



## The Bluebirder

Fall/Winter 2020

Edition 5

**H**ere we are close to the end of this interesting year. Even though we could not hold our 40<sup>th</sup> Anniversary Celebration for everyone in the park, we've had some great things happen within our Society. We had our first photo contest, installed two short trails with nest boxes at Lake Ann and Lake Avalon, had a great number of babies fledge this year, and started a new nest box study. This edition is full of great information!

As a reminder, if you have any ideas, interesting stories or suggestions, or have questions that you'd like us to answer via "Dear Bluebirder" please feel free to e-mail us at [JSBlueBirder@gmail.com](mailto:JSBlueBirder@gmail.com).

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### 2020 Fledglings

Thanks to the almost 100 Bella Vista residents, the total bluebird fledglings from all sources this year reached 2,654, approximately 200 more than in 2019.

The total bluebirds fledged in the BVBBS-managed nest boxes were down a bit from last year. Two trails were not monitored this year, that last year had a combined total of over 110 fledglings. Had they been in this year's tally, we would have most likely come out about the same as last year at over 1,900 fledglings.

In mid-season, we added two short trails at Lake Ann (10 boxes), and Lake Avalon (6 boxes), bringing the total boxes that the BVBBS monitors and maintains to **592**.

In our 40th year, we have reached a cumulative total of over **50,000** bluebirds fledged!

All of the 2020 statistics, including each trail's results and other birds who used the nest boxes, can be viewed on our website at [BVBBS Statistics](#).

Thank you all for helping to increase and protect the bluebird population of Bella Vista.



Photo by Quin Warsaw

**And the Winners Are....**

Thank you to everyone that entered our 1<sup>st</sup> Annual Anniversary Photo Contest. We had a total of 39 photo entries for the Amateur category. No one entered the Professional category, so we changed up the prizes and awarded six winners in the Amateur category.

The photos were judged and selected by our Board in a blind photo selection (the names of the entrants/photos were kept strictly confidential by Jacqui Stockman, who did not participate in the judging). The photos were selected based solely on what they liked. There were no specific criteria that had to be met.

Yes, we are planning to hold the contest again next year, so keep your cameras pointed at those bluebirds, as there should be some great photo opportunities this fall and winter. To view all of the photo contest entries, please visit our [Photo Contest Page](#). We are also featuring some of the photographs from the contest in this issue.



1<sup>st</sup> Place – Bill Johnson  
\$75 gift card to The Bluebird Shed



2<sup>nd</sup> Place – Gary Frigon  
\$50 gift card to The Bluebird Shed



3<sup>rd</sup> Place – Debbie Raspberry  
\$25 gift card to The Bluebird Shed



4<sup>th</sup> Place – Jennifer Knoke  
BVBBS t-shirt or hat



5<sup>th</sup> Place – Sharla Miller  
BVBBS t-shirt or hat



6<sup>th</sup> Place – Quin Warsaw  
\$10 gift card to The Bluebird Shed

## **What are Bluebirds Having for Dinner?**

**by Raymond S. Matkowski**

On average, nearly 70 percent of a bluebird's diet is made up of insects including grasshoppers, crickets, beetles, spiders, and caterpillars (Beal 1915, as cited in Sialis 2020). Bluebirds are also known to feed on other arthropods including ants, wasps and bees, flies, myriapods [millipedes, centipedes], angleworms, snails, sow bugs, black olive scales, moths, weevils, and termites (Sialis 2020).

Pinkowski (1977) described the insect foraging tactics used by bluebirds that include dropping in on prey spied from a perch, flycatching aerial prey, gleaning insects from foliage, branches, or trunks of trees and shrubs, flight gleaning of prey primarily from tall grasses, and on rare occasions, hopping on the ground searching for prey.

In winter, when insects are scarce, fruits became an important part of a bluebird's diet and can include seeds and berries of dogwood, hawthorn, wild grape, sumac, hackberries, blackberries, bayberries, fruit of honeysuckle, Virginia creeper, red cedar, and pokeberries.



*Photo by Candy Prudhomme*

During the nesting season, the quantity of insects foraged by bluebirds increases to sustain their nestlings. A study on eastern bluebirds in Michigan found adults fed nestlings a diet comprised of butterflies and moth larvae (32.4%), grasshoppers, crickets, and katydids (25.6%), spiders (11.3%), and beetles and weevils (11%), earthworms (5.2%), ants and wasps (3.9%), millipedes (2.3%) as well smaller

quantities of sowbugs, snails, flies, dragonflies, cicada, lacewings, and centipedes (Pinkowski 1978). Likewise, in Delaware, adult bluebirds fed their nestlings a diet



*Photo by Jennifer Knoke*

comprised of moth, butterfly, and sawfly larvae (41%), grasshoppers, crickets, and katydids (26%), spiders (19%), earthworms (5%), beetles (3%), true flies (1%), and berries (1%), as well as lower percentages of many other insects orders that included mayflies, dragonflies and damselflies, praying mantises, true bugs, dobsonflies, ants and wasps, daddy longlegs, millipedes, centipedes, earwigs, and woodlice (Kennedy 2019).

