all food from the feeder. I then stood as close to the redbud tree as possible, filled my hand with peanut hearts, and placed it on the feeder. The male bluebird cautiously approached the feeder giving my hand several long looks. Despite his obvious reluctance to come closer there were five squawking babies begging for food not far away. Finally, he gently alighted on my hand, filled his beak with the soft food, and flew to the nesting box with the bounty for his babies. After allowing him to come to my hand several times while it was resting on the feeder, I moved my hand a short distance away from the feeder. Again the bluebird hesitated for some time before taking the risk and alighting, but the hungry baby “blues” apparently influenced him.

After a few days of this exercise I moved away from the tree with the food held in my outstretched hand; this was the most difficult test. Eventually he made the move and helped himself. That was a triumphant moment for me.

My wife and son had been away for a week. On their return I was anxious to show them my success. After watching the act my eight year old son said, “If you can do it, I can too.” I had my doubts, but he followed my example and to my happy surprise and his great pleasure the bluebird did not hesitate to help himself.

5315 28th St., N.W.
Washington, D.C. 20015

Editor’s Note:
We thank the Audubon Naturalist News of Washington, D.C., for permission to reprint the above feature which originally appeared in the January 1980 issue entitled “Birdfeeder Exchange—a note from the past.”
Review of Recent Literature on Bluebirds

Ben Pinkowski

Gary, H. L. and M. J. Morris. 1980. Constructing wooden boxes for cavity-nesting birds. USDA Forest Service Research Note RM-381.--The authors describe use of nest boxes by 15 species of birds, including Western and Mountain Bluebirds, in Colorado's Front Range Ponderosa Pine forests. Two box sizes having 1½ and 3-inch entrance diameters were put up and both bluebird species used the larger boxes when other sites were not available. Of 100 boxes placed in the Manitou Experimental Forest near Colorado Springs, Western Bluebirds comprised 70 (68%) of 103 breeding pairs that fledged young over a two year period. Especially interesting to local bluebirders.

Herlugson, C. J. 1978. Comments on the status and distribution of Western and Mountain Bluebirds in Washington. Western Birds 9:21-32.--Timed censuses in six habitat types indicated that both species were common on burns, whereas only Mountain Bluebirds were recorded on farmland and subalpine habitats. Western Bluebirds were most abundant on the edges of Ponderosa Pine forest. A comparison with historical records indicates that, although the distribution of Mountain Bluebirds evidently changed little over 20 years, the Western Bluebird is more restricted than formerly. Accurate distribution maps are included.

Pitts, T. D. 1978. Foods of Eastern Bluebird nestlings in northwest Tennessee. Journal Tennessee Academy of Science 53:136-139.--"Primary foods were caterpillars, grasshoppers, spiders, and crickets.... Potential food items increased in number and size from April through September." A 10 cm long skink was fed to a fully-grown nesting, and houseflies were fed to young when cattle grazed nearby.

Sloan, N. F. and D. J. Carlson. 1980. Eastern Bluebird home range determination using radio telemetry. Inland Bird Banding 52:20-22.--Data were obtained on three males breeding in lumbered Jack Pine forests in Baraga County, Michigan. Transmitters equipped with an 11 inch whip antenna and weighing 4 grams were attached with epoxy glue to the birds' backs. Mean territory size was 2.7 acres although the authors note that broods were reared in boxes only 200 feet apart.

Thompson-Cowley, L. L., D. H. Hefter, G. D. Schmidt, and E. K. Eltzroth. 1979. Acanthocephalan parasitism in the Western Bluebird. Avian Diseases 23:788-771.--The internal parasite Plagiorynchus formosus was found during necropsies of two male and two female Western Bluebirds in Oregon. The endoparasite, which is believed to have contributed to the death of the birds, may have been contracted through sowbugs, an alternate host and "common prey species for ground-feeding bird." Excellent photographs.

Persons having recent articles on bluebirds for review (other than those published in Slalia) or desiring to review articles are asked to contact Ben Pinkowski, Chairman, NABS Research Committee, P.O. Box 308, New Town, ND 58763.
A trail of 108 boxes through the rural and suburban areas of mid-Dutchess county is in its nineteenth year. Starting with 16 boxes the Ralph T. Waterman Bird Club has long been helping to bring back a species that in the 1950’s was steadily declining in numbers. Although the Eastern Bluebird is the state bird of New York, I am sure most residents have never seen or heard one. However, with well-managed trails over the entire state, I believe that within ten years the bird’s soft warble and flashing blue could be a familiar sight and sound on the farms and perhaps in suburban developments as well.

The trail, which is divided into five sections, is monitored by members of our bird club who keep detailed records of their weekly visits.

The blowfly larvae have become a real problem in the last two seasons. Prior to 1979 only an occasional grub would be discovered on a nestling, but this year and last high mortality appeared in the early broods. It is very discouraging to have a box of healthy nestlings one day and then find them all dead a day or two later. We are now dusting nests with rotenone. In boxes where heavy infestation is suspected, we remove the entire nest, rebuild it of material at hand, and then replace the young. This has been entirely successful in all attempts; however, it takes real dedication on the part of the monitors since these boxes must be visited oftener than weekly.

Another recent problem predator is the raccoon. Most of our boxes are mounted either on pipe 1 to 1½ inches outside diameter or on metal fence posts. A raccoon can climb anything, I believe. From one box I lost an adult bluebird in early May. A second nest was built. The young and one adult disappeared in late June. I then greased the pipe with axle grease and put moth crystals on the ground. A third nesting was attempted. Eggs were laid and young hatched. When they were a week old I discovered the wings of both parents on the ground under the box. Next year predator guards will be added to some of our boxes.

In spite of all the sad things that happen our trail has brought off many successful broods. Most of our pairs nest twice and it is not rare to have a few raise three broods.

We can tell people where bluebirds may be seen at most seasons of the year because a few winter over each year. Indeed many residents of Dutchess county are seeing their state bird for the first time as a result of our efforts.

354 Shunpike
Clinton Corners, NY 12514
The Passing of the Bluebird

Chas. S. Reid, Walhalla, S.C.

