



BLUEBIRD

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Melissa McMasters / flickr.com

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www.nabluebirdsociety.org

Fall Message to Our Affiliate Organizations

Mike DeBruhl

As we enter Fall (thank goodness) I wish to reiterate to all our affiliate organizations that you are truly the “Life Blood” of NABS. Without you, NABS cannot achieve and further the great conservation and education progress made over the years. So, a big **THANK YOU** to each of you. Keep up the good work.

As I step into the role of VP of Affiliate Relations, and as I have discussed with a few of you already, a major focus will be to further “connect” our affiliates across North America. We can do this with enhanced and more frequent communication, which I encourage for sharing best practices, practical solutions to trail and organization issues, learning of affiliate activities that can apply across NABS, fostering friendships across the continent, and generally increasing affiliate involvement in NABS. **Sound too lofty??** I certainly do not think so and look forward to working with each of you to make this a reality.

One simple way to kick this off is to **send a copy of your organization’s newsletter**, or whatever you may use to communicate with your members, **to every other affiliate** when you produce it. You will quickly realize that other organizations are often wrestling with some of the same issues / concerns you are discussing. And, you will also gather some valuable information that can assist and educate your members—and have some fun at the same time.

Another way is to keep in close touch with your NABS Affiliate Representative. Your Rep can help coordinate needs for educational materials, provide guidance on policies (we generally have few), and keep communications flowing.

And speaking of guidelines—you will soon receive the newest Guidelines for Affiliate Membership. These guidelines apply to organizations that ARE NOT currently NABS affiliates and provide application procedures. Current affiliates (**YOU**) are “Grandfathered,” but we encourage you to look them over for some points on being an even stronger affiliate...and to encourage others to join you and NABS. Your feedback is welcomed.

Have a great fall and do reach out to your fellow affiliates to contact, communicate, share, and learn from each other. In my other role as the President of the South Carolina Bluebird Society, I can assure you it is worth the effort. **STAY WELL AND SAFE – Mike**



From the President

Bernie Daniel

The third season is upon us again—or should I say already overtaken us? Normally I am a bit dismayed to find that time seems always to be moving faster as it goes. I think this year I'm willing to make an exception though. The year 2020 cannot end too soon to my way of thinking.

Of course we are all wondering how the nesting season went for bluebirds across the continent. Some of the NABS Directors have reported in on the season that just ended. For example, Jane Brockway, a NABS Director from western Montana, has mentioned that across many parts of Mountain Bluebird range the climate/insect conditions seem to support at least an average nesting season for the Pacific Northwest. This is certainly good news. Over the last two decades the MOBL population, measured by the North American Breeding Bird Survey, has been growing slowly. This is a welcome contrast to the population declines recorded over the late 1960s to the early 2000s.

Harold Sellers, a NABS Board Director whose trails are located in the southern interior of British Columbia, reports that he experienced a cool wet spring over the first part of the season (late April to early June), which resulted in a number of nest abandonments and lost nestlings. In the last half of the season he enjoyed better weather conditions with greater supplies of insects, which led to normal annual production for Mountain and Western Bluebirds. Some species such as Tree Swallows did not nest at all this year on his trails—a result he attributes to a shortage of flying insects.

Nesting conditions and results across the Eastern Bluebird range were similar with many of our Directors reporting a cool, wet spring and a shortage of insects. The uniformity of their observations is striking given the large size of the Eastern Bluebird range, i.e., approximately a fourth of North America! Allen Jackson, a NABS Director from New Jersey is on track to band about a thousand EABL nestlings this season. All would agree that this is a Herculean accomplishment and it also gives Allen a first-rate window to see what is happening on trails in his part of the country. Allen mentioned that the slow start to his season (due to weather) was partly compensated by the fact that several pairs of birds produced four successful clutches this year. This seems to me that this is very unusual for a location

as far north as New Jersey. But Allen's most striking observation (confirmed by other New Jersey banders) is the fledglings this season were noticeably smaller than was typical in past seasons. He believes this is due to less than ideal supplies of insects. We can speculate about the reasons for the diminished insect supplies. Is the reason due merely to the combination of a wet spring and dry summer conditions or is it a confirmation of the general loss of insects being seen throughout the world in current times? We have talked about that issue before in these pages.

Bet Zimmerman Smith is a Director from nearby Connecticut and she also mentioned a weather-induced slow start to the season. These conditions even interfered with her Wood Duck nesting success. She also noted fewer than normal numbers of TRES and that chickadees and titmice did not use her nestboxes this season, but House Wrens were in great supply.

We have three Directors in the mid-Atlantic states: Stan Fisher and Kathy Kremnitzer in Maryland and Christine Boran in Virginia. Stan reported that early conditions in the Maryland Piedmont were cold but that most EABL and TRES nests were successful. Stan also mentioned higher than normal numbers of HOWR. Kathy in central Maryland near the Virginia border experienced a slow, late start to the season resulting in a good number of second nests, but few third nests. On her trail at the Antietam National Battlefield she encountered a "super-predator" that was taking the tops off boxes. They speculate that it might be a family of racoons and hope to do some video surveillance on the site next season. Christine in Virginia noted that the spring conditions were cold enough to freeze the peach orchards and of course this also interfered with nesting attempts by all species including EABL, TRES, HOWR, and Carolina Chickadee. The cold spring was followed initially by a cool summer period leading to issues with blowflies and mites. Later in the summer the weather turned hot, resulting in nest abandonments. Overall, a less than ideal season with lowered production but still successful. Christine's experience shows the value of aggressive trail management. Finally, Darrell Ashworth, a Director living in southern West Virginia, had a similar story of poor weather conditions throughout most of the season leading to below average success.

Let me conclude this season review with the comments of three of our NABS Directors working in the southeast: Jim Burke (North Carolina), Mike DeBruhl (South Carolina), and Sky Rector (Georgia). All three reported issues with weather being less than ideal. For one thing, the higher than normal summer temperatures shortened the season by a few weeks and this took a toll on production. Similarly, all three Directors mentioned that this season was a particularly bad one for nest predation. Raccoons were mentioned but snakes were a bigger problem in all three states. These difficulties took a toll on production and it was a little below average but still within the range of normal for all three of them.

I hope this little impromptu, yet nonscientific, review of the season across parts of the continent was interesting. First, based on these reports I predict we will find this was at least an average season for fledging bluebirds! Second, I hope it demonstrates to the membership that your NABS Directors are actively engaged on the nestbox trail and are fledging bluebirds just like you!

A couple of final thoughts related to that matter of the availability of adequate nutrition (i.e., insects) for nestlings. Recall in an earlier discussion I had mentioned that undoubtedly the declines in insects would impact the fortunes on insectivorous species like bluebirds. I suggested that things like abandoned nests (with eggs or nestlings) and small or undernourished fledglings might be one of the signs that we might start seeing more often. With those thoughts in mind I will mention that one of the most frequent complaints this year on the NABS Hotline was just that issue, i.e., nest abandonment.

And let me take this time to impress on all again the value of getting your nestbox data in to the NestWatch team at Cornell. With our data NestWatch can combine the results from thousands of nestboxes across the continent and compare them with the on-the-ground conditions—e.g., unseasonably low or excessive rainfall or atypical heat or cold, or inadequate supplies of food items. Large data sets permit more robust analysis and permit an evaluation of these different conditions/factors on the productivity of our nestbox trails.

I would like to close with a topic that has taken the attention of the NABS Board in the last two months and that is cats. The Board is currently looking at facts and figures and considering whether it is time for NABS to formally join other birding organizations in helping to educate the public on issues surrounding cats that are relevant to wild birds.

The topic of domesticated or “house” cats and their impacts on wild birds (as well as small mammals, reptiles, and amphibians) in North America has long been a subject of concern. The issue can be complicated and agonizing because certainly many bluebirders, and NABS members as well, have cats as pets in their homes.

Most of our members are probably aware that house cats are not native to this continent. Rather, house cats, like House Sparrows and European Starlings, are a nonnative species introduced to North America by humans. Past studies indicate that all modern-day house cats (*Felis catus*) are descendants from the domestication of a small, wild cat species (*Felis silvestris*) in Egypt perhaps 4,000 years ago. In fact, more recent studies suggest that cats may have become human companions even earlier in the Middle East—perhaps 10,000 years ago!

Although numbers are not precise, it has been calculated that there are up to 60 million owned (pet) cats in the US and perhaps over 90 million in North America. But owned cats are only a part of the total cat population as there are also an estimated 60–160 million wild or feral cats on the continent as well (the large range on this number shows that it’s imprecise).



