Habitat Herald

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Bluebirds Thriving in Loudoun County



oudoun's bluebird population continues on an upward trend, according to monitoring data reported October 12. With help from over 200 Loudoun Wildlife Conservancy volunteers monitoring 53 public trails and 686 nest boxes throughout the county, 1,479 bluebirds fledged this year, compared with last year's 1,440. Participants in the last two Central Loudoun Christmas Bird Counts observed more Eastern Bluebirds here on count day than any other Christmas count nationwide.

Bluebirds breed throughout the county and are year-round residents, delighting observers with their brilliant royal blue on the back and head, flying acrobatically, and then abruptly dropping to the ground to catch insects.

In Loudoun, Eastern Bluebirds (*Sialia sialis*) mostly live in open country around trees. Nearly 75% of Loudoun Wildlife's nest boxes are located in meadows, pastures, parks, lawns, or golf courses. The birds will nest in cavities such as old woodpecker holes in pine or oak trees if these are available. But as woodlands give way to residential and commercial developments and their natural habitat diminishes, bluebirds will readily build their nests in artificial refuges such as nest boxes.

In March, male bluebirds attract females by bringing pieces of dried grass to a nest box, hopping in and out, and waving their wings while they perch above the box. Once the female enters the nest box with the male, the pair bond is typically established.

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Executive Director's Message



We had a busy summer at Loudoun Wildlife, and we want to thank everyone who came out to our events and volunteered on projects. We kicked off our last quarter with our Annual Butterfly Count in August, and closed it out with October's Walk for Wildlife. In between, we hosted our Fall Native Plant Sale, planted trees with volunteers at the Willowsford Conservancy, connected with people at the Bluemont Fair, conducted stream monitoring, witnessed the wonder of fall bird migration, and so much more! And we started our new Advocacy 101 educational

I want to thank everyone who made our month-long Walk for Wildlife a rousing success this year. We surpassed all of the

participation and fundraising totals from the previous year. I know I observed, recorded, and learned a few new species during the event. It really is a wonderful excuse to get outside in nature, and learn about the world around us. You never know what you will discover when you spend time outside.

We don't have as many winter activities, but we do have some great ways for you to stay engaged, including our annual Christmas Bird Count on December 28. Be sure to check out all of our upcoming events and activities, and don't forget to swing by the Gatehouse at Morven Park on Saturday, December 10, for our Open House event. We'd love to see you there.

We are still waiting on the exact dates for the next opportunities for public input for Loudoun County's Zoning Ordinance Rewrite process. Meanwhile, we invite you to check out our Advocacy 101 series, where we are breaking down a variety of advocacy-related

topics into bite-sized segments to make them easier to understand as we continue to invest in advocacy to improve our community's quality of life.

As we wind down the calendar year, it's a great time to support our efforts to make Loudoun a place where people and wildlife thrive together. This year #GivingTuesday is November 29, but anytime is a great time to give.

The strength of our organization is the commitment and dedication of our members and volunteers, and I want to thank everyone who contributes to our success!

We wish you and your loved ones a happy, safe, and healthy holiday season.

Happy trails, Michael

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Loudoun Wildlife Conservancy is a nonprofit 501c3 nonprofit organization that inspires, motivates, and engages people to protect, preserve, and restore wildlife habitat in Loudoun County. Contributions are taxdeductible to the extent allowed by law.

The Loudoun Wildlife Conservancy Board meets bimonthly. Board meetings are open to all current members. For more information, or to suggest topics for discussion at upcoming meetings, contact Jim McWalters.

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Take a Stand on Power Expansion Plans, Zoning Ordinance, and More

by Trinity Mills, Conservation Advocacy Specialist

Loudoun Wildlife's Conservation Advocacy department has a number of campaigns underway, all seeking to protect Loudoun's wildlife. Read on to find out what's in our advocacy spotlight.

New Transmission Lines

Loudoun County now houses more than 25 million square feet of data centers, with millions more square feet in development. To meet the heightened energy demands of this growing number of data centers, Dominion Energy has started the process of building major transmission lines, substations, and infrastructure linkages. The first segment of this multiyear, multiproject expansion includes a new high-voltage transmission line along Broad Run between Northstar Boulevard and Loudoun County Parkway (and beyond).

This location consists of meadows, mature forest, forested wetlands, wetlands-creation projects, a new Great Blue Heron rookery, and stormwater ponds that attract shorebirds and waterfowl. While the exact route of the power expansion has not been determined, this proposal would further fragment habitat within the Broad Run riparian buffer and floodplain, creating more challenges to wildlife and the ecosystem as a whole.

Virginia law mandates that Dominion Energy must provide service to new customers within their service area. We acknowledge that Dominion Energy has a variety of challenging constraints to provide power to areas in eastern Loudoun, and that this project is a component of collateral impacts caused by poor land-use planning decisions that did not adequately account for utility corridors to accommodate growing community needs. However,

Loudoun Wildlife Conservancy has grave concerns about this proposal, and we do not support the proposed location of these infrastructure improvements.

Please check our website for updates and information on how to submit comments opposing the current proposal and urging that alternative routes be found for this project.