Many of our readers undoubtedly will agree with Mr. Reid’s remark that the “bluebird is passing forever.” The fact that this lament was published in 1899 helps us to appreciate the precarious position occupied by bluebirds for decades in many areas of the country. The editor’s note at the end is the original as is the highly embellished cover of The Drey which is reproduced for its historical flavor. Our thanks to Robert M. Patterson for providing this treasure.

As I wander among the trees of the forests and along the brooks and hedges, there is one sweet voice I miss from the sylvan chorus which makes the spring day joyful with its music. There, among the shrubs along the brook are my old friends, tanagers and brown thrushes, busily engaged in their nesting, while ever and anon their clear, sweet notes join the general woodland chorus. Yonder, on the very topmost twig of a large white oak, sits the mockingbird, speaking to bird nature in all its many languages. His song sends a thrill of ecstasy through my being which is only increased when the melody is momentarily strengthened by a rare strain from the throat of his cousin-german, the brown thrush. Now, a dozen little warblers join their voices in the choral effort, and the rare medley seems full, but for the absence of one sweet voice—that of the bluebird, whose clear, liquid trill is no longer heard along the hedges and fences.

Beneath the old apple tree in the orchard, where I once loved to linger, dreamily drinking in the song of the bluebird as it sat upon the fences, ever and anon darting like a brilliant rocket into the air to catch some unwary insect which its marvelous eye had seen, I linger now in vain. The voice which was once the song-life of the orchard is heard no more; its liquid measure only comes back to me through the blessing of memory’s dream, faintly, like an echo, yet soothingly. How its sweetness once thrilled me with its living strength, filling my day dream with music, sighing plaintively when I was sad, trilling blithely when I was joyful; soothing away my sorrows with a song, and voicing my joys in a lay.

Around the hollow of the old gate post and the eaves of the barn where the bluebirds nested, what a flutter there was at evening when the fledglings began to fly—what rare kaleidoscopic figures of blue and white and gray in the gold of the setting sun; while the strains of many voices filled the evening atmosphere with song!

The bluebird was our friend; it brought its song to our doorstep to fill us with cheerfulness, while it served us in many ways that we knew not of. Throughout the day it would sit among the shrubs of the hedge or upon the gate posts and fences, carefully watching our gardens and fields, and freeing them from thousands of insects which come to retard the growth of, or to destroy, the young shoots, buds, or fruits of our cereals and garden vegetables.
But an invincible enemy came from over the sea, invading our fair home of the bluebirds, waging a war of extermination against them, which has not ceased until now, when the bluebird is seen no more happily flitting here and there in the sunlight, and the sweet, thrilling song comes no more to our ears, bringing its measure of joy and love. The place of our poor lost bluebirds is taken by their enemy, the English Sparrows, which, throughout the day, fill our ears with their unorganized chatter. The sparrows have driven the bluebirds away from human habitations, far back into the forests, where they have sought the dense shrubbery along the streams for their home, building their nests in stumps and knotholes of fallen and decaying tree trunks. Here they have met with other enemies in reptiles, high waters, and rigidly cold winters, which have slowly continued the work of extermination begun by English Sparrows against the best friend man ever had among birds.

The bluebirds are gone; they are almost extinct in the middle and central Southern States, and only a few of them are left in extreme southern portions of the States. A few years ago every post seemed to be occupied by a bluebird, and the atmosphere was mellow with the music of their happiness. But now, while I wander through the woods, despite the efforts of the songsters to enliven every metre of the air with melody, I miss that one sweet voice, and deep sadness fills my bosom when I reflect that the bluebird is passing forever—that in a few more years its voice will be no longer heard in any portion of our land, which, though so rich in all things else, will then be so much poorer in the loss of the beautiful, sweet-voiced bluebird.

(We can comfort the author of this lamentation by the assurance that the case is not so bad as all that. English Sparrows harass and drive away bluebirds, and many of them are sometimes killed by stress of weather; but Sialia sialis is in no present danger of extinction.—Ed.)

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Request for Assistance

During the spring and summer of 1980, the Muddy Run Ecological Laboratory conducted an Eastern Bluebird banding project at the Muddy Run Project Area, near the towns of Holtwood and Drumore, Lancaster County, Pennsylvania. Bluebirds were banded with numbered, colored (red, yellow, green or blue) leg bands in addition to the standard Fish and Wildlife Service leg bands.

Observers of these birds are asked to report sex, exact location, date, time of day, number of bluebirds in the flock, number (if possible) as well as color and position of bands (e.g. left leg green over metal or left leg green, right leg metal). Please report sightings along with your name, address, and telephone number to the Bird Banding Laboratory, Laurel, MD 20611, with a copy to Robert M. Schutsky, Muddy Run Ecological Laboratory, P.O. Box 10, Drumore, PA 17518 (phone 717-548-2121). All reports will be acknowledged.
Aptosochromatism—Birtwell—Keeler

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The Osprey Company,
321-323 4th Street, Washington, D. C.

As well be out of the Bird World altogether as go without the Osprey.

Enter as Second-Class Mail Matter at the Washington, D. C., Post Office, 1898.

Publishers' Note.—We are obliged to go to press without the colored plate ordered to illustrate Birtwell on Aptosochromatism. We will publish the Birtwell plate in the May number, if received in time.
THE LINCOLN PARISH LOUISIANA BLUEBIRD TRAIL


During the winter of 1977-78 a group of Wildlife Biology students at Louisiana Tech University in Ruston, Louisiana, inspired by Lawrence Zeleny's *The Bluebird*, organized the Field Biology Project Society with the intention of establishing a trail for the Eastern Bluebird (*Sialia sialis*) in Lincoln Parish. This part of northwestern Louisiana is characterized by gently rolling hills and woodland. Most of the area is utilized for timber production and agricultural purposes such as pastureland. At its peak our group numbered about ten people. A contribution of $50 was received from the Blooming Garden Club of Ruston for construction of nest boxes.

