The Bluebird-Box Debate
By Barb Stedman

The burning question for most bluebird enthusiasts is simple: Which nest-box style is best? Which material and which design will my bluebirds be irresistibly drawn to? Which precise dimensions—of the living space, of the entrance hole, of the overhang—will attract Eastern Bluebirds but deter European Starlings, House Sparrows, and unknown predators?

Think the answer is simple? Ha! My obsessive online searches over the years have turned up more than 20 documented styles of bluebird boxes, with nearly 70 variations of those 20 basic styles. Most are made of wood, but PVC, concrete mixed with sawdust, and even milk cartons are used in some successful styles.

The design we’re all familiar with is the wooden box that has been recommended by the North American Bluebird Society (NABS) for decades, with these basic specs: Front wall about 10” high, back wall about 12” high (thus creating a slanted roof), and 1½” circular hole (vital for keeping out starlings), with small ventilation holes in the sides and drainage holes in the bottom.

We’ve seen this design most often because it has worked—for the most part. Unfortunately, the NABS style still attracts House Sparrows, which will happily take over traditional bluebird boxes. Birddowers and woodworkers have been tinkering with tiny details on this basic design for a long time, but every once in a while, a revolutionary new design has come along, sometimes with revolutionary results.

For the past 20+ years, I’ve used the NABS style and have built several of these boxes, using untreated scrap lumber. But about a decade ago, after cleaning out House Sparrow nests for the umpteenth time and having only a couple of successful bluebird nests in a season, I decided to try a Peterson’s-style box.

I bought six, with slightly different designs, and saw immediate results. One box, in fact, proved to be a reliable nesting destination for bluebirds for nine years, with at least two successful broods in a season.

(continued on page 2)
Bluebird Boxes... (Continued from page 1)

While the results were better, problems still arose. In two of my Peterson boxes, a small space below the nest platform was the perfect place for wasp nests. During my weekly monitoring of each box, I found that babies could topple forward and out of the box. And Tree Swallows nested in the boxes even more often than the bluebirds did. Of course, that was fine—I love Tree Swallows—but I was greedy. I wanted more bluebirds!

I tried a slot-style box, which had great reviews. In eight seasons, though, I’ve had only one pair of bluebirds ever take up residence there. Most years, that box has sat empty. A year ago, I extended my unscientific experimentation to the Gilwood nest box, designed by Steve Gilbertson, who spent years studying bluebird preferences for the size and shape of the entry hole, the distance from the bottom of the hole to the bottom of the box’s interior, the cavity size, and the amount of light inside the box. The resulting design, considered “radical” in the long history of bluebird boxes, was showing great results in every study that I read.

I bought four of these boxes in spring 2019 and had them up by late May, well after the first brood of bluebird babies had fledged. Still, as soon as the second nesting cycle was underway, two bluebird pairs chose the Gilwood boxes.

Now, in the middle of the first brood cycle of 2020, our bluebirds clearly prefer the Gilwood boxes. Of the 15 nest boxes spread around 12 acres, 13 have nests:
- Gilwood style: All four boxes have active bluebird nests (with either eggs or hatchlings)
- Peterson style: Four boxes have active Tree Swallow nests, one has an active Carolina Chickadee nest (with eggs), and two have abandoned bluebird nests
- Traditional NABS style: Two have active Tree Swallow nests, and one is empty
- Slot style: Completely empty (though investigated frequently by both bluebirds and swallows)

With plenty of time before the second egg-laying cycle of the summer, I’m about to add more Gilwood boxes to our bluebird trail! I’ll replace the oldest (unused) NABS box and find locations where we can add some new boxes.