Zoning Ordinance Rewrite

With regard to the ongoing Zoning Ordinance Rewrite process, staff continues to make revisions after the initial public comment period and is preparing to submit another draft for review by the Planning Commission. The Planning Commission hosted the first public hearing on August 30 to review Part 1 of the new draft text. The Planning Commission is reviewing the next version of the draft in work sessions in preparation for the next

public comment period. Once the Planning Commission has completed its work, the Zoning Ordinance will be forwarded to a Board of Supervisors public hearing and subsequent business meeting for action, tentatively scheduled for late January/early February. Please continue to check our website for updates to this process and announcements on the reopening of the public comment period.

Route 15 North and Black Oak

During their July 5 business meeting, the county's Board of Supervisors approved a Comprehensive Plan Amendment (CPAM) to allow future widening of Route 15 north of Montressor Road to the Maryland State Line. One of the proposed improvements is the construction of a western bypass around the Village of Lucketts that would cut through Loudoun Wildlife Conservancy's JK Black Oak Wildlife Sanctuary.

While the bypass alignment has been approved in conjunction with the CPAM itself, the final location and alignment will be further evaluated and determined during the roadway design process. Your voice will still be needed in the future. It is essential to speak

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Bluebirds Thriving, continued from page 1 The female builds the nest with more grass, pine needles, and occasionally horsehair. She lays two to seven pale blue eggs, one each day. The female alone then incubates the eggs for 11 to 19 days.

After the eggs hatch, the male and female both catch insects and feed the nestlings, which take 17 to 21 days to develop and fledge. The first brood usually fledges in May, with a second and sometimes third brood following in the summer. The parents may use the same box for multiple broods. In Loudoun, the last fledglings leave the nest by mid-August to early September. Bluebirds do not migrate to warmer places in the winter and can sometimes be found seeking shelter on colder days in nest boxes, huddled with half a dozen other bluebirds to stay warm.

Bluebirds are not the only species that use nest boxes. Tree Swallows, Carolina Chickadees, House Wrens, **Tufted Titmice, and House Sparrows** all breed in nest boxes and will vigorously compete for space. Avian nest box takeovers are not uncommon. House Wrens may enter boxes where bluebirds have built their nests, destroy eggs and hatchlings, and then build their nests on top of the bluebird nests. All but one of these species are protected under the federal Migratory Bird Treaty Act (MBTA), so Loudoun Wildlife trail monitors must often let nature run its course.

The exceptions to that rule are the House Sparrows. These non-native, human-introduced birds will evict other nest box species, kill adult birds and nestlings, and destroy eggs. Loudoun Wildlife nest box monitors perform a vital service for other cavity nesters by removing House Sparrow nests and eggs before they hatch. Many bluebird trail leaders this year reported increased House Sparrow activity; one reported 22 House Sparrow attacks on nests, resulting in the loss of 23

nestlings. This trail leader removed 43 House Sparrow eggs from the 10 boxes on her trail.

Loudoun Wildlife Conservancy monitors nest boxes each April through August. We welcome new and returning monitors every spring. In 2022 Kiley Gannaway, the Bluebird Program's education and training leader, delivered an online "get acquainted with bluebirds and monitoring" session to an audience of 45 potential new monitors. That talk was recorded and saved on the Loudoun Wildlife website in the Resources section. In March, Kiley and Rich Wailes, the bluebird monitoring data coordinator for Loudoun County, led a hands-on training session for new and returning monitors and trail leaders using nest boxes at Ida Lee Park.

Throughout the breeding season Lisa McKew, a former Loudoun County coordinator, acted as our help desk/ answer specialist, providing guidance to monitors who asked questions about what to do in some unusual situations. Monitors this year ranged in ages from under 10 years old (working with mom and dad) to over 80. Some monitors were experiencing their first season on a trail; another was enjoying her 25th.

If you are interested in becoming a monitor, we would love to welcome vou. Please fill out the volunteer application and waiver forms on the Loudoun Wildlife website (https:// loudounwildlife.org/2022/03/volunteerbluebird-nestbox-monitoring/) or email Volunteer Coordinator Kim Strader at kstrader@loudounwildlife.org.



Annaliese Meistrich

2022 Bluebird Program Results (data as of 10/12/22) Eastern Bluebirds fledged 1,479

Tree Swallows fledged 968 **House Wrens fledged** 591 Other cavity nesters fledged 77 Number of public trails 55 **Number of nest boxes** 686 Number of volunteers monitoring nest boxes

Loudoun Wildlife Conservancy www.loudounwildlife.org

Wildlife Encounters on the Bluebird Trail

by Spring Ligi, Bluebird Monitor

One of the many joys of nature is never knowing what discoveries you'll make. As a bluebird monitor for the Bug Strip Trail at the Blue Ridge Center for Environmental Stewardship, I walk the same path each week but rarely observe the same things. One beautiful day in May, I was treated to the comical sight of a Wild Turkey (Meleagris gallopavo) flying from the field to a tree branch, which loudly protested under the additional weight. Thankfully, turkey sightings are more common now that populations have rebounded

since being overhunted a century ago.