Fifty-one top-opening boxes were constructed with the donation. Area landowners were contacted and permission received to mount the boxes on fence posts in suitable habitat. Most persons who were contacted remarked on the scarcity of bluebirds in the area in recent years. The habitat where the boxes were placed consisted, for the most part, of open pastures interspersed with woodlots and farm ponds. By 2 April 1978, 49 boxes had been placed within an area of approximately 25 square miles.

The boxes were monitored two to three times weekly for the duration of the 1978 nesting season. Data recorded included the following items: progress of nest construction; number of eggs; number, age, and condition of young; number of young fledged or lost; and any unusual nesting phenomena. Trail operator observations in which nesting activity was recorded numbered 563. Nesting activity occurred from approximately 12 March to 23 August and involved 39 (80%) of the boxes. Six boxes were utilized once, 24 boxes twice, and nine boxes three times for a total of 81 nesting attempts. The peak of nesting activity occurred in the period 16-31 May when 32 boxes were being used simultaneously.

Of the 81 nesting attempts 7 (8.64%) were abandoned before egg laying. A total of 339 eggs were laid during the other 74 nesting attempts. Ninety-seven eggs (28.61%) did not hatch; 66 (19.47%) were infertile or abandoned; 23 (6.78%) were lost due to accident or predation; and 8 (2.36%) disappeared unaccounted for. Out of 242 hatchlings (71.39% of all eggs laid), 13 were lost to accident or predation and 5 disappeared unaccounted for. A total of 224 young bluebirds fledged. This represented a fledging success rate of 66.08% of all eggs laid and 92.56% of all eggs hatched.

During the 1978 nesting season, five clutches of white eggs were laid.
In two boxes, each of which was used twice, both clutches consisted of white eggs suggesting utilization by the same birds (or at least the same female) successively. The boxes were not used by any other species during the 1978 nesting season.

During the winter of 1978-79 the Blooming Garden Club made a further donation of $30 for repair of boxes and expansion of the trail. Of the 62 boxes available for the 1979 nesting season, 58 were utilized by bluebirds with one box used successfully by Carolina Chickadees (Parus carolinensis) for a total utilization rate of 95%. Six boxes were used once, 27 boxes twice, and 25 boxes three times and four nesting attempts occurred in one box. (In the latter case two broods fledged while the other two attempts failed due to predation.) A total of 632 eggs were laid of which 475 (75.15%) hatched. Of these hatchlings, 439 fledged representing a fledging success rate of 69.46% of all eggs laid and 92.42% of all eggs hatched.

During the 1979 nesting season, six clutches of white eggs were laid. Four instances of parasitism by the Brown-headed Cowbird (Molothrus ater) were noted. All occurred in a group of three boxes in the same vicinity. (When we checked the boxes during the summer of 1980 we observed cowbirds in the same area again.) Parasitism occurred twice in one of the boxes. Once a cowbird egg was removed, twice young were removed (to Red-winged Blackbird nests), and once an egg disappeared. After removal of cowbird eggs or young, all bluebird nestlings subsequently fledged. It is not known whether the size of the entrance hole in the parasitized boxes was larger than 1½ inches in diameter. All holes were made with the same 1½ inch diameter drill press, but measurement was not made after the cowbird parasitism.

The number of bluebirds fledged from the Lincoln Parish Trail totaled 663 for the combined 1978 and 1979 nesting seasons. The number of boxes available in 1979 was 17.70% greater than in 1978. A 46.70% increase in the number of eggs laid and a 49.00% increase in the number of young fledged was noted in 1979.

Our nest boxes were turned over to the individual landowners after the 1979 nesting season. This was necessary because the student members of the group graduated and moved from the area. A visit to the trail area during early August 1980 revealed that most of the boxes were still in good condition. The biggest problem appeared to be failure to clean the boxes between successive nesting attempts. The nesting success rate has probably dropped somewhat as a result; however, the number of active nests for that time of the nesting season was comparable to that of the previous two years. It is our hope that through individual landowner maintenance of the boxes, the Lincoln Parish Trail will continue to aid in the recovery of the Eastern Bluebird.
HAPPINESS IS BLUEBIRDS

John M. Edwards

When we moved to the country some years ago an unexpected bonus was the variety of bird and animal life. The robins, swallows, wrens, thrushes, mockingbirds, doves and blackbirds seemed to thrive. We even had a pair of bluebirds who perched on the high-tension wires; however, in the spring of the fourth year the bluebirds failed to stay. They appeared for a time and left, and the fifth year they didn't show up at all.

A friend, hearing of my disappointment, brought me a National Geographic article (151: 854-865) recounting the depletion of bluebirds from loss of habitat and the depredations of starlings and sparrows. I found it shocking. There was a solution suggested: install a proper bluebird box with a 1 ½ inch entrance hole in the proper habitat and watch the box. If the competitive House Sparrows were regularly evicted, behold! Bluebirds. The article was resplendent with a success story of 100 new boxes placed along the Appalachian Trail fairly bursting with bluebirds.

After several conversations with fellow bluebird lovers (who had boxes but no birds), I resolved to give it a try. A catalog offered three kits for a reasonable sum. These were duly assembled in February and placed in the cellar.

Sunday, 10 March, dawned a blustery 40 degrees. Out of necessity I was hogging out a couple of weed-infested drains down along the west edge of the pasture. The ubiquitous blackbird clans were swooping in noisy black clouds while a few early robins managed to maintain a melodic chorus.

All of a sudden a small, grayish bird the size of a large sparrow caught my eye as it alighted about ten fence posts away. I am always alert to the various bird shapes and colors and something seemed just a little bit different from the usual brush sparrows even at that distance. I dropped my digger and eased along the fenceline. To my amazement "Ms. Gray" was joined on the fence wire by a handsome "prince" sporting an azure blue coat and a rose-colored waistcoat. I caught my breath. The bluebirds were back! Or were they just passing through on their way north? And what were such lovely harbingers of spring doing here so early and in such unpleasant weather? I learned later that bluebirds ARE early arrivals and will nest two or three times a season if un molested.

