



## **NestBox News**

# Newsletter of the South Carolina Bluebird Society

(An Affiliate of NABS) www.southcarolinabluebirds.org

#### June 2024

#### Inside this Issue:

Pg. 1: Message from Our President

Pg. 2-5: Did You Know & Comments from the Peanut Gallery

Pg. 6-20: Featured Articles

Pg. 21-29: Pictures

Pg. 30: Join NABS & SCBS

#### A Message from Our President Mike DeBruhl

A belated Memorial Day GREETINGS to all our members. I hope that you paused to appropriately honor our fallen Servicemen and Women.

It looks like our Summer is just around the corner. And, you know what that means. It will be getting HOT! Let's remember (as if we could forget) that the heat can be harmful for our monitors and our blue feathered friends. So – we need to be careful out there on the trails. Please stay hydrated, wear a hat, and stay as cool as possible.

Our educational presentations continue to be much in demand. When you receive this, we will have delivered over 40 presentations to organization across the state - - and have another 10 scheduled for 2024 and 5 already for 2025! We are meeting a number of interested individuals and gaining new members to SCBS. Check our Website <a href="https://southcarolinabluebirds.org">https://southcarolinabluebirds.org</a> for a listing of upcoming events and to request one for your Garden Club, Bluebird Group, etc.

And while you are on the Website, please note that our member meetings are now held in the lecture hall of the Science & Engineering Build at USC – Aiken. The location directions are included on the website and we hope to see you in person - - or via ZOOM. A link is sent to members in advance of the meeting.

Just a "subtle" reminder. LAST CALL - - Have you renewed your membership? If not, please do so ASAP. Notices were sent back in April and we need you to rejoin over 450 fellow members to support our programs and take care of the Blues. You may renew (1) either online at our website or (2) print the renewal form and mail it in. Membership Chair Deb Slaunwhite hopes to soon see your renewal in our SCBS mailbox or online.

Your dues dollars go to support educational programs and our SCBS Bluebird Scholarship Program at USC – Aiken. It has been expanded and we now award \$1,000 scholarships to THREE students in the Biology Department who will assist SCBS with projects and research. This is a very successful program and we hope to include other Universities around the state in years ahead. Speaking of membership, if you are currently not a member of the North American Bluebird Society (NABS), I encourage you to join. We are a noted Affiliate and you will get a glimpse of Bluebird activity and information from across the USA and Canada. The annual dues are modest and you will receive a wonderful quarterly magazine ("Bluebird") loaded with informative, fun, and educational information. Check it out at <a href="https://www.nabluebirdsociety.org">www.nabluebirdsociety.org</a>.

Through the diligence of our dedicated monitors, we continue to expand our existing trails and adding new trails as well. We now have over 125 trials in SC, NC and GA and are starting to replace / repair worn out nestboxes. Many thanks to all our dedicated Monitors - and please do not forget to provide your fledge data to our dedicated SCBS Data Guru and "Trail Boss' Glen Hendry. Until next time - keep enjoying the birds as they grow, fledge, and more nests are built. Happy Trails and remember to keep those feeders and bird baths CLEAN and filled.



Peruse our website to view upcoming public presentations and Bluebird Society meetings. You can also purchase a complete Nestbox setup (box, pole, predator guard) on our website. Check us out on Facebook also.

Contact Steve Baker if you would like a Bluebird seminar presentation for another organization that you may belong to!! Go to our website to register.

#### **Did You Know?**

- ❖ You should clean out your nestbox after each brood is complete.
- ❖ Keep Feeders and Bird Bath / Water Features Filled for our feathered friends
- Clean the bath and water feature on regular basis. WHY = because it keeps down the chances for avian disease & also does not provide a ready breeding ground for our old friends THE MOSQUITOS.
- ❖ The average Bluebird lives about 5 years.
- Generally, 70% of Bluebirds fledge if you employ a pole and baffle with your nestbox. Twenty percent of the eggs do NOT hatch or the Nestlings die from various causes. Predators, mainly the Black snake, account for the remaining 10% of the eggs laid.
- There is a common misconception about which direction to face your Nestbox. Bluebirds do not care which direction the Nestbox faces if there is a clear flight path to and from the box.
- The feathers at a bird's wingtip are called pinions. Ravens have 17 of them. Crows have 16. Thus the difference between crows and ravens is a matter of a pinion. (Thanks Jim)

## **Comments from the Peanut Gallery**





#### A question from Ezra in Columbia, SC (4/27/24):

"I probably set up my Bluebird home too late for this year (about a month ago) and my Haikubox picks up only a very occasional Bluebird.