On a bright June day, I was daydreaming of bluebird nestlings in the next box and nearly stepped on an Eastern Milk Snake (Lampropeltis triangulum) soaking in the

sun. After my heart started beating again, I took a closer look at this copperhead look-alike. Milk snakes are harmless and have square-like blotches along their body, bordered by black. The blotches differ from the hourglass shape of the poisonous Eastern Copperhead (Agkistrodon contortrix) and do not extend onto the sides of the body as they do on a copperhead. The milk snake observed me for a minute, then casually slithered away into the taller grass.

The heat of July monitoring brings out butterflies and dragonflies that flutter ahead of you along the trail. A flash of black and white caught my eye, and I watched the low, erratic flight of

a Zebra Swallowtail (Protographium marcellus) cross my path. Their bold colors and flight pattern make it difficult for predators to follow and capture them. Pawpaws (Asimina triloba), this butterfly's larval host plant, and other deciduous trees are found along the edge of the farm field, creating a strip that attracts plenty of insects and is beneficial to both farmers and wildlife (hence the trail name, Bug Strip).

As August rolls in and the final nestlings of the season venture away from their nests, I look forward to

> the dazzling yellow of the goldenrods (Solidago spp.). This insectpollinated beauty is sometimes blamed for our is the culprit. Ragweed's inconspicuous

runny noses and itchy eyes, when in fact ragweed

green flower heads allow this windpollinated native to go unnoticed.

Eastern Milk Snake spotted at the Blue

Photo by Liam McGranaghan

Ridge Center.

As cold begins to set in this winter, I'll find comfort in memories of my warmer-weather wildlife encounters all along the bluebird trail.

The **Blue Ridge Center for** Environmental Stewardship has two bluebird trails (25 boxes), 10 miles of hiking trails, and a Nature Play Area. Almost 650 species have been documented at this future Virginia State Park (https://www.inaturalist. org/projects/plants-and-animalsof-the-blue-ridge-center). The park is currently free and open daily from dawn to dusk, so stop on by!

Take a Stand, continued from page 3

up to protect JK Black Oak's unique natural assets, which are at a high risk of local extinction during construction of a western bypass. Loudoun Wildlife will continue to monitor progress on the Route 15 North widening project, and we will post updates as other opportunities for public input become available.

A Win for Dark Skies

At a September 6 business meeting, the Board of Supervisors instructed the County to withdraw its application to add lighting to the existing ballfields at Scott Jenkins Park outside Hamilton. The supervisors' decision honors the original 2009 conditions of approval for the park's construction, which prohibited lighting at the ballfields. This decision came after considerable pushback from the community. Many people spoke out against the project during a lengthy public comment period, pointing out the incompatibility of lighted fields with the area's rural character and the negative impacts of light pollution on surrounding properties.

While the withdrawal of this application is a success for wildlife conservation, it seems likely that similar efforts to increase usage and accessibility by adding lighting will be directed toward different ballfields in Loudoun County. These efforts, if approved, could have similar negative impacts on wildlife.

Proposals to add lighting to athletic fields present a myriad of conservation issues. The disruption of dark skies has detrimental effects on local ecosystems, especially insect populations. Additional lighting can have adverse environmental and agricultural impacts for neighboring properties, some of which could be under conservation easements. Loudoun Wildlife continues to monitor new development applications that have the potential to impact dark skies and nocturnal wildlife.

How Does One Count Butterflies?

by Anne Ellis, Butterfly Count Coordinator

On August 6, a typical warm, humid summer day, 60 volunteers set out to count as many butterflies as they could find in a single day. It was our 26th Annual Butterfly Count, and we tallied 3,756 butterflies of 45 species in an area of about 178 square miles in the northwestern corner of Loudoun County.

This takes a lot of effort, and when I ask my friends if they'd like to join a butterfly count, I receive many a puzzled look. Exactly how does one count butterflies, they want to know? The short answer is in whole numbers beginning with one. No need to worry about decimals or fractions. But seriously, it's really a three-step process.

Step 1: Make sure it is a butterfly and not a moth, plant hopper, grasshopper or other similar fluttery creature. If you surprise a plant hopper or one of the little moths tucked among the grasses along the pathway, you'll see them for a moment, and then they'll vanish — not a butterfly habit. The Carolina Grasshopper is large and jumps into the air with patterned wings spread, and for a moment you may think "butterfly." Of course, a grasshopper looks nothing like a butterfly when it lands. And keep a lookout for the Hummingbird Clearwing and Snowberry Clearwing — two fascinating day-flying moths that don't behave at all like moths. Fascinating, yes, but not butterflies, therefore we don't count them.

Step 2: Count how many you see of each kind of butterfly. Do this quickly, as they move around fast. You'll need help at this point to keep track of your sightings. As a team works its way around a meadow or garden, one person acts as scribe while teammates call out names and numbers, for example: "Four Cabbage Whites, two Tigers (Swallowtails), 20 ETBs (code for Eastern Tailed Blues) — no, make that three Tigers." And the field checklist is not nicely alphabetized! Butterfly identification guides (like bird guides, tree guides, and others) are organized according to taxonomic order. The first butterflies in the guide are always Swallowtails, followed by Whites and Sulphurs, Gossamer Wings (Hairstreaks, Blues), Nymphalids (Brushfoots), and Skippers. Aren't butterfly names special?



