



NCBS Logo with Carolina Blue by Dempsey Essick

Bluebird Notes

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North Carolina Bluebird Society Mission Statement

Our goal is to support activities that foster the resurgence of bluebirds and other cavity nesting birds in our home areas.

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Homes For Bluebirds

Reprinted from Carolina Country
Vol. 37 No. 2 Author- Carla Burgess

One afternoon last summer, Jack Finch climbed on his golf cart and prepared for a four-hour journey. He traveled only a mile and a half, but he made nearly six dozen stops along the way. Jack was making his weekly check of the 70 birdhouses he built and put up on his farm and blueberry nursery in Bailey, Nash County. The wooden boxes are homes for bluebirds, which Jack, who is 87, has been studying for more than 30 years.

"I think nothing but bluebirds 24 hours a day, eight days a week," he says. His obsession with the birds began in 1972 when he and his youngest son, Kelly, were digging blueberry plants and Jack heard the familiar sweet warble of an Eastern bluebird. He knew the sound from his childhood, but to his dismay his teenage son did not recognize it, because at that time the birds had all but disappeared from the countryside. They stopped work and built seven crude, wooden boxes with shingled roofs, then erected them immediately on poles around the farm. Eventually, bluebirds moved in.

In 1973 Jack founded Homes for Bluebirds, a nonprofit organization dedicated to restoring bluebird habitat, supporting research and educating the public. He believed that conservation was key to saving the species, whose populations had suffered largely because of widespread pesticide use, dwindling habitat and competition with aggressive non-native species. Though bluebird numbers have rebounded, the birds are still in a fight. Unlike woodpeckers, which hollow out their own nest sites in trees, the bluebird's bill is not designed for chiseling. The bird



Photos by Mike Dunn

must use existing cavities for raising young. Perhaps unaware of the consequences, people have destroyed habitat by removing dead trees, wooden fence posts and other places with holes and hollows where bluebirds once built nests. The English sparrow commonly called the house sparrow) and the European starling, introduced in the United States from Europe in the late 1880s, have stolen many of the remaining breeding locations. These species have handily outpaced the reproductive rates of bluebirds. Today, the house sparrow is one of the most abundant songbirds in North America.

Conservationists determined that the best hope for the bluebird's comeback was widespread placement of nest boxes combined with strategies to discourage house sparrows and starlings. They also turned on its head the conventional wisdom of not interfering with birds and nests. To the contrary, experts insist that people monitor and maintain bluebirds' artificial homes and keep records on

(Continued on page 14)

Bluebird Notes

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Bluebird Tales



Memorial Bluebird Trail

Helen,
My brother and I are establishing a memorial bird trail for our deceased sister. The trail is on the 100 acre farm that we all grew up on in rural Rockingham County north of Greensboro near the Virginia border. We expect to put up as many as 100 houses of all types (bluebird, woodpecker, owl, bat, etc.)

The first bluebird house went up today. Picture attached. I also peeked in the old tobacco curing barn in the picture before I left. There is a very large nest (possibly a hawk or owl) way up in the top of the barn near an opening.

Fred
(Benson, Cary, NC)



You are always the right age for bluebirds!

Dear David and Kay Hindsley.

We are from Fayetteville but have lived in Winston-Salem (WS) for 25 yrs. Our parents are still in Fayetteville. I put a bluebird box in my parent's back yard on Cumberland Rd and they have had two nesting this year for a total of 5 babies that fledged. I never thought they would have nested in that location. I actually had put the box there because I recently got my father interested in feeding birds (he's in his 80's) and thought he would enjoy watching out for bluebirds. I had never seen one in their yard before.

Also, we put one at the front doors of the elementary school where my wife works in WS as a sample box to help educate parents and kids. The other boxes placed around the school grounds. And believe it or not, that is where we also had two nestings. I also help the HR manager at our Sara Lee Plant maintain 14 boxes around our facility. We are trying to engage more employees and will probably take this on as a project in the future once some of our plant renovations are completed. Bill Abbey is our resource here in Forsyth County and is always helpful.

David & Pam Young, WS, NC



Bluebird Tales



Mill Creek Update

Our little project here in Mill Creek is in progress. Four bluebird boxes have been relocated, to deter snakes and to make our monitoring a bit easier, and in another couple of weeks I will again check them, with the intention of giving them a thorough cleaning with a mild bleach/water solution (per the latest newsletter!). Once they are dry, I have the cardboard berry boxes to install, then close up the boxes. As it turns out, my garden club is now totally responsible for these boxes, so my plan is to install the metal hole protectors to deter squirrels from enlarging the holes. The club members will be going out in teams of two in golf carts to monitor, so we have created a small list of "stuff" to have with us as we make our rounds. Several of the women are horrified at the prospect of meeting a snake, so one of the im-

portant items to carry will be a golfing iron to remove the beastie from the box, should the need arise.

We may all be going out to monitor at the same day and time, so the other possibility is for me to carry a "beeper" or cell phone, so that I may be contacted to rush over and attend to the reptilian intruder!

If this upcoming season is a success, I hope to add three more boxes the following year. I will certainly enjoy reporting in to the NCBS.

Sincerely,
Linda Nunemaker
Mebane, NC

Bluebirds are Good for Your Health

The Wake Forest University Baptist Medical Center in Winston-Salem, NC, has a program called BestHealth. This is a new health and wellness program designed to help adults of all ages better understand their health needs, maintain or improve their overall health and stay active.

