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Cover photo: Male Mountain Bluebird photographed at Vancouver, British Columbia, Canada (devon/bigstock.com).

Table of Contents photo: This Northern Flicker was photographed against a backdrop of autumn leaves a few years ago in Searsmont, Maine. https://www.flickr.com/photos/79452129@N02/
Overland Automobile manufactured vehicles from 1903 to 1908, when it was purchased by John Willys, who renamed the company Willys-Overland. Willys continued to produce cars with the Overland name (including the 1924 Blue Bird pictured above) until 1926. Willys went on to fame for its development (with the Ford Motor Company) of the Willys GP—the ubiquitous military Jeep. So in a way, the Overland Blue Bird is the great grand-daddy of the Jeep and all other modern-day sport utility vehicles. Vintage ad courtesy Alden Jewell (https://www.flickr.com/people/autohistorian/).
Well it’s over again. What started in March with great hope is now in the rear-view mirror—the 2017 nesting season is completed. In many parts of our North American continent weather did not cooperate this year. For example, much of the upper west from British Columbia to Montana and beyond was very hot and dry. I’m sure many of our bluebirders in that area have been impacted by forest fires and smoke. The US southwest was an a cauldron for much of the summer. These are not the kind of conditions that are ideal for incubating eggs or finding insects to feed a brood of chicks, unfortunately.

And it was not just heat and drought—other things are going on I think. Many areas on the interior of the continent, like Ohio where I live, were fairly normal in terms of temperature and moisture but insect populations still seemed “below normal” to me. I do not think it is just my imagination. I have data! I use the “windshield test.” It certainly seems to me that the number of bugs splattered on my Jeep’s windshield are very much reduced now compared to decades past. In fact, I know it is not just my imagination. In May of this year I read an article in Science magazine on insect populations in the United Kingdom entitled “Where have all the insects gone?”

It’s a very good question with no obvious answers. One prominent research group in the UK, the Krefeld Entomology Society, has run insect traps for decades. These are “pitfall” traps and also “vacuum traps” (vertical pointing pipes with suction) so they collect both walking and flying insects. They have noted up to 80–90% declines in their trap biomass (weight of collected bugs) when comparing the last several years with the collections of the1980s.

Similar observations are seen on the European continent. A 2015 article in Yale Environment reported that German entomologists working in the rural Westphalia region have found that the total biomass of insects collected over a summer sampling period (May to October) have dropped steadily over the years from about 3.5 kg (~3.5 lbs.) per trap in the 1980s down to about 0.3 kg (~10 oz) by 2014. The article further points out that these dramatic declining trends appear to be worldwide.

But of course such changes in insect populations have further implications. Ornithologists in England believe they are finding hints that the numbers of insectivorous birds maybe declining in synchronization with the loss of food items. Bird population declines would hardly be unexpected—all species respond to changes in their food chain. In fact, the English studies also showed that the array of insects consumed by these birds had changed also. Similar observations have been made in North America as well. Ornithologists in Canada who have studied Chimney Swifts for decades have seen dramatic changes in the chitinous insect parts found in the droppings collected from chimney flues. We can probably anticipate that changes in insect populations are impacting welfare of all species that depend on insects as a food source—our bluebirds included.

This is something we must watch as there is evidence of insect population declines happening in North America, too. We know that American scientists have long been documenting the decline in flying species such as honey bees, monarch butterflies, and fireflies. But now there is also evidence of declines in “non-charismatic” insect species such as various moths, flies, beetles, and even non-insects like spiders. I did not see a lot of mosquitoes this summer—did you? Ask me if I care. But I would probably care a lot if I was a Tree Swallow or a Purple Martin!

What is causing these changes is unclear. The usual suspects are changes in land cover and land use, the use of new generation pesticides (e.g., neonicotinoids), and perhaps changing climate patterns. But these are mostly theories at this point. One clue might be that scientists observed similar decreases and then increases in insect populations when DDT was introduced in the 1940s and then withdrawn in the 1980s.

In Germany, for example, entomologists found that while very small amounts of common neonicotinoids may not kill directly they can have other indirect, albeit life-impacting, effects on insects. As little as a nanogram (one billionth of a gram) caused a marked reduction in the breeding success of parasitoid wasps, for example.

So human activities with pesticides might be part of the problem, but it seems likely that other factors may
be at play as well. For sure all of this “bug business” is very much of interest to “us bluebirders.”

Moving on, I have been telling you about our effort to interview all of the NABS Affiliate organizations. The process is nearly complete but we are still having trouble contacting, and hence are missing, reports on about 10 of the 61 Affiliate organizations. Therefore, I will wait until the winter issue of Bluebird to describe the results of our survey. One thing I can say is that you will be very impressed with these organizations. Some Affiliate organizations have a membership of only a few individuals while some have more than 1000! But they have one common characteristic and that is a long-time devotion to bluebirds. In fact, some of these Affiliate organizations were in existence before NABS!

Most of the Affiliate organizations are, like NABS, registered nonprofit corporations and they have a Board of Directors and by-laws. Almost all of them provide workshops on bluebirding, sponsor nestbox building, hold annual conferences, and collect nestbox productivity data each season. These are our partners in this bluebirding business. Look at our list of Affiliates and if there is one of them in your area consider joining it as well as NABS!

If you are a member of one of the NABS Affiliates please take the time to look at the Affiliate Directory on page 30 and check to see that the contact information for your organization is correct. If you see an error please let us know about it.

Again, we would love to hear stories about our Affiliate organizations—when and how it was founded and information about the yearly activities. For those Affiliates who might be interested in doing a story on their organization for publication in Bluebird please contact NABS either by telephone, email, or postal service and we will get back with you to help coordinate the effort.

In the near future NABS will be introducing a new website so keep an eye out for it. The address will remain www.nabluebirdsociety.org but the site will be completely freshened and much of it will appear different. Our long-time webmaster Jim McLochlin (Nebraska) has retired from the post. All of us owe Jim a debt of gratitude for creating our website in the first place and then for his many years of service as NABS webmaster. Also be advised there may be a periods in the transition when some parts of our new site might not work exactly as we intend but these problems will be dealt with as they appear.

Be sure to winterize those nestboxes to help bluebirds when the cold weather comes!

Bernie

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Give the gift of Bluebird!

Or make a year-end tax deductible donation to NABS!

Bluebirds and other cavity nesting birds continue to need our help. As we approach the holiday season, please consider giving the gift of a NABS membership to a family member or friend. This is an easy, hassle-free way of shopping for a special gift or making an important donation to NABS. Simply make a copy of the membership form on the back cover of this issue of Bluebird and fill in the necessary information. Then send it with payment to the NABS post office box listed on the form. Alternatively, you can go to www.nabluebirdsociety.org and download a membership form or complete the form online and submit payment using PayPal. Your gift or donation will be acknowledged by letter.

David Kinneer
From the Managing Editor
Scott W. Gillihan

As I write this, Halloween is just a few weeks away, so the media and local stores are awash in pumpkins, witches, candy, and costumes. That must be why this story caught my eye: A writer for the Richmond (Kentucky) newspaper recently reported seeing purple-faced juvenile bluebirds. Early Halloween costumes for trick-or-treating bluebirds? No, it seems the local birds are fond of pokeweed (Phytolacca americana), which they can’t eat without smearing that berry goodness all over their faces. (Note that virtually all parts of the pokeweed plant, including the berries, are highly toxic to humans. Birds have a digestive system that can handle the toxins, but mammals do not. Don’t eat any pokeweed! But do eat your fair share of Halloween candy!)