For what it’s worth, I’ve always followed these common bluebird trail rules of thumb:
- Erect boxes in pairs, about 10-15’ from one another, on the theory (which I’ve found to be true) that bluebirds might adopt one box and swallows might adopt the other.
- Place boxes or pairs of boxes 100’ apart.
- Erect boxes on metal poles, not wooden posts and certainly not trees. Narrow, smooth poles are best for discouraging predators; if predators like raccoons or snakes are a concern, you can place a baffle on the pole.
- Face boxes toward the east and a little toward the north, to catch the morning sun but not allow the box to overheat in the afternoon or allow rain to enter from the west or south.
- Place the box away from overhanging branches but facing a nearby fence, shrub, or branch that fledglings can safely hop to.
- Be sure to monitor your boxes weekly during nesting season and become familiar with the appearance of different species’ nests. When you positively identify House Sparrow nests, remove them, eggs and all. (See www.sialis.org/nestshosp.htm.) But don’t disturb swallow, chickadee, or wren nests—they’re all protected by the Migratory Bird Treaty Act!

For more details about Eastern Bluebirds and bluebird boxes, visit www.nabbluebirdsociety.org/nabs-fact-sheets/.
For construction plans for a Gilwood box and an interview with Steve Gilbertson, visit www.nestboxbuilder.com/nestbox-article-gilwood.html.
And finally, if you want a Gilwood box but don’t want to build your own, I recommend JackQuest, an Etsy shop (www.etsy.com/shop/JackQuest). Under “Nature Houses/Feeders,” look for “Raw Cedar Original Style Gilwood.”

www.cooperaudubon.org
Spring Sightings: Our Members Report
Compiled by Catherine Kubo

Rose Jeffery reports: I miss our field trips! Yes, we can venture forth in small family groups to nearby preserves and parks, but it isn’t the same. With a group we invariably see more birds, and I always learn (or relearn) something—a new plant, a new bird song, a bird or nature factoid.

Still, spring is here, COVID-19 or no. Backyard birds are very active. Our resident birds are singing again, and courting. Meanwhile we are seeing some migrating and returning birds. I keep an informal list of new sightings of bird species in our yard. On March 20 we had a visiting Fox Sparrow. And a few days later, we had some drama. A Cooper’s Hawk came and sat on a post on our back deck. She dove into the heart of a small juniper bush and came away with a junco. She took the poor junco to a nearby tree branch, pulled off its feathers, and dispatched it.

Annette Rose shares: (3/21) Wood Ducks, a Horned Grebe, and an immature Bald Eagle brightened my day. (3/24) Today, an Eastern Phoebe visited the usual nest site on the downspout outside my kitchen window. (4/1) Over the last two days, an Osprey and Bald Eagle have been circling the cove. I’ve yet to see a Palm Warbler, but they should be here by now. (4/7) Have you seen any Tree Swallows? Not one has passed our way.

Barb Stedman writes: Martha Hunt and I ran down to Prairie Creek today (3/22), and we saw a Horned Grebe. We also saw a flock of about 100 Red-breasted Mergansers, with a Lesser Scaup mixed in.

And a couple of non-migratory observations from my yard: On 3/7 a Northern Flicker foraging in the snow, and on 4/7 a bright yellow American Goldfinch at the feeder. What a difference a month makes! We hope you were able to enjoy the succession of spring wonders in spite of the difficulties this year has presented.

A Big "Thank You" to Our Outgoing Chairs
By Kamal Islam

We thank Advocacy Chair Brandon Connare and Program Chair Alexander (Alex) Sharp for their volunteer service to the RCAS these past 2 years. Both Brandon and Alex served as graduate teaching assistants in the Ball State University Department of Biology from 2018 to 2020. Also, they conducted regularly scheduled bird mist-netting and banding on BSU properties and supervised an undergraduate Northern Saw-whet Owl banding project. Brandon and Alex both received the 2019-2020 “Outstanding Graduate Student in Field Science” award from the BSU Department of Biology for their scholarship and contributions to the department and the community. They recently successfully defended their Master’s theses based on 2 years of field research on Cerulean Warblers, a species of conservation concern, in southern Indiana.