Derek Bridges / www.flickr.com/photos/derek_b

Still, regardless of the actual number of feral cats you will see later in this article that they create serious ecological and human health issues

Pet cats that are truly “house” cats, that is those cats not given access to the outdoors, are of minimal consequence to birds or other small wildlife. But owned cats that are allowed free access to the outdoors are a different matter entirely.

Feral cats (even more so than House Sparrows) are environmental wrecking balls. Studies show that feral cats are responsible for the annual killing of billions of small birds (including bluebirds), as well as small mammals, amphibians, and reptiles. Feral cats are indiscriminate killers and have played a major role in the extinction of at least 63 small animal species on this continent. But North America is only the tip of the iceberg and many island ecologies around the world have been stripped of small mammals and birds by the unfortunate introduction of feral cats.

One reason that wild cats are especially problematic is that they are “surplus killers,” meaning they kill whether they are hungry or not. As a result, feral cats often leave up to half of their kills behind unconsumed. One study where small cameras were attached to 55 feral cats showed that these cats killed from one to two prey items a week and up to half of the prey carcass was not consumed. Some of the cats made multiple kills on a single night. Simple math shows the potential magnitude of the issue. The numbers of wild birds and other native small animals killed by feral cats has been calculated to measure in the billions per year. Among the most prominent prey items of feral cats in North America are American Robins and small mammals including rabbits, voles, moles, shrews, and mice. Unfortunately, feral cats seem seldom to kill rats. If you want rats controlled get a Jack Russell terrier. In the 1800s a terrier named “Jacko” supposedly killed 100 rats in about 5½ minutes. I have no details about how this “experiment” was performed! LOL.

There are many other risks presented by feral cats including the transmission of serious illness. Approximately 75% of feral cats carry *Toxoplasma gondii* and this parasite (similar to the one that causes malaria) is shed in cat feces. In warm climates *T. gondii* survives in cat droppings for many months and it is a source of toxoplasmosis in other animals and sometimes humans. Feral cats can carry and transmit

other disease like rabies. A full discussion of the impacts of feral cats on humans is beyond the scope of this note.

But here is the most important part of this house cat discussion. The fact is many pet cats are not only “house” cats. Instead their owners allow them free access to the outdoors. In this way, owned, or pet cats contribute to the carnage wrought by feral cats. For many this is a controversial subject and opinions run strong. For this reason, NABS intends to provide reliable information on the subject so individuals can make an informed decision on the wisdom of outdoor cats.

How individual cat owners deal with their pets is a decision that they must make. However, some facts that might impact their decision as to whether to allow their cats to roam freely outdoors could be mentioned.

First, we know that some house cats stay close to home or their immediate neighborhood. But many other house cats are given to wandering far beyond their home and may range over areas of 50–100 acres. Second, cats are “hardwired” hunters and thus, nearly all cats “hunt.” Cats simply can’t resist pouncing on or trying to catch something that is moving be it a mouse or a small bird. Third, the average life span of house-bound pet cats is typically 12–18 years. In contrast, a study by the Willamette Humane Society in Oregon determined that cats allowed to roam outside usually live, on average, only 3–5 years. The outdoors is full of threats to cats, such as rock salts during the winter, and they may fall prey to creatures such as fishers and coyotes. Finally, one might consider that a cat owner who opts to allow their house cat to roam outside may, in many cases, be unwittingly causing more harm to wild bird populations than any hunter. Something to think carefully about?

So, another nesting season is over but before you leave that trail for the last time please be sure to winterize yours so they can serve as bluebird roost boxes when cold weather arrives.

– Bernie



From the Managing Editor

Scott W. Gillihan

It's difficult to imagine any sort of silver lining to the COVID-19 situation, but one thing that may come close is the surging popularity of birdwatching. This quiet, relaxing activity has been a godsend for many—a way to get out of the house, get some fresh air, and absorb the beauty of birds and nature in general, all while practicing social distancing. Some novice birders have gone so far as to credit it with saving their sanity while on lockdown. Let's hope that this newfound interest in birds translates into increased bird conservation efforts down the road.

For suggesting or facilitating materials for this issue, I thank Terry McGrath (South Carolina Bluebird Society) and Pauline Tom (Texas Bluebird Society). My thanks also to all of the writers and photographers who contributed material. And of course, my thanks to the sponsors, advertisers, officials, and Affiliates, and the members of NABS, for supporting the conservation of bluebirds and other native cavity-nesting birds.

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



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On the Lookout for Bluebirds

Susan Mates

In June, my husband and I set off for eastern Oregon where we were to be fire lookouts near the Hells River Canyon. I was sad to be leaving behind my bluebird nest box route, but looking forward to spending the summer at 7,000 feet in a remote cabin on a tower near a wilderness area.

We jounced over the rough 4WD ride up to the cabin, and the first thing I noticed was a beautiful male Mountain Bluebird greeting us from the guy wires of the cabin, sunlight glinting off his brilliant blue feathers. He and his mate were making frequent trips to the awning-like shutters over our windows. I figured that the shutters were being warmed by the sun, and that the insects were particularly active there, a bluebird attractant.

A few days later, it began thundering, then snowing. We were struggling to get our heater working and wanted to make sure the pipe was clear. John stuck his head up through a trapdoor in the roof and discovered a bluebird nest, tucked into the eaves! Shortly after, we began noticing fragile peeping that we could hear from inside the cabin. I feared for their lives, but those poor parents continued to search out food for their babies despite days of snow, 40 mph winds, chilling rain, and consistent temperatures in the 30s.

One day I kept track of the number of times the bluebirds fed those nestlings. It was an astounding 25 times an hour, and I know that I missed many visits when they flew in from a different direction. That translates to each 1.79 minutes when it was partly cloudy, and then each 2.9 minutes when were socked in by a cloud and visibility was poor. They worked from the first feeble light until the last fading glimmer.

The strength of the cheeping grew noticeably stronger as the days passed, and then raucous. Finally, one evening we took a walk just at dusk. The parent bluebirds were perched on the radio tower, keeping watch, as usual. But this time, one of the nestlings had ventured out and was clinging to a wire above the eaves, testing its wings. As we came up the stairs, another was perched right at the edge of the shutters. Its little beady eye looked into mine, almost on the same level, its subtle pattern of blue and gray smooth now, no baby feathers left. As we readied ourselves for bed, John noticed one of the baby birds fluttering down to the ground. We worried about its fate, but... that's nature.

The first thing we did the next morning was search for the baby bluebirds. There they were, being herded around by the parents in a nearby clump of subalpine firs and snags just to the north. It was the perfect spot for them to get accustomed to their wings: lots of cover, plenty of nearby branches, clouds of insects swirling in the air. I watched the female shove something into the mouth of one of them. It was impossible to make a count, but it was a good sized group, mixed in with some Cassin's Finches and juncos who were hovering around in the same area.

Within a few hours the bluebirds vanished. Like squabbling, demanding teenagers, they leave a hole when they are gone. I miss them, and the feeling of being a part of their daily lives. Monitoring nestboxes over the years has been rewarding. Now I am grateful to have been given this different, more intimate look into the life of one family of these brave, gentle, and hard-working birds.



Concerning Other Species

Monty Carter

These thoughts I bring before you today are something I've been mulling over for several months now. I've had a growing interest in bird watching as I've gotten older. It's the growth of a seed planted by my father several decades ago. This past year is the first time I've reached out, to get more involved with others that share this interest, by joining the South Carolina Bluebird Society (SCBS). And while I don't live close enough to Aiken to be at regular meetings (even before the coronavirus put them on hold), I've still been enjoying the connection to a group who shares this interest, not only in our beautiful bluebirds, but many other native species. The one meeting I was able to attend this year was a good first introduction to SCBS. The quarterly newsletter is always a pleasure to read through as soon as it's published. And the society Facebook page has been a great distraction for sharing photos and information as our cavity nesters prepare the home and raise the family.

It is, however, this last medium which has shown me a mindset perhaps some of us need to reconsider. While we are the South Carolina **Bluebird** Society, it is the stated purpose of this society to aid all native cavity nesters. The Eastern Bluebird is certainly one of the most beautiful songbirds in our region, with a temperament we find endearing, who also provides hours of joyous entertainment. Sadly, this love for our bluebirds has, in some posts, manifested as disdain for other cavity nesters who compete with our beloved bluebirds. In recent months, I've seen many posts or comments indicating a level of open hostility toward other species. The most common of these are about tearing out nests of other native cavity nesters, or even a case of destroying a mockingbird nest in a bush because they eat the mealworms intended for "my Bluebirds." It is this mindset I wish to address. (I should note, in fairness to our members, some of these posts may come from individuals who aren't in our society, as the Facebook page is open to the public.)