My thanks to Robyn Bailey & Chelsea Benson (Cornell Lab of Ornithology), Gaye Lindsey (Mobile Bay Audubon Society), Sandy Morrissey (Bronx River – Sound Shore Audubon Society), NABS member Bob Peak, and all of the writers and photographers who contributed material to this issue, and to the sponsors and advertisers. And a special thank-you to the members of NABS, for their hard work and dedication to conservation of bluebirds and other cavity nesters.

As always, please send any photos, articles, or ideas to me at NABSeditor@gmail.com or 5405 Villa View Dr., Farmington, NM 87402.

Officials of the North American Bluebird Society, Inc.

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<th>Facebook Committee</th>
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Bluebird Managing Editor
Scott W. Gillihan (NM)
To the Editor:
I’m 80 years old and have been raising bluebirds practically all my life starting from the time I was 7 or 8 years old, and even while in the Air Force during my 21 years on active duty when stationed near home. So you may say I’m a bluebird fanatic, and have converted many of my friends to being one also.

After joining NABS last year I had just started experiencing the House Sparrow problem with the slot-box concept. After receiving several of your fact sheets and ordering a slot-box from Amazon.com. That was a mistake as the box was made with the emphasis only on the slot hole. It was a useless piece of crap being made for money only and the sparrows had a nest in it the second day I put it up, and it had a 1-3/16” slot entrance hole. I have been building slot-boxes with a 1-1/2” slot-hole for wrens for years and have had sparrows nest in them. So when the bluebird slot-box came out with the 1-3/16” slot entrance hole I thought that may be the key to sparrow resistance. But not so. That 1-3/16” slot entrance hole means absolutely nothing to a sparrow. From my experience any entrance hole a bluebird can enter so can a sparrow and he will.

The only problem I have with the Loren Hughes slot-box is the technical design itself, and a novice woodworker will get a headache following his building plan. My box works just as well as his and it’s a four-sided box anybody can build even without woodworking experience. And it works like a good bluebird dream.

Bobby Langley
Rocky Mount, NC

P.S. It would be great if you could publish an article about sparrow-resistant nestboxes and a good working plan to build one.

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To the Editor:
I found the NABS Summer issue article “Do Bluebird Parents Coax Their Young To Fledge?” to be quite interesting. My own anecdotal experience (and that of others I know in this state) is that with Eastern Bluebirds, the parents will often start coming less to feed the young close to fledging. Moreover, they will also “call” the young toward a nearby tree or shrub. I don’t observe this all the time, but I have seen it often enough to believe there is something to it. We have received quite a few questions over the years asking, “Why are my bluebirds not coming to the box with the young still in there?” And after questioning it always seems to be happening close to fledging. So, getting back to the research study mentioned in the article, which only observed Mountain Bluebirds, more research would need to be done with Eastern Bluebirds as well. Also, 19 boxes and 78 fledglings is a small study, so the usual issue of statistical significance would have to be brought up. A final point would be that the camera recordings used probably didn’t include audio. So, if the parents were calling the young, the researchers likely wouldn’t have known.

Anyway, again, all this is useful and points toward more future work.

Kurt Hagemeister
President, Michigan Bluebird Society
Welcome NABS Board Member Sky Rector

[Note from Jim Burke, NABS 2nd Vice-President for Community Relations: I have been communicating with Sky for the 2+ years I have been doing membership. Shortly after I took over membership Sherry Linn mentioned to me that she thought he had brought in over $2000 to NABS thru his nestbox building, but nobody was keeping a record. I then set up a data cell to record when a donation was the result of his work. Since that time NABS has gotten another $1950. Here is the biography provided by Schuyler (Sky) Rector.]

I was born 77 years ago in Madison, Wisconsin, and was the third of four children. (My twin sister, Kate, still reminds me that she is nine minutes older.) At age 10 my family moved to Milwaukee and that was my home until I graduated from UW Madison, married my college sweetheart, and entered the US Air Force via OTS. I was in USAF for 4½ years serving as a Weapons Controller Officer (“scope dope”) and had one memorable tour in Southeast Asia from 1964 to 1965 where I was awarded the Bronze Star.

I separated from the Air Force in 1967 and joined a small brokerage firm in Atlanta, Georgia. Years before I had purchased my first share of stock with some paper route money and the idea of investing and owning stock fascinated me. Atlanta appealed to me because it looked to me to be a city on the move with a lot of opportunity for a young married couple. The brokerage business was challenging, exasperating, and a lot of hard work, but I loved it and stayed with it for 30 years, cultivating many friends and raising a family of two children. Along the way my wife died after a long battle with multiple sclerosis. I remarried—to Diana, who came with two of her own children and became Super Mom in all respects.

Woodworking had long been a hobby of mine. I had a small workshop when I was 12 years old and spent many hours creating objets d’art. It was a hobby I never had much time for as an adult but I continued on with it nonetheless. About 25 years ago I got more serious and bought a basement full of “big boy” tools. These would remain “dry docked” for a couple of years until I retired and could devote quality time to making all the things that I had only dreamed about.

Here and there I made a few nestboxes using the Peterson design and gave them to friends, family, and charities. I guess over a period of about 20 years I made a lot of boxes but never kept track of who I made them for or their final destination. Then three or four years ago I heard about NABS and thought, “Hey this is a great organization and it’s 100% volunteer. Maybe I can help them out a little.” So I devised a plan: build nestboxes, sell them at cost ($25 including installation), and have the recipient send $50 per box to NABS.

I also built and installed 20 boxes around a 60-acre polo field complex, which I monitor every week beginning in mid-March. I have three boxes with cams on my own property and two are currently rented out—one to a bluebird family with four babies and one to a titmouse with six eggs that are about ready to hatch. What goes on inside the boxes is truly fascinating! Going forward I plan to build about 10 to 20 boxes per year as long as I am able to do so. I am also a Life member of NABS.
I have read that before House Sparrows and European Starlings were imported bluebirds commonly nested in cities and on farms. Now bluebirds are uncommon in these areas, probably because of the high numbers of House Sparrows. I live in a city of about 16,000 people and I have been fortunate to have had Eastern Bluebirds nesting in my yard despite having numerous House Sparrows in my area. I am lucky that the birds found my yard and I have strategies for maximizing the nesting success of bluebirds and other native cavity-nesting birds and minimizing interference from House Sparrows and European Starlings.

I think it is imperative to aggressively trap House Sparrows and European Starlings and to have a zero-tolerance policy toward these two imported pest species. I use a Trio ST-1 trap, Deluxe Repeating Sparrow Trap, and Van Ert Traps inside nestboxes. I think it is important to trap year-round to help keep House Sparrow and European Starling numbers down because more of these pest birds are constantly moving into the area. I think it is necessary to immediately trap House Sparrows when they take over a nestbox because if bluebirds come it is essential that there are unoccupied nestboxes for them or they won’t stay.

If you have bluebirds and House Sparrows nesting in different nestboxes I would not count on there being peaceful coexistence between the birds. They may get along for a while but House Sparrows have been known to suddenly turn and attack, destroying bluebird eggs, killing the young, or even killing the parent bluebirds. If House Sparrows and bluebirds are allowed to coexist and if all the nestboxes in the yard are occupied, what happens when more House Sparrows show up? The answer is that the new House Sparrow arrivals will probably evict the bluebirds. These are good reasons not to let House Sparrows and bluebirds coexist and why it is important to trap House Sparrows as soon as they claim a nestbox.

While European Starlings cannot enter a bluebird house with the correct size entrance hole I feel that it is still important to try and eliminate them from the area for the sake of the native birds. I use larger nestboxes with Van Ert Traps to capture starlings. Starlings have been known to harass and attack adult bluebirds, interfere with the parent bluebirds that are feeding their young, and have been known to stick their heads into a bluebird’s nestbox and peck the eggs, young, or parents even if they cannot totally enter the nestbox.