Their arrival galvanized me into action. I literally ran up the hill to the house, grabbed two of the boxes, and hurriedly mounted them on fence posts about three hundred yards apart. This seemed to be a logical area to place them because I had discovered that the secret of the birds' past habitation had been a lovely knothole in one of the older fence posts which finally had split open.
During the next few days my wife and I watched anxiously as the pair swung on the fence wire and fluttered to the meadow floor for insects. We saw the female enter the entrance hole a couple of times. They seemed to be taking up residence. The next weekend we checked the boxes and there were nests in both. Our new neighbors were a bit indecisive, but it was exhilarating even to see them after a two year absence. The forecasts of doom from the nature news articles were pushed to the back of our minds.

We decided the bluebirds should have names like our regular pets. Since the male not only looked princely in his exquisite blue suit, but also deported himself in a calm, lordly manner, surveying his domain from his high perch, we decided on Albert (Prince) and Lillie after the characters in the TV Masterpiece Theatre hit, "Lillie."

Albert and Lillie appeared to settle down in the more northern of their two apartments. While driving to work, I was cheered by glimpses of them perched either on the fence or on the electric power line overlooking the meadow. On wet, dreary days they completely disappeared, and I liked to think that they were safe in their dry birdbox waiting for the return of the sun.

Meanwhile, after rereading several bird book selections, I had become quite apprehensive. These characterized our couple as gentle, lovely, useful birds but so non-aggressive that they were unable to hold their own against any competing birds, except perhaps the tiny House Wren. Nevertheless, I had become concerned about the local wren who was pugnacious by nature and had already displaced our Northern (Baltimore) Oriole the year before. As a result I had moved the wren house to the side of our lawn away from the meadow’s edge.

As time passed things looked peaceful enough down along the meadow, although there seemed to be a bird population explosion in the vicinity of the west fence. It didn’t look as though there was even room for a pair of gentle bluebirds. Albert and Lillie did leave at times—perhaps to feed in a less congested area—but they always returned.

Early Sunday morning a week later I glimpsed a fluttering commotion at the nest box. Looking through my binoculars I saw a starling attacking the box and clinging to its flat front. Albert and Lillie were bravely defending it. I rushed down the stairs but, by the time I was out of the door, the starling had left, probably frustrated by the small entrance.

This first raid was very discouraging, so I considered alternative locations. The season was still early (26 March), and there was one more box. I put this one on yet another fence post on the northeast corner of the meadow, up the hill where it joined the lawn. (I had also read that bluebirds were not particularly disturbed by man’s habitations.) Although some distance from the original nesting post of former years, the new site was close to their old aerial highwire perch.

The starling attack or their noisy neighbors must have disturbed the bluebirds because they changed locations that very day. When I checked the new box on
Monday night, there was a completed nest. That made three that they had built, but we weren’t home free yet. Not only was this box closer to our four cats, three dogs, and the wrens, but starlings and grackles conducted sporadic forays into the yard. As the weather warmed, however, Albert and Lillian prospered, even surviving another futile starling invasion. The following Saturday there were four beautiful pale green-blue eggs in evidence, but tranquility was not to reign.

Saturday evening while sitting on the front steps checking new bird arrivals, I saw four or five dark brownish birds in the still-bare maple tree near the bluebird box. Without bothering to look closely I dismissed them as transitory blackbirds. They flew off as our big cat strolled by. However, they had seemed oddly threatening. They just sat in the tree nearest the bluebird box without the usual bird-like fidgeting, reminding me of a film clip from Hitchcock’s “The Birds.” The next afternoon they were back again. Just sitting and waiting. This time I was in the house looking out the window, and I suddenly remembered the parasitic COWBIRD. I hurriedly checked the bird book, glassed the birds confirming that they were indeed cowbirds, and shooed them away. Was there to be no end to the perils of our bluebirds?

After a week of intermittent bad weather, the weekend came. On Saturday afternoon I glimpsed Albert clinging to the box, inserting his head, and apparently feeding something inside. Close inspection revealed two pink baby birds and two unhatched eggs. I proudly announced the success to my wife and we drank a toast to the new family at supper.

Sunday dawned lovely and springlike with no portent of disaster. I concentrated on removing dandelions, planting squash and cucumber seeds, and mowing the lawn. I took care not to use insecticides near the bluebird box and limited my mowing in the immediate area. As I started my chores in the morning I had observed a wren fly to the bluebird box (which was unattended at the time), dart in for just a second or two, and then come out. In the afternoon as I was mowing the lawn some distance up the hill from the box, I noticed that Albert and Lillian were conspicuously absent. After an hour I became alarmed and checked the box by slightly opening the tilt door in front. I was aghast to find the nest completely empty. I looked on the ground by the post and the full extent of the tragedy struck. There in the grass were two eggs, each pierced in two places, and two dead baby birds. The wren had struck! After all our effort and vigilance, to be defeated by this midget was too much, especially since I had taken the trouble to place the wren house over 150 feet from the bluebird box.

After recovering somewhat from the shock, we tried to determine what could be done to help the couple start again. There was some comfort in knowing that bluebirds usually produce two or three broods a season, but we had no way of knowing if they would move away or try again. That evening we saw that Albert was very
solicitous of his mate, staying close and touching her beak a number of times. His lovely exuberant song was silenced except for an occasional murmur when fussing at me in the yard.

Monday, upon my return from work, I found that the bluebirds were still in the area and seemed to be back around the lower meadow fence where they had been building earlier. That area was still a Grand Central Station for flocks of grackles, starlings and robins, so I decided to give the bluebirds an alternative. I took the third house and placed it about seven feet high on an electric pole just outside the north fence line and 200 feet from the first house. Again this was near their original high wire perch, but farther from the wrens and completely outside both the yard and the meadow areas. All we could do now was wait.

Events took an optimistic turn when we heard them courting and mating in a tall locust tree just before dusk that same Monday (30 April). We said our prayers to the patron saint of bluebirds and hoped for a happy ending. At least we had enjoyed the pleasure of their colorful, delicate presence throughout the spring.

Epilogue

There was a happy ending. The third box attached to the electric pole was ideal, and Albert and Lillie produced a lovely family of four. They all flew away but returned several times in the fall to their homesite, perching on the high wire and the tall locust trees and fluttering for food to the lawn and meadow below. Other bluebird enthusiasts were at work in the area so that flocks of between six and twenty birds were seen throughout the mild winter. We CAN successfully reverse the depleted bluebird population if we do the right things before it is too late!