Brandon’s graduate research focused on using radio telemetry to conduct a comprehensive study of Cerulean Warbler diurnal landscape space use in southern Indiana. His research findings suggest that this species requires larger tracts of habitat on its breeding grounds than previously known. In addition, Brandon examined whether climate change has affected first arrival of Cerulean Warblers in the state of Indiana based on 38 years of data. He found that Cerulean Warblers advanced their arrival by ≤ 4 days; however, springtime in Indiana is occurring earlier by 14 days. This delay in arrival time coupled with an earlier spring may be having a detrimental effect on populations. There is asynchronization between the peak abundance of their main food source, caterpillars, and the hatching of Cerulean Warbler young. (continued on page 5)
Peregrine Falcons of Anderson, Indiana

By Lois Rockhill

Peregrine Falcons in a small city like Anderson, Indiana, are our crown jewels. They rule the sky above our tallest building, looping and soaring to our amazement, an absolute thrill to see.

We were introduced to the peregrines in the spring of 2019, when a beautiful pair settled on the tall building at 33 W. 10th Street as their nesting site.

One of the falcons was wearing leg bands and was traced back to Canton, Ohio. His banding certificate mistakenly categorized him as a female, banded in 2012. He was named Peenie. His mate was not banded. She disappeared shortly after the two mated.

Not long after, a young female appeared on the scene. From her plumage, she was thought to have been hatched in the spring of 2018. Peenie consistently brought her food, which she often ate while on the huge Stifel Nicolaus sign on the front of the building. We watched as she shed her baby feathers and molted into a beautiful adult bird. DNR installed a nest box. But, although the two were very friendly, there is no record of anyone having seen them mate.

Our male Peregrine, Peenie, left us at the end of October. Many peregrines migrate and many don’t. Those that do, according to my iBirdPro app, have one of the longest migrations of any North American bird. Those that don’t are said to be satisfied with the abundance of food available to urban birds. The female stayed.

After much worry on the part of the peregrine fan base, Peenie returned in mid-March—with a new female. While he was gone, the young female from last spring had attracted a new suitor. He entered the picture in mid-December. We enjoyed watching them and were happy that they seemed comfortable around the nest box. A few days before we first saw Peenie, I noticed that their behavior had changed. They had relocated much of their activity to the City Building, perching there and flying back and forth to a tall, nearby antenna. Looking back, I wonder if they were being chased out of town by Peenie and his new mate.

We were excited to find that the new female was banded. A trace revealed that she was banded as a chick in Toronto, Canada, in 2019 and named Raptorette in honor of the Toronto Raptors’ winning season. Although she was about the same age as Peenie’s previous young companion, she was quite willing to mate.

As I write this in late April, Peenie and Raptorette are at the nest box. She appears to be in the box for longer periods of time, with him relieving her for stretches and short flights. We are hopeful this means eggs have been laid and are being incubated. Time will tell! You can follow the story by visiting the Peregrine Falcons of Anderson, Indiana Facebook page.
A Birding Trip to Hawai‘i

By Catherine Kubo

Last year when my old birding buddy from Virginia and I were considering possible 2020 destinations, we independently came up with the idea of a winter trip to Hawai‘i. It seems pretty obvious, right?—a tempting array of endemics and exotics that you can’t see anywhere else in the United States, plus a two-week respite from winter. Hence the end of February found us in Honolulu. We spent a pleasant day in the capital touring the sights and ticking off various species that frequent the downtown parks, including introduced birds such as the Red-crested Cardinal and the Warbling White-eye, and natives like the gorgeous White Tern, which is the city of Honolulu’s official bird. The next day we met up with our two guides from Wings and eight other participants for the start of a ten-day tour covering three islands and a variety of habitats, from urban parks to sea shores to native forests, wet and dry.