When we put out a nestbox, hoping to attract a family of bluebirds to our backyard, it's not the same as setting out a doghouse for our pet. We don't get to choose who uses it or dictate what happens inside. We're seeking to provide aid in the conservation of our feathered friends. But not just one species, any native bird that chooses our backyard as their home

is well deserving of our help. I, like most of you, think the bluebird is certainly a pleasure to watch from the back window; however, I wish to suggest equal joy can be gained from watching the fierce little Wren (House or Carolina) raise her brood or the spirited chickadee watching over his family while feverishly bringing in caterpillars from the yard. Every species has its own personality and has every right to compete for the nestbox we've provided. Unfortunately, some in our communities need to be reminded that all native birds are protected by law. Even when they're in a nestbox we provided in our yard, it's still illegal to harm, harass, or destroy them, their eggs, or their nest.

Therefore, let me make this simple recommendation. When it comes to the competition and interaction between native species, don't feel you need to police them to help your personal favorite. They've been fighting it out amongst themselves for a very long time, before we ever considered getting in their way. They always flourished under that system, until we started destroying their habitat. Habitat loss is the true enemy we're fighting with that box in the yard. So, mount that nestbox, protect it with a baffle, and grab the binoculars for a wonderful show every day, no matter the species that makes your yard their home.

This article originally appeared in Nest Box News, the newsletter of the South Carolina Bluebird Society. It is reprinted here with permission.



Christina Butler / www.flickr.com

Mountain Bluebird Pairs with Eastern Bluebird and Successfully Nests in Wisconsin

Ryan Brady

On May 16, 2020, Ryne Rutherford of Biophilia LLC discovered a female Mountain Bluebird on Chequamegon National Forest lands near Hannibal in Taylor County, marking Wisconsin's ~25th record and only the 6th since 2002. As word spread and birders arrived to catch a glimpse of this rare western species, it quickly became apparent the bird was closely associating with a male Eastern Bluebird, and both were showing interest in a nestbox at the site.

Could the birds be setting up to nest? While Mountain Bluebird had never been found nesting in Wisconsin, hybrid Eastern–Mountain pairs have been previously documented elsewhere, including twice in Minnesota, once in both North Dakota and Ontario, and nearly 20 times where the two species' ranges overlap in Manitoba. These hybrid pairs have often been successful in producing young.

The Mountain Bluebird continued at the Taylor County site in the days following its initial discovery. On May 23, John Dixon and friends from the Hoy Audubon Society visited and saw the bird enter the nestbox. As experienced bluebird monitors, they waited for her to later depart and then quickly took a peek inside—six eggs!

Based on behavioral observations and known incubation time of ~13–14 days, John suspected

hatching should occur between May 30 and June 5. Then on June 3, observers noted for the first time the female bringing food to the nestbox, indicating hungry mouths to feed. John was right!

Our goal then became to document the fledged young, which in bluebirds generally occurs 18–21 days after hatching. Given the hatch date no later than June 3, we anticipated fledging around June 20, give or take a couple days. A June 19 visit found the female still feeding nestlings in the box, good news as it showed the nest was still active. Then on June 21 Nick Anich checked again and bingo, at least four fledged hybrid young!

Subsequent observers continued to see the family in the area through at least June 27, including the original observer, Ryne Rutherford, who was able to confirm five young were present. The birds haven't been reported via eBird since but very few birders visit this area of the state. It's likely the birds are still in the area. Will the adults try for a second brood? Stay tuned!

Ryan Brady is with the Wisconsin Breeding Bird Atlas II.

This article originally appeared online at ebird.org/atlaswi in the "News" section, where you can view photos of the mixed pair and their nest, eggs, and fledglings. The article is reprinted here with permission.

Snake Repellents?

Bernie Daniel

One of the most intractable problems in bluebirding is dealing with snake predation. While pole baffles clearly help discourage rat snakes and corn snakes (*Pantherophis* spp.) in the East and gopher snakes (*Pituophis* spp.) in the West they are not 100% effective and nestboxes are sometime depredated even when proper baffles are affixed. NABS is in favor of research on how to more effectively prevent snake predation and researching ideas for deterring snakes is certainly something of interest to our Society. I wonder if any of our members experimented with snake repellants like some of those shown at right? If so please relate to us your experiences with these products.



Some examples of typical commercial snake repellants. These are shown only as examples of what is on the market and NABS does not necessarily recommend or promote any of these products.

An Unusual Cavity

Christine Boran

Along the Woolwine House Bluebird Trail, I have a few Virginia Bluebird Society grant boxes in a public park. Bluebirds usually are the users of those nestboxes. At Nestbox 40, a Tree Swallow quickly moved in a few days after the first bluebirds fledged. That usurped that one bluebird couple building nest #2. That bluebird couple then moved into the nearby park's pet waste station and built a nest inside the green metal "cavity," which was void of the waste bags for the dog walkers. They laid four eggs. I became concerned as how to protect it from the numerous avian, reptile, and mammal predators at the park (including some worry about humans, too) with the metal box 3½ feet from the ground. How does one protect that station from predators?

I kept a watch several times a week. The four eggs hatched during the hottest period of the summer. I then had to make a sudden trip out of town. After returning from my trip, I walked by the pet waste station in the park to peer in to get an update if they survived. To my surprise, I was there during the fledging! One fledgling was left in the station, and I heard the other youngsters in the nearby tree. The parent birds were upset with me that I was anywhere near the nest in the station. I actually like that—it's a good sign of the health of the

parent birds and their natural instinct to protect their young. We know bluebirds are opportunists and have been resourceful nesting in the most interesting and unusual cavities they sometimes find. I am glad they made it into the world and hope the best for them to survive their first year. I will add another trail nestbox to this public park this autumn. I will get permission from the county first. Many locals asked me if I knew about the birds nesting there, including the walkers in the park and the community's Postmaster. It indeed takes a village.



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Why Use a Nest Cup?

Dean Rust

A nest cup can be a 4-inch plastic, cardboard, or molded wood fiber cup, either round or square in shape. The cups are also called “jiffy pots” or “peat pots” and they can be found in most hardware, garden, or nursery stores. The cost will range from 30 cents to a dollar depending on the thickness and grade. Buy a three-pack or five-pack, because the thinner ones will only last a year. This nest cup placed in your nesting box will act as a template for your mother bluebird to weave her soft grass or pine needle nest. And she will build the nest in record time, as fewer building materials are usually needed. Many times, she will only use one-half of the cup for her nest. On other occasions, if she likes a deep nest, she will use the entire cup. It is her choice, as she is the expert artisan nest builder.

When eggs start appearing, they stay nestled down in the bottom of the nest where it is safe. Without a nest cup, perhaps you have seen that sometimes an egg gets pushed up onto the brim of the nest. Unfortunately, the mother may NOT recognize this problem and the egg is “out of the zone of incubation” for a few days. That is bad enough. But there is a worse scenario—the egg is on the brim of the nest at the side door and when you come to monitor the box and tip open the door, the egg rolls out and hits the ground. It is rare but it can happen. With a nest cup, the eggs are always secure in the bottom of the nest!!



Another problem is that large, deep, spongy, regular bluebird nests without a nest cup may have “soft spots” in the nesting construction. This can lead to “submerged egg syndrome.” Again, one of the eggs can find this soft spot and get inadvertently pushed down into the nest. The mother has no way to raise the egg and if she tries, it only goes down farther. This egg will NOT hatch because it is “out of the zone of incubation” unless you notice the problem and correct it. With a nest cup, the evenness of the building material as it is spun into place in the cup stays at a defined thickness and prevents “egg sinking.”

The nest cup also acts as a moisture barrier. This is one of the best attributes of the nest cup. Every year in Pennsylvania in April we have many days of continuous rain and wind. This coupled with low temps in the 38–42 degree range creates an unfortunate perfect storm that can descend onto a blissful happy nest and brings a quick death of hypothermia to a whole group of young chicks. This can be devastating to the Bluebird Landlord. YES, the weather can be cruel at times. During this time frame, there is a lack of insects to feed the nestlings, which adds to the death sentence. Swirling wind and driving rains can enter the box via the entrance hole and the ventilation ports and then find the box floor. When the floor gets wet, that moisture then wicks up into the nesting material, creating a wet nest. Nest cups can prevent wet nests in April due to their moisture barrier characteristic!! Wet nests can be changed out using dry nests. However, time is of the essence and who can be checking their nests every day?