I also strongly suggest putting up numerous nestboxes in areas where House Sparrows are numerous. If there are only one or two nestboxes in a yard there will probably be a fight for control between the bluebirds and House Sparrows, and the latter will probably win and the bluebirds will be out of a home or, even worse, will be killed. By having numerous nestboxes there is a good chance they won’t all be occupied by House Sparrows and bluebirds may be able to use one of the nestboxes and the House Sparrows can be trapped with Van Ert Traps in the nestboxes they occupy. If there are unoccupied nestboxes and if House Sparrows come into the yard the chances are pretty good that the bluebirds will defend their nestbox enough that the House Sparrows will move over to one of the unoccupied nestboxes where they can be trapped with a Van Ert Trap.

If Tree Swallows are common they may colonize if numerous nestboxes are put up but I don’t have this problem. Some people feel that putting up numerous nestboxes encourages House Wrens to nest but I have seen bluebirds and Tree Swallows chase wrens away so I don’t have a problem with wrens. These methods require vigilance but this can be done fairly easily if the nestboxes are in your own backyard. The goal is to eliminate all House Sparrows from your nestboxes and have only bluebirds and other native cavity-nesting birds in your nestboxes, and to reduce the populations of House Sparrows and European Starlings in your area. These strategies work for me as I have had Black-capped Chickadees, Tree Swallows, and Eastern Bluebirds nesting simultaneously on my quarter-acre lot.

James Kronenberg is a member of NABS, BRAW (Bluebird Restoration Association of Wisconsin), and the PMCA (Purple Martin Conservation Association).
When one of our volunteer monitors reported one blue egg (Eastern Bluebird) and six white eggs (Tree Swallow) in a nest, we did not get too excited because this has happened before, and the bluebird egg never hatched. This was in nest box #79 of our 88-nestbox bluebird trail at Sky Meadows State Park near Delaplane, Virginia, a project of the Shenandoah Chapter of Virginia Master Naturalists.

But, two weeks later when the monitor reported four Tree Swallows and one Eastern Bluebird hatchlings (two unhatched swallow eggs), and sent a photo, we got very excited. I checked the nestbox the very next day and confirmed this report (plus another Tree Swallow had hatched by that time) and took several photos clearly showing the larger bluebird hatchling with the smaller Tree Swallow hatchlings.

This nestbox was then watched closely and more often as the chicks developed and feathers started to appear and open when many questions came to mind. What might happen when the chicks fledge? Would the Tree Swallow parent tend the bluebird chick? Would it adapt and learn to hunt like a swallow? Might it also attempt to migrate with them? As it got closer to fledging time, I had to seek advice on this situation, so I contacted the NABS hotline. I got a response very soon with good advice. They said it would be highly unlikely the swallow adults could attend the bluebird chick and that swallow chicks develop ready to fly as soon as they fledge due to their aerial hunting style, as opposed to bluebird chicks, which must have more time with adult bluebirds tending and feeding them as they develop their flying and drop-feed hunting skills. They suggested I move the bluebird chick to another nestbox with bluebird chicks the same age.

So, the very next day, I studied the trail log books to find an appropriate bluebird nest. I found two that had dates very close to the age of the chicks in box #79, but when I checked the first of those boxes the chicks looked older and more developed. The other nestbox looked just right with four bluebird chicks at the same developmental stage as “Little Blue” (our new nickname for the bluebird chick in box #79). I retrieved “Little Blue” from his nestbox and transported him in a temporary nest made from a felt hat I had in my truck lined with grasses and a cloth to cover it to simulate the darkness inside a nestbox. He remained very calm and still. I then put him in nestbox #6 with the other bluebird chicks and he snuggled right in with them. The nestbox was then checked almost daily to assure all chicks were thriving. By July 5, all the chicks had fledged. So, we can assume that “Little Blue” was accepted and tended by the parent bluebirds with the others. On the next regular monitoring date (July 7) the swallow chicks in box #79 had also fledged.

Another interesting note to this story is that after the bluebird chicks in box #6 had fledged, I checked the box and found one unhatched bluebird egg. So, “Little Blue” made up for the chick that never hatched.

Here is the timeline for the mixed-species nest (all dates are 2017):

- June 2: mixed-species eggs reported in nestbox #79, first egg date figured at May 29
- June 6: mixed-species hatchlings reported, four Tree Swallows, one Eastern Bluebird
- June 17: box checked again to confirm and found five Tree Swallows and one Eastern Bluebird hatchling (one swallow egg remained unhatched)

Mixed-breed nest of hatchling Tree Swallows and a much larger Eastern Bluebird.
June 23–27: nestlings developing and feathers opening, contacted NABS
June 28: transferred bluebird chick from box #79 to box #6
June 29–July 1: all five chicks in box #6 thriving
July 5: all five bluebird chicks in box #6 have fledged, one unhatched bluebird egg from original clutch remains in nest
July 7: All five swallow chicks in box #79 have fledged

Many thanks to the NABS hotline for their swift and intelligent advice. All’s well that ends well!

Margaret Wester is project manager for Sky Meadows State Park Bluebird Trail.

Mixed-breed nest in box #79 on June 27, 2017. You can plainly see the Eastern Bluebird chick at the front of the nest—he is resting his head on the tail end of a Tree Swallow chick in front of him.

What’s in a Name?

Below, on the left, is a list of old-timey and colloquial names for some common native cavity-nesting birds. See if you can figure out the “modern” name of each—answers are below, on the right, upside-down to discourage cheating!

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<th>Old-Timey Name</th>
<th>Modern Name</th>
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<td>1. Eastern Bluebird</td>
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<td>Golden Swamp Warbler</td>
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<td>Gourd Martin</td>
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<td>Grasshopper Hawk</td>
<td>8. Red-headed Nuthatch</td>
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<td>Half-a-Shirt</td>
<td>9. Red-breasted (or Northern) Pygmy-Owl</td>
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<td>Little Cat Owl</td>
<td>10. Eastern Red-shafted Flicker</td>
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<tr>
<td>Snakeskin Bird</td>
<td>11. Great Crested Flycatcher</td>
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<td>Tommy Woodpecker</td>
<td>12. Downy Woodpecker</td>
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<td>Topsy-turvy Bird</td>
<td>13. Red-bellied Woodpecker</td>
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<td>Tree Duck</td>
<td>14. Tree Swallow</td>
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<tr>
<td>Tufted Chickadee</td>
<td>15. Purple Martin</td>
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<td>Whistle Duck</td>
<td>16. Prothonotary Warbler</td>
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<td>White-breasted Swallow</td>
<td>17. Northern Pygmy-Owl</td>
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<tr>
<td>Yankee Sapsucker</td>
<td>18. Red-breasted Lezardner</td>
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<tr>
<td>Yellow-hammer</td>
<td>19. Lewis’s Woodpecker</td>
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<tr>
<td>Zebra Woodpecker</td>
<td>20. Red-breasted Woodpecker</td>
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Margaret Wester is project manager for Sky Meadows State Park Bluebird Trail.

Mixed-breed nest in box #79 on June 27, 2017. You can plainly see the Eastern Bluebird chick at the front of the nest—he is resting his head on the tail end of a Tree Swallow chick in front of him.
On May 24, 2017, Jason Estep noticed something unusual. A male Eastern Bluebird was inspecting an old American Robin’s nest above a light fixture in an open-air facility in Franklin County, Ohio. He had seen a bluebird pair in the area on previous occasions, but did not think much of it until the male appeared to start working on this old robin’s nest. Jason then monitored the nest for eight consecutive days and found, each time, a female bluebird sitting low in the nest. She appeared to be incubating!