Hackberry Emperor. All butterfly photos by Michael Myers

Step 3: Identify the butterfly. There are about 70 species of butterfly on our August checklist, and many of them are easy enough to identify. Remembering their names just takes practice. But there are several butterflies that look alike or similar, such as the Comma and the Question Mark, or the Pearl Crescent and the Common Checkerspot. Spying out the differences when they are moving around so quickly is challenging. Even our leaders may take extra time to puzzle out a skipper, leaning on two or more guidebooks and experience they may have from other butterfly counts. Accurate identification is certainly important, but sometimes the lack of a clear ID can't be helped and a butterfly might go on the list as "Swallowtail sp.," which means "swallowtail of unspecified species."

When the count day is over, team leaders tabulate their results, which are consolidated into a report submitted to the North American Butterfly Association (NABA). NABA collects reports from all over the country and makes them available to researchers. Check out the results of our butterfly count at: https://loudounwildlife.org/citizen-science/butterfly-count/.

The 2023 count will be on Saturday, August 5. Please join us and count the butterflies!





Remembering Caroline Kuhfahl

Who knows how much milkweed has been planted in Loudoun County and beyond thanks to Caroline Kuhfahl? Her willingness to share seeds was as boundless as her passion for teaching others how to help endangered Monarch butterflies. Caroline, a longtime Loudoun Wildlife volunteer, passed away in August after a courageous battle with lymphoma. Survivors include her husband, Bob, their daughter, and their two sons. Here are excerpts from memories of Caroline, shared by just a few people she touched through her work on behalf of the Monarchs:

"I met Caroline at a large Ashburn Farm Monarch butterfly event around 2016. ... At the time, my seemingly small encounter with her centered around our beloved Monarchs. In the long term, that encounter did launch me into a new direction into nature for the rest of my life. I'm sure she had that effect on everyone she met. Her passion for nature and the Monarchs spread like wildfire."

– BJ Lecrone

"I remember Caroline with butterfly wings! Oh, the gusto that she shared [with] the love of Monarchs! I remember doing the caterpillar adoption days with her ... [and]

that big release of over 100 Monarchs at Oatlands. ... Caroline was always there to help: The huge milkweed sales. The waystation plantings. The charge she led to create Monarch waystations around her community. The Easter Egg Roll at the White House [in 2015]. Wow. We talked to 20,000 people that day, and boy, were we tired! But she shared her love of Monarchs, and the sparks shined in the eyes of those she touched." – *Nicole Sudduth*

"When one thinks of Monarchs, one also thinks of Caroline. She led the charge in Ashburn for putting in one of the first Monarch waystations. The next spring, she came to me to ask how to tell the pollinator plants from the invasives in the waystation — always delving deeper into what needed to be done to make the Monarch waystation better. ... During her battle with cancer, she continued her joy of all things Monarch and kept everyone up to date with what was happening in the Monarch world in Texas."

- Ann Garvey

"Caroline introduced me to Monarchs, taught me to recognize (and protect!) milkweed, and, as my former co-worker, brought a ray of good cheer to my days." – *Hilary Jensen Rice*

"We first met Caroline in her role as an educator at Hutchison Farm Elementary School in South Riding, where she was Carter's technology teacher. ... Caroline cheered Carter on as he established a Monarch Waystation Garden at the school in third grade and began serving conservation efforts with Monarch Watch. From there, Carter and Caroline joined efforts and planted, presented, and educated people together for three years, everywhere from Loudoun County to the White House. Her life force was one of love, love, love. We envision her now with wings, and we will never forget her." – Sarah & Carter Steadman

"I remember her being so happy and positive all the time. We traded milkweed seeds, and I dropped off many milkweed seeds so she could

spread her love for the Monarchs. She will be missed." – *Doreen Varblow*

"The morning after I learned the sad news about Caroline, I walked out my back door and a Monarch was sitting on my porch drying his wings. Of course, I thought of Caroline. ... Caroline and the work she did to help preserve the Monarchs will continue to live on in all who knew her, including in me and in my granddaughters." – Pat Rountree

"We've lost one of our Monarch advocates, Caroline Kuhfahl, who loved all living things [and] had a never-ending passion for nature. ... We will miss her and have to continue to advocate in her honor."

– Janice Scott Fish



"This wonderful woman helped so many people in so many ways with rearing Monarchs, and planting native flowers and plants. Her calm, helpful and supportive words and deeds will be so deeply missed." – Jill Joyce

"I met Caroline a couple of years ago through a native plant group, and she generously shared her plants with me and gave me a tour of her lovely Ashburn garden. I will remember her joy in sharing her love of Monarchs." – Kristin Myzie

"Caroline was a wonderful person, and left a terrific legacy of sharing her love for Monarchs. She will be really missed." – Barbara DeRosa-Joynt

"Caroline was an amazing advocate and such a kind, sharing person for everyone new to raising Monarchs. She was such a bright light here in Ashburn. I hope we can work to do something in her honor to remember the mark she made locally." – Jennifer Smirnoff





eptember 18 turned out to be a fabulous day to hold our first public open house at JK Black Oak Wildlife Sanctuary. The weather was beautiful, the sky was blue, and our meadows were in bloom.