My question, hopefully for next year, is where can I find a small amount of "diatomaceous earth" for the floor of the bird house, which was suggested in the reading?

Also are there any plants, colors, etc. that might attract Bluebirds to one's yard?"

#### **SCBS Answer:**

"Do not despair .... You are not too late in setting up your Nestbox.

It is not too late for a nesting to still occur in that nestbox. Our normal nesting season here in South Carolina is from March 1 thru through August 31 .... And we sometimes get 3 nesting during that period. Just make sure that the nestbox is cleaned out and not being hit by your lawn sprinklers, if you have them.

You can find Diatomaceous Earth (DE) at the garden department of most Lowes or Home Depot or local Garden center or Tractor Supply store.

Unlike Hummingbirds, Bluebirds are not drawn to any specific colors. They do eat berries on Junipers or sometimes Sparkleberry and other native plants.

If you have bird feeders in your yard / lot be sure to place them about 25 feet away from the nestbox. They attract a range of birds that are fun to watch - but Bluebirds do not like to have the others too close."

## **Comments from the Peanut Gallery**





#### A question from Georgia in Aiken, SC (5/10/24):

"When you add the diatomaceous earth to the birdhouse, do you ever clean that out or just leave it in there?"

#### **SCBS Answer:**

Georgia:

Thanks for the question.

When you clean out the nest after each fledging, do brush out any remaining DE, then apply a new amount to the nestbox floor. Brushing it out and replacing it will keep it fresh and activated.

Enjoy the Bluebirds

### **Comments from the Peanut Gallery**





#### A question from Holly in Beaufort, SC:

"I went out this morning to install a predator guard on Box 19 because there were signs a cat was trying to reach the box. Unfortunately, I was too late but I don't think a cat took the nest. There wasn't a single piece of pine straw left and there were no signs of the nest or hatchlings anywhere in the area. I looked thoroughly. The box isn't far from Box 21 where we lost a CC nest recently. I now suspect a raccoon may be the culprit. Can they open boxes? Your thoughts? If it is likely a raccoon, how do I best protect the nests"?

#### **SCBS Answer:**

"I suspect humans ... kids. You can screw the door shut and carry a screwdriver with you. We've had to do that before too. Raccoons would have left nesting materials hanging out the door hole".

# "The Doctor Says So"

We are excited to present featured articles from our very own Dr. Michelle Vieyra of the University of South Carolina, Aiken branch campus.

As many of you know, the South Carolina Bluebird Society sponsors scholarships with the USCA biology department. Dr. Vieyra administers those funds and selects the student recipient(s) each year.

# To Feed or Not to Feed: Does the Supplemental Feeding of Mealworms Help Bluebirds?

By Dr. Michelle Vieyra

At the April SCBS meeting, guest speaker Shari Potter, owner of Beetle Barn Mealworm Farm in Hephzibah, GA, presented information about how she raises mealworms. Her presentation was fascinating but raised the question – Does the supplemental feeding of mealworms actually help Bluebird nesting success? As a scientist I always approach questions like this by looking at the published research. I would like to share with you what I have learned after consulting two recent publications on mealworm supplementation.

Both studies provided live mealworms, either within the nesting box or in a feeder attached to the box, during the nesting season. Both compared results to a comparable number of control boxes that did not receive supplementation. The first study, published in 2021 in the Journal of Field Ornithology, took place in New York and only provided mealworms after the eggs began hatching. While there were no differences between the supplemented and non-supplemented groups in average brood size, incubation period, or percentage of nestlings that fledged, they did find that 13-day old nestlings receiving supplemental mealworms weighed 5.2% more than those not being supplemented. The authors did note that this difference in weight was greater during the warmer/ drier part of the season, that these results contradicted results found in other states, such as North Carolina, and that environmental conditions are likely a major factor in whether or not supplemental feeding is beneficial. Bluebirds are very skillful insect hunters and can provide their offspring with ample amounts of food if plentiful but if prey is scarce supplemental feeding can be a benefit.