With the abundance and diversity of insects we know to be consumed by bluebirds, the recent barrage of media reports, and a handful of scientific studies warning of the decline of the world's insect populations and in many cases referring to the coming "insect apocalypse", has been concerning (e.g., ABC News: "Earth's Insect Population Shrinks 27% In 30 Years", The Atlantic: "Is the Insect Apocalypse Really Upon Us?", Smithsonian: "Insects Are Dying Off at an Alarming Rate", and *American Bird Conservancy*: "Insect Freefall: What Does It Mean For Birds?").

Fortunately, much of this speculation on the decline of insects has been based on studies that were broadly generalized to represent the global status of insects yet the results of these studies were often geographically-limited, lacked sufficient sample size or temporal scope, or focused on a small number of insect species. Still, the results of these studies do show localized declines of some insect species are occurring.

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So, what is the status of insect populations in the United States? Just recently Crossley et al. (2020), using long-term data sets of insect populations collected from a diverse range of habitat types in the United States, found "no evidence of wholesale declines in arthropod abundance and diversity in the United States." Although this overall finding is encouraging, the study did point out that declines are still occurring among some localized insect populations in the U.S., as well as generally among certain insect species that include native bees, butterflies, and carrion beetles.

What can we do to help protect this important food source for bluebirds? The [Xerces Society for Invertebrate Conservation](#) (2020) recommends that homeowners use their yards to provide the natural habitat features that benefit insect populations. This includes providing native trees, shrubs, and wildflowers that can provide food, shelter, nesting, and overwintering habitat. They not only recommend flowers for insect pollinators, but also plants that provide stems for cavity nesting insects and plants known to host feeding larva and adult stages of plant-specific insects including many butterflies, moths, and beetles.

Beside plants, other important sources of habitats for insects include leaf litter, brush and rock piles, undisturbed ground, standing dead trees, and fallen logs. Maintaining or providing such habitats should attract and support a healthy insect community as well as provide an abundant food source for bluebirds and other insectivorous bird species. Of course, reducing or eliminating the use of outdoor pesticides would also benefit insects and birds in the yard. Now, put down that bug spray!

Beal, F.E.L. 1915. *Food Habits of the Thrushes of the United States*. U.S.D.A. Biol. Surv. Bull. 280.

Crossley, M.S., et al. 2020. *No Net Insect Abundance and Diversity Declines Across US Long Term Ecological Research Sites*. *Nature Ecology & Evolution*. DOI: 10.1038/s41559-020-1269-4.

Kennedy, A.C. 2019. *Examining Breeding Birds Diets to Improve Avian Conservation Efforts*. (Doctoral Dissertation).

Pinkowski, B.C. 1977. *Foraging Behavior of the Eastern Bluebird*. *The Wilson Bulletin*, Vol. 89 (3): 404-414.

Sialis. 2020. [Diet--What Do Bluebirds Eat?](#)

Pinkowski, B.C. 1978. *Feeding of Nestling and Fledgling Eastern Bluebirds*. *The Wilson Bulletin*. Vol. 90 (1): 84-98.

The Xerces Society for Invertebrate Conservation. 2020. [Nesting & Overwintering Habitat for Pollinators & Other Beneficial Insects](#)



Photo by Gary Frigon



Photo by Tim Garton

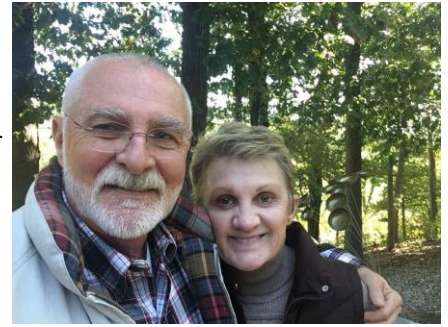


Photo by Quin Warsaw



## Volunteer Profile – Steve and Susan Skaggs

Steve and Susan Skaggs retired to Bella Vista three years ago from nearby Carthage, Missouri. In Carthage, Susan had at various times been an elementary school teacher, the manager of a family owned restaurant, and a caregiver for her aging parents. Steve held a number of accounting and manufacturing management roles at Leggett & Platt, a century-old designer and manufacturing firm in Carthage – taking him to a number of company locations throughout the Americas, Europe, Africa, and East Asia.