For the next 23 days, Jason had to be away and could not monitor the nest (sometimes life gets in the way of data collection). Unfortunately, we will never know if the nest fledged or failed, or how many eggs were in it, but we do know that it was empty on the final nest check on July 11. At 25 feet high and under a roof overhang, the nest was challenging to monitor. Jason’s notes indicate that the female would step away from the nest periodically and return to it throughout the day, ruling out the explanation that she was simply using it as an overnight roosting location. However, we cannot rule out the possibility that the pair “adopted” a nest full of blue eggs (the same color as their own eggs would be) after happening upon it within their territory. Although we have heard of birds incubating the eggs or feeding the young of other species, fostering is rare. Might this have been caused by a coincidence of timing, similarity of egg color, and/or loss of their own nest?

We think that Jason probably did see Eastern Bluebirds using a salvaged nest to try to raise their own young, and there are two main reasons: (1) it is the simplest explanation, and (2) Eastern Bluebirds have been documented to occasionally use open-cup nests. Captain S. G. Reid, writing in 1884 in The Birds of Bermuda, states that the Eastern Bluebird “occasionally drives the Red Bird (Cardinalis virginianus) from its nest, even after eggs have been laid, and uses it as a foundation for its own.” Reid also noted finding nests “on the branches of trees” in Bermuda. Mr. A. Sprunt Jr. in 1946 recorded an instance of an Eastern Bluebird nest in South Carolina that was “saddled on the horizontal limb of an oak tree.”

We asked Dr. Patricia Gowaty, a Distinguished Professor of Ecology and Evolutionary Biology at UCLA who has studied bluebirds in the field for 30 years, how unusual this sighting is. According to Gowaty, the frequency of open-nesting in bluebirds is incredibly hard to know. “Almost nobody studies Eastern Bluebirds in natural nests. Focusing on nestboxes means there are a lot of variations in life history that we don’t see.” Gowaty explained that we tend to canonize what we expect from bluebirds by focusing so closely on nestbox results. In the book Longleaf, Far As The Eye Can See, one can find a photo of an Eastern Bluebird nest situated within a
vertical burn scar on a tree trunk, on a short projection of bark. Gowaty points out that this type of nest may have been more common in the ancestral pine forests of the southeastern United States.

**Don’t Box Them In**

So was Jason’s observation actually rare, or has our close study of nestboxes colored our perceptions of “normal” bluebird behavior? Jason told us that the small woodlot behind the facility was clear cut last summer. It’s possible that the pair returned to their territory that otherwise had food and resources, but now lacks sufficient nesting cavities. Perhaps they exhibited the flexibility of their ancestors, before nestboxes were backyard staples.

At the time of writing, NestWatch holds 77,729 digital records of Eastern Bluebird nests. Of these, we could only find one that was similar to Jason’s. Barbara Starr had Eastern Bluebirds nesting under the deck of her Victor, New York, home in June of this year. Barbara reports that it was possible to peek between the floorboards to check the nest. Although the below-deck nest was successful, the bluebirds did not attempt a second nest in this spot (there are two nestboxes on the property, which are also used).

This article originally appeared in the blog of the Cornell Lab of Ornithology’s NestWatch program, which is “a nationwide monitoring program designed to track status and trends in the reproductive biology of birds." It is reprinted here with permission.

You can read the original blog entry and the comments left by readers at http://nestwatch.org/connect/blog

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**Lessons from a Five-Box Trail**

**Ralph Stemp**

Data over the past two years have been collected from the five Eastern Bluebird nesting boxes comprising the Avalon Bluebird Trail near Daphne, Alabama. Even with little data, some conclusions can be drawn about our bluebirds. They are:

1. The realtor's mantra of “location, location, location” is appropriate for bluebirds. The Avalon nesting boxes that were most productive in producing chicks each year were next to a large expanse of green lawn. The lawn’s short grass held an abundance of bugs for the birds and their chicks. Food is most important!

2. The boxes must be separated at least 100 yards because bluebirds are very territorial. The Avalon Trail has five boxes due to the space that is available. But Trails can be dozens of boxes or just a single box in one’s yard. All Trails are important for the Eastern Bluebird’s survival.

3. Here in Lower Alabama, bluebirds start nest building in late February; nesting is over by early August. Our bluebirds do not migrate, they just “disappear” into the nearby woods.

4. Most bluebird parents had two broods and each brood usually had 4 or 5 eggs in it. Most of the eggs did hatch and the chicks did fledge. Over 30 chicks were produced and fledged each year from the Avalon Trail.

5. Monitoring nesting boxes is important in order to gather good data. Once or twice a week is sufficient monitoring and data gathering.

6. Predation is an issue that must be addressed. Putting up a nesting box is only half the job. An effective predator guard completes the installation. Plans for a bluebird predator guard are on the Mobile Bay Audubon Society website (www.mobilebayaudubon.org).

7. Finally, people often ask whether Mother Nature would have produced these chicks in the wild. In other words, are we simply supplying luxurious accommodations to the parent bluebirds. The answer is No, Mother Nature is unavailable for this job today—there are not enough holes in old trees. And the few woodpecker holes that do exist are often taken by starlings and other birds. If it were not for the artificial cavities that our boxes provide there might not be any bluebirds at all. Eastern Bluebirds nearly disappeared in America until the correlation with disappearing cavities was noticed. A national effort was begun in 1978 to build and install nesting boxes to augment the few natural cavities occurring in trees and it has been very successful. Surprisingly, virtually all Eastern Bluebirds now come from boxes, not from Mother Nature’s woodpecker holes in the woods.

This article originally appeared in the newsletter of the Mobile Bay [Alabama] Audubon Society. It is printed here with permission.
We have been raising bluebirds in our backyards for years, or more correctly, providing a welcome environment for them. They first found us years ago after I had installed a Purple Martin house 20 feet above the ground. We were thrilled when a bluebird pair moved in. The female stuffed the three top apartments with nesting material, finally settling on the one at the peak. After that first nesting was complete, I promptly built a cedar bluebird box, sawed off the pole to seven feet, and we were in business.

After several years and dozens of bluebird clutches in that location, we moved to a house on a smaller lot with a relatively small backyard. It is bordered at the back with tall, dense evergreens, and has a large crape myrtle just outside our elevated sunroom windows. Adjoining it are a glassed-in porch and a deck on the same level. Some of my first acts were building a bluebird box, placing a birdbath, and putting a feeder out for other birds.

We love them for their industry and their devotion to each other and their young. They work so hard that I thought I would experiment with feeding mealworms while the mother was hatching the second clutch this year, which she started about two weeks after the first five had flown. As we have read, the male would keep feeding the juveniles for a time, but I wanted to make life easier for her.

We have since decided to cease feeding until winter, but the experiment provided some interesting observations. An open feeder did not work, because of mockingbirds. Therefore, I built a feeder with 1½ inch entrance holes out of cedar and plexiglass and it worked perfectly. A few times, the first juveniles returned to be fed right outside our window, but we assumed they fed elsewhere because the visits were infrequent.

However, after the second clutch hatched, things were different. We were lucky enough to observe them when they left the nest and videotaped that event. The two males left on a Saturday afternoon, but the little sister waited until the next morning. (The first two clutches each had five eggs, but two did not hatch in the second. She has produced four in the third clutch, just now starting to brood.) The juveniles disappeared into the trees for about a week, but then began to perch in the crape myrtle to be fed. After a day or two, they began to perch on the feeder or on the deck railing. Baby Girl, as we called her, would gape while looking through the plexiglass at a parent inside the feeder.