Representatives from Loudoun Wildlife Conservancy, The Nature Conservancy, the Land Trust of Virginia, and Lucketts Ruritans were available to answer questions about their organizations and their role in helping to make JK Black Oak a possibility.

Jenny Erickson, the head of Loudoun Wildlife Conservancy's Amphibian Monitoring Committee, and members of her team were present with photos, videos, and sound recordings. They enjoyed answering questions about the amphibians that make JK Black Oak their home. Jenny especially enjoyed watching the reactions of attendees when she played recordings of Eastern Spadefoot frog calls. The discovery of adult spadefoots at Black Oak this year was the first confirmed Loudoun County sighting of the elusive species in more than 10 years. These frogs breed in the vernal pools at Black Oak in the spring.

Another big hit was Bruce Kimmel, who monitors bats on the property and other properties throughout Loudoun County, and his display. He had information about the resident bats that have been identified at Black Oak, including the Northern Long-Eared Bat, as well as a display of the different frequencies of echolocation and how to ID bats by their frequency. His work shows that JK Black Oak has the most recorded species of bats in the county in 2022.

As part of the open house, we led tours of the property throughout the day. During these tours we guided attendees through the meadows, past vernal pools, to the Le Sabre Pond Overlook, and through the Oak-Hickory forest. This showed a nice diversity of habitats at the sanctuary. We also told stories about our experiences here during work days, citizen science activities, and nature walks, and while monitoring our wildlife cameras.

We are happy that the many people who attended showed great enthusiasm for JK Black Oak and hope to hold another open house in the future. And we thank all the organizations and volunteers who attended; we couldn't have done it without them.

Loudoun Wildlife Conservancy www.loudounwildlife.org





Before a tour, guests gather to hear more about the sanctuary and Loudoun Wildlife's work there from Executive Director Michael Myers. Photo by Allison Gallo

Adult Eastern Spadefoot frog. Photo by Jenny Erickson



An open house display shows visitors details about Black Oak's resident bats. Photo by Allison Gallo



Speak Up To Protect Black Oak!

As plans to widen Route 15 North move forward, tell your Loudoun County supervisors how important it is to preserve this wildlife sanctuary, its rare wetlands, and the many animal and plant species who live there. For more about how to make your voice heard, visit: https://loudounwildlife.org/conservation-advocacy/

Open house visitors follow a volunteer along a trail. Photo by Trinity Mills



Restore Half Your Lawn to Native to Save Us All

by Sharon Plummer

This article's headline may sound dramatic and exaggerated, but it is what I learned at a conservation talk recently. If we all pitched in to plant native plants and trees and reduce the size of our grass lawns, it could bring back the biodiversity that we have lost through our modern landscape and development practices.

At this event I heard a presentation by Doug Tallamy, professor of entomology at the University of Delaware and author of *Nature's Best Hope*. Tallamy outlines a plan of re-naturalizing 20 million acres in the United States. If we are able to work together to accomplish this feat, we can restore the rich, interconnected ecosystems that our country needs for humans and wildlife to thrive together. Tallamy's Homegrown National Park program (https://homegrownnationalpark.org/) is an ambitious community environmental project that invites private landowners to enroll their land in the program and become part of the solution to the critical environmental problems facing humans and wildlife.

Tallamy has compiled compelling statistics — from his own studies and those of other organizations that helped — to calculate some quantitative goals that we can all work toward to help achieve this noble endeavor. He highlights many factors that define why we humans are dependent on the food web of nature. This is not just a project for nature hobbyists; everyone should be engaging in it regardless of political or cultural affiliation. Restoring our planet to a sustainable home for all inhabitants is something that we can do together if many people take small actions.

For sustainable biodiversity, we need a connected network of habitats. Tallamy started the concept of the Homegrown National Park to communicate that citizens can form a park-like patchwork of our properties. Only 5% of lands in the United States are preserved in parks, so the only way to accomplish our goal is to restore private lands in yards, airports, power-line corridors, and more. If we restore many

smaller plots of land with native plants, we can build a web of habitat across the country that will sustain the diverse natural relationships humans and nature need to thrive.

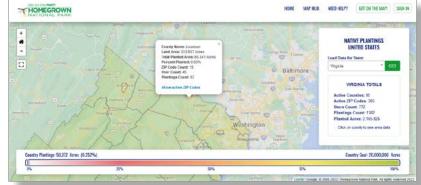
There is a lot of interesting data to support Tallamy's ideas and goals, so I highly recommend reading one of his books or watching his presentations online, where he elaborates on these topics with depth and eloquence.