*Steve and Susan Skaggs*

To honor Susan’s late mother, who enjoyed monitoring bluebirds on the family ranch in Carthage, they both joined the Bella Vista Bluebird Society.

Steve first joined Jerry Butler, as junior trail boss on the BV Country Club golf course, added the Loch Lomond Marina as trail boss, and then assume shared trail boss duties with Jerry at the Highlands golf course.

Susan first started as a monitor on the short trail at the Inn at Bella Vista, followed by monitoring the Edinburgh Road trail, the Loch Lomond Marina, and currently a 24 box trail at the BV Country Club golf course.

Susan is concerned with making sure that the bluebirds have as safe and as secure of a home environment as can be reasonably provided for them. No matter how many times she has seen it, it’s always a thrill to her to open a box and see either eggs in the nest, a mom on the nest, or a nest full of little ones. And it’s a bittersweet event for her to open a box to find that the young ones have all fledged.

Steve is particularly interested in creating defenses against bluebird nest box predators. He has designed and installed a number of Noel guard-based wire guards, to varying degrees of success. While there is no one silver bullet to stop all predators, Steve enjoys working to find the right combination of defenses to make them look elsewhere for their next meal. Steve’s latest defenses for Leon Wehmeyer’s regularly invaded nest box (pictured at right) includes a taller T-post, a long-tunnel wire guard and PVC, in addition to the existing conical guard.



*Leon Wehmeyer*

When not on the bluebird trail, Steve and Susan enjoy spending time with their grandkids and family who live in Bentonville. They appreciate and reap the benefits of the beautiful Bella Vista/Bentonville outdoors with almost daily walks, often at Crystal Bridges.

Among their many other activities and interests, Susan volunteers at Crystal Bridges and plays cards, while Steve is keen on cooking and piddling around (for which he earned a lifetime achievement award).



*Photo by Tony Pratt*



*Photo by Joda Taylor*

## **Lake Ann and Lake Avalon Study**

**By Laura Claggett**

Two small trails\* that we added this year are at Lake Ann (10 boxes) and Lake Avalon (6 boxes). Inspired by the [research project](#) being conducted on 100 of our boxes, we will be conducting a small study at these two locations to test what methods are most effective in preventing predators.



We installed slotted boxes at both lakes with openings measuring  $1 \frac{1}{8}$  inches to deter House Sparrows.

As with our other newly installed boxes, the lake boxes are mounted on six-foot T-posts with 40 inches of PVC pipe over the posts. The PVC somewhat deters raccoons, snakes, squirrels, and other creatures that might climb up to the nest.

On Lake Ann, we've installed wire guards at the slot openings that extends six inches, making it difficult for little furry arms to reach eggs and chicks.

Next season on both lake trails, we are planning to coat the PVC with a measured amount of petroleum jelly (i.e. Vaseline). Vaseline has proven to be effective at some residential locations in preventing snakes and raccoons from climbing the poles, and we would like to test its effectiveness in the field.

At the end of a year or two, we'll see how effective the protections we've put in place have been. Along with the results from the bigger research project, we'll hope to have some recommendations and/or best practices for predator control going forward.

\* The reason these two lake trails are small has more to do with the bluebirds than the available space. Bluebird boxes need to be *at least* 300 feet apart (think football field). Bluebirds are territorial and will fight and chase away other bluebirds for the use of a nest box.

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## **NOAC Notes**

**by Butch Tetzlaff**

The [North American Ornithological Conference](#) had a virtual conference the week of August 10, 2020. The conference provided an opportunity for attendees to share and discuss their efforts in avian research and conservation. A synopsis of three studies relevant to our community follows:



- The reason bluebirds readily take to nest boxes only 4-6 feet from the ground is that they naturally seem to select this niche for their nests. Other species select cavities higher up and more suited to their needs. This was looked at in an old growth southern pine forest in Georgia where only natural cavities exist.

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- Neither Noel nor stovepipe baffles decreased overall nest predation over randomized control boxes without predator guards. They did not test additive effects (meaning boxes with both). The Cornell study that was done a couple of years ago only found a 7% decrease in predation rate when using predator guards. This current study was a complete randomized, controlled study, which the Cornell study was not.

The reason for the failure in nest success appears to be that predator guards usually only thwart one type of predator leaving nests still available for many other predators to take. Thus, it becomes clear that one must understand all predators in an area and thwart them all, or the effort is futile in helping actual nest success. Merely preventing one predator with one type of guard doesn't work.