The second study, published in 2022 in the Journal of Avian Biology, took place in Oklahoma and employed three different supplementation protocols; providing mealworms from nest completion until fledging (full), only from nest completion until hatching (partial), or not at all (none). This study found no difference between the three groups in average brood size, percentage of eggs that hatched, percentage of nestlings that fledged, or blood markers that reflected stress or immune function in adults or offspring. Contrary to the previous study, they also found no difference between the fully supplemented and non-supplemented groups in 14-day old nestling weight. They did, however, find that providing mealworms only while eggs were present (partial supplementation) resulted in slightly reduced nestling weight at day 14.

So, what can we take away from these two studies? First of all, depending on conditions that affect prey availability, there may be some benefit to the health of fledglings by offering your Bluebirds live mealworms. NABS recommends 15 mealworms per Bluebird per day. However, if you are going to open up a mealworm buffet make sure you are committed to staying open until the nestlings fledge or you risk compromising their health. If you know you will be taking a long summer vacation or are otherwise unable to provide steady supplementation through the full nesting cycle it might be better just to let the Bluebirds do what they are great at hunt their own prey.

Dr. Michelle Vieyra is an Associate Professor of Biology at USC Aiken. Her undergraduate lab maintains and monitors 31 nestboxes on the USCA campus in collaboration with the SCBS.



#### **Shared Information in Collaboration with Other NABS Affiliates**

The following "Q&A" items are reprinted with permission from Gail Chapman of the Michigan Bluebird Society from their Winter Edition Newsletter.

### Q. Are bluebirds monogamous?

**A.** For Bluebirds, there are two aspects of mating: social and sexual. Studies have shown that 95% of Bluebirds form socially monogamous bonded pairs that stay together for as long as they both survive. During nesting season, a male will guard his mate to prevent her from mating with another male. He does this to ensure that their offspring are his. But despite their life-long social bonds, Bluebirds are not always sexually monogamous. Genetic analysis of nestling Bluebirds across multiple studies has revealed that as many as 25-30% of broods are fathered by more than one male.

Although Bluebirds routinely copulate outside their bonded pair, it's the socially bonded male that sires most of the nestlings in the nest. And the socially bonded pair will raise and care for the young. While socially bonded Bluebird pairs typically stay together for life, they may split up if they experience one or more failed nesting attempts. One study of Eastern Bluebirds showed that 30-50% changed partners after nesting attempts that were unsuccessful. Bluebirds will also find a new partner if their mate dies.

### Q. Is it necessary to add calcium to mealworms? If so, how should I do it?

**A.** A lack of calcium can cause serious health issues for both nestlings and adults. Low calcium can cause a nestling's bones to develop incorrectly and to be weak. In adult females, low calcium can cause egg binding where the shells are softer than normal, making it difficult or impossible for the female to pass the egg.

Mealworms are rich in fat and protein but have a low calcium content; eating too many mealworms can deplete a Bluebird's calcium. For this reason, mealworms should be fed as a treat or to supplement their regular diet. Some experts suggest feeding 12-15 mealworms per Bluebird per day. But sometimes it's necessary to feed larger amounts — such as after the loss of a parent bird or during long periods of cold, rainy weather when insects are scarce.

You can supplement calcium by dusting mealworms with calcium carbonate or calcium citrate powder before feeding. Food grade powder is inexpensive and readily available online or at health food stores. Sprinkle it directly on the worms and toss them gently. Alternatively, some

people sterilize their eggshells then dry and grind them to a powder to use as a supplement. The bottom line is that adding calcium is a good idea.



Photo by Rich Field (Michigan Bluebird Society)



## **Spotlight on SCBS Trails**



### New (Old) Trail in North Augusta

Julie Bush is a member in North Augusta. Julie introduced herself to the administration at **LBC Middle School** in the hopes of revitalizing the old Bluebird trail at the school. The trail has been dormant since 2016, although the nestboxes were still on the campus. Julie got the full support of the school administrators and even has some students very interested in helping her maintain the trail and assist with monitoring.

As is the problem with most school trails, keeping monitors involved in the summer months while school is adjourned, this trail suffered from those circumstances. Thanks to Julie's dedication, the trail is back and the kids are involved. She has permission to monitor with the kids during the summer months also.

A BIG HURRAY and heartfelt thanks to Julie & her Bluebird kids. As of March 22<sup>nd</sup>, 3 of 6 nestboxes were occupied; one had 3 eggs and another had 5 eggs.



LBC Middle School students: From L to R – Drewann Rucker, Jocelyn Jowers, and Rose Hileman

<u>Julie Bush</u> is a retired college administrator who got hooked on Bluebirding by her friend, SCBS's own Janis Krauss. Her passion was quickly passed to Julie as she taught her how to monitor and care for a section of the Barbara S. Greeneway Trail in the Spring of 2022.