For the Monitor, removing the nest for a weekly check is quite simple. A nest cup with eggs and/or nestlings, may be lifted out, viewed, photographed, and returned to the box in just a few seconds without moving one blade of grass or pine needle. By removing the entire nest cup, a good inspection can be made for ants or earwigs under the nest. Diatomaceous earth can then be introduced for either of these maladies and the cup can be returned with an exact orientation.

When monitoring bluebird boxes regularly, peering into the darkness of the box to count number of eggs or chicks can be a daunting task. Wouldn't it be nice to pull out the whole nest cup and its contents, to examine in the light of day?



Sometimes even mother bluebird makes a skimpy, hasty nest and lays eggs before the nest is fully finished. She may be a novice bluebird mother and her timing has not yet been perfected. The eggs may even be on the bare floor! And the chicks may not stay in the ill-defined nest. Chicks can now get their legs or wings pinched when the door is closed. The nest cup precludes these problems. The nest cup provides a circular wall that protects the eggs and chicks even when the nest is shallow! The cup surrounds the chicks keeping them free from drafts. And when the nestlings become fledglings, O Happy Day, the nest cup can easily be cleaned and replaced for the next nesting.

This article originally appeared in the newsletter of the Bluebird Society of Pennsylvania. It is reprinted here with permission.

A Long 17th Day

Christine Boran

"A man's interest in a single bluebird is worth more than a complete but dry list of the fauna and flora of a town."
Letter, November 22, 1858, from Henry D. Thoreau to Daniel Ricketson, in The Writings of Henry David Thoreau, 1906

My Nestbox 10 on the Woolwine House Bluebird Trail lost Mom Eastern Bluebird. She disappeared after the eggs hatched, and I discovered with relief a few days later that Pop kept up the feeding and diaper duties without his mate. One assumed she died, perhaps taken by a predator. My first concern, of course, was if he would be able to solely care for his five young during a long streak of rains. He indeed maintained all parental duties. Hero Pop Blue not only fed the nestlings, but he guarded the nestbox and dive-bombed me as I monitored it.

A few days later I noticed a runt in the nest of the five nestlings. The runt was developing slowly at about three days behind the other four. I kept vigil every few days and watched the runt slowly grow and move positions in the nest next to its siblings. This nestbox is on my own home grounds. On Day 17, I sat on the front porch balcony with binoculars and watched three of the five fledge at High Noon within a few minutes of each other. They flew straight and slightly angled up from the entry hole through the Noel Guard and into a pine tree. Since I saw no more

fledge after the three, I decided it would be a good idea to stand at the nestbox an hour later to see if Pop would dive-bomb me again (my clue that fledglings are still inside), and he did! I left the area. One hour later, I stood there again and noticed no dive-bombing from Pop. I cracked open the bottom-hinged panel and used a mirror to look down through the crack by the roof, and there I saw those recognizable fledgling spots. I saw one fledgling sitting on the nest. It was the runt, facing the wrong way toward the back of the nestbox, so I quietly closed the panel door and kept yet another vigil late afternoon on the front porch balcony looking for Pop bluebird to return to the box to feed it or coax it out. It felt excruciating to me as I watched for him to return, thinking at that point to be ready to call my go-to licensed avian rehabber if I thought it was necessary in the morning if the abandoned fledgling was deformed in some way inside the nestbox. Well, seven hours later, I watched the last one, the runt, finally fledge, at 7 PM that evening. He flew with a wobble up toward his siblings in the pine tree as Pop flew down to direct him where to go! Bravo!

Bluebird Trail at Kachina Wetlands

Doug LeVasseur

President's note: The following article describes the latest efforts in bluebirding by Doug LeVasseur, proud resident of both Ohio and Arizona! Doug is a former president of NABS and also a longtime member and president of the Ohio Bluebird Society (OBS). Doug was president of OBS when I joined in the late 1990s and as a county coordinator I will never forget my first OBS Board meeting. Doug came to the room carrying a huge box of books, papers, and pamphlets, then he brought in a computer (they were not miniaturized in those days folks), and finally he made a third trip to the car to get a printer! Then he set it all up. After OBS, Doug spent several years at the helm of NABS as president and presided over a transitional period for the Society. He also organized one of the most successful NABS conferences ever, the 2000 event in Columbus, Ohio. He and his wife Ethel-Marie have long fledged Eastern Bluebirds at their place near Senecaville in Guernsey County, Ohio, some 80 miles due east of Columbus. They used to have a mealworm feeding station set up on their dining room table and enjoyed watching the blues fly through the window and pick up worms at their table. Since the COVID debacle trapped them in Arizona this summer Doug turned the hog's ear into a silk purse and set up a trail to raise Western Bluebirds at a site about 10 minutes south of Flagstaff. I learned so much about bluebirds and bluebirding from Doug and I hope you enjoy this cool story!

An observant visitor will notice a nearly inconspicuous addition to the Kachina Wetlands...a fledgling bluebird trail! Thanks to the support of the Northern Arizona Audubon Society six bluebird nestboxes have been erected on the 70-acre parcel. From 1850 to 1970 bluebird populations in North America plummeted more than 90% for two reasons: the introduction of two competitive nonnative species, the European Starling and the House Sparrow, and the loss of nesting sites. Then in 1978 Larry Zeleny (1904–1995) founded the North American Bluebird Society. Thus began one of the most successful grassroots conservation success stories ever embarked upon. It took no government

grants or loans, no wealthy donors, just thousands of regular folks all across North America erecting and monitoring bluebird nesting boxes. NABS still thrives as do its 62 affiliate organizations in 32 states, 4 Canadian provinces, and Bermuda too!

We hope our bluebird trail will be both educational and productive. not to mention fun. With that in mind let me describe the two box designs now found at the Wetlands. The triangular-appearing box was designed by Minnesota native Dick Peterson (1919–2000). Dick started building boxes in the 1970s. Dick and his friend Dave Algren built and distributed more than 60,000 boxes of this design through 30 states and several Canadian provinces. Many boxes were given away. All the profits from the sale of Dick's boxes were plowed back into the bluebird conservation movement. Neither Dick nor Dave made a penny from the sale of Dick's boxes. It is about the only bluebird box you will find on bluebird trails in the state of Minnesota. It has a proven track record for raising bluebirds.

The more typical squarish-looking box is the flagship box design of NABS. NABS founder Larry Zeleny took a personal interest in the design of this box. It has been only slightly modified over the past 40 years. The "old" top-opening box design makes the box a bit more difficult to clean but when banding nestlings it offers added protection against premature fledging. This box also has a proven track record for fledgling bluebirds. So, I believe we are off to a good start! Look to see many more bluebirds at the wetlands in the seasons to come!

Doug LeVasseur is a member of the Northern Arizona Audubon Society and past president of NABS.

This article originally appeared on the website of the Northern Arizona Audubon Society (<https://www.northernarizonaaudubon.org/>); it is reprinted here with permission.

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Bluebird River Rescue

Glen Hendry

My wife Gail and I were camping at Clark's Hill Lake in Petersburg Campground the second week of August. We went fishing in the Savannah River below the dam on the South Carolina side. While standing on the bank, I noticed some splashing out in the river. Thinking it was fish breaking water, I cast out to try my luck. I then noticed an adult Eastern Bluebird calling and calling while hovering over the splashing area. So it wasn't fish but a baby bluebird that had fledged, flown out over the river, and come down in the water. The little fellow tried for several minutes to escape to no avail. I could see he had his head up while trying to break free of the water. As he grew exhausted he stopped battling and his head was down in the water. By now he was about 30 feet out from shore. I couldn't take it any more. I emptied my pockets (wallet, cell phone, and car keys), and dove into the river, shoes and all. I was able to retrieve the little guy and bring him to shore. I handed him off to Gail and she dried him and tried to get him warm as the river water was quite cold. He was gasping for air and I assumed he had swallowed enough water that he had basically drowned. After 15–20 minutes we put him down on the blacktop of the parking lot to get even warmer.

To our surprise, he left a small deposit on the ground and proceeded to fly off—BACK TOWARD THE RIVER!!! Luckily he only made it as far as the river bank, which is lined with huge boulders—riprap. I didn't want to leave him in that predicament as the boulders are quite large and if he got down in between them he would be lost in snake city!! The parents were on a sign nearby, calling frantically. After some frantic searching on our part, we located the little dude and he flew off across the parking lot into the woods—AWAY FROM THE RIVER, with the parents in tow. That's when we said our goodbyes.