- Lastly, mealworms...someone did a randomized, controlled study regarding food supplementation during nesting using meal worms. They attached small cups to the tops of boxes and selected some of those boxes to receive 10g (grams) of dried mealworms per day as a food supplement. They found that nestlings in boxes that received the food supplement had a 5% faster growth rate than untreated boxes. Nestling mass and growth rate are well known to correlate with a myriad of survival benefits post-fledging.



*Photo by Jean Berg*



*Photo by Jean Justice*

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### **Bella Vista Birders**

Bella Vista Birders is a bird watching group that was founded in February 2019 by Gail Storm & Butch Tetzlaff. They have seasonal gatherings and meet and greets that include talks about bird watching. The group also goes on field trips to places with good birding opportunities, such as the Craig State Fish Hatchery in Centerton, Compton Gardens in Bentonville, and Swepco Lake in Siloam Springs, as well as visiting local parks and golf courses. If you're interested in becoming a BV Birder, contact Gail Storm at [bvbirders@gmail.com](mailto:bvbirders@gmail.com).



*Photo by Sharla Miller*

**Benefitting Bluebirds at Berksdale**  
Article and photos by Wendy Barnes



Berksdale Golf Course is pleased to be home to over 70 bluebird nesting boxes. The efforts of the Bella Vista Bluebird Society were an integral part of Berksdale earning Audubon International's certification in Wildlife and Habitat Management in the spring of 2018. We have earned certification in Water Quality, Water Conservation, Chemical Use Reduction and Safety, and Outreach and Education.

Audubon International staff are planning a site visit mid- October, after which we anticipate being designated an official Cooperative Sanctuary. We are committed to providing optimum habitat for bluebirds and all our natural neighbors here at Berksdale.

There are numerous practices in place on Berksdale to benefit a variety of wildlife. In complement to the bluebird houses, we have installed bat nurseries, wood duck boxes, birdbaths, and bug hotels.

We also have expanded the buffer zones along Little Sugar Creek, and our five ponds, greatly enhancing the diversity of flora and fauna in this core, water's edge, environment. And we continue to remove nonnative invasive species such as burning bush and Bradford pear while encouraging natives such as elderberry and sumac.

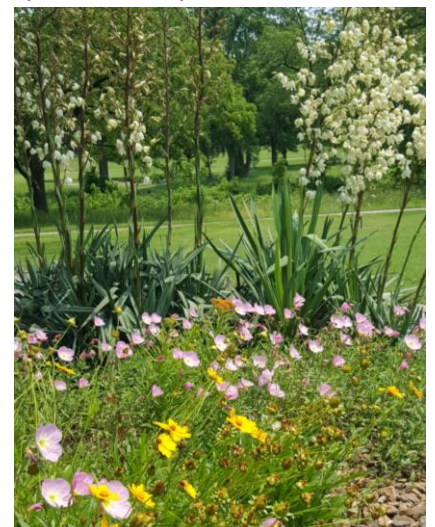
The landscape at our halfway house (washrooms) was redecorated with native plants several years ago. We removed clumps of maiden grass and euonymus shrubs, replacing them with purple coneflower, coreopsis, milkweed, primrose, and a dogwood tree. These plants were labeled as a sort of miniature botanical garden, demonstrating a homeowner- scaled project.

Here are some helpful sources:

- ❖ An vast resource for creating your own home habitat is the Missouri Department of Conservation's Native [Plants for Your Landscape](#)
- ❖ The [Missouri Botanical Garden](#) in St. Louis provides an excellent native plant search platform
- ❖ More information on bug hotels can be found at [Insect Hotels](#)
- ❖ [Bat World Sanctuary](#) and [Bat Conservation International](#) have information on bat houses

Wendy Barnes is the Assistant Superintendent at Berksdale Golf Course in Bella Vista, [wendyb@bvvpoa.com](mailto:wendyb@bvvpoa.com)

The [Berksdale Golfcourse](#) is located along Route 71 in Bella Vista. Click on the link for more information.





## **It's a Dirty Job**

**Warning**, you might not want to be eating your lunch when you read this!

What you see in the photo to the right is an adult bluebird removing a fecal sac from the nest box.

A fecal sac is a clean, tough mucous/gelatinous membrane containing the excrement of baby birds. Some call it a "birdie diaper."

Nestlings usually excrete one sac after each feeding, especially as they get older. The female and male adults both take fecal sacs from chicks to keep the nest clean. They grasp the sac by the middle with their beak and fly away with it. They may take out as many as 60-70 bundles a day!