# **Spotlight on SCBS Trails**



### **A Bluebird Trail of Happiness**

Or How the **Barbara S. Greene Trail** came to be in North Augusta, SC

#### By Janis Krauss

In 2011 when Jon and Janis Krauss moved to their house in Hammond Hills, SC, there was a note left on the kitchen counter explaining that there were nesting Bluebirds in the backyard. By the time their move was complete the birds had moved on, but wanting to learn more, Janis started reading all about the blues. She found out how particular they are about their houses and food! After several years of coaxing, cajoling, nest-box relocation, whistling, and providing mealworm delicacies, she finally lured a family to settle in 2014. Her perseverance was rewarded with 2 broods of Bluebirds (5 + 3), for a total of 8 babies. Inspired, she then became a member of the South Carolina Bluebird Society (SCBS) and the North American Bluebird Society (NABS). As a retired nurse, she found taking care of birds was easier than people.

As a happy coincidence, there was a group of folks called Friends of the Greeneway (FROG) who supported the "Rails to Trails" walking/running/cycling project in North Augusta and during a meeting discussion, it was mentioned that there was an interest to develop a Bluebird trail along the route. A collaborative effort was then formed between SCBS and FROG to add a Bluebird trail on the Greeneway. Named after North Augusta former First Lady Barbara S. Greene, who dearly loved Bluebirds, the Greeneway was set up as a dedication trail with interested folks purchasing the boxes, poles, baffles and plaques with their choice of wording.

The trail began with 10 nest-boxes on the Greenway for the 2015 March – August season. Our fledge numbers for the starting year were: 8 Bluebirds and 18 Carolina Chickadees. To our delight in 2016 the numbers went up to 30 Bluebirds, 11 Carolina Chickadees and 4 Carolina Wrens. 3 more boxes were added in 2017 for a total of 13 nest-boxes. That year produced 41 Bluebirds, 6 Carolina Chickadees and 22 Carolina Wrens.

For the 2018 season, when there was a request to add 5 more boxes, Leslie Dickerson came on board to become a 2<sup>nd</sup> monitor. That year we had 39 Bluebirds, 13 Carolina

Chickadees and 7 Carolina Wrens. And in 2019 another 5 boxes were added to the Brick Ponds area off the Greeneway. Michaela Canaday accepted role of monitoring those new nest-boxes and although we had some snake predation, our numbers were: 40 Bluebirds, 11 Carolina Chickadees and 14 Carolina Wrens.

Fast forward to 2022. The Greeneway trail had yet another expansion to total 40 nest-boxes with 2 more helpers added to monitor the boxes; Julie Bush and Jamie Riedy. We really exploded that year with a total of 65 Bluebirds, 32 Carolina Chickadees and 11 Carolina Wrens.

2023 saw a decline in our numbers, (except for the wrens) for unknown reasons, but we still managed to fledge 38 Bluebirds, 15 Carolina Chickadees and 32 Carolina Wrens.

And we're off to a great start for this season. Stay tuned for those numbers in the fall!

Janis Krauss, BSN, MS Quality Assurance, currently enjoys retirement in North Augusta with her husband and 2 small white rescue dogs. They all love traveling in their RVAN. She is currently serving as Secretary of South Carolina Bluebird Society



# New bat species for South Carolina discovered in Upstate

A new bat species not previously known here has been discovered in South Carolina by SCDNR scientists. A captured gray bat is shown in this photo. In the photos below, Jennifer Kindel, SCDNR state bat biologist, looks for the bat in a crevice beneath a Greenville County bridge. In the photo at bottom, a gray bat is shown in the crevice in which it was found. (SCDNR photos)

Nov. 15, 2023

Scientists have known for many years that South Carolina has been home to 14 bat species, but another bat species has now been recorded: the gray bat (*Myotis grisescens*).

This fall, scientific staff with the S.C. Department of Natural Resources (SCDNR) discovered the first gray bat in South Carolina roosting in a crevice on the underside of a bridge in Greenville County.

"The recorded range of the gray bat has always skirted the edges of South Carolina, with counties bordering the state from Georgia and North Carolina in the Blue Ridge ecoregion," said Jennifer Kindel, SCDNR state bat biologist. "Without a record of this species in the state it was difficult for biologists to obtain funding for systematic surveys, but now we hope to learn more."