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Thank you for supporting the conservation of bluebirds and other native cavity nesters!



Updated Conservation Priorities for Cavity-Nesting Birds

Scott W. Gillihan

Back in 2012 I wrote an article for *Bluebird* that used Partners in Flight (PIF) data to rank cavity-nesting birds based on their conservation priority. PIF regularly updates their data based on new and more complete information available, so it seemed like it was time to update the conservation ranks of our cavity-nesting birds.

PIF is a group of more than 150 government agencies and non-governmental organizations, such as American Bird Conservancy, Cornell Lab of Ornithology, and National Audubon Society. PIF's mission is "keeping common birds common and helping species at risk through voluntary partnerships." They are uniquely qualified to assess the conservation needs of North America's birds.

Methods

Details of the PIF scoring system are available online (Panjabi et al. 2019, Partners in Flight 2020), and details for how I used those scores are available in the previous article (Gillihan 2012). In a nutshell, the scores I used for ranking species are based on PIF's *continental* scores, which cover bird populations in North America north of the US–Mexico border. The population estimates, though, are for *global* populations (North American populations plus populations in Mexico and farther south, and populations of the handful of northern cavity-nesting birds that live in both the New World and the Old World).

Basically, PIF assigns scores of 1–5 (1 being the best, 5 the worst) to six aspects of each species' life history: threats on the breeding grounds, threats on the wintering grounds, population size, population trend, size of the breeding range, and size of the nonbreeding range. These scores are added up to yield an overall score. The higher the score, the more that species needs help.

Results and Discussion

The priorities have shifted quite a bit since 2012, in part because of actual changes in the conservation situation for species (for better or worse) but also because the quality of information about their populations has improved. Species whose ranking dropped by at least 10 spots (i.e., became *lower* priorities, which is good news) include Nuttall's

Woodpecker, Lucy's Warbler, Red-breasted Sapsucker, American Kestrel, Red-naped Sapsucker, American Three-toed Woodpecker, Black-backed Woodpecker, and Boreal Chickadee.

Species whose ranking went up by at least 10 spots (i.e., became *higher* priorities) were Chestnut-backed Chickadee, Mountain Chickadee, Mountain Bluebird, Purple Martin, Violet-green Swallow, and Tree Swallow.

The Mountain Chickadee is an interesting case. The estimated population size is nearly 8 million birds, but the species is the #19 priority. PIF classifies it as a Common Bird in Steep Decline, which means that, even though there are a lot of them now, their continental population has declined by at least 50% since 1970—a worrying trend that needs to be watched.

As was the case in 2012, the three bluebird species are in good shape, as evidenced by their comparatively low conservation priority rankings. Eastern Bluebirds continue to be strong and maintain their rank way down the list as the #58 priority, with an estimated 23 million birds—only two cavity-nesting species have larger populations (Black-capped Chickadee and House Wren). Western Bluebirds moved up slightly to the #41 priority. Mountain Bluebirds are a bit of a concern, having moved from #46 in 2012 to #28 in 2019. One would need to drill down into the PIF data to learn what drove that change and made them a higher priority for conservation action; in any event, it is worth keeping an eye on that species.

I did not include cavity-nesting waterfowl in the 2012 article or in the table that accompanies this article. Those species (and their current scores) are Barrow's Goldeneye (12), Common Goldeneye (9), Red-breasted Merganser (9), Bufflehead (8), Black-bellied Whistling-Duck (8), Hooded Merganser (8), Common Merganser (7), and Wood Duck (7). The Barrow's Goldeneye score is high enough that it would have been priority #15 had I included it.

Let the table on the opposite page guide your conservation efforts. Although there's not much that individuals can do to improve the situation for Ivory-billed Woodpeckers, every other species on the list could benefit from your support and active

participation in providing nestboxes, conserving habitat, keeping cats indoors, taking steps to reduce bird collisions with windows, reducing pesticide use, and supporting nonprofit organizations like NABS.

Literature Cited

Gillihan, S.W. 2012. Setting Conservation Priorities for Cavity-Nesting Birds. *Bluebird* 34(3):12–14.
 Panjabi, A.O., W.E. Easton, P.J. Blancher, A.E. Shaw, B.A. Andres, C.J. Beardmore, A.F. Camfield, D.W. Demarest, R. Dettmers, R.H. Keller, K.V. Rosenberg, and T. Will. 2019. Avian Conservation Assessment

Database Handbook, Version 2019. Partners in Flight Technical Series No. 8. Available from pif.birdconservancy.org/acad_handbook.pdf
 Partners in Flight. 2020. Avian Conservation Assessment Database, version 2020. <http://pif.birdconservancy.org/ACAD>. Accessed on 29 Aug 2020.
 Scott, V.E., K.E. Evans, D.R. Patton, and C.P. Stone. 1977. Cavity-Nesting Birds of North American Forests. Agriculture Handbook 511. USDA Forest Service.

Table I. Cavity-nesting landbird species in North America, ranked by conservation priority.

Priority	Species	Score	Global population	Priority	Species	Score	Global population
1	Ivory-billed Woodpecker	18	extinct?	33	American Kestrel	10	9,200,000
2	Red-cockaded Woodpecker	18	19,000	34	Carolina Chickadee	10	13,000,000
3	Spotted Owl	15	15,000	35	Violet-green Swallow	10	7,200,000
4	Lewis’s Woodpecker	15	82,000	36	Tree Swallow	10	19,000,000
5	Flammulated Owl	15	5,500	37	Brown-crested Flycatcher	9	14,000,000
6	Oak Titmouse	14	840,000	38	Red-naped Sapsucker	9	2,000,000
7	Gilded Flicker	14	770,000	39	Acorn Woodpecker	9	7,500,000
8	Prothonotary Warbler	14	2,100,000	40	Ladder-backed Woodpecker	9	5,500,000
9	Elf Owl	13	72,000	41	Western Bluebird	9	7,100,000
10	Bridled Titmouse	13	160,000	42	Northern Flicker	9	12,000,000
11	Western Screech-Owl	13	310,000	43	Gray-headed Chickadee	9	2,000,000
12	Brown-headed Nuthatch	13	1,600,000	44	Golden-fronted Woodpecker	8	5,300,000
13	Red-headed Woodpecker	13	1,800,000	45	American Three-toed Woodpecker	8	1,600,000
14	Chimney Swift	13	8,800,000	46	Black-backed Woodpecker	8	1,700,000
15	White-headed Woodpecker	12	240,000	47	Northern Saw-whet Owl	8	2,000,000
16	Williamson’s Sapsucker	12	300,000	48	Boreal Chickadee	8	13,000,000
17	Black-crested Titmouse	12	1,200,000	49	Ash-throated Flycatcher	8	10,000,000
18	Chestnut-backed Chickadee	12	12,000,000	50	Great Crested Flycatcher	8	8,800,000
19	Mountain Chickadee	11	7,900,000	51	Pileated Woodpecker	7	2,600,000
20	Northern Pygmy-Owl	11	180,000	52	Barred Owl	7	3,500,000
21	Juniper Titmouse	11	290,000	53	Red-bellied Woodpecker	7	16,000,000
22	Gila Woodpecker	11	1,500,000	54	Carolina Wren	7	19,000,000
23	Nuttall’s Woodpecker	11	850,000	55	Tufted Titmouse	7	12,000,000
24	Pygmy Nuthatch	11	3,300,000	56	Downy Woodpecker	7	13,000,000
25	Bewick’s Wren	11	7,900,000	57	Black-capped Chickadee	7	43,000,000
26	Northern Hawk Owl	11	190,000	58	Eastern Bluebird	7	23,000,000
27	Lucy’s Warbler	11	3,000,000	59	Hairy Woodpecker	6	8,900,000
28	Mountain Bluebird	11	5,600,000	60	White-breasted Nuthatch	6	10,000,000
29	Eastern Screech-Owl	10	560,000	61	Yellow-bellied Sapsucker	6	14,000,000
30	Boreal Owl	10	1,540,000	62	Red-breasted Nuthatch	6	20,000,000
31	Red-breasted Sapsucker	10	2,800,000	63	House Wren	5	190,000,000
32	Purple Martin	10	9,300,000				

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–Julie Zickefoose

An Unusual Clutch

Bill Read

As part of a biomonitoring study to look into the effects of chemical sprays on birds nesting in apple orchards I monitored over 180 nestboxes in 2010 for the Canadian Wildlife Service. These boxes were located in apple orchards and in control sites that were not sprayed. On June 7, 2010, I observed a complete Eastern Bluebird nest with no eggs in one of the control site boxes located near Branchton, Ontario. The nestbox was on a free-standing pole and greased to prevent climbing predators like raccoons from accessing the contents.