For several days, we got to see all three juveniles being fed by both parents. Later, we worried that we were interfering and decided to taper off. Before that happened, however, both parents decided they would no longer serve food directly. One of the most touching things we observed was Baby Girl sitting on the deck railing, begging to be fed. She would watch her parents come to the feeder, and she would stare and wing-wave both wings rapidly, only to be ignored. When they left, she would then follow.
Big brothers found they could enter the feeder themselves in a couple of days, and Baby Girl did a day later. In the ensuing days we have seen a few visits and occasionally the juveniles will gape to be fed. Father bird will move over against them and bump them to make them stop. Since that first tough love, we have never seen the parents relent. Since their visits are less frequent now, we must assume their education is proceeding as it should.

We have concluded that it is probably not a good idea to continue feeding when conditions are normal, but are glad we did so this once. We got to see parental training and we got to see that even juveniles use wing-waving to attract attention. We also found that it is hard to do anything else when the family group is right outside our windows.

Roger Meadows is an author and bluebird enthusiast living in Spartanburg, South Carolina. You can read more about him and see the books he's written at www.amazon.com/author/rogermeadows

This is an experimental feeder I built. I built it tall to give the birds room, tapered the sides to keep rain from streaking, and included holes near the peak to simulate nestboxes. The first time the male went in he panicked and couldn’t get out. I released him and did some reading. Someone suggested a dowel across near the bottom. I did that, and added two more entrances. I also put tape on the plastic instead of the magic marker lines. It worked great. They sometimes come in the top and out the bottom or vice-versa. If I were building another, I would make it a little shorter and just have the lower holes and the dowel. Might also use a shed roof rather than peaked and hinge it on the lower side.

Bluebirds in the Smithsonian

What better place for a national treasure (bluebirds) than in America’s storehouse of national treasures, the Smithsonian Institution? The Summer 2017 issue of the Virginia Bluebird Society’s newsletter, The Bird Box, reports that Amanda Moniz, Curator of Philanthropy at the institution’s National Museum of American History, recently added a bluebird nestbox to the museum’s collection. Amanda felt that the nestbox, which was donated by the Virginia Bluebird Society, suitably represented the dedication of committed volunteers working for conservation over long periods of time.

You can learn more details by reading Amanda’s blog post about the nestbox: http://americanhistory.si.edu/blog/bluebirds-and-philanthropy

Autumn...the year’s last, loveliest smile.

— William Cullen Bryant
Within an eight-day period (17 April and 24 April 2017) three adult Eastern Bluebirds (Sialia sialis) were found dead, two in nestboxes and one on the ground near nestboxes provided for bluebirds on a 17-year-old nestbox trail at Mashomack Preserve on Shelter Island, New York, an island in the Peconic Bay. Two were 1-year-old birds, both fledged in the same year (2016), as verified by USGS bands and plastic color bands (color coded according to year) applied to them as 11-day-old nestlings. The third bluebird was 5 years old, banded in 2012. The three birds were found within 300 yards of each other on different days in the course of monitoring the nestbox trail.

The male found on 17 April, the female on 19 April, and the male on 27 April all had an outward physical appearance of well fed and well developed adults with no signs of external wounds or injuries. All had been dead for several days and had fly eggs deposited around the proximal beak and vent. One had visible maggots in the abdomen. All had an intestinal tract containing no ingesta. However, each had several 1 mm by 5 mm pale yellow worms in the gut above the colic cecae. These were gathered close together and in two birds one appeared to be outside the intestinal wall on the serosal side. One of the birds had 15 of the worms gathered in one section of the gut in a clump. The ventriculus in two of the birds seemed flaccid while remains of a beetle were found in that of the third. A fourth Eastern Bluebird was found dead in a nestbox on 3 May 2017. It had been killed by an attack most likely by another bird. This bluebird also had five of the same type of worm in its gut just proximal to the colic cecae. No other bluebirds have been found dead in the area to date (9 June 2017) during weekly monitoring.

Specimens of the worms submitted to Dr. Mani Lejeune at the Cornell University College of Veterinary Medicine Animal Health Diagnostic Laboratory were identified as the acanthocephalan Plagiorhynchus cylindraceus (Polymorphida: Plagiorhynchidae). Commonly known as a “spiny headed worm,” its proboscis bears multiple hook-like projections which it can evert and contract to grasp its host’s tissues. Dr. Lejeune commented that he had seen P. cylindraceus associated with sudden death in American Robins in Alberta, Canada, presenting with only lesions in the lower gut, noting similarities in the case of the bluebirds. The USGS National Wildlife Health Center has also reported death of American Robins in Montana associated with this acanthocephalan (https://www.nwhc.usgs.gov/publications/quarterly_reports/2009_qtr_3.jsp).

Histopathology of the small intestine of one bird (23514) showed brightly eosinophilic radiating material (Splendore-Hoeppli) surrounded by macrophages and multinucleated giant cells. Within the ventriculus were numerous adult and larval aphasisid worms measuring 60 microns wide with a small intestine. Examination also found focally extensive fibroser pyogranulomatous intestinal myositis.

Plagiorhynchus cylindraceus has an indirect life cycle in which the vertebrate definitive host becomes infected by ingesting its larvae, known as cystacanths, contained in the body cavity of an arthropod intermediate host (pill bugs). Eastern Bluebirds consume many insects and it is likely they contracted this infestation in their normal course of feeding. Cystacanths have been reported from terrestrial isopods in Bulgaria and Altoona, Pennsylvania, USA, and, interestingly, some mammals like hedgehogs have been found to harbor this species. However,
Bluebird Day
Dean Rust

This story in photos is about my 84-year-old sister, Barbara, who lives in Eaton, Ohio, 30 miles west of Dayton. The two young assistants are Jacob and Uriah Via, great-grandsons of Barbara’s good friends, Pat and Dick Via (shown in the final photo).

Four years ago I got Barbara started with a simple bluebird box and an 8” × 24” stovepipe baffle for a predator guard. She had never even seen a bluebird in her backyard prior to summer of 2014. I coached her through the process with my new book, *The Beloved and Charismatic Bluebird*. I am happy to say that she has been an excellent learner. This year Barbara has enjoyed three bluebird nests; first nest: five bluebirds FLEDGED; second nest: five bluebirds FLEDGED; third nest: four bluebird nestlings 7–10 days old. She has been having more fun sharing her backyard bluebird hobby with others—friends, family, and neighbors.

Dean C. Rust, DDS, is President of the Bluebird Society of Pennsylvania.

Let’s get started. Hmm...how to build a bluebird house.

Barbara shows the boys a bluebird nest.

Thank you, Barbara, for sharing your baby bluebirds with us!

the highly variable life cycle of this parasite and the impact it causes to its host has not been completely understood.

Lacking findings of these parasites in previous years’ necropsies (unexplained bluebird deaths have been few) the question of the reason for their appearance this year arises as well as the whether the latest findings suggest that changes may be occurring in food and/or parasite distribution.

Thank you to Drs. Mani Le Jeune of the Cornell University College of Veterinary Medicine Animal Health Diagnostic Laboratory and Daniel Gilrein of the Cornell Co-operative Extension for their help in preparing this report.
Humans have been providing nestboxes for cavity-nesting birds for hundreds of years. In the last 50 years, a lot of creative ingenuity has gone into trying to solve the problem of nest predation. Enter the predator guard, a device that is installed on or below the nestbox to keep predators away from vulnerable eggs, nestlings, and even incubating females. However, almost no studies have tested their performance. In 1969, Lewis Kibler hypothesized that metal cone-shaped guards on nestbox mounting structures are “probably” the most reliable device against ground predators, yet five decades later no conclusive research has been published.