3023 Houck's Mill Road
Monkton, MD 21111
Will bluebirds visit feeders in winter months when insects are hard to find? If so, what feeder food is appropriate for them?

Barbara Yost
Huntsville, Alabama

In winter when insects are not available bluebirds live largely on berries of many different kinds. If no berries are available or if the berries are covered with ice, bluebirds will often come to feeders where they will eat raisins or other dried fruits, peanut hearts, chopped unsalted nutmeats of any kind, suet, or finely cracked corn or cornmeal. They find very little that they can eat in the usual mixtures of seeds intended for bird feeding.

I have heard that an opening in a nest box that is 1¼ inches in diameter will keep out House Sparrows and permit bluebirds entry. Is there anything to this theory?

William W. Rivers
Charlotte, North Carolina

You have been misinformed. House (English) Sparrows can and will enter a 1¼ inch hole. Bluebirds, however, usually are either unable or unwilling to enter a hole that small.

Besides bluebirds, what other desirable species are likely to inhabit bluebird nesting boxes? Can I expect any bluebirds to overwinter here in central Wisconsin?

Steve Bower
Stevens Point, Wisconsin

Native birds (other than bluebirds) in your region that are most likely to use bluebird nesting boxes are Tree Swallows, House Wrens, and Black-capped Chickadees. House Wrens are sometimes troublesome since they like to fill all available nesting boxes with twigs, and they may at times enter bluebird nests and puncture the eggs. They are a protected species.

House Sparrows also frequently take over bluebird nesting boxes. These alien birds are among the bluebird's worst enemies. They are not protected by law and should never be allowed to use the nesting boxes.

Most of the bluebirds in Wisconsin wisely move south for the winter. The few that remain are likely to perish from cold and starvation.
PLANTINGS FOR BLUEBIRDS AND OTHER WILDLIFE

George N. Grant

The chart in this issue covers many of the fruit or berry producing plantings that were listed in the Summer 1979 issue of Sialia. Most of these are important to the survival of bluebirds as well as many other species of birds and wildlife.

This chart is designed to help those who would like to start their own wildlife planting program utilizing basically native or "wild" plantings. In this way landscape plants can occupy a dual role providing beauty as well as food and cover for wildlife.

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.

ZONE 1 - BELOW -50°
ZONE 2 -50° TO -40°
ZONE 3 -40° TO -30°
ZONE 4 -30° TO -20°
ZONE 5 -20° TO -10°
ZONE 6 -10° TO 0°
ZONE 7 0° TO 10°
ZONE 8 10° TO 20°
ZONE 9 20° TO 30°
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.
<table>
<thead>
<tr>
<th><strong>KEY</strong></th>
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<tbody>
<tr>
<td><strong>Tree - Shrub - Vine</strong></td>
<td>X - Depends on Species</td>
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<tr>
<td><strong>Size</strong></td>
<td>T - S - V</td>
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<tr>
<td><strong>Native - Escaped - Cultivated</strong></td>
<td>A - 1-3'; B - 3-6'; C - 6-10'; D - 10-15'; E - 15-20'; F - 20-30'; G - 30-50'; H - 50-80'; I over 80'</td>
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<tr>
<td><strong>Hardiness Zone</strong></td>
<td>N - Native; E - Escaped from Cultivation; C - Cultivated</td>
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<td><strong>Landscape Value</strong></td>
<td>D or E</td>
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<tr>
<td><strong>Specimen or Mass</strong></td>
<td>E - Excellent; G - Good; N - Naturalizing</td>
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<tr>
<td><strong>Flower Display</strong></td>
<td>S or M or E - Either</td>
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<tr>
<td><strong>Flower Color</strong></td>
<td>F - Fair; P - Poor</td>
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<tr>
<td><strong>Fruit Color</strong></td>
<td>White; Red; Pink; Yellow; Greenish</td>
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<tr>
<td><strong>Fruit Size</strong></td>
<td>Bk - Black; B - Blue; R - Red; O - Orange; P - Purple; W - White</td>
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<td><strong>Fruit Display</strong></td>
<td>A=1/8&quot;; B=1/4&quot;; C=3/8&quot;; D=1/2&quot;; E=5/8&quot; or larger</td>
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<tr>
<td><strong>Fruiting Period</strong></td>
<td>E - Excellent; G - Good; P - Poor</td>
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<tr>
<td><strong>Fall Foliage</strong></td>
<td>Jan = 1; Dec = 12. Ex. 9-3 = Sept to Mar</td>
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<tr>
<td><strong>Light Requirement</strong></td>
<td>E - Excellent; G - Good; N - Not Effective</td>
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<tr>
<td><strong>Soil Requirement</strong></td>
<td>1 - Full Sun; 2 - Part Sun; 3 - Shade</td>
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<tr>
<td><strong>Soil pH</strong></td>
<td>A - Wet; B - Normal Garden; C - Dry; D - Dry Poor</td>
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<td><strong>Plant Sex</strong></td>
<td>A - Acid; B - Mildly Acid; C - Mildly Alkaline</td>
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<td><strong>Plant Source</strong></td>
<td>A - M+F on Separate Plants; B - M+F on Same Plant; C - Either of Above</td>
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<td><strong>Method of Transplanting</strong></td>
<td>A - Most Nurseries; B - Some Nurseries; C - Specialized Nurseries; D - Dig from Wild</td>
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<td><strong>Propagation</strong></td>
<td>A - Dormant with Soil Ball; B - Dormant with Bare Roots when Small; D - Difficult</td>
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<td>A - Seeds; B - Stem Cuttings; C - Root Cuttings; D - Suckers; E - Difficult;</td>
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<td><strong>Wildlife Value</strong></td>
<td>Refer to Reference</td>
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<td>A - Preferred; B - Limited; C - Minimal</td>
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<th>Light Requirement</th>
<th>Fall foliage</th>
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<th>Fruit Color</th>
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<th>Flower Display</th>
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**Key Attributes:**
- A: ACIDIC
- B: BASE
- C: COLD
- D: DECIDUOUS
- E: EVERGREEN
- F: FLOWERING
- G: GINSENG
- H: HERB
- N: NUT
- P: PROPAGATE
- S: SHRUB
- T: TREE
- X: XERO

**Volume 3, Number 1**
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:

The bluebirds are making a comeback here in Knox County, Ohio. Last year we raised 106 and this year 147 baby bluebirds in our 75 houses.