Kindel had been in touch with bat biologists in North Carolina who had been finding gray bats only miles from the North Carolina/South Carolina border the past few years. Though Jennifer and her wildlife technicians had attempted to net a 100-foot bridge where gray bat calls had been recorded, they were not having any luck. She decided to expand the

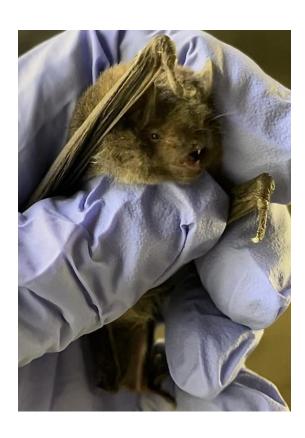
search to shorter bridges with easier survey access, and in mid-August, she and Helle Cavalieri, her lead bat technician, found the first gray bat for South Carolina in Greenville County.

A week later, Kindel and Mary Bunch, retired heritage preserve manager and biologist specializing in bats and other small mammals, found the first record of a gray bat in Oconee County. A total of four gray bats were ultimately recorded.

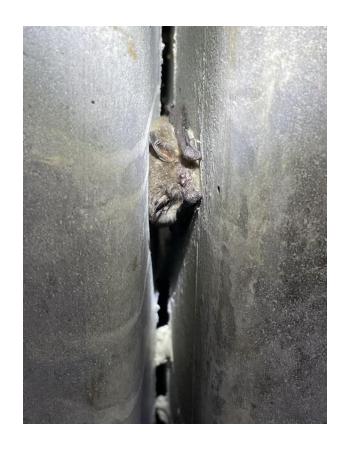
Gray bats are listed as a federal endangered species. Kindel said the gray bat has recovered from predicted extinction since being placed on the endangered species list, but populations are still at risk due to gathering in very large numbers in only a few caves.

To learn more about bats in South Carolina, visit <u>SCDNR - Bats</u>.

Media contact: Greg Lucas, Office of External Affairs, (864) 380-5201, LucasG@dnr.sc.gov







# New Species Discovered in Aiken County, SC

# "Grey Crested Oldus dufferus"

A new species was discovered in Aiken County recently, "Grey Crested Oldus dufferus". It is closely related to the Koo Koo & Dodo bird. It was discovered by an SCBS trail monitor who noticed the dufferus looking for its abandoned eggs. They are not cavity nesters but are open ground nesters. They abhor sand and water and often times their eggs are lost in water "traps". Their call is often a high pitched scream. Approach one of these birds with caution as they can be grumpy at times (especially around water).



"Oldus dufferus" tending to its eggs



#### **SCBS Article in the Aiken Standard Newspaper**



# Out My Backdoor: Bluebirds Sometimes Nest in Odd Places (Reprinted with Permission)



Eastern Bluebird (Terry W. Johnson)

#### By Terry W. Johnson

When the first European colonists set foot in North America, the eastern bluebird was nesting almost exclusively in cavities found in native trees. However, as the population of these early settlers swelled and began to dramatically change the environment, bluebirds began nesting in places that were previously unavailable to them. Some of these sites continue to be truly odd.

One of the earliest reports of bluebirds nesting in strange places appeared in a newspaper column published in the 1800s. The column reported that a pair of bluebirds nested in a railroad signal ball. Despite the ball being raised and lowered scores of times every day, the birds successfully raised two broods of young.

It seemed that each time the ball was raised and lowered, if an adult was in the nest, it would simply fly to a nearby fence and wait for the signal to return to its original position. At such time, without hesitation, it would fly back to its nest.

In another case, bluebirds attempted to nest in what was described as a stone jar lying on its side in a cemetery. For some unexplained reason, a female bluebird built a nest and laid four

eggs in the jar. All went well until a well-intentioned visitor noticed the jar lying on its side and set it upright. This resulted in one egg being broken and the nest being abandoned.

There are any number of reports of bluebirds nesting in mailboxes and newspaper delivery tubes. Bluebirds have also been known to nest in jars, cans, clothespin bags and even a pair of shoes left to dry atop a car.

In Texas, a pair of bluebirds nested alongside a busy highway in a hole in the pole supporting a traffic sign. That in itself is different; however, what makes this report truly odd is that the hole was only 24 inches above the ground.