With the rise of citizen scientist nest monitors, it’s now possible to test the effectiveness of predator guards in promoting the nesting success of cavity-nestings birds at a large spatial scale (United States and Canada). Using NestWatch data from 24,114 nest records submitted from 2014 to 2016 to NestWatch, the Cornell Lab of Ornithology tested whether installing predator guards on nestboxes is an effective management technique (Bailey and Bonter 2017). We also tested how different guard types compared to each other, and whether or not using multiple guards is better than using a single guard.

Guarding Your Interests

When we looked at all species combined, the nest survival data suggested a 6.7% increase in nest success for attempts in boxes with guards versus attempts in boxes without guards. That may not be the 100% protection that many people believe they’re providing, but 7% is actually a large increase at the national level. There are few other actions a homeowner can take that would improve nest success to that extent. However, all species did not benefit equally. Western Bluebird stood out as a species for which a predator guard did not seem to make a difference. We’re not sure why, but it could be that other factors (e.g., drought, insect supply) have more impact on their nesting success than do predators. Other species, such as the Carolina Wren, showed a 15.7% increase in nest survival when guarded!

Although all types of guards were correlated with improved nesting success, boxes with cone-type baffles, stovepipe baffles, or entrance hole extenders (also called “wooden block hole guards”) were most likely to result in successful nesting. The Noel guard did not rise to the top as a clear leader, although it is surely better than nothing. Additionally, birds nesting in boxes with multiple predator guards (such as a cone baffle and a hole extender) were more successful, on average, than birds nesting in boxes with only a single guard.

We Are A Force For Birds

At NestWatch, we know that caring for wild nesting birds is a top motivation for providing nestboxes, and most people want to maximize nesting success while minimizing human effort. The predator guard is therefore an inexpensive, passive, and effective way to increase the survival of nests, especially with other factors being less under our control (e.g., weather, food supply). However, there is still no such thing as a “predator-proof nestbox” because it is hard to control for predators such as bears and House Sparrows, which are not so easily deterred.
We would like to thank the legions of NestWatchers who monitored 12,274 nestboxes (both guarded and unguarded), enabling this comparative study. Without you, large-scale studies like this would not be possible!

**Literature Cited**


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**History of the Lafayette County Bluebird Society, Inc.**

Carol McDaniel, President

The Lafayette County Bluebird Society, Inc. is dedicated to the conservation of the Eastern Bluebird and other native cavity-nesting species.

When the settlers came to Wisconsin in the early 1800s, the Eastern Bluebird was as common as the robin. In 1976, the Eastern Bluebird was reported on the Wisconsin Breeding Bird Survey with only four pairs in the entire state. Its dwindling numbers were troubling.

In the spring of 1981, an effort was made in Darlington to help bring back the bluebird. A few concerned local individuals met in the basement of the Methodist Church. Under the leadership of Carol and John McDaniel, the Darlington Bluebird Society was formed. A few years later, as the bluebird population began to grow, the organization’s membership expanded to include people from around the county and the name was changed to the Lafayette County Bluebird Society (LCBS).

Over the years, LCBS has been successful in bringing back the Eastern Bluebird to the county and increasing the population of bluebirds to a very comfortable number.

Numerous bluebird trails are located throughout the county. The largest trails are at Yellowstone Lake State Park, Leadmine/New Diggings, Fayette, Darlington (a Bird City: www.birdcitywisconsin.org), and Blanchardville. The boxes on these trails are monitored regularly for bluebird activity.

The Society has placed Purple Martin housing near Argyle and at Yellowstone Lake State Park in an effort to bring the Purple Martin back to Lafayette County. Additionally, a population count was conducted on the Red-headed Woodpecker and the Pileated Woodpecker to determine how these species are doing in the county.

The Society was headquarters for the North American Bluebird Society from 1997 to 2002, when it moved to Ohio.

In 2014, LCBS opened the Bluebird Nest Nature Center in at 308 Main Street, Darlington. The Center, staffed by volunteers, is equipped with educational and interactive displays for all ages. Programs are held monthly at the Center.

The LCBS works closely with the Bluebird Restoration Association of Wisconsin (BRAW), is an Affiliate of NABS, and is a member of the Prairie Enthusiasts, the Wisconsin Society for Ornithology, and the Darlington Chamber of Commerce.

Learn more about the LCBS at www.bluebirdhouse.org
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“Feeding live insects to the wild birds in my yard has helped me build a special bond with individual birds.”
—Julie Zickefoose
Photo Gallery

The Bronx River – Sound Shore Audubon Society (a NABS Affiliate) has a large trail of nestboxes—mostly in Westchester County, New York. They have more than 30 monitors helping, and one of them (Iris Cohen) spotted this bluebird family nesting in a mailbox near her boyfriend’s country house in Salt Point, New York, which is in Dutchess County. One wonders how many such nests the mail carrier has seen over the years—maybe many!

This picture was taken by 10-year-old Kendall Creamer. She is a member of the New Jersey Bluebird Society and an avid bluebird monitor. Kendall says, “Mama Bluebird caught a small Blue-tailed (Five-Lined) Skink to feed her babies.” Kendall lives in Belleplain, New Jersey, and used her mom’s Canon Rebel to take the photo.
Getting Started with a Bluebird Trail on a Golf Course
Chuck James

One of the best settings for a bluebird trail is on a golf course. However, many fellow bluebirders tell me they have a problem getting permission to establish trails on golf courses. This article will provide you with our experience at Tellico Village in Loudon, Tennessee, and hopefully provide you with some knowledge that will help you approach the Director of Golf or Golf Course Superintendent at a golf course near you.

Here’s what Wells McClure, Golf Course Superintendent of the Tellico Village, Tanasi Golf Club has to say about their bluebird trail, “In my experience the bluebird nestboxes are a great foundation for getting started with ACSP [Audubon Cooperative Sanctuary Program]. They are very low impact on golfer experience and the look of the course, are easy to put out, and show that we are doing the right thing for the wildlife. Much like our nest tubes for Mallards/Wood Duck boxes, these bluebird boxes provide safe habitat for future generations for these birds, which will help ensure their success.”

In 2009 Pinehurst #2 golf course in Pinehurst, North Carolina, one of the top golf courses in North America, underwent a huge transformation to a more environmentally and economically friendly style: more naturalized areas that required less water, fertilizer, and maintenance. Many golf course professionals today are looking for ways to cut costs while maintaining an excellent environment for the golfer. This push to save money has actually been a blessing for those of us interested in more sanctuaries for birds and other wildlife. What once was two groups butting heads, environmentalists and golf course superintendents, has evolved into two groups working together.

Tellico Village (www.tellicovillage.org) has three beautiful golf courses. In 2009 Claire Manzo started a bird club in Tellico Village. My wife and I joined with about 20 other people. Like most bird clubs we had people give presentations on different birds and we had outings. In 2010 an older gentleman, Dale Chapman, came to one of our meetings and said he had been maintaining a nestbox trail on one of our golf courses. He and his wife were moving and he wanted to know if our club would be interested in monitoring his 35 nestboxes. Stan Colburn and I agreed to take over that nestbox trail. Fast-forward seven years, and we now have nestbox trails on all of our golf courses and around the community our team of about 36 people monitor 120 nestboxes on a weekly basis during nesting season.

In our case we met with the Director of Golf Jim West. He’s a PGA Professional who is responsible for all aspects of the golf operations in Tellico Village. Reporting to the Director of Golf are the individual golf course teaching professionals and the Golf Course Superintendents. They are responsible for maintaining the golf courses. Today many golf course superintendents have college degrees in Turfgrass Management. Maintaining a golf course is a very complex process; at some golf courses the Golf Course Superintendent may be independent from the Director of Golf. You should always determine who the decision-maker is before setting up a meeting.