Along with programs on heart disease, diabetes, cooking, skin care, diet, exercise, CPR, hormone replacement, cholesterol screening, cataracts, etc. Bill Abbey of Clemmons, NC, offered a program called "Love Those Baby Blues." Most of these programs require pre-registration and twenty five citizens (senior and younger) came out on the 23rd of February to hear Bill share with backyard bluebirders his passion, as well as bluebird tips and ways to help.

Bill said that the response was enthusiastic and hopes to participate with this group again in the future.

Thank You Note from Best Health:

Mr. Abbey,
Thanks so much for your enthusiastic and informative talk at BestHealth. The evaluations were outstanding.

Many asked to have you back again and we would really enjoy that. Stay in touch and let us know when you might like to return.

Thanks again,
Karen
Manager, BestHealth
Office of Public Relations
& Marketing,
Wake Forest University
Baptist Medical Center,
Winston-Salem, NC

NEST-SITE FIDELITY IN EASTERN BLUEBIRDS (*SIALIA SIALIS*) *The Auk* 120
 DEPENDS ON THE QUALITY OF ALTERNATE CAVITIES (4):1029-1032, 2003

Abstract by
Mark T. Stanback and Ellen K. Rockwell,
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P.O. Box 4225, Basalt, Colorado 81621, USA

ABSTRACT.-Secondary cavity nesting birds have been predicted to switch their nesting location when the quality of the nest site declines such as from accumulation of soiled nest material and parasites. We hypothesized that nest-site switching in Eastern Bluebirds (*Sialia sialis*) should depend not only on the condition of the original nest, but also on quality of alternate nest cavities. We tested that hypothesis experimentally by providing Eastern Bluebirds with attractive and unattractive nest boxes (as determined from a choice experiment). In one experiment, bluebirds were forced to choose between their soiled box of the preferred type and a clean box of the

less-preferred type. Faced with that decision, a significant proportion of pairs opted to reuse their nest cavity, despite the ectoparasitism costs of that option. When given the choice between their soiled box of the preferred type and an identical but clean box, a significant proportion switched to the clean box, which suggests that soiled nests present some cost. By manipulating box type, we were able to decrease and increase, respectively, the costs of nest-site fidelity. Thus, bluebirds do not simply operate under a rule of thumb "switch nest sites when nest quality falls below point x ." Rather, they must weigh the declining quality of their current nest against the relative quality of all other available nest sites.

Received 31 October 2001, accepted 26 May 2003.

A Comparison of Eastern Bluebird Reproductive Parameters in Golf and Rural Habitats

Abstract by Mark T. Stanback, Department of Biology, Box 7040, Davidson College, Davidson, NC 28035, USA, mastanback@davidson.edu
 Megan L. Seifert, School of Biological Sciences, Washington State University, Pullman, W A 99164, USA

Abstract: Analysis of reproductive parameters of birds breeding on golf courses can provide valuable information into the biological effects of the golf course environment on wildlife. For Six seasons (1999 - 2004) we monitored initiation of breeding, inter-nest intervals, clutch size, brood size~ and chick condition of eastern bluebirds (*Sialia sialis*) in North Carolina with ~ 150 nestboxes in available nongolfhabitat (hayfields, old fields, pastures) and up to ~250 on golf courses. Bluebirds nesting on golf courses initiated their first nests an average of 1 day later and laid slightly smaller clutches (4.4 vs. 4.5) than pairs nesting in nongolfhabitat. The mean time interval between spring and summer nests was 3.5

days longer for bluebirds on golf courses. Brood size did not differ significantly between golf and nongolfhabitat. Nestlings (the shortest-winged chick in each brood) on golf courses were in slightly but significantly poorer condition than those in nongolf habitat. Using 2 independent measures of condition-quality (residuals from a linear regression of mass on wing³, tail symmetry), we found that adults of both sexes breeding on golf courses were similar to those nesting in nongolfhabitat. While these adult data do not rule out the possibility that the poorer performance of bluebirds on golf courses was due to settlement of golf courses by inferior birds, they do suggest that a more direct effect is at least as plausible. Similarly, although we cannot rule out direct effects of chemical contamination or human disturbance, the lower abundance of arthropods on golf courses provides a likely mechanism for the slightly poorer performance of bluebirds breeding there.

Wildlife Society Bulletin

Education is Ongoing!!

Helen Munro, Co-Editor, Jackson Springs, NC

The last *Bluebird Notes* included an article entitled “*The Debate on Cleaning Nest Boxes*” supporting the idea that nest boxes with old nests in them are preferred to nest boxes that are empty (cleaned). Dr. Mark Stanback’s email came just a few days after his newsletter arrived along with information on two research papers. The abstract of “*Nest-Site Fidelity in Eastern Bluebirds (SIALIA SIALIS) Depends on the Quality of Alternate Cavities*” is printed on page 4. Mark and his students at Davidson College monitor about 400 nest boxes. Nest box preference is one of the bluebird behaviors that they have studied. As you can see from the abstract, nest box choice depends on more than rather or not it is clean.

Back when I was teaching school, I was doing a seed lesson with second graders on what would grow and what wouldn’t. The “smart” kid was challenging that the small rocks mixed in with the seeds would not grow into big rocks. When I asked him where did he think the boulders in the school yard came from, the “slower” child piped up and said, “You see you don’t know everything.” I had convinced him that rocks grew!

With that, I want to say that I didn’t mean to convince anyone not to clean out their nest boxes, but to present another view point. Articles printed here are for our information and we have to decide whether rocks grow and whether or not to clean out old nests in bluebird houses. I personally have decided to continue to monitor and clean out after each fledging.