Key Points

- 80% of all plants and 90% of all flowering plants are reliant upon pollinators.
- Insects are the base of the food web; it is believed that humans cannot exist without a functional food web.
- Throughout much of America, 14% of plant species make up 90% of the insect food. These are "keystone" species, a term emphasizing the importance of some plants that are critical to good ecosystems.
- If we added up all the powerline rights-of-way, golf courses, airports, and other private lands, it comes to 599 million acres. Restoring just a percentage of that could have amazing results for our country's biodiversity and biomass.
- Tallamy restored his own 10-acre property with key native plants and trees and has created a successful habitat where 1,028 moth species and 59 bird species breed successfully.
- Non-native ornamental plants support 29 times less animal diversity than do native plants. If we buy more native plants and stop buying invasive non-natives such as Bradford Pears and non-native honeysuckles, then large nurseries and stores will be forced to provide more natives.
- If landowners could restore 50% of their lawn to native plants and trees, we could make significant progress in restoring our nation's biodiversity and ability to support human life and wildlife.
- Even if you have only a small yard, planting a few keystone species will have a positive impact.
- Reduce or eliminate chemical pesticide use because its impacts are so negative to our environment.
- On this page is a QR code you can scan to find information about keystone species by area within the US. Some common ones listed for Eastern temperate forests are oaks, poplars, cherries, Joe Pye Weed, asters, and Skunk Cabbage.



Scan the QR code for Homegrown National Park and to look up keystone plants in our area.



Loudoun Wildlife Conservancy www.loudounwildlife.org

Yesterday and Today

Editor's Note: The Spotted Lanternfly threat appears to be increasing. In May, Beth Sastre, Commercial Horticulturist from the Virginia Cooperative Extension Loudoun Office, discussed how we can slow the spread of this invasive insect in Virginia. Her talk can be seen on Loudoun Wildlife's YouTube channel: https://youtu.be/g81AxCrFMfs. Audubon at Home Ambassador Sue Russell, who is also a Master Gardener, says that only one infestation had been confirmed in Loudoun as of early October, but Master Gardeners and other experts continue to conduct scouting expeditions in response to SLF reports. Below is a reprint of the Habitat Herald's first article about the lanternfly, published in 2018.

Threat of the Spotted Lanternfly

by Kerry Bzdyk

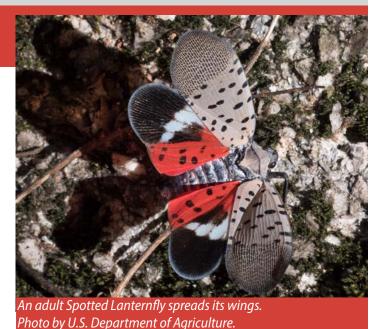
Usually when I encounter an insect I have never observed before, the naturalist in me is thrilled and excited to learn more about it. But there is one insect I am just hoping none of us see here in Loudoun County. By now you may have seen reports of a new invasive insect species, the Spotted Lanternfly. The sense of alarm has increased in our region with the positive detection of this insect in Winchester [in January 2018]. There are many reasons to educate yourself about this particular threat.

The Spotted Lanternfly (Lycorma delicatula) is a plant hopper that is native to Asia, where it primarily feeds on Tree of Heaven (Ailanthus altissima). Adults measure about an inch long and a half-inch wide with their wings folded. The forewings are mainly gray with black spots near the base and a darker region at the tip with lighter veins. The hind wings are a bright scarlet at the base, with an area of black with a white band. The abdomen is yellow, with black bands down the center. After hatching, nymphs develop through four wingless stages (instars), during which they are black with white spots and grow to about a half-inch long. The fourth instar develops red patches on the body. Winged adults appear in July.

First detected in Berks County, Pennsylvania, in 2014, the Spotted Lanternfly has shown a remarkable ability to thrive and spread. It feeds on a large variety of plants, including grapes, apples, stone fruits, and many other agricultural and commercially valuable crops. In the fall, adults will aggregate (or gather in large groups), mainly on Tree of Heaven, and can be seen at dusk traveling up and down the trunks of trees in large numbers. Females will lay eggs on almost any hard surface, including those that move, like trucks, cars, shipping containers and trains, which is how they have spread not only to Virginia, but also to New York and Delaware. The egg masses are shiny, light gray, flat and up to 1.5 inches long and three-fourths of an inch wide. The egg mass fades to a dried mudlooking mass over the winter.

In addition to being a threat to commercial crops, the Spotted Lanternfly is also a notable pest to homeowners. Lanternflies feed on ornamental and native vegetation and secrete honeydew, which is a sticky, sweet liquid that attracts the growth of mold and the interest of ants and other unwanted insects.

Management of this invader targets the different life stages of



the lanternfly and includes scraping of egg masses, targeted insecticides, tree banding and host tree removal. One adult lanternfly management technique that has had some success is the removal of Ailanthus trees in an area with the exception of a few "trap" trees that are then treated with a systemic insecticide.

So what can you do? Be observant! Spread the word! If you have any Tree of Heaven on your property, have it removed. If you think you have found a Spotted Lanternfly, [please follow the directions in the textbox on this page]. With education, outreach, observation and determination, we can all help to control the spread of this detrimental invasive species.

How You Can Help

Loudoun County's Extension Office encourages the public to keep an eye out for the distinctive Spotted Lanternfly adults, especially from early July through November. If you see one:

- Smash/kill it!
- Take a photo.
- · Note your location.
- Report it using the form available on the <u>loudoun.gov</u> website. If you have questions about identifying a suspected SLF, email a photo to <u>loudounmg@vt.edu</u>.

The use of insecticides to control lanternflies should be avoided, however, because of the detrimental effect on our native pollinators and other native species. Remember, if it kills a lanternfly, it will also kill a butterfly, a bee, or a spider.