First, a brief review of the game of golf for those not familiar with the game: Most golf courses have 18 holes to play. The typical course will have a front 9 holes that go out and back to the clubhouse and a back 9 holes that go out and back to the clubhouse. A hole consists of a tee box (where the golfer hits their first ball), a fairway where the ball lands, short grass and a green where the player putts the ball into the hole where the flag is positioned. Par represents the number of shots it should take a good player to get the ball in the hole from the tee. There are usually two par 3s, two par 5s, and five par 4s per nine holes. Typically it takes about 4–4½ hours to play a round of 18 holes. White poles along both sides of the fairway represent the out-of-bounds markers. Red stakes indicate a lateral hazard (water). On most days the
players will start on the front 9 holes. On some days there may be an event where they have a shotgun start, which means the players are sent out as a group starting on all the holes at the same time. When monitoring nestboxes it's always wise to check with the pro shop to learn where the golfers are starting and what is the first tee time. If you are not familiar with golf, take some time and watch the professionals on TV on the weekend—it will help you understand the game and learn some of the terminology.

When you meet with the Director of Golf it is always wise to have a golfer with you who can answer many of the questions that golf course management might have regarding putting up and monitoring nestboxes. Here are a few of the questions you might encounter: Where will you place these nestboxes? (The answer he or she will want to hear is “in non-mowing areas near the out-of-bounds stakes.”) We don’t want non-golfers disturbing people while they are playing golf! (The answer: “We completely understand your concern, and would recommend placing 10–15 nestboxes on the back 9 holes. We would arrive and monitor those nestboxes before the golfers get to the back 9 holes.”) We’re concerned that you will drive the golf cart where you shouldn’t, like on the greens. (Answer: “We will keep the golf cart on the cart path.”) These responses should defuse many of the concerns. Once you become established and build a relationship with the Director of Golf and the Superintendent, you can expand your trail and start a dialogue going forward about conservation.

Getting back to our experience at Tellico Village, we started with 35 nestboxes on one golf course and today after seven years we have 88 nestboxes on the three courses. We monitor in the morning and sometimes during the day. Golfers see us coming and they often inquire about the nestboxes and the birds. The Golf Course Superintendents all know and regularly talk to our monitors as they are making their rounds.

In 2012, in an effort to save money, Tellico Village golf course management decided to start naturalizing many nonplaying areas on the golf courses. This change in course maintenance was similar to what had transpired at Pinehurst #2 in 2009 and was an opening to take our program one step forward.

In 2015 we approached our Director of Golf about seeking Audubon Cooperative Sanctuary Program Certification (ACSP; www.auduboninternational.org/acsp). The Superintendents were busy and the paperwork seemed overwhelming so the program didn’t advance. At the beginning of 2017 we approached our Director of Golf, Jim West, again about the ACSP program. This time we suggested putting a team of residents together along with the superintendents to work on this project; after all, we already had nestboxes and naturalized areas on our golf courses.

Wells McClure, Superintendent of the Tanasi Golf Club, had the following to say about the ACSP program, “The ACSP certification is important to us at Tanasi and all the Tellico Village courses because it allows us to showcase what we have been doing for years. We have been managing these golf courses and the environments within them with this in mind: (1) Provide the best playing conditions possible for our guests; (2) Be responsible with how we spend our money managing this property and do so in a way that has little impact as possible on the wildlife; (3) Do not over-maintain areas that are out of play that we do not need to maintain; (4) Keep fertilizer and
pesticide inputs as low as possible and only when needed."

Our team today consists of about 14 members of the community. Members include individuals from the Golf Advisory Committee, Garden Club, Golf Course Beautification Committee, Tennessee Bluebird Society, Clean Water Group, and Photography Club. Since the beginning of the year we have completed the first 27 pages of the application for all three golf courses and have been recognized by ACSP for our work. We are currently working on our case studies and future plans, which will include Wood Duck and Mallard nestboxes, wild plants such as milkweed to attract Monarch Butterflies, bee structures, etc. We hope to have the ACSP application for all three golf courses completed by November 2017.

Why did we want our golf courses ACSP certified? For several reasons. First and foremost, to protect our birds from harmful insecticides and fertilizers, providing a safe environment. Second, to demonstrate to our community that our golf course staff are good stewards of our natural surroundings and environment. Finally, it’s a very good marketing tool for golf operations and the Tellico Village Community.

We hope this article will inspire you to approach a local golf course regarding establishing a nestbox trail. We started simply by taking over an old trail on one golf course and it evolved into an environmental movement involving many members of the community.

If you have questions regarding this article you may contact Chuck James at chuck3185@gmail.com

Chuck James is the Co-Founder of the Tennessee Bluebird Society, Immediate Past President of TBS, and a NABS Board Member.

Inventor Floyd Van Ert (1934–2017)
Bet Zimmerman Smith

Floyd Van Ert passed away peacefully at home in Elgin, Nebraska, on June 3, at the age of 83. Floyd was a farmer, WWII veteran, dancer, businessman, and family man. He was also a bluebirding hero.

Floyd invented the Van Ert Universal Sparrow Trap to deal with that nemesis of native cavity-nesting birds—“those pesky House Sparrows.” From 2000 to 2012, he handmade over 20,000 traps. His simple, inexpensive live trap works on any style bluebird nestbox. Later on, Floyd created variations for kestrel, Wood Duck, and PVC boxes, and also came up with unique nestbox mounting bracket designs.

Floyd never patented his inbox trap design. Some have imitated it, but in my opinion, his is still the best. I’ve caught House Sparrows within a minute or two of setting it, and never hit the trail without several in my bag.

Like most bluebirders, Floyd was little bit crazy and somewhat ornery. But he sure was fun, and he loved bluebirds. He also thought ahead. In 2012, he trained Aaron Perkins to take over product manufacturing. Floyd’s original design is still available at www.vanerttraps.com, and is always sent with a warning about the importance of frequent monitoring when trapping. His clever invention has saved countless bluebird lives. Even though Floyd’s gone, he continues to help us fill the skies with blue.
The Outdoor Kansas for Kids (O.K. Kids) program is held in over 40 Kansas locations each year. The first year of this program was 2001 and participation continues to increase through 2017. The mission of this program is to provide multiple outdoor recreation opportunities for Kansas youth with adult partnering and mentoring to encourage outdoor recreation opportunities, and promote and provide an active lifestyle as an alternative to sedentary activities.

In 2017, Wolf Creek Nuclear Operating Corporation’s Green Team decided to serve as a partnering group to the Coffey County O.K. Kids Program. The Green Team, organized by the company’s environmental group, is an employee, retiree, friends, and family collective. Typical Green Team activities include trail restoration, wildlife habitat improvement, and youth hunts.

The Green Team wanted to provide a station that allowed youth to bring something home. This, coupled with access to recycled power pole lumber from one of our owner companies and a few good birders, resulted in the idea to send the kids home with a bluebird house that they built. After a little research, we determined it necessary to prepare “bluebird house kits.” Smaller groups of Green Teamers met several times over a few months to prepare the kits. Pieces were cut to size and holes were pre-drilled. We also recognized that these bluebird houses needed to be installed properly, or not installed at all. Therefore, we contacted NABS to make sure we were aligned with their information.