Dr. Stanback’s second paper is entitled “*A Comparison of Eastern Bluebird Reproductive Parameters in Golf and Rural Habitats*” and is co-authored with Megan L. Seifert, Washington State University. (Again, see page 4.)

This, of course, piqued my interest. The bluebird trail that I help monitor is on two golf courses and has been fledging between 300 and 420 bluebirds for ten years.

Bluebird, the newsletter of NABS (Winter 2005,

Vol. 27 #1), presented an article, “Bluebirds and golf courses: Studies show this habitat can be used successfully. Here the work of Dr. Mark Stanback and experiments done by Dr. Daniel Cristol and along with Josh LeClerc, Judy Che and John Swaddle were presented together.

Dr. Daniel Cristol’s group worked from the College of William and Mary in Williamsburg, VA, during the 2003 breeding season and included 410 nest boxes.

They were surprised to find that “Contrary to ... predictions, the study found that nest boxes on golf courses had slightly more eggs laid in them and produced more fledglings per nest than boxes in other habitats. Because nest failures were somewhat more frequent on golf courses, the overall productivity of golf courses and other habitats was about the same. The research team did not find any evidence that adult bluebirds breeding on golf courses either initiated their nests significantly later in the season or laid smaller clutches.”

Dr. Mark Stanback’s group monitored 402 boxes over six years (1999-2004) and found that

“bluebirds living on golf courses initiated spring nests about one day later than those living in non-golf habitats...

Habitat and year also had significant effects on the time interval between spring and summer nests. This interval averaged 3.5 days long on golf courses than in non-golf habitat.

Clutch sizes were very close to the same for golf and non-golf sites. Brood size was not influenced by location of the nest, year, nor nesting date.”

Both studies were concerned about the effect of the chemicals (insecticides and herbicides) used on golf courses on the insects and, hence, the diet of the bluebirds.

Dr. Cristol tested the symmetry of the left and right leg bones (tarsus) of bluebirds that were 10 or 12 days old. This bone has stopped growing by day 10. “Bluebirds

(Continued on page 13)

Experimental



Front View

Every year baby bluebirds are lost due to overheating in the nesting chamber. The ideal brooding temperature is about 98° F. The maximum temperature the eggs can survive is 107° F. Lethal temperatures can occur in some houses when the outside temperature is only 87° F.

A solar powered thermostatically controlled fan cools this bluebird nest box. It features large louvered side intake ports, louvered exhaust ports and rechargeable battery backup. When the temperature inside the nest box exceeds the control setting, the fan comes on and cools the nesting chamber to prevent overheating.

E-mail from Fred on March 6, 2005

"I got the solar powered bluebird house working today. It's pretty neat to watch the fan keep running when you pull the battery out. The house has a solar panel embedded in the roof. I tried it under a 60-watt reading lamp and it works fine. I use an attic fan control switch to regulate the temperature in the nesting chamber. The switch thermostatically controls the fan. The temperature range is 50 degrees F to 120 degrees F. I used a hair dryer to heat the nesting chamber so I could calibrate the attic switch setting with a digital thermometer.

The next project will be to install a miniature wireless X10 color cam in the top of a bluebird house so I can record the nesting process. The wireless camera has a motion detector feature to transmit when something moves in the nest. The camera transmits to a VCR commander attached to a VHS recorder."



Side View showing exhaust ports at the top and intake ports in the middle.

Nesting chamber inside view showing fan in the ceiling and side cross ventilation ports.



Bluebird House



Solar panel embedded in the roof

Top electronics compartment containing fan control, battery backup, charging system and control switch. →



A solar panel embedded in the roof of the nest box powers a miniature solar fan motor and also charges a single 1.2 V 2000 mAh AA Nickel Metallic Hydroxide (NIMH) battery that serves as a backup source of power. A single pole, single throw (SPST) switch secures the fan motor when it is not needed or maintenance is required.

The house with the solar battery has a top electronic compartment only. The 12 VDC B-B house has top and bottom compartments.



The Raleigh News & Observer Birdhouse Competition

this year was held on March 19 and 20, 2005 (Saturday and Sunday) at the JC Raulston Arboretum . This competition is sponsored by the Raleigh News & Observer, Pennington Seed, Inc. and the JC Raulston Arboretum.

Categories include Professional, Adult Serious, Flight of Fancy and Children (Ages 4-12).

Fred Benson entered this experimental bluebird house in this competition and received third prize.

In addition to the bird house competition, there was a lecture by Dr. Chris Moorman (NC State University) on "Landscaping for Wildlife with Native Plants" on Friday night (March 18).

Bill Satterwhite, NCBS Board Member and JC Raulston volunteer, presented a program on Saturday about bluebirds and showed the "Inside the Nest Box" video. On Sunday, a JC Raulston Volunteer showed the video. Tours of the JC Raulston Arboretum were available. Fred Benson entered this competition last year and would encourage anyone interested in building nest boxes in looking toward entering next year.

As Fred puts it, "Guess this comes under the category -- "when you care enough to give your bluebirds the very best."