Volunteer of the Quarter: Kathy Cain

by Kim Strader, Volunteer Coordinator



Loudoun Wildlife Conservancy offers a wide variety of volunteer opportunities through its

programs in education, citizen science, and advocacy. Many volunteers come to us to engage in areas of interest or expertise that they already have, while some people look to gain experience and knowledge in new areas. Our current Volunteer of the Quarter, Kathy Cain, discovered a newfound passion for amphibians through volunteering with us.

Kathy is a beekeeper and a Virginia Master Naturalist and enjoys educating people about Monarch butterflies. She discovered Loudoun Wildlife in 2015 when she attended one of our educational programs, "Creating a Habitat Garden." Over the years, Kathy supported us by being a member and continued to attend programs like native plant propagation and bird walks. In July 2021, she attended an "Amphibian Night Walk" program, and then in January 2022 she participated in FrogWatch training to help monitor local frog populations. Little did she know that this would turn out to be a unique opportunity, one that some people wait a lifetime (and still never get the opportunity) to experience — witnessing the explosive breeding habits of the Eastern Spadefoot frog.

Kathy was part of the Loudoun Wildlife Amphibian Monitoring Program's Herpetology Survey Team that answered an early May call of possible spadefoot activity. The team ended up spending all night at JK Black Oak Wildlife Sanctuary documenting the movement, calls, and breeding activity of approximately 300 Eastern Spadefoots. After approximately 18 hours the breeding event was over, and the team began a months-long project to record the development of these fossorial frogs.

"Kathy participated in tracking the spadefoot populations on rainy nights into the early morning hours," said Jenny Erickson, coordinator of the Amphibian Monitoring Program. "Her enthusiasm and exceptional observational skills were integral to the success of monitoring the spadefoot population at JK Black Oak. She is an enthusiastic participant both at JK Black Oak and the Dulles Greenway Wetlands, including helping map GPS coordinates for potential survey sites at the Dulles Wetlands."

Loudoun Wildlife Conservancy is fortunate to have teams of dedicated volunteers, like Kathy, from a variety of backgrounds and experiences, all working together for a common vision — to create a place where people and wildlife thrive together.

Dec. 28: Join the Central Loudoun Christmas Bird Count

by Joe Coleman, Birding Coordinator

Since 1899, thousands of people have participated in the world's longest-running citizen science project, the National Audubon Society's Annual Christmas Bird Count. This year, during 2,000 different counts, people will count every wild bird they can find in one 24-hour period. The results are used to better understand bird populations and dynamics.

Join Loudoun Wildlife on Wednesday, December 28, as we count birds in the Central Loudoun Christmas Bird Count Circle. Count circles have a 15-mile diameter covering 177 square miles. The Central Loudoun Count covers the county north to Waterford, south to Aldie, east to Ashburn, and west to Purcellville. In that area approximately 20 teams will explore the county's natural and not-so-natural areas in search of birds.

The count includes a number of Loudoun's very special places, such as the Banshee Reeks Nature Preserve, the Dulles Greenway Wetlands Mitigation Project, Beaverdam Reservoir, Morven Park, Ball's Bluff, Waterford's Phillips Farm, a number



Tennessee Warbler spotted on a recent walk at Banshee Reeks. Photo by Laura McHugh.

of private estates, and much of the still-rural western portions of the county, and in Maryland, about five miles of the C&O Canal around White's Ferry.

Everyone is welcome; amateurs are teamed with experienced

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Bird Count, continued from page 12

birders, and every eye and ear helps! Counters share their wonder of the wild beauty of feathered creatures with like-minded people and sometimes find truly rare birds. It is always lots of fun!

After the counting ends, we may meet for a Tally Rally, where we will find out what others have found and share stories about the day's highlights. If you are interested in participating in the count for just a couple of hours or for the entire day, Sign Up Online by December 22 or contact Joe Coleman (jcoleman@loudounwildlife.org) or Bryan Henson (bhenson@loudounwildlife.org).

Other Bird-Counting Opportunities

Several other counts also include parts of Loudoun County. If you can't make the Central Loudoun Christmas Bird Count or want to participate in more than one count, try one of these:

- The Manassas-Bull Run count is on Sunday, December 18. To participate, contact Phil Silas by December 18 at epsdcva@aol.com.
- The Seneca MD/VA count on Sunday, December 18, includes five sectors in Virginia ranging from Great Falls Park to the eastern corner of Loudoun County. To participate, contact Jim Nelson at kingfishers2@verizon.
- The Calmes Neck count on Saturday, December 31, includes much of far western Loudoun County and eastern Clarke County. The cutoff date to participate is December 18; contact Margaret Wester at margaretwester@ hotmail.com to sign up.

You can see these count circles at https://experience.arcgis.com/experience/94b00fd33a7d4dec9df71f053fac22a3

Book Review: Sentient by Jackie Higgins

Review by Steve Allen

How many senses do you have?

Aristotle's answer to that question was five — taste, touch, smell, sight, and hearing — but that was about 2,400 years ago. If you were to ask modern neuroscientists the same question, you would get different answers. Their response might be a number between 12 and 20, or maybe just a wry smile and a shrug of the shoulders.