The build your own bluebird house station was very popular. Green Teamers assisted 120 kids, ages 2–16 years old, build their own bluebird house. Many of these kids had never operated a cordless screwdriver. The “Getting Started with Bluebirds” fact sheet from NABS was enclosed in each house. The enclosed information will help families install, care for, and observe their bluebird house. Additionally, the fact sheet will help drive traffic to the NABS website.

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Canada’s Wildlife in Peril
Back in October 2016, the World Wildlife Fund (WWF) released a report on changes in the world’s populations of wildlife. The results were nothing short of shocking. WWF found that populations of wild animals had declined by more than half since 1970. It’s sobering to consider that humans have wiped out fully half of the animals in the world. This staggering loss of life has implications not only for wildlife but for humans as well. In a follow-up report released in September, WWF-Canada reported the depressing findings that half of Canada’s wildlife species have declined since 1970, and the average decline is an unbelievable 83%. This result was surprising given the comparatively low densities of humans in Canada and correspondingly low levels of habitat loss. NABS members should be concerned as the populations of Canada’s aerial insectivores (Purple Martins, swifts, swallows, etc.) as a group have declined 51%. You can find the full report online at www.wwf.ca/newsroom/reports/.

Bluebirds Every Day
NABS member Carolyn Perkins from Connecticut has created a 2018 Eastern Bluebird Calendar which she is making available to society members at her cost. The 8½ × 11 calendars feature twelve captioned photographs of bluebirds in her area. The cost is $13 + shipping (check or money order) and can be ordered by emailing her at cperkins0three@hotmail.com. A unique gift for the bird or nature lover!

Bluebirds Everywhere
“Bluebirds Everywhere” is a feature that celebrates the widespread and creative uses of bluebird images and the word “bluebird” itself. We invite you to submit your own images and ideas—simply email them to NABSeditor@gmail.com or mail them to NABS Editor, 5405 Villa View Dr., Farmington, NM 87402. Let’s see what bluebirds you can find!

NABS member Jeri Edwards was on a woodpecker birding tour in the Deschutes National Forest in June when she saw this Bluebird Coffee shop in Bend, Oregon. The Bluebird Motel sign (below) is from Cambria, California.
What Makes a Natural Nest Cavity Safe?
In general, birds that nest in cavities enjoy higher nest success rates than birds that nest in the open, apparently because nest cavities are hidden from view and are protected by a relatively small opening and by the thick walls of the tree. But what happens when a predator does attack a cavity nest? What factors help keep the adults, nestlings, and eggs safe?

A researcher in Poland kept records of nesting activity in a national park for 30 years. His main species of interest was the forest-dwelling Marsh Tit—the European look-alike cousin of our Black-capped Chickadee. He located their nests and followed their progress over the course of each breeding season, regularly checking the nest contents and watching for signs of predatory attacks.

He documented 169 attacks by predators on cavity nests after hatching, of which only 30% survived completely (i.e., no adults or young killed). The most common predators were voles, mice, squirrels, pine martens, and woodpeckers. (Unlike North America, with its predatory rat snakes, there are no snakes that pose a threat in this Polish forest.)

The most efficient predators were the small mammals, which were small enough to enter the nest cavity. Factors that helped nests survive attacks by the other (larger) predators included:

- Small cavity entrance.
- Thick, strong cavity walls (i.e., the tree itself—most nests were in cavities that formed naturally in sound wood, rather than cavities excavated by woodpeckers in soft, diseased wood).
- Deep cavity depth (so predators could not reach the nest).

Also, older nestlings were more likely to survive attacks—apparently, older chicks are better at moving around in the cavity to avoid a predator, and are stronger and more tenacious in clinging to the nest to avoid being pulled out of the cavity.


Eggs Should Be Blue, but Not Too Blue
Regarding social and political issues, economist Thomas Sowell once said that there are no ideal solutions, only tradeoffs. The same is apparently true for at least one facet of the bird world: eggshell color.

Of all the colors available for eggshells, blues and greens are among the most prevalent and are especially common among forest-nesting species that build open-cup nests. Red and brown colors (either entire eggs or the beautiful swirling markings) are common, too, and plain old white occurs as well.

Such coloration can serve to camouflage eggs or to send a signal to males about the female’s overall health and fitness. But pigment also blocks infrared and ultraviolet radiation from penetrating the eggshell and harming the embryo (infrared can cause the egg to heat up from the inside, while ultraviolet can cause mutations and other damage to the embryo). However, if the coloration is too dark, the egg can overheat when exposed to direct sunlight.

This where the tradeoff occurs. An egg needs enough blue-green pigment to block harmful sunlight but not so much pigment that the sunlight heats the egg to a lethal level. There is some evidence that species that lay eggs in open-cup nests high in trees produce lighter-colored eggs than do species that lay eggs in open-cup nests close to the ground, where shade is deeper; species that nest at intermediate heights...
produce eggs with intermediate pigmentation.

Of course, this research does nothing to shed light on the question of why cavity-nesting bluebirds would lay blue eggs (most all cavity-nesting birds lay white eggs). Possibly, bluebirds built open-cup nests at one time in their evolutionary history, just like other birds in the thrush family which lay blue eggs. In fact, bluebirds still occasionally nest in open-cup nests (see article on page 10)—possibly a throw-back to their early history.


**Why Raise Young where There’s Risk?**

Thanks to bird feeders, bird baths, nestboxes, and bird-friendly landscaping, some bird species are far more abundant in urban areas than in non-urban areas. Predators of birds, such as Cooper’s Hawks, determine where their prey is abundant, and go into urban areas to subsist on the plentiful adult birds.

But in non-urban areas, where adult birds are not superabundant, Cooper’s Hawks focus their predation efforts on nestlings, not adult birds. It turns out that Eastern Bluebirds know about this shift by hawks from adult prey to nestlings.

In a Florida study, Eastern Bluebirds exposed to recordings of Cooper’s Hawk calls responded differently, depending on whether they were nesting in urban or non-urban areas. In non-urban areas, where Cooper’s Hawks were a bigger threat to nestlings, Eastern Bluebirds exposed to recordings of hawk calls devoted less effort to breeding (as measured by such factors as clutch size) than did nearby bluebirds who did not hear the hawk calls.

The opposite was true in urban settings, where adult bluebirds were more at risk: Those that heard the hawk calls devoted more effort to breeding than did urban bluebirds who did not hear hawk calls.

What this boils down to is this: Based on experience and observation, these populations of Eastern Bluebirds could apparently tell that Cooper’s Hawks were keying in adult birds as prey in urban areas and nestlings as prey in non-urban areas. The bluebirds who heard hawk calls adjusted their breeding effort accordingly. Why put a lot of effort into raising a brood that is at higher risk for being killed by a hawk?


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If you have a car, truck, motorcycle, RV, boat, or even an airplane that you no longer need, NABS would like to receive it as a tax-deductible charitable donation.

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*Thank you for supporting the conservation of bluebirds and other native cavity nesters!*
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The North American Bluebird Society serves as a clearinghouse for ideas, research, management, and education on behalf of bluebirds and other native cavity-nesting species. NABS invites all state, provincial, and regional bluebird organizations to become NABS Affiliates in a confederation of equals working together in a partnership in international bluebird conservation. No cost is associated with affiliating with NABS. Your affiliated organization will be listed on the NABS website and in *Bluebird*. If your organization has a newsletter, please forward a copy to our headquarters. To find out more about becoming a NABS Affiliate, read our Affiliate Letter. Notice: If you are listed below, please check listing to see if it is current. If not, please send correct information to Phil Berry at pbsialia@gmail.com and info@nabluebirdsociety.org.

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www.bluebirdhouse.org
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<th>Duration</th>
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- □ Subscribing
- □ Supporting
- □ Contributing
- □ Guardian
- □ Life

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