Fred Benson, Cary, NC

NABS 2005 Registration Form

One Month or less to go to NABS 2005



| | # of people | Cost | Total |
|---|-------------|-------------|-------|
| Conference Registration (includes Saturday's lunch) | _____ | \$35 | _____ |
| Friday Field Trips: Select one. | | | |
| A. Biltmore House & Folk Art Center | _____ | \$45 | _____ |
| B. Biltmore & North Carolina Arboretum | _____ | \$45 | _____ |
| C. NC Mountain Tour (lunch included) | _____ | \$45 | _____ |
| Meals: | | | |
| Friday Evening Barbeque | _____ | \$30 | _____ |
| Saturday Evening Banquet | _____ | \$30 | _____ |

Vendors - \$25.00 per table charge for sales' tables, including electricity. _____ # tables Fee _____

Display tables (no sales) and nonprofit organizations are free of charge. _____ # tables

Total Enclosed _____

I will need transportation from the Asheville Airport _____ My flight number is ____ **I (we) will arrive on**
_____ (date) at _____ (time) There will be ___ in our party.

This is my (our) first NABS Convention. Yes _____ No _____

To help with planning, check your interest in these workshops. Sunday Morning: Local Birding Trip _____
Thursday: Photography _____ Bird Banding _____ Keep America Beautiful _____ Ventures Birding _____
Saturday: Tote Bag (\$3) _____ Card Making _____ Press Release _____ Asheville Historic Trolley (\$13) _____

Name (s) _____ Phone _____

Home Address _____

City/State (prov.)/Zip _____

Email Address _____

Complete this form and return with full payment to:

Helen Munro, 22 Bobolink Rd., Jackson Springs, NC 27281

Checks should be made payable to **North Carolina Bluebird Society or NCBS.**

List of attendees will be available to participants in NABS 2005.

Check here _____ if you do not want to be listed.

Host Hotel - HOLIDAY INN, SunSpree Resort (phone - 828-254-3211 or 1-800-733-3211) Advise them that you are with NABS 2005. The discounted room rate is \$89.00 per night which will be held until April 19, 2005. After that date, it will depend on availability. Rooms have either two double beds or one king size and a sofa bed. (Web Site: www.sunspree.com).

Additional Asheville information including other hotels and attractions can be obtained from the Asheville Visitors Bureau, 151 Haywood St., Asheville, NC 28801. (1-800-257-1300) (www.exploreasheville.com)

EWW!! Fecal Glue!!!

Several years ago, former BSP president Kathy Clark was called to a member's house to check on a nestling. It hadn't fledged with the others. Because of the bird's age, Kathy simply took a fast peek into the box. The bird looked active and healthy so she quickly shut the box. The woman was adamant that something was wrong and became quite insistent that Kathy examine the nestling itself. Against what she thought, she decided to oblige the lady. She gently picked up the bird but the whole nest came with it! Its foot appeared to be "glued" to the nest by a sticky gook. She had never seen this before!

There was a thick layer of goo on top of the nest and the nestling's foot was literally glued to the nest! What was this? What caused this glue-like substance? Kathy turned to other experts she knew for the answers.

During prolonged wet periods many of the bugs that bluebirds rely on are in short supply. During these times, earthworms are plentiful and relatively easy to find. Bluebirds will feed their young earthworms, in excess perhaps, during difficult times. It is thought that the undeveloped stomachs of the nestlings have difficulty digesting the dirt castings in the worm's gut. This causes diarrhea which causes loss of fluids which causes dehydration. The birds can become so listless they no longer gape, hence, they starve.

Cool wet weather also taxes a nestlings metabolism so hypothermia can also add to problems of listlessness, etc. Even if or when the birds recover, they can be sitting in this layer of sticky fecal sub-

stance. When the weather warms and dries this substance, it can turn into a hardened sticky "fecal gruel".

My own observations (Kathy Clark): I've seen bluebirds feed earth worms to their young during *all* kinds of weather, even when they have a large and varied supply of food available. This tells me that an occasional earthworm isn't going to hurt. Indeed, it might very well be part of their normal diet, but excesses of just about anything for any living creature (including bluebirds) can be detrimental. Of course the same goes for severe lack of basic needs, like the right kinds of food. We, and bluebirds, are what we eat (in many respects) and variety is the spice of life!

Epilogue:

So what happened to the nestling?

Two BSP (Bluebird Society of Pennsylvania) members returned to check on the young bird 2 days later, and watched it fly right out of the box to join the parents and the other young birds that had fledged 4 days prior. ***Only because the nest box was monitored and the bird was freed of the sticky substance was it able to successfully fledge!***

Contributions for story: Kathy Clark in Pennsylvania, Dean Sheldon in Ohio, Dan Sparks in Indiana, Dick Tuttle in Delaware and to Bluebird-L-list server, where this information was originally shared. This report is a summary of that, plus my own experiences. Joan Watroba send in the Epilogue.

Reprinted from Bluebird trails & Tales/ Summer 2004, Bluebird Society of Pennsylvania..

It's A Bird-Eat-Bird World Out There!!

A Great Crested Flycatcher was perched on a dead snag I have in my yard. I saw a flash of fluorescent green and a blur of fast-beating wings swoop downward, and to the side, from just above the flycatcher's head. Before I could blink, the flycatcher snatched what I *believe* to have been a hummingbird, right out of the air. The flycatcher then sat back on the branch with it's catch. Wings were still beating feverishly as the bird held it in it's mouth.

This blur of wings in the flycatcher's mouth stopped after the flycatcher gave it several quick whacks on the

branch. It then 'flicked away' a few little miscellaneous pieces, swallowed hard several times and gave his head a few shakes. It almost looked like the flycatcher was saying something like "Wow, that was tasty!" He then took off into the mulberry tree for what I presume was dessert. It just goes to show, it is ***really*** a *bird-eat-bird-world out there!* OH MERCY!!!!!!