When I returned on June 17 the nest contained five bluebird eggs and one Tree Swallow egg. As I approached, a second-year female Tree Swallow flew out of the nestbox. I recorded in my field book that something had probably happened to the female bluebird and the swallow had now taken possession of the nestbox. The male or female bluebird were never observed at this nestbox during the 13 visits I made. When I returned on June 20, I confirmed that the Tree Swallow was incubating the clutch of eggs including the one egg that she had laid. On June 28 four of the five Eastern Bluebird eggs had hatched and were about 1½ days old. One bluebird egg was infertile. On my next visit the following morning the Tree Swallow had hatched. This gap in age put the Tree Swallow at a disadvantage when being fed and after a few days it was clearly being out-competed for food by the larger bluebird nestlings.

On July 1 the four bluebirds were removed and put in a bluebird nest where the eggs were infertile. The four bluebirds and one Tree Swallow all fledged successfully. To allow bluebirds to fledge from a nestbox managed by Tree Swallows would end in failure. The bluebirds would fly into a tree to wait for the adults to feed them, which would not happen or would happen for only a short period. If I had not found a nest with infertile eggs I would have located them in other bluebird nests. This works as long as they are all the same size. The puzzling thing in all of this is why the Tree Swallow only laid one egg. Did she recognize the bluebird eggs as her own?

A similar occurrence happened in 2002 in an apple orchard near Copetown, Ontario, where one bluebird

egg was laid before the nest was taken over by Tree Swallows that laid an additional five eggs. On the June 23 nest check one Tree Swallow and one bluebird had hatched. On June 25 all five swallows had hatched. The bluebird was one day older than the swallows. On the June 30 visit I recorded that the five swallows were six to seven days old and the bluebird eight days. On July 6 the bluebird was removed from the nest and taken to a bird rehabilitator near Guelph until I could find a box with same age bluebirds to put

it in. While at the rehab facility the bluebird flew out an open window and was not re-found. All five Tree Swallows fledged successfully. The best option is to place any orphaned nestlings in with other bluebirds. They must be the same size as the bluebirds that are already in the new nest or they will not be fed evenly.



Two other examples of Tree Swallows incubating and hatching bluebird eggs are found in the literature. One by Field (1971) was not a natural event, as the eggs were taken from a failed bluebird nest and put in an existing Tree Swallow

nest with five eggs. Two of the five swallow eggs were removed and put in a Tree Swallow nest nearby. Two of the bluebird eggs hatched, the third was infertile. The three Tree Swallow young were placed in another nest leaving only the two bluebird nestlings in the nest. Both were banded and fledged. The other example took place in a large grid of nestboxes monitored by Chapman (1955). This nestbox was taken over by Tree Swallows after a male House Wren had destroyed the eggs and the bluebirds had abandoned it, leaving one egg unbroken. The swallows laid five eggs of their own making it a clutch of six. The bluebird's egg hatched along with the five swallow eggs and the nestling bluebird developed at the same rate as the swallows but it died when about half fledged.

References

- Chapman, L.B. 1955. Studies of a Tree Swallow colony. *Bird Banding* 26:45-70
Field, M. 1971. Tree Swallows acting as foster parents to bluebirds. *Ontario Bird Banding* 7:44-46.

Thanks to Dr. Frances Bonier for providing information on Tree Swallow-bluebird nesting activity.

The Bluebird: A Historical View

Florence A. Merriam

Editor's note: This is an excerpt from the 1889 book Birds Through an Opera-Glass, a very early bird field guide by Florence A. Merriam. She was an outstanding natural history writer and ornithologist with an impressive list of accomplishments and publications; these are her observations on bluebirds.

As you stroll through the meadows on a May morning, drinking in the spring air and sunshine, and delighting in the color of the dandelions and the big bunches of blue violets that dot the grass, a bird call comes quavering overhead that seems the voice of all country loveliness. Simple, sweet, and fresh as the spirit of the meadows, with a tinge of forest richness in the plaintive tru-al-ly that marks the rhythm of our bluebird's undulating flight, wherever the song is heard, from city street or bird-box, it must bring pictures of flowering fields, blue skies, and the freedom of the wandering summer winds.

Look at the bluebird now as he goes over your head—note the cinnamon of his breast; and as he flies down and turns quickly to light on the fence post, see the cobalt-blue that flashes from his back. These colors are the poet's signs that the bird's sponsors are the "earth and sky." And the little creature has a wavering way of lifting its wings when perching, as if hesitating between earth and sky, that may well carry out the poet's hint of his wild ethereal spirit.

Notice the bluebird's place in literature. The robin, with his cheerful soprano call, serves as the emblem of domestic peace and homely cheer; but the bluebird, with his plaintive contralto warble, stirs the imagination, and is used as the poetic symbol of spring. The temper of the bluebird makes him a fit subject for the poet's encomiums. Mr. Burroughs goes so far as to say that "the expression of his indignation is nearly as musical as his song."

Lowell speaks of the bluebird as
"shifting his light load of song
From post to post along the cheerless fence."

But although he is as restless and preoccupied here as elsewhere, lifting his wings tremulously as if in reality "shifting his load of song," and longing to fly away, the bluebird sometimes comes down to the prose of life even here and actually hides his nest in the hole

of a fence rail. When this is not his fancy he fits up an old woodpecker's hole in a post, stub, or tree; or, if more social in his habits, builds in knot-holes in the sides of barns, or in bird-boxes arranged for his use. At Northampton I was shown a nest in an old stub by the side of the road, so shallow that the father and mother birds fed their young from the outside, clinging to the sides of the hole and reaching in to drop the food into the open mouths below.



Although the bluebird has such a model temper, it has not always a clear idea of the laws of meum and tuum, as was shown by a nest found directly on top of a poor swallow's nest where there lay four fresh eggs! The nest is usually lined with dry grasses and similar materials. The eggs, from four to seven in number, are generally plain pale greenish blue, but occasionally white.

Sitting on a fence at a little distance the young birds look almost black, but as they fly off you catch a tinge of blue on their wings and tails. Their mother is more like her husband, but, as with most lady birds, her tints are subdued—doubtless the result of "adaptation," as bright colors on the back of the brooding mother would attract danger.

We have two reasons for gratitude to the bluebird. It comes home early in the spring, and is among the last to leave in the fall, its sweet note trembling on the air when the "bare branches of the trees are rattling in the wind."



timlewisnm / www.flickr.com/photos/gpzalewis/

Great Crested Flycatcher: Snakeskin Charmer

Glen Hendry

I am with the South Carolina Bluebird Society. We monitor a variety of cavity-nesting birds in addition to bluebirds. One of the more unusual birds is the Great Crested Flycatcher. They migrate to our area and nest usually in April. They are a bigger bird and thus take a house bigger than the Eastern Bluebird house. We typically use 1×8 cedar but they readily use our Eastern Screech-Owl boxes, which use 1×10 cedar. I have had them nesting in my backyard

for a few years now and this year I got some great pictures.

One interesting fact, they line their nest with snakeskin—quite a shock when you see it for the first time when you open a box for observation. Not only do they use snakeskin and pine straw, but they use feathers, fur and hair, and in this case a plastic zip lock bag (bottom photo in left-hand column).



Ring Nestbox Camera – A New Way of Looking at Nesting

Penny Brandau

For several years I have been fascinated with the idea of monitoring the activity inside a nestbox with an inbox video camera but the complexity of the set ups and the cost of maintenance seemed more than I could justify. However, after reading an article, "Nestbox Mysteries," in the North American Bluebird Society's Winter 2019-20 journal, *Bluebird*, I changed my mind and took the plunge! Authors Nancy Fraim and Marilyn Michalski wrote about their experiences with a Ring camera system, its relatively simple set up, and reasonable price. Their descriptions of several instances when the camera video helped them understand nesting outcomes that would have been a mystery otherwise was fascinating. When my youngest daughter heard of my interest, she bought a Ring stick-up cam and accompanying solar panel for me for Christmas for around \$150. It is all weather and has HD 1080 video, 2-way audio, and night vision. We have chosen to cover the blue light of the cam with a small piece of tape to reduce interior night lighting but otherwise have made no changes to the camera itself. It has been one of the best gifts I have ever received!