I've enjoyed my trail very much. It's quite a thrill to lift "Mama" off her eggs and count them and put her back. She does not seem fearful, but seems to know we are helping her. I'm certainly proud to have raised 100 and will use the same trail next year and add a few more boxes.

Arlene Kunkel
Frederickton, Ohio

Dear Arlene Kunkel:
You have every right to be proud of the increase in bluebirds in your area. We hope your success is an inspiration to others.

Dear Editor:

A number of months ago my class wrote to you as a class project in letter writing. We requested information on bluebirds and received your fine brochures. After reading and discussing them we decided to each make a bluebird house. What a project! We did post about 80% of the boxes in the countryside; however, a few of the pupils lived in town and wanted to keep them on their property as wren houses.

Thank you for your great brochures and the patience it took to answer 28 letters. The rewards to bluebirds, wrens, and Mother Nature were well worth it.

Glenn Albers
Fifth Grade Teacher
Lake City, Minnesota

Dear Glenn Albers--and Class:
We're delighted that all of you were moved to try to help the bluebird. Did bluebirds nest in any of the boxes? Our Treasurer, "Chuck" Dupree, said he enjoyed answering those letters. Sorry that the newspaper photograph couldn't be reproduced to show all those smiling faces. Tell the students to be sure to clean out the boxes now during the winter. Soon they will be able to start watching for bluebirds again.

Dear Editor:

Thought you might like to know how tremendously helpful the NABS Slide Program has been to us here in Massachusetts. We don't know now
Dear Editor:

Thought you might be interested to know that I built a bluebird box this last winter. I put it on a tree near my house. I saw the local bluebird pair check it out, but they rejected it.

I have had a Purple Martin house up for two seasons now. The martins always check it out but never move in. But the bluebirds did!

Two broods have been raised in our “Grandpa Trio” martin house this summer. Great fun!

I have no count on numbers of new birds, but on some mornings there are bluebirds everywhere.

L. E. Beezley
Joplin, Missouri

Dear Mr. Beezley:

Bluebirds do occasionally use unoccupied martin houses, but they usually prefer more conventional types of boxes. What a grand sight to have bluebirds “everywhere.”

GOOD MORNING!!!
The Third Annual Meeting of the North American Bluebird Society was held from Friday, November 7 through Sunday, November 9, 1980, at the Gunston Hall Plantation, Lorton, VA. About 90 people attended. They came from ten states, the District of Columbia, the province of Saskatchewan, and the Island of Bermuda. Attendees arriving Friday afternoon explored Mason Neck National Wildlife Refuge and the extensive Gunston Hall grounds.

Formal opening of the meeting occurred on Saturday at 10:00 a.m. In his introductory remarks, Master of Ceremonies, William R. Stott, Jr., Dean of Student Affairs at Georgetown University and incoming Vice President of the Society, laid the philosophical cornerstone for the meeting. In a moving invocation Mrs. Ruby Finch asked Divine blessing and guidance upon the Society’s work.

The Director of Gunston Hall, Walter Price, and his wife Jeanne, were our gracious host and hostess for the weekend. During the morning session they cooperated in giving an illustrated talk about the history of the plantation, the story of the Mason family, and some of the area’s natural history.

The next speaker was Joe Huber from Heath, OH. Joe’s many inventions favoring bluebirds have decreased House Sparrow populations (his nestboxes have built-in sparrow traps) in his residential subdivision and have kept bluebirds coming to his feeder throughout the winter. At dusk he puts out peanut hearts, suet, and wild berries just as the bluebirds come to roost in a nestbox in his yard.

Saturday afternoon’s session began with the Annual Business Meeting chaired by Vice President George Grant in place of President Marilyn Guerra who was unable to attend. The election of officers and board members took place after their introduction. The amendments to the By Laws and Constitution were passed. These amendments dealt with restricting the Society’s lobbying efforts and freeing the Society’s annual meeting date. NABS is no longer mandated by the Constitution to hold its annual meeting on a particular date in November.

A potentially rich area for bluebirding, National Wildlife Management Areas, was the topic of Theodore Gutzke, Assistant Refuge Manager at the Great Swamp National Wildlife Refuge in Basking Ridge, NJ. He has a growing population of bluebirds within 25 miles of New York City.

Lillian Lund Files gave us a highly entertaining insight into her efforts to spread the bluebird word “from Concord (NH) to Concord (MA).” It seems Lil will talk to anyone any time about bluebirds.

Concluding the afternoon presentations Robert Schutsky and
Scott Ault described their activities in bluebird conservation in an ecological park northwest of Philadelphia, PA (Dumore) run by the Philadelphia Electric Co. (PECO). Bob described having to move bluebird nestboxes when an influx of 20,000 Christian campers came into the park one year just at nestling time. He managed to move the boxes with minimal bluebird loss; one pair even found their relocated box immediately and continued their housekeeping chores. Scott, a senior at Millersville State College, discussed the records which were carefully kept.

Following dinner the group was treated to a special viewing of the NABS Bluebird Slide Show by Richard M. Tuttle, Education Chairman, from Delaware, OH. Dick did an outstanding job of narrating the 141 slide collection from all over the continent. All three species of bluebirds were featured.

That same evening we had a surprise addition to our program. David Wingate, of the Department of Agriculture and Fisheries in Bermuda, and his "bluebird project" assistant, Stephen Burgess, presented a fascinating report on Bermuda's bluebirds. Bermuda stands as the exception to the statement that bluebirds exist only on continental North America. It is not definitely known whether bluebirds are native to Bermuda, were brought there by settlers, or were blown there from the continent. Several years ago Vincent Baudry visited Bermuda to urge trial of his "open-top" box in trying to discourage House Sparrows. (See Stalla 1:24, 36)

David and Stephen's findings do not seem to show promise for that particular nestbox in Bermuda, but they are continuing to experiment with other designs. One that they mentioned had a translucent top, which sparrows may reject, perhaps because they don't like light coming into their nest sites.