By Susan Renkel Reprinted from Bluebird trails & Tales/ Summer 2004, Bluebird Society of Pennsylvania..

BACK YARD BERRY BASH

Three years ago I was planning and planting our yard as a Backyard Wildlife Habitat sponsored by the National Wildlife Federation. This year while recovering from hip replacement surgery, I am realizing the joy and benefits of the work done by my husband Vern and myself. Our yard is an insecticide free environment in order to protect the wildlife that shares our world. As the saying goes, "build it, they will come. . .and they do! Birds and other critters abound and a natural balance has been established. The center of today's "fun" is the action in the "Serviceberry tree". (*Amelanchier arborea*). It was recommended by my Master Gardener Volunteer friend Nancy Stein. It is a narrow under story tree with rounded crown. Many tend to have multiple trunks. The importance of the tree is for the wonderful cherry-like berries it produces after a Spring show of clusters of white flowers. The berries are edible by humans, but believe me, the birds will find the ripening ones first! Fortunately the berries ripen over a course of five to nine days.

The first to find the "dessert banquet" were the resident Eastern Bluebirds that have young birds nesting in a box about fifty feet from the Serviceberry tree. They think they "own" this tree and become visibly upset when neighboring Robins want to share in the feast! The scene is reminiscent of a Cleveland Brown versus Pittsburgh Steelers football game! First one Robin scores a hit of at least six berries in his mouth at one time! Then the male Bluebird wants his turn and he scores with two uninterrupted trips before being driven off by the returning Robins.

A few minutes later a Red-bellied Woodpecker swoops in and breaks up "the game". He gets his way with the berries until a Brown Thrasher arrives to claim his share of the bounty. Sometimes a berry or two are dropped in the confusion, and later are recovered from the ground by Purple Finches. Nearby the seed-eaters, Chickadees, Titmice and Nuthatches seem to care less about the ruckus going on nearby. I do not see them enter the tree at all. They are content with their oil sunflower seeds.

By midday, the male Bluebird is no longer feeding the young, he is too busy defending his territory from as many as six marauding Robins. They form a team

and for most of the afternoon, keep the bluebirds away from the tree. While two or three Robins fill their beaks with many berries, the other Robins are taking their berries to their nestlings.

Day three of the entertainment brings a BEAUTIFUL Cedar Waxwing to the berries. He is such an aristocrat . He is not a pillager like the Robins, but very specific as to the size and color of the berry that he takes. So far, just one Cedar Waxwing appears, he is either just passing thru or he is keeping the berries a secret from his flocking friends.

This morning the air is very cool and crisp. A cold front brought a half inch of much needed rain and 50 degree temperatures. The scene this morning is of renewed vigor. The resident male Bluebird is having a busy time with the robins and the arrival of two Blue Jays! The Blue Jays have invaded with their usual greedy furry! They are so pretty, but their behavior does not endear them to me. They are so forceful and show no restraint in their selection of berries. . . . , some ripe, some still yellowish. . .yet they gobble them down. Much to my surprise the Jays leave. . . they give a loud warning call and take to the air. They had spotted a circling hawk overhead. I was not able to identify it from where I was seated. I am reminded "Jays" do provide a service and "fit into Nature's plan".

Today, May 16th, equilibrium is back to normal after the feeding frenzy of the past several days. Most of the berries are gone with just a few "inbound visitors". A small flock of Cedar Waxwings paid a short visit, but too few ripened berries remain to hold the interest of these beautiful birds. Several female Waxwings perched in surrounding trees and waited for a male to " bring a berry to her". It is such a treat to see this feeding habit. They are by far my favorite bird.

If you have an interest in having an assortment of birds in your yard, I certainly suggest the wonderful Serviceberry tree. The best time to plant it would be in the Fall, but if watered weekly it could be planted now.

More information about the Backyard Wildlife Habitat Program can be found on-line under National Wildlife Federation. (MAB 5-17-02)

Marisa Back, Seven Lakes West, NC

Native Plants

Don't Promote non-native plants

Reprinted from *Bluebird*, Vol. 27#1, Winter 2005

To the editor (of *Bluebird*, NABS newsletter),

I ordered a copy of the NABS Educational Packet (undated) and was disappointed that a number of invasive plants (Multiflora rose, Japanese Honeysuckle, Common Privet, Japanese Barberry, and White Mulberry, with an asterisk noting they were non-native) were included in Table One under the topic "Wildlife Plantings."

NABS should be promoting environmentally responsible conservation approaches, and should encourage people to avoid these plant, and to work to eradicate them if they are on their property.

Yes, bluebirds may eat fruits from invasive plants. One of the reasons invasive populations have exploded is precisely because birds eat the fruit and then disperse the seeds when they defecate. These alien plants can cause serious ecological harm, taking over whole habitats and choking out native species.

Bluebird enthusiasts should go with native plants whenever possible -- they are more likely to thrive, anyway.

*Bet Zimmerman
Woodstock Valley, CT*

NCBS Editor's Note:

After reading the article reprinted above, I went into the internet to check whether or not the plants that the revised "Bluebirds Forever" recommended were native or non-native.

Website <http://plants.usda.gov/>, provided quick and easy information.