A Ring stick-up camera is small (roughly the size of an empty toilet paper roll) and is installed in the "attic" area of a modified nestbox. The video is activated by motion and sent by WI-FI to an iPhone app or computer for viewing. The Ring stick-up cam I received had a rechargeable battery included, but

the addition of a Ring solar panel for energy has provided enough energy to keep the cam working well without the need to remove the battery for charging. Any events that trigger a motion alert on the phone Ring app or computer can be viewed immediately by clicking on the Ring app. It is possible

to also choose to look inside the nestbox for a "Live" view whenever you just want to check in real-time what is happening in the box. By paying a nominal fee of \$3 month or \$30 year the video clips can be viewed anytime for a rolling 60 day period and even downloaded from the Ring cloud storage. When activated by motion, the cam automatically records up to 30 seconds of video at a time then pauses for a minute before starting to record another clip if motion continues. The clarity of the video and the sound quality is much better than I could have imagined.

In January my husband designed a modified bluebird nestbox and installed the Ring webcam. Advice and suggestions from the NABS co-author Nancy Fraim were very helpful to him as he built our nestbox. She willingly answered many of my emailed questions. Some new modifications that my husband added to his plan though included placing the solar panel on a separate mounting pole instead of on the nestbox roof (we use sparrow spookers on the roof of our nestbox when there is an active bluebird nesting and thought the panel might be in the way of a spooker). Having the solar panel nearby but on a separate pole actually has given the bluebirds another place to perch near the box to guard it. Even the solar cord has been used for perching.

The solar panel can be pivoted if needed to face the sun more directly. Another idea was to attach the Ring cam to a sliding board, which could be adjusted to two different heights inside the nestbox for different viewing depths. We know that some bluebird females like taller nests than others and wanted the option of moving the camera a little higher if needed for better viewing.



The nestbox was mounted on a 1-inch EMT pole and an eight-inch diameter Kingston stovepipe predator guard was installed under the box to help protect against ground predators like raccoons, snakes, or chipmunks.

Since the new nestbox was installed in our back yard we have seen several different birds enter it. Eastern Bluebirds checked it out early in January along with a pair of curious Black-capped Chickadees. Our overwintering pair of Carolina Wrens were seen inspecting the interior, and Downy Woodpeckers entertained us several nights in March and April as they individually roosted in the box (minimal remodeling by the male downy). More recently House Sparrows tried to claim the box but having the Ring camera alerted us to their activity and made it easier to trap and dispatch the male House Sparrow before they actually nested.

We were actually checking a bluebird trail about eight miles from our home last week when the Ring motion alert activated on my phone. When I checked, I was appalled to see a House Sparrow entering the Ring box at our home and feared that he might catch and kill one of our bluebirds who had been building a nest that very morning in the box. It suddenly occurred to me that I could possibly use another feature of the camera which I had been careful to avoid up to that point. The webcam has a microphone feature which is defaulted to be off but can be turned on in order to speak through the webcam inside the nestbox. When the motion alert sounded the second time a few minutes later I opened the Ring app, activated live feed and I saw the unwanted House Sparrow in the box again! I turned on the speaker and loudly ordered him to leave! He scrambled quickly out of the house and probably wondered what in the world had happened! I actually laughed out loud! At least the bluebirds were safe temporarily until we could return home and set the Van Ert trap. (We did catch the House Sparrow the next day when he returned once more.)

Having a Ring nestbox camera can enrich our knowledge of what happens inside a nestbox exponentially. I have been able to share clips of downloaded video to my Facebook page and have made some of them public when requested. Others



are finding it as interesting as I am. It is fascinating to see the activity of different bird species inside a nestbox and I'm hopeful that we will have a bluebird nesting soon to share with others. The opportunities for education are limited only by our imaginations.

More experienced Ring cam users like Nancy Fraim have installed Ring cameras inside bluebird nestboxes located on school grounds in order to introduce students to views of nest building, egg-laying, and nestling feeding, as viewed from their Smartboard, iPad, or computer. Retirement communities are another group that would probably love the responsible viewing of bluebirds or other native cavity nesters in action. It could be a tool to increase a private bluebird landlord nestbox monitor's early awareness of problems inside a nestbox. Most of us have wished we knew why certain nests failed or perhaps what we could have done better or differently to improve the nesting success of our beloved bluebirds. Use of a Ring cam with WI-FI video can be one potentially useful tool. I'm definitely loving the things I am learning. It has opened up a whole new way of viewing a nestbox!

For more information about Ring webcam equipment check the website www.ring.com.

Penny Brandau is a NABS member, Ohio Bluebird Society newsletter editor, Area Contact for Ohio Bluebird Society in Lorain County, Ohio, and Bluebird Program Coordinator for Black River Audubon Society.

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You Say You Don't Have Predators? Maybe Not Today But What About Tomorrow?

Allen Jackson

In this day of an educated public, I find it amazing how many people still mount their bluebird boxes on wooden posts, telephone poles, or trees, setting the stage for encounters with ground predators. If I had a nickel for every time I heard “We don't have predators here....” Predator issues are usually infrequent but certainly not uncommon. A swift response is needed to prevent continued predation, but an ounce of prevention can virtually eliminate predator issues.

Rat snakes and raccoons are two prevalent ground predators here in New Jersey. Both are active at night and are very efficient hunters. Landlords have a responsibility to prevent unnecessary bluebird loss. The accompanying two incidents is followed by a suggestion how to make an effective predator guard.

Snake Incident

I wanted to share these pictures with the readers, hoping it will encourage everyone to make sure predator guards are on every box. The two dramatic pictures show a large rat snake that found easy access

to a bluebird box mounted on a wooden post. The box was actually being used to trap House Sparrows but a pair of Eastern Bluebirds commandeered the box. There are four other bluebird boxes on the property with predator guards that are the primary bluebird producers.

I do not want to deal with a snake of this size. What would you do? Don't be caught having to deal with a snake the size of the one pictured. Snakes can have attitudes. They bite, poop on you (the smell is worse than horrible), and may likely cause nightmares.

Raccoon Predation Incident

Raccoons also create problems for bluebirds. In early July, I conducted a site visit that had four boxes. The landlord stated he had lost all 25 bluebird eggs in 2020—not a single bluebird hatched. All four boxes were mounted on wooden posts and had some sticky Tanglefoot on the post to ward off predators. Each post and box had claw marks from raccoons. Claw marks are easy to spot if one simply looks for them. I erected two boxes with predator guards and asked



Very large rat snake in a nestbox mounted on a wooden post.

Photos by Pete Bosak.

Tell-tale scratches from raccoons climbing a wooden post. *Photo by Karen Legg.*

the landlord to remove his boxes. He has good habitat that I expect will host two pairs of bluebirds next season—successfully of course. (Update: A pair of bluebirds nested in the new box within the month. Three eggs were laid and I expect to band young in August.)

My Predator Guard Preference

It should go without saying that each and every bluebird setup should have a predator guard. Installing predator guards is not hard. I have reverted to using the best protection I can muster. While there are a number of types of guards, the one pictured has been extremely successful for me.

The materials, which can be purchased at most home improvement stores such as Lowes, include a 6-foot heavy duty T-post, a 48-inch-long piece of 4-inch PVC sewer pipe, a 4-inch end cap drilled with a 7/8-inch hole, a 1/2 inch × 8 inch galvanized threaded pipe held on the T-post by two hose clamps (size 3/4 inch to 1 3/4 inch). I screw a 1/2-inch threaded galvanized flange to the bottom of the bluebird box and simply screw the box onto the mounting pole after the post and guard are ready. This requires little maintenance other than occasional steel wooling of the PVC pipe, followed by some Turtle wax to keep it smooth. The 48-inch length and the fact that it wobbles on the post make it hard for predators to climb. Personal experience

and recommendations from the Purple Martin Conservation Association indicate that a 4-foot rat snake can extend out 3 feet to get by cone guards, so consider not using cone guards if you have rat snakes. However, a rat snake can not go up 3 feet if there is nothing for it to cling to (like screws that hold metal guards together). Most metal guards are only 2 feet long, which snakes have gotten by too many times on Purple Martin setups I have monitored.

My setup is somewhat costly (~\$35) but well worth the effort to make the box safe and should not be a concern for most people that host a bluebird box in their yard. Bluebirds have many factors to overcome for a successful nesting. Protecting them from predators is a simple step to keep your bluebirds around and productive. Needing multiple boxes for a trail adds to the cost but there are ways to reduce things. I purchase Atlantic white cedar from a local saw mill, deliver the lumber and hardware to a school wood shop class that builds 150 boxes per school year, and receive financial assistance from local environmental groups. Partnerships are a great way to go.

Common sense tells you it is better to be proactive and prevent the problem than to suffer the consequences.