Following this stimulating day of presentations, discussions, deliberations, and mealtime delights, we were treated to another like it in many ways. Sunday dawned cloudy, but warm, so the early morning walk was held, and many winter birds (including bluebirds) were seen.

The morning session indoors began with a topic very much on everyone's mind -- reducing predation on the bluebird trail. This was ably discussed by wildlife biologist, Daniel Bodine. Dan explained various attempts by bluebirders to discourage snakes (grease a pole and sprinkle it with cayenne pepper!) and raccoons (try not to leave a scented trail). Never discard used nest cleanings near the nest site as this could provide a clue to predators of bluebirds' presence.

Sunday morning's program included the lovely, lively slide show done by Lorne Scott on Saskatchewan's flora and fauna which includes Whooping Cranes.

An ecumenical prayer service was held before lunch.

Following our final luncheon, two events concluded the meeting. In the lecture room Edith and Bill Miller showed a fascinating film of their experience in hand-raising some orphaned bluebirds. Following that presentation an
informal question and answer session on trail problems was held. While that was taking place the newly elected officers and Directors held their first meeting.

Before and after each of the sessions attendees were able to examine the many fine exhibits. These included the following: Laurance Sawyer's distinctive nestboxes, feeders, and wooden articles constructed from hollowed logs; Fran Hanes' hand-painted china brooches and pendants; Lillian Files' bluebird exhibit which she and Joyce Marinel have constructed from various Lawrence Zeleny-Michael Smith articles; a substantial exhibit by Dick Tuttle and Bob Orthwein on nestboxes along with methods to maintain an educational bluebird trail; and the NABS table where catalog items were on display along with two maps, one of Canada and one of the U.S. showing membership distribution.

To quote from just one of many letters and comments received after the meeting, Bob Bodine of Media, PA said: "The relaxed and unhurried tone of the interesting sessions, the fellowship of friendly people with a common interest, and the lovely setting of Gunston Hall all contributed to a fine weekend.... I left the meeting wishing it were February and time for another bluebird nesting season!"

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Muddy Run Bluebird Nesting Trail
to be Featured at 1981 Philadelphia Flower Show

Each year Philadelphia Electric Company (PECO) participates in the Philadelphia Flower Show. This major botanical event attracts nearly a quarter of a million visitors to the Civic Center in Philadelphia to view a full spectrum of botanical displays, flowering plants and related items. This year PECO has chosen as its theme the Bluebird Nesting Trail at Muddy Run Park, owned and operated by Philadelphia Electric. PECO display personnel and professional landscapists and ecologist are combining their efforts to authentically recreate a portion of the Bluebird Nesting Trail. The display will emphasize proper nesting habitat and offer a variety of information and literature to those wishing to help the bluebird in its struggle for survival.

This year's show takes place 8-15 March 1981. Doors are open from 10 a.m. to 10 p.m..

For more information about Philadelphia Electric Company's involvement with the Bluebird Nesting Trail, contact:

David B. Ellenberg
Superintendent
Muddy Run Park
R. D. #1
Holtwood, PA 17532
717-284-4325

Or

Robert M. Schutsky
Research Biologist
Muddy Run Ecological Laboratory
P. O. Box 10
Drumore, PA 17518
717-548-2121
GLIMPSE OF BLUE

Glimpse of blue winging through saturating my attention,
flyin confined within this mind beyond comprehension.

Glimpse of blue -
Glimpse of blue -

Is that you old meek and lovely of the skies
causing me to early rise to view earth's giving promise?
Love songs have been fashioned from thee;
Poems, prose, and paintings have brought you closer from the tree;
A miracle and wonder have you been and always will be;
What is in you to cause our hearts to bleed, seeking solace
as you stay with us to secure your family need?
If you were not so rare would I give up morning and evening
hours to care, to place your home close to stare,
monitoring your nestlings cuddled helpless and bare?
Could I be equally fair to other winged species pairs?

Alas, I ponder too much questioning, for just your presence is
enough- blessing us as you do majestic glimpse of blue;
Your way of family molding, concerned with life unfolding,
in nature's glory holding hidden secrets from our eyes;
We'll begin to rectify some of our sin-
going forward preaching virtues of your kin.

Glimpse of blue -
Glimpse of blue -

Come winging through attracting the world to your attention,
that because to us you gave you'll be saved
as we pave the way made ready for your spring return.

Thomas G. Johnson

YOU'VE FLOWN AT LAST

Little bird, you've flown at last.
The days of nesting are now past.
I see you in the treetop there:
Your tiny wings have stroked the air.

You gave no thought to why or how
You came to be upon that bough.
A thousand summers put you there
And let your wingtips stroke the air.

A thousand summers showed the way
To find you food day after day;
To build the nest that held you there
Before your feathers stroked the air.

And soon, upon another spring
Your nestlings, too, will grow bright wings
To take them to the treetop there,
When they have learned to stroke the air.

Carol Ann Lantz
BLUEBIRD TALES

Mary D. Janetatos

As fond memories of the Third Annual Meeting of the North American Bluebird Society linger, old friendships and new ones glow with the prospect of aiding the bluebirds. Now attention focuses on responses received on nestbox survey forms. These forms were sent to persons who, having read of the bluebird's problems in the Parade article, decided to help by ordering ready-made nestboxes from the Society. Some of those sending in the results of their first adventures in bluebirding took the opportunity to join the Society. I'd like to share some of the comments of these new members.