Many thanks to the people that submitted pictures for a proposed calendar. The calendar turned out to be too expensive to make and sell. The pictures have been turned into small cards and will be available first at NABS 2005 and later through the NCBS Store. (\$10 for 12 cards)

Plants That Provide Summer and Fall Food

| | |
|--|---------------|
| Russian Olive* | Autumn Olive* |
| White Mulberry* | Red Mulberry |
| Flowering Crab | Elderberries |
| Blueberries | Blackberries |
| Black Cherry | Chokeberry |
| Common Snowberry | Serviceberry |
| Tatarian Honeysuckle* | Wild Grape |
| Japanese Barberry* | Pin Cherry |
| Viburnums (Mapleleaf, Hobblebush, Arrow Wood, Witherod, Siebold, Nannyberry) | |
| Dogwoods (Alternate-leaf, Silky, Gray, Red-osier, Roundleaf) | |

Plants That Provide Winter Food

| | |
|--|-------------|
| Multiflora Rose* (large properties only) | |
| American Holly | Pyracantha |
| Western Red Cedar | Spicebush |
| Red Chokeberry | Inkberry |
| Amur Honeysuckle | Hackberry |
| Virginia Creeper | Coralberry |
| High-bush Cranberry | Bittersweet |
| Flowering Dogwood | Bayberry |
| Mountain Ash | Moon Seed |
| Washington Hawthorn | Black Alder |
| Small-leaved Cotoneaster | |
| Sumac (Smooth, Staghorn, and Small) | |

Reprinted from Page 3 of "Bluebirds Forever," published by the NCBS.

The plants marked with an asterisk are non-native.

Serviceberry
in the Spring.
From <http://>





Bluebirds, Inside the Nest Box

Recorded by the Cornell Birdhouse Network

Summer 1999

Produced by the North Carolina Bluebird Society

Available for \$13.85 including shipping and handling.

Two tapes for \$25; Three for \$35; Six for \$70

E-mail towhee@blueridge.net to price larger quantities.

**MAKE CHECKS PAYABLE TO: NCBS. SEND ORDER & CHECK TO:
Ms. Christine Ammons, 670 Nanneytown Rd., Union Mills, NC 28167-8762**

North Carolina Bluebird Society Products

| Description of Item | Cost Postage Included | No. Wanted | Total |
|---|--------------------------|---------------|---------------|
| Baseball style hat with State Outline | \$ 6.50 | X_____ | =_____ |
| Novelty License Plate | \$ 8.00 | X_____ | =_____ |
| <i>Carolina Blue</i> T-Shirts | | | |
| by Dempsey Essick (S, M, L, XL) | \$20.00 | X_____ | =_____ |
| Lands End knit shirt with collar (M, L, XL) | \$35.00 | X_____ | =_____ |
| Bluebird Patches - Iron on (Bluebird with holly____ or with pink dogwood _____) | \$ 4.50 | X_____ | =_____ |
| NCBS Decals | \$ 1.00 | X_____ | =_____ |
| Cloisonné Bluebird Pins (1", 4 colors) | \$ 5.00 | X_____ | =_____ |
| Bluebird Stamp Magnets | \$ 1.00 | X_____ | =_____ |
| Bluebird Wall Pendulum Clock | \$16.00 | X_____ | =_____ |
| <u>Bluebird Trails</u> edited by Dorene Scriven | \$12.00 | X_____ | =_____ |
| "On the Wings of a Song" - Audio Tape | \$ 5.00 | X_____ | =_____ |
| - CD | \$ 8.00 | X_____ | =_____ |
| Eastern Bluebird with Flowers Card | \$ 2.50 | X_____ | =_____ |
| or 5 for \$10.00 | | X_____ | =_____ |
| <i>Bluebirds, Inside the Nestbox</i> Video Tape | \$13.85 | X_____ | =_____ |
| Also available in DVD format, same price | \$13.85 | X_____ | =_____ |
| (2 for \$25; 3 for \$35; 6 for \$70) | | | =_____ |
| | | | Total = _____ |

MAKE CHECKS PAYABLE TO: NCBS.

SEND ORDER & CHECK TO:

Ms. Christine Ammons, 670 Nanneytown Rd., Union Mills, NC 28167-8762

Date of your order is _____

Video tapes and DVDs are available on the ncbbluebird.com website.

A Way to Mount a Bluebird House

Submitted by Don Adams
Southport, NC

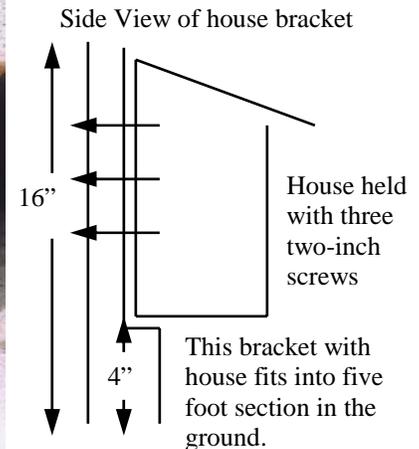
I am trying a new procedure for mounting bluebird nest boxes. The mounting on trees and fences are an invitation for squirrels.

I am using five foot sections of 1 1/2 inch and a half scheduled 40 heavy wall PVC pipe (plumber grade) with a coupling cemented at the top. I cut the bottom of the PVC pipe at an angle which can be driven into the sand in our area.

A sixteen inch piece of this PVC pipes fits on the back of the house. It is held by three two-inch dry wall screws. The PVC on the back of the house is mounted into the coupling of the six foot PVC that is in the ground. It takes less than fifteen minute to install.

To rework or replace a house, lift the box out of the coupling. Do not cement the house bracket to the coupling.

If squirrels, raccoons, or snakes are a problem, use a gallon milk jug with the bottom cut out. Mount the



jug on the pipe below the house with the open-bottom down.