In all, we saw 97 species of birds, 14 of them endemic to the islands. We watched Red-tailed Tropicbirds sail in the stiff winds around Kiluea Point Light House on Kaua‘i. We hiked a very muddy forest trail into the Alaka‘i Swamp, also on Kaua‘i, where we had beautiful, bright red ‘Apapanes and several other endemic honeycreepers, including an increasingly rare ‘Anianiau (heard only, for me and most of the group). An iconic i‘wi carrying nesting material allowed us to spot its nest, high in the ‘ohia trees just off the trail.

Big Island birding brought more endemics, including the beautiful orange-red Hawai‘i’ Akepa and the Palila, a dry-forest specialist.

The Hawaiian honeycreepers are a great example of adaptive radiation. Current thinking is that a species of cardueline finch populated the islands, evolving into over 50 species adapted to various niches, with various bill shapes to match. For example, the ‘Akiapola‘au uses its stiff lower beak to drill into trees in search of grubs and larvae, which it then noodles out with its long, flexible upper beak. We got to watch this bird forage—fantastic!

Birding in Hawai‘i is a sobering as well as a wonderful experience. Fewer than half of those honeycreepers are extant today. Probably the top threats are habitat loss, avian malaria, and predation by non-native mammals. Various efforts to combat the losses are underway, including habitat protection and restoration and captive breeding programs. But progress is slow, and populations continue to decline.

Our Wings tour guides did an excellent job with the itinerary, and they were diligent about helping everyone get good looks at the birds. And they were fonts of knowledge not only about birds and birding, but also about local conservation issues and general Hawai‘i natural history. In all, it was a trip to remember.

A Big “Thank You”...(Continued from page 3)

Alex conducted his graduate research on simulating the exposure of breeding Cerulean Warblers to a common avian nest predator (Blue Jay), and analyzed their response using behavioral variables. He found that female Cerulean Warblers recognize Blue Jays as a potential nest predator by increasing their vigilance while on the nest. In addition, females exposed to the nest predator increased the time that they spent incubating their eggs and brooding their young compared with the control. This is the first study that examined behaviors of an open-cup, canopy-nesting species exposed to a simulated nest-predation threat.

It has been a pleasure having Brandon and Alex as part of the RCAS community. We congratulate them on their successful completion of their Master’s degrees and wish them continuing success in their career endeavors. Brandon will be pursuing his career interest in bird conservation research. Alex will begin a Ph.D. program at Florida Atlantic University in the fall, developing population models for the Little Blue Heron.
About RCAS

Membership
Robert Cooper Audubon Society is a chapter of the National Audubon Society serving Blackford, Delaware, Grant, Henry, Jay, Madison, and Randolph counties. To join, visit the RCAS web site.

Officers
President: Mary Annette Rose 765-774-3134  
Vice-President: Robert Williams  
Treasurer: Robert Williams  
Secretary: Kim Lee

Directors
2019-2021  Kamal Islam  Kim McKenzie
2018-2020  Catherine Kubo  Jim Schowe

Programs and Field Trips
Most programs and field trips of the Society are free and open to the public. Programs are generally scheduled from October through June on the second Wednesday of the month and, typically, held at the Muncie Kennedy Library at 7:00 p.m. For updates on the schedule, refer to our website.

Contact us
Chapter Website: www.cooperaudubon.org
Find us on Facebook!
Email: admin@cooperaudubon.org

Stay Connected

Many of us are missing our birding buddies now, especially during the height of spring migration. We can still stay connected and share our collective knowledge through Facebook. The Robert Cooper Audubon Society page, which provides updates on our events, continues to share relevant information such as webinars and videos. There is also the public group East-Central Indiana Birding, where you can share your own photos, videos, sightings, and even questions. Sharing what we are seeing helps many improve their birding skills by informing others in our region what to look out for or by even offering identification help. Two other excellent Facebook resources are Birding in Indiana and What’s this Bird? Enjoy spring migration!

About Cooper’s Talk

© 2020
Cooper’s Talk is published four times per year for members of the Robert Cooper Audubon Society.

Submissions
All are invited to submit photos, articles, and events for publication by emailing items to admin@cooperaudubon.org