Caecilia Hanson of Scofield, UT: "Our bluebirds returned for the second year and again raised a brood of six. The other boxes were invaded by wrens." (I wonder if they were Western or Mountain Bluebirds?) Patricia Beauchamp of Murchison, TX: We live on 21 acres and see many different birds, but the bluebirds seem to be the friendliest. They watch us every time we cook outside....When we whistle, they cock their heads and just look at us....I am one who saw and answered the article in Parade.... I am very happy I did and have been very pleased with Sialia." L.M. Leaverton of Claremore, OK: "The drought hurt all our birds this year. Bugs were scarce and they (the birds) quit their nests. Titmice were interested. I look for better results next year, with a moderate summer." Virginia L. Perclival of Kirkwood, MO: "We always had a bunch (of bluebirds) when my little old 85 year old mother lived out in Pacific. She could almost set her clock every day when from anywhere, say 25 or 30 bluebirds would all try to get in the bird bath together and just make the water fly."

John A. Obee of Detroit gave the box to his father of Palms, MI. He reports a familiar experience: "He followed all the instructions faithfully including placing it by a meadow but he wound up with Tree Swallows. He'd love to know the experience of other people." Mrs. B.R. Dial of Birmingham, AL, says that at her daughter's home in Atlanta, "One box is about 30 ft. from the front door at the edge of a parking area. The past two years we have had two hatchings (of bluebirds) each year in this busy spot." Another person from Birmingham, AL, Mrs. W.E. McCaddon says: "....I understand from golfers in our neighborhood that Oak Mountain has put up many bluebird houses out on the edge of
the greens." Jonathan C. Benson of Mt. Holly, NJ: "Erected three boxes. No bluebirds this year. Haven’t seen any in area. Will hope for better luck next year. Will THINK BLUEBIRDS!"

William P. McCarron of Merrimac, MA: "...five baby bluebirds wiped out after mosquito-control spray in 1968. Four were killed after mosquito-control spray in 1969. No nesting bluebirds since. Mosquito-control stopped at town meeting of 1970 by my efforts." (Way to go, WPM!) "Still haven’t seen any (blue)birds here in central Connecticut in over 10 years, but I keep on hoping. (I did see a small flock in the Poconos last weekend, though.) says Dr. Vincent P. Ringrose, Berlin, CT. Mrs. E. Bothwell of Allegany, NY: "...June ’79 a pair of bluebirds settled in a house from which wrens evicted Tree Swallows and then didn’t use it. The wrens came back and killed the young bluebirds. There is a bluebird trail 3-4 miles from us." From Fred A. Turner of Towson, MD: "I believe with my back yard abutting the Baltimore Beltway the noise factor makes it impossible for me to ever enjoy nesting bluebirds, but I keep trying."

Mrs. Dallas C. Duncan of Marion, NC writes: "Have had four sets of bluebirds raised this summer and all three houses are presently occupied again. Was amazed and delighted at the sight of four beautiful adult bluebirds joining forces to warn me off when I was mowing. Have never seen a lovelier aerial display."

Eileen Lorenz of Fairfax Station, VA: "Having a problem with some kind of predator, perhaps raccoon or snake! From Nokesville, VA, Mrs. Herbert H. Markle writes: "Our pair of bluebirds out here in the country raised two broods of four each, gender uncertain; had trouble with House Sparrows after first brood fledged, but taping the hole discouraged them. It took three or four days though and it was heartbreaking to see the male bluebird come every morning to check it out and find it covered. Fortunately, he didn’t give up and everything turned out all right."

Joy Lilley writes from Central, SC: "My boxes were probably too close together. I had two families raised this summer (bluebirds). (We won’t argue with success, Joy!). Max Kummerow of Madison, WI, states a familiar complaint: "Bluebird populations seem to have crashed in our area, quite uncommon at present." From Barbara Marquardt of Pittsburg, PA, comes the plaintive question: "Are there bluebirds in the South Hills area of suburban Pittsburgh?" Perhaps an Audubon chapter or local bird club has an answer, Barbara, but it’s a sure bet that any remnant populations lurking there need all the friends they can get! Keep those houses monitored, and who knows, soon there will be bluebirds in the South Hills!

These letters make what we’re doing seem so worthwhile. Folks out there who want to help the bluebirds may feel isolated from others wanting to do the same. NABS enables them to share these common experiences in a way which will ultimately achieve our goal of saving the bluebirds for future generations to appreciate."
increases in the bluebird population. Although the last two winters in this area have been severe, other environmental factors such as cutbacks in pesticide use may favor the gradual increase of the species. Although bluebirds do not usually come to feeders, they enjoy bathing and many reports mentioned their use of bird baths. The Northern Neck of Virginia Audubon Society counts its Bring Back Bluebirds campaign as a substantial factor in aiding the return of the Eastern Bluebird to this area.

Route 2, Box 457 Lancaster, VA 22503

ATTENTION BLUEBIRD TRAIL OPERATORS
Do Your Bluebird Boxes Trap Tree Swallows?

Recently, several bluebird trail operators have found dead Tree Swallows in their standard design bluebird houses. On one trail a deep box contained five dead Tree Swallows. Apparently this occurs in the spring when Tree Swallows are moving north to nest.

Have you found any Tree Swallows trapped in your bluebird boxes? If so, please take the time to respond to this questionnaire. The results will be summarized in a future issue of Sialia.

(1) Date of occurrence.
(2) Inside dimensions of box (i.e. 4” x 4”, 5” x 5”).
(3) Depth of cavity (from floor of box to bottom of hole).
(4) Inside front of box rough or smooth?
(5) Any nest material in the box?
(6) Number of dead Tree Swallows found in box.
(7) Any wear to the tail or wing feathers indicating a struggle to leave box?
(8) Sex or age, if known (notice feather color—iridescent green or brown).

Please send information to
Daniel Boone
4011 Woodhaven Lane
Bowie, MD 20715

EDITOR’S NOTE: Bluebirders should continue to watch for and report on this problem during the coming nesting season.

Items for Bibliography Requested

Charter members of NABS may recall that in the first issue of Sialia a request was made for printed items pertaining to bluebirds which would be used in compiling a comprehensive bibliography. That bibliography is now nearing completion under the direction of Robert M. Patterson. Please send Xeroxed copies (or at the very least a complete citation) of articles, reports, theses, etc., from both scientific and popular literature that have appeared in the last year. Forward your contributions to the editor, 10617 Graeloch Rd., Laurel, MD 20810.

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Sialia, Winter 1981
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