Reasons why fecal sacs are removed include:

- sanitation – a dirty nest could encourage bacteria and parasites
- safety – if excrement is more liquid than usual it turns into "fecal glue" and the babies could get stuck to it and be unable to fledge
- protection – avoid attracting predators or pests



*Photo by Michelle Warsaw*



When the chicks get bigger, shortly before they fledge, it is sometimes difficult for the parents to remove the fecal sacs, so you'll often (but not always) see a dirty nest after the chicks have fledged.

If you have had tree swallows in your nest box you probably know how nasty the inside of the box can get when the adults don't remove fecal sacs.

Tree swallows make elegant looking nests by lining them with beautiful (usually) white feathers, that look like duck or goose feathers. But at some point, and earlier than bluebirds, they stop removing the fecal sacs.

You wouldn't think that the swallows are using the feathers for aesthetics, so it begs the question: Are the feathers effective in preventing some of the reasons why fecal sacs are removed? In other words, are they absorbing some of the gunk and/or preventing parasites, bacteria, odor? (And indeed, science backs up this theory - [Use and Importance of Feathers as Nest Lining in Tree Swallows.](#))



*Tree Swallow Nest*

One of the most efficient methods for tree swallows to remove fecal sacs can be viewed in this cute 8 second video [Thanks Mom.](#)

Information for this article was used with permission from [sialis.org/fecalsacs](http://sialis.org/fecalsacs)



- HOME
- Bluebird Basics
- Bluebird History
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- Myths
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- Nestboxes
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- Suppliers
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From time to time when I'm looking for information about bluebirds, one of the sites that almost always comes up with relevant information is [sialis.org](http://sialis.org). *Sialia sialis* (pronounced see AL ee ah, see AL iss) is the Latin name for the Eastern Bluebird.

Being curious about the wealth of information (e.g. there are no less than 30 suet recipes!), and hundreds of color photos, on the site, I contacted the site's creator, Bet Zimmerman Smith.

Bet started the site 17 years ago from a bluebirding listserv that she summarized and put online. Sialis.org now has around 1000 pages and she admits that she often must use her own [sitemap & search tool](#) to find where she has put something. She also updates the site every week as she is constantly learning new information that she wants to share.

In addition to maintaining the sialis.org website, Bet also contributes articles to the North American Bluebird Society (NABS) journal, *Bluebird*. She is on the NABS Board of Directors, and serves on four NABS committees – Grants, Education, Nestbox and Website. She and her husband Patrick manage about 50 nest boxes in Northeastern Connecticut.

The countless hours that went into sialis.org includes information on:

- Nests and Egg ID has seven subtopics, including table that lists 27 cavity nesters with their egg sizes and another table that has photos of most of the eggs
- Problems & Solutions – has 24 subtopics, everything from bears to window strikes
- House Sparrow Control has 12 subtopics and includes articles on behavior (Are House Sparrows "Evil?"), wing clipping, photos, etc. Managing House Sparrows is under Problems & Solutions and Sparrow Spookers appears on the main table of contents.
- Resources & Links has more information than you can shake a stick at, and the BVBBBS is even listed under the subheading Bluebird Societies or Organizations.

Above and to the left is the table of contents for the site. There is also a very handy (and large) [Index/Site Map](#) that fortunately also has an internal Google search feature.

Beth Zimmerman Smith  
creator of Sialis.org





**Dear Bluebirder....**

Have questions about bluebirds, nest boxes, problems, or concerns? Any comments or suggestions for an article or an event we should attend? Write to us at [JSBlueBirder@gmail.com](mailto:JSBlueBirder@gmail.com) and in the Subject Line add "Dear Bluebirder". We will answer your questions in our next edition! As always, you can visit the [BVBS](http://BVBS) website for up-to-date information.

*Photo by Carl Ball*



*Photo by Debbie Raspberry*



*Photo by Rick Wimpee*

To become a member or donate to the BVBS, go to [Make a Donation or Become a Member](#). If you are interested in becoming a BVBS volunteer, you can email us at [bellavistabluebird@gmail.com](mailto:bellavistabluebird@gmail.com), or fill out and send our [Volunteer Application](#).



*Photo by Linda Largent*



*Photo by Sandy Toppin*

The Bella Vista Bluebird Society (BVBS) is a 501(c)3 non-profit organized for wildlife protection & preservation. For more information go to our website [bvbluebirds.com](http://bvbluebirds.com) or email us at [bellavistabluebird@gmail.com](mailto:bellavistabluebird@gmail.com).

Dedicated to increasing and protecting the Eastern Bluebird population of Bella Vista, Arkansas

**BVBS Board**

Laura Claggett	President	Leon Wehmeyer	Past President	Lorna Sterrett	Treasurer	Buzz Schoenhard	Secretary
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