Sentient by Jackie Higgins is a fascinating exploration of all of our

senses, even if we disagree about how many we have, and how sensory information is processed by our brain. For each sense, Higgins compares another animal species which has evolved that same sense to a degree far beyond our human abilities. This comparison helps illuminate how our own senses work. and the boundaries and limitations of

our senses. There are people who lack a sense, and others who are hypersensitive, and their experiences cast more light on our abilities.

Three hallmarks determine whether a physical response qualifies as a sense: a receiver that can detect some stimulus and send a signal to the brain, a neural pathway for that signal to travel, and a specific location in the brain that can accept and interpret that signal. Using that definition, it is clear that Aristotle seriously undercounted our senses.

Several of the five are in fact multiples. Touch, for example, is really two different senses. Our fingertips contain thousands of touch fibers that send rapid-fire messages to our brain, allowing us to actively explore our environment with our hands. The rest of our skin contains different, more passive receptors that send slower messages down a parallel pathway to a different part of the brain, allowing us to feel both pleasure and pain.

Sight is even more complex, comprising two or three senses depending on your point of view. On

our retinas we have millions of cones, which work in brighter light levels and are capable of sending signals that our brain can interpret as to both shape and color. We also have 20 times as many rods which cannot distinguish colors but allow us to see shapes in very low light levels, giving us night vision. A recently discovered third photoreceptor,

known as the photosensitive retinal ganglion cell, or pRGC, sends signals to a different part of the brain that controls our circadian rhythms, giving us a sense of time.

Aristotle missed other functions altogether that are now clearly regarded as senses. For example, the semicircular canals in our inner ears are filled with fluid and act like a carpenter's level, giving us our sense of balance.

The existence of other senses is more controversial. Long-distance migrating birds like the Bar-tailed Godwit appear

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Programs and Field Trips

Unless otherwise specified, contact info@loudounwildlife.org with questions.

Birding Banshee



hether you're a beginning birder or an expert, you'll be dazzled by the many bird species you'll find at the **Banshee Reeks Nature Preserve** south of Leesburg. Join Loudoun Wildlife Conservancy and the Friends of Banshee Reeks for the monthly bird walk at this birding hotspot. Bring binoculars if you have them. **Registration required. Sign Up Online. Questions:** Contact Joe Coleman at 540-554-2542 or <u>icoleman@loudounwildlife.org.</u>

Second Saturdays: November 12, December 10, January 14, 8:00 am

Birding Bles Park



oudoun Wildlife Conservancy is excited to offer a regular bird walk at **Bles Park**, located along the Potomac in eastern Loudoun. More than 175 different species of birds have been observed here in a great mix of habitat. Everyone is welcome, whether you are an experienced or beginning birder. Bring binoculars if you have them. **Registration required.** Sign Up Online. Questions: Contact Bryan Henson at bhenson@loudounwildlife.org.

Third Sundays except December: November 20, January 15, 8:00 am



he Blue Ridge Center for **Environmental Stewardship** (BRCES) is a beautiful 900-acre preserve in northwestern Loudoun. With its diverse wildlife habitats, including meadows, streams, and heavily forested slopes, BRCES draws a wide variety of birds and other creatures. Join Loudoun Wildlife Conservancy on our monthly walk and see what's there! Meet at the Education Center; bring binoculars if you have them. BRCES is located just north of Neersville at 11661 Harpers Ferry Road (Rte 671); detailed directions at www.brces.org. Registration required. Sign Up Online. Questions: Contact Joe Coleman at jcoleman@ loudounwildlife.org.

Fourth Saturdays except December: November 26, January 28, 8:00 am

Loudoun Wildlife Conservancy Board Meeting

— The Board typically meets the second Tuesday of the month at 7:00 pm. All Loudoun Wildlife members are welcome. Contact Jim McWalters at imcwalters@loudounwildlife.org for additional information.

A Year in the Life of an Owl — Wednesdays, November 2, Rust Library, and November 9, Cascades Library, and Thursday, December 1, Gum Springs Library, 7:00 - 8:00 pm. Join Liz Dennison of Secret Garden Birds and Bees to follow our region's four resident owls from winter through fall. We'll learn what makes owls instantly recognizable and find a few surprises hidden under all those feathers! We'll get a peek into their courtships, the challenges of raising young, and the difficult transition from nestling to fledgling. Finally, we'll see the guiet time when the young seek out their place in the world and the adults can (almost) relax. Four Owl Ambassadors will help Liz tell the story. You'll meet Scarlett (Barred Owl), Hodor (Great Horned Owl), Phantom (Barn Owl), and Kvosir (Eastern Screech Owl) in the flesh, learn about each species, and find out a little about their personal lives in captivity. You might even get to take a few selfies! This program is cosponsored by Loudoun Wildlife Conservancy and the Loudoun County Public Library.

Writing in Nature — First Thursdays: November 3, December 1, January 5, 11:00 am – 12:30 pm, Gate House at Morven Park — Join

Nancy Morgan, director emeritus, Georgetown Lombardi Arts and Humanities Program, for this monthly opportunity presented by Loudoun Wildlife Conservancy to enjoy the combined health benefits of time spent in nature and writing thoughts and feelings. Writing is often considered a solo, reflective practice, but writing