Editor's Note: Don was one of the speakers at the annual meeting in Saxapahaw, NC, in March of 1996. Don says that bluebird houses that haven't had any activity in two years should be moved.

Education is Ongoing!! (concluded)

(Continued from page 5)

raised on golf courses exhibited less fluctuation in the symmetry of their tarsus bones."

Dr. Cristol concludes, "Based on our study, I tentatively can recommend golf courses as suitable habitat for Eastern Bluebirds, with the understanding that conditions vary from course to course. If other habitat in the area of the courses is suitable or better than the golf course, it might be best to place the nesting boxes off the course."

Dr. Standback "found reproductive parameters to be slightly ... poorer on golf courses.... We cannot claim that the high chemical inputs associated with golf courses have no direct effect on bluebird reproduction. It is likely that toxins, regular disturbance, and, most importantly, low food availability combine to make golf course environments less favorable for bluebird reproduction than non-golf habitats. He goes on to say, "But from a practical standpoint, there was very little difference.... I would tell

people, go ahead and do it, put nest boxes on golf courses. There is high-quality habitat and low-quality habitat everywhere. The non-golf habitat we chose also showed variations. If golf courses really are bad for bluebirds, they would not nest there."

Dr. Stanback also writes that "our insect sampling in 2004 showed golf course sites to have dramatically fewer (insects) than did our non golf habitat." This non-golf habitat had six times the number of insects found on the golf course sites.

For myself, I will look at my data a little closer. I will also contact the head Greens Keeper to see what chemicals are being used. The past few years bluebirds have occupied 85% of our houses. After ten years of monitoring bluebird nest boxes primarily on golf courses, I am still learning new things and will look at my trail differently.

*Helen S. Munro, Co-Editor,
Jackson Springs, NC 27281*

Homes for Bluebirds (continued)

(Continued from page 1)



Since 1972, Jack Finch of Nash County has worked to revive eastern North Carolina as a welcome place for bluebirds.

breeding trends. They even recommend evicting the aggressive starlings and house sparrows, which will take over a box and destroy bluebird eggs and their young.

Jack Finch perfected his own custom design and by 1979 had erected 2,280 of the vertical, rectangular bluebird boxes throughout North Carolina, South Carolina, Virginia and Florida. He strived to monitor them at least once every 40 days. He put up hundreds of boxes in Pinehurst, Southern Pines and other places in North Carolina where golf courses are abundant. Though bluebirds will breed in a range of locales, they favor mowed, open landscapes where prey is highly

visible. Bluebird boxes are now a common sight in pastures, on golf courses, and in rural and suburban yards.

About bluebirds

Bluebirds are members of the thrush family and a bit larger than sparrows, about 7 inches. Males are vivid blue with a rusty-red breast and "white belly." Females are similarly colored but much duller. Young birds have a gray-and-white speckled breast with a tinge of blue in the wings and tail.

Bluebirds are often described as having a cheerful song and disposition. Adults and children alike are enchanted by bluebirds' stark beauty and docile nature. They spend hours watching them build their nests and peering into boxes to count the eggs and young. "Observing bluebirds is a good form of mental therapy, especially for older people," Jack says.

In the temperate season, bluebirds feed almost exclusively on insects. They hunt from high perches, scanning the ground for grasshoppers, grubs and other insects, then swooping down to snatch up their prey. Both the male and female feed their babies meals of primarily soft insects. In the winter, when insects are scarce, bluebirds eat berries. They particularly love the berries of hollies and dogwoods. Beautyberry, elderberry, mulberry and sumacs (staghorn or winged) are other suitable fruit-bearers that homeowners are encouraged to plant.

Bluebirds stay in North Carolina year round and usually

begin searching for nesting sites in late February or early March. So it's best to put up new boxes by January or early February. Days or weeks may pass before the male and female begin collecting grasses or pine straw to build a nest, usually in April.

They typically build a nest in five or six days. The female begins laying eggs four or five days later. She lays one light blue (or rarely white) egg each day until the clutch is completed, then begins incubating them. The young hatch in about 17 to 18 days and spend another two weeks in the nest.

Bonded pairs can raise three broods each season—the first brood averages five young, the second brood four and the last one three, though Finch says as many as six may comprise a brood. The breeding season lasts until early September.

Because young birds fledge from the nests so quickly, it's a rare sight to see, even for Jack Finch. "In 30 years, I've never seen bluebirds leave on their own," he says, though on a few occasions he has accidentally flushed them

from the box close to fledgling time. For that reason, he recommends that people stop monitoring nests when the babies are 12 days old.

Devoted to bluebirds

Each year, Robeson County extension agent Everett Davis gets phone calls from people who want to

know how to attract bluebirds. During the past 20 years, Davis has built about 600 boxes. He gives away the ones he makes



Bluebirds stay in North Carolina year-round and usually begin searching for nesting sites in late February or early March. So it's best to put up new boxes by early February.

Desma Perry has done her part in the chain of distribution. In 25 years working for Jack Finch, she's built 70,000 boxes



(Continued on page 15)

Homes for Bluebirds (concluded)

from scrap wood and sells at cost the ones he makes from new materials. Davis also teaches 4-H and garden clubs how to build them. "It gets a whole lot of bluebird houses around the countryside;" he says.

Desma Perry has done her part in the chain of distribution. In 25 years working for Jack Finch, she's built 70,000 boxes. Her record is 10,000 in a single year. That was 1990, when Jack and his accomplishments were featured on the "CBS Evening News" with Dan Rather. The saws and nail guns hardly stopped running to meet the demand for boxes afterward. Edith Finch (no relation), another loyal employee, once made 157 boxes in a day.