From time to time, bluebirds will nest in vehicles. Nests have been found in car grills and bumpers, and even the tailpipes of scrapped cars. In one instance, a pair of bluebirds nested, in of all places, the gas tank of a retired tractor.

Several years ago, Dr. Jerry Payne, a retired U.S. Department of Agriculture research scientist and a Georgia DNR Wildlife Resources Division volunteer, showed me yet another bizarre bluebird-nest site.

Over the years, Jerry (recently decreased) and his wife Rose did more to enhance their property for wildlife than any other couple I know. Their accomplishments include erecting literally scores of bird nesting structures. Because of their efforts, countless young bluebirds and other cavity-nesting birds fledged from the Paynes' boxes.

In addition to his conservation endeavors, Jerry created what is probably the largest bottle tree forest in the entire state. I call it a bottle tree forest because it contains more than 140 bottle trees.

Jerry dedicated one of these trees to the eastern bluebird. This tree is bedecked with scores of colorful bottles. What makes it even more unique is that near the top, a bluebird nesting box is nestled among the colorful bottles.

When I first looked at the tree, I was taken aback by the tree's dazzling kaleidoscope of colors. Then when I gazed at the box, I could not help but wonder if a bluebird would actually nest in such a unique but unnatural setting. When I asked Jerry about it, he said bluebirds had successfully nested there for years.

After seeing a bluebird box surrounded by colorful bottles, I now wonder if I will ever see anything stranger than bluebirds nesting in a bottle tree.

Terry W. Johnson is a retired Nongame program manager with the Wildlife Resources Division and executive director of The Environmental Resources Network, or TERN, friends group of the division's Nongame Conservation Section

# Where Does Your SCBS Membership Dues & Donations Go?



That money goes into making happy, smiling faces!!









SCBS donated 15 Bluebird nestboxes to the Scouts this year. The kids assembled the nestboxes and they will be installed at the Knox Scout Reservation on a new Bluebird trail.

# **Picture Collage**













These beautiful pictures of Bluebirds were taken by **Robert Weston** of Columbia, SC. The pictures were taken in Clemson, SC at Carl Ackermans' bird setup called The Nuthouse. (https://www.carlackerman.com)





Feeding Time (Bill Bender)





Screech Owlets in Hitchcock Woods Owl Boxes





House Wren – Stick Nest & 7 Eggs in Hitchcock Woods

(Glen Hendry)



Nest from Spanish Moss (Holly Ruoff)



Brownheaded Nuthatch Hatchlings (Roger Brock)



Chickadee Hatchlings (Glen Hendry)





## "Blinky" the Rescue Owl

Blinky, six week update...

- \* Very healthy and growing like a weed, he is up to 2.4 lbs, and 14 inches tall. Based on (six week) size he is expected to reach 28 to 32 inches tall.
- \* Feathers are nearly 80% complete; but his (secret weapon) claws are just starting to form.
- \* All though it took him 4 days to figure it out, yesterday he passed a major milestone, by capturing his first live bait (quail), that was released inside his man made (wired) habitat (size of a dbl. car garage).
- \* The Rescue specialist advised he will NOT be released back where he was born (Woodside). Residential release is prohibited by Wildlife guidelines.
- \* The official release (in the wild) date will not be set until after June 25th.
- \* Of all the rescue animals... owls take the longest in developing and understanding how to use and protect their powerful hunting capabilities.

# **Trails on the Trails**

As we walk our respective Bluebird trails, be on the lookout for telltale signs of other critters out there with us!!

















## **A BIG Shout Out to Our Corporate Members**

## **Please Support Your Local Business & Our Corporate Members**



**Bridgestone** Americas, Inc.

Salem SC

Graniteville SC



Surfside Beach SC



Columbia SC



Augusta GA



Broad River Energy, Gaffney SC



Carriage House Inn, Aiken SC



Woodside Plantation, Aiken



Beidler Forest Audubon Center, Harleyville



Friends of Lake Keowee Society, Anderson



Cold Creek Nursery, Aiken SC

## Join the North American Bluebird Society

The South Carolina Bluebird Society is an affiliate of the North American Bluebird Society (NABS). NABS needs your support to continue their mission in Canada, Bermuda & the USA. Visit NABS on their website www.nabluebirdsociety.org.



## Join the South Carolina Bluebird Society

Give a membership to a family member / friend. It makes a great present!





We appreciate your support and will continue to spend your membership dues responsibly to ensure the continued viability of the Bluebird population in South Carolina & adjoining states.