The author's preferred mounting post and predator guard set-up. Photos by Allen Jackson.

Remembering Steve Simmons

September 14, 1941 – June 1, 2020

Lee Pauser

Some of you may recognize the name Steve Simmons. I became aware of him when, in March 2009, I found an email from him in my website's inbox. I had recently posted a video of a working bottom-opening Barn Owl nestbox. This sounds unusual, but at the time I had wanted to install nestboxes on a property where I was told I couldn't use a ladder. It seemed reasonable then to have the bottom of the box open for clean-out. I later called it the pull-the-latch-and-run-upwind design.

Steve's email never mentioned this bottom-opening design, but this stranger mentioned that at one time he monitored 650 nestboxes in four California counties from Merced down to Tulare and that he was also a master bander who had banded his 10,000th Barn Owl in 2006.

He was then a retired teacher but, while teaching, his students had built and sold over 10,000 Barn Owl boxes over nine years with most of them being installed in the Central Valley. The monies raised from the sale of the boxes provided over \$168,000 in scholarship money.

I came to know Steve over the years as we regularly exchanged emails and occasional visits. Needless to say I switched to using his Barn Owl nestbox design.

Steve was a gracious man who was always willing to help others. He invited me and my good friend Chuck Wade to visit him in Merced. At the time, one of his trails was on the 12,000-acre Flying M ranch. Steve had an ATV for each of us and we followed him around while he showed us some of his nestboxes. For the first time I saw nesting Barn Owls and kestrels. He also showed us several underground artificial burrows for Burrowing Owls. For me it was like a Class A ride at Disneyland.

Steve credits me with bringing Western Bluebirds to the ranch as that was the first year they nested there. Somehow a pair of bluebirds who had heard of this powerhouse of a man wanted to meet him and slipped themselves into my gear.

In April of 2010 Steve agreed to give a presentation on his activities at the IBM Almaden Research Center (ARC) in San Jose. Steve and his wife Margaret drove to San Jose; I met them and took them to Santa Teresa County Park to show them Barn Owl and kestrel nestboxes I had installed. I remember Steve pointing to a Barn Owl nestbox mounted in a tree high on a hill and asking, "Why did you put the box way up there?" I asked myself that question many times since; Steve's approach was to mount his nestboxes along a fence line where he drove his ATV from box to box.



Photo by Lee Pauser

On the day of the presentation Steve received help to cart all of his nestboxes, bird carvings, and displays into the auditorium. The slideshow, display materials, his knowledge, and recollections of his experiences were impressive. The presentation was a huge success. Steve had been warned that some of the audience members might slip out early to resume their

research activities, but no one did—they all were enthralled with his two-hour presentation and Q&A session.

After the presentation I took Steve around the property to show him where I had mounted some Wood Duck boxes. Steve noticed a plastic Wood Duck box mounted high in a tree (IBM installed nestboxes on the property after the center opened). Pointing to the nestbox Steve said, "I know the man who designed the box and I had told him that the squirrels will chew the entrance hole larger." I looked closely at the box and, yes, the squirrels had chewed the entrance hole larger. (The box's design was changed

to add a metal collar around the entrance hole to prevent this.) I thought to myself, “This man knows everything.”

Steve monitored nestboxes for over 45 years beginning with Wood Duck nestboxes. In 1974 he initiated the Merced River Wood Duck Research Project and in 1991 he helped found the California Wood Duck Program.

For all of those years Steve penciled in his nesting data into log books—Steve was a paper and pencil guy. I kidded him that he was keeping the pencil companies in business. I once showed him how I enter nestbox visit records into a Palm handheld device.

He asked if it ever failed and I said that I had to reset it three times. He said, “Aha, aha, see,” which to him justified the use of paper and pencil. I didn’t lose any data—I just had to reset the Palm.

I could ramble on, but it would take many others and volumes to describe the accomplishments of this giant named Steve Simmons who fledged over 100,000 birds. Margaret wrote, “I like to think that he climbed the ladder of life and when he got to the top, he just stepped off and flew away with the birds.” I truly hope so.

You can see Steve in action in the video at <https://www.youtube.com/watch?v=s9vHwGF6VXw>

Adopting a Trail

Barbie Allen

Several years ago while helping me put in a trail at Northbrook Golf course in Luxemburg in Kewaunee County, Wisconsin, Steve Mayer (Brown County Coordinator) and Gene Birr (Oconto County Coordinator) spotted many nestboxes attached to a fence line on Highway 54 near Lake Largo in Green Bay, Wisconsin. They asked if it was part of one of my trails. I said no but it made me question if anyone had been monitoring them. We all know that an unmonitored trail is worse than no trail at all. I found this trail to be a House Sparrow haven. I immediately started monitoring it on a weekly basis. The houses were not in great shape and spanned a stretch of about two miles along the highway and a walking trail. I had no way to trap sparrows in these houses but I knew I could prevent adding to the existing House Sparrow population. That year I did not allow any House Sparrows to fledge in these boxes. The House Sparrows did kill a Black-capped Chickadee batch of chicks but several Tree Swallows eventually filled a couple of the nestboxes. I worked hard to find out if I could replace the deteriorated boxes.

I can only stress how important adopting even a “hopeless” trail is. I will never make the high bluebird-per-box ratio that is the goal of most monitors but maybe reducing House Sparrow numbers should also be a monitor’s goal. The following year, I did replace the old nestbox houses and put up new houses that were no longer on the fence and were better spaced.

These were all equipped with Van Ert traps. The second year, I had fewer House Sparrow problems and fledged two nests of Black-capped Chickadees, more Tree Swallows, and happily one pair of Eastern Bluebirds had a second batch fledge.

I was fortunate and attended the Bluebird Restoration Association of Wisconsin annual convention. In talking with many successful “House Sparrow trappers” I found out about the Deluxe Repeating Sparrow Trap. I purchased one and am happy to say that since using this, my House Sparrow population has been greatly reduced. Anyone serious about House Sparrow trapping should invest in this trap (available online at <https://www.sparrowtraps.net/>).



Jay Cross / www.flickr.com/photos/antoniaseb/

Photo Gallery



Back in March, Kenny Griffin found a six-egg Eastern Bluebird nest in Jacksonville, Alabama. "Approximately 2 weeks after the 6-egg nest I found this nest approximately 250 yards away. The 6-egg nest hatched and fledged 4 chicks. The 7-egg nest had 5 chicks. So in nearly 50 years as a bluebird landlord, a first for 7."



Evelyn Cooper of Delhi, Louisiana, found this beautiful beehive in June. She writes that a "swarm of bees made a small cone on the side of the box and it has honey in it. They left two days after I found it and I removed the cone." A sweet gift from the bees!



Ralph Stemp says he "snapped several hundred bluebird photos last year and this year in my backyard." He titled this one, "Green Cricket, It's What's for Dinner."



Pat Ready submitted these two photos: A male Eastern Bluebird (above) bringing a big ol' green caterpillar to a hungry nestling, and the image at right, which Pat says shows that two out of three bluebirds can't read.





Is it just me or does this fledgling look *considerably* larger than its dad? They grow ‘em big in western Wisconsin. Our thanks to Mary Roen for submitting this image.



Doug Barker sent this image of an albino Eastern Bluebird taken by “First Time Bluebirder” Makenna Herget of North Hampton, New Hampshire.

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!



Kathy Miller wrote: “With the current 100th Anniversary of the passage of the 19th Amendment, I was researching and came across this tie in to bluebirds.” According to the National Park Service, “The Massachusetts Woman Suffrage Association chose the bluebird as their symbol leading up to a 1915 state referendum on women’s access to the vote. On Suffrage Blue Bird Day (July 19, 1915) as many as 100,000 of these tin bluebird signs were displayed across the state. The 1915 Massachusetts referendum failed, and women did not get the vote in Massachusetts until the passage of the 19th Amendment to the US Constitution.” Image courtesy of National Museum of American History (https://americanhistory.si.edu/collections/search/object/nmah_508085)



Kay Cameron of NABS Affiliate North Carolina Bluebird Society writes, “I was happy to see that my friend, Susie McDowell, in Biglerville, Pennsylvania got a little blue truck to help with her many gardening and horticulture activities. And I was delighted that she ordered a “Bluebird” vanity license plate for the truck! I imagine Pennsylvania motorists chuckle when they see Susie coming down the road.

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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*. To find out more about becoming a NABS Affiliate please contact Kevin Corwin at KCorwin@nabluebirdsociety.org. If your organization is listed below, please review your listing to ensure it is current and send any changes to Kevin. Thanks!



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