Jack won't even wager a guess at how many boxes Homes for Bluebirds has built and sold. All the money goes right back into making the boxes. Early on he borrowed thousands of dollars to buy a saw, which he has used to mill the lumber and cut all the pieces for the birdhouses. Now he's even growing the trees. "When I say we're nonprofit, I mean real, real nonprofit," he says. "I'd say the bluebirds owe me \$12,000."

All these boxes amount to a boon for bluebirds everywhere. But Jack stresses that monitoring is just as important as putting up a box. His and other bluebird organizations say you shouldn't put up a bluebird box unless you will check it regularly.

"If you don't monitor and take care of problems you're actually doing more harm than good," Jack says. "You might *just* be raising sparrows to destroy some- one else's bluebirds:'

Plus, he adds, "You're missing half the fun if you don't check your boxes:'

Carla Burgess of Raleigh is a regular contributor to Carolina Country:

Mike Dunn is an educator with the North Carolina Museum of Natural Sciences and a freelance nature photographer. Contact him at mikedunn@aol.com.

Please note, bluebirds houses should be 100 yards apart not 100 feet as stated on sidebar.

BIRD AND BOX TIPS

Building and Mounting Boxes

A versatile and functional bluebird box has a fixed floor, three fixed walls, and a front wall that swivels at the top and latches at the bottom. Entrance holes should be no smaller than 1½ inches and no larger than 1⅞ inches (to exclude starlings, which are larger than bluebirds). Perches are not recommended. Floor size should be either 4-by-4 inches or 5-by-5 inches. Boxes must have ventilation and drainage holes in each corner. Birdhouses may be mounted on wooden, metal or PVC poles. Baffles on the poles made of plastic or aluminum tubing will discourage predators like snakes and raccoons.

Place boxes at a height convenient for monitoring, usually 5 feet. Allow 100 feet between boxes, as bluebirds are territorial. Select a site near open or mowed areas, but not too open—bluebirds need a high perch nearby from which to spot prey. Boxes may be erected year-round. Put up new ones by mid-winter to recruit birds.

- For educational brochures or to order boxes, feeders, specialty hardware or handy cardboard nest cups, contact Homes for Bluebirds, P.O. Box 699, Bailey, N.C. 27807, www.danfinch.com/birds.htm or (252) 235-4664.
- The N.C. Bluebird Society has county coordinators who provide bluebird house plans, tips and reference material. To find the coordinator in your county, visit the society's Web site at www.ncbluebird.com. Or call Chuck Bliss at (336) 625-5423.
- The North American Bluebird Society also offers plans, fact sheets and other resources. Visit www.nabluebirdsociety.org or call (330) 359-5511.

Monitoring and Maintaining Boxes

The Birdhouse Network provides field worksheets and instructions for recording and submitting your data. Your input helps biologists expand the body of scientific information. See www.birds.cornell.edu/birdhouse or call (800) 843-BIRD. Observe and record nesting activity, including when egg-laying begins each season, what materials the birds use for building the nest, size of the clutches and survival rate of young. Remove any dead babies as soon as you see them but leave unhatched eggs alone. Clean out boxes between each brood, removing old nest material, blowfly larvae and other insects, and debris. Check for and fix any leaks.

Identifying Other Species

Bluebirds build neat, cup-shaped nests made of weed stems, grasses and sometimes pine straw. House sparrow nests are tall and messy, sometimes made of trash. Remove these nests, or better yet, locate your boxes away from places where house sparrows abound—such as close to your house or near a source of grain. Do not disturb nests of other native species that may use the box, such as tree swallows, flycatchers, wrens, chickadees and titmice. These are protected by law and are desirable species you can still have fun observing.

Feeding Bluebirds

Unlike typical feeder species, bluebirds must be coaxed to eat from a specialty feeder. Supplements like berries and mealworms can help birds survive harsh winters when starlings have stripped shrubs and trees of fruit. For training tips, consult any of the sources listed above.



North Carolina Bluebird Society County Coordinators

| | | | | | |
|-------------|------------------------|----------------|--------------|--------------------------|----------------|
| ALAMANCE | Fran Outhwaite | (336-226-4770) | MOORE | Helen Munro | (910-673-6936) |
| ANSON | Heyward McKinney | (704-694-3240) | ORANGE | Arthrell Sanders | (919-732-4698) |
| BLADEN | Mike Jackson | (910-863-3839) | POKE | Barbara Rowe | (838-863-4253) |
| BRUNSWICK | Don Adams | (910-278-3872) | PITT | Dr. Edward Davis | (252-756-4165) |
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| EDGECOMBE | Ann Kent | (252-823-7862) | YORK, SC | Bill Hilton, Jr. | (803-684-5852) |
| FORSYTH | Bill Abbey | (336-766-5857) | | | |
| GASTON | Dana Glenn | (803-684-2300) | Web-site – | Liz Schmid | (336-595-6379) |
| GRANVILLE | Phil Walters | (919-603-0472) | | liz.schmid@earthlink.net | |
| GUILFORD | Paul Waldrop | (336-299-5308) | | | |
| HYDE | Sherri Surrat | (252-926-9313) | | | |
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| MECKLENBURG | Doug Archer | (704-643-3841) | | | |

If your county does not have a coordinator, please
Call Chuck Bliss (336-625-5423) and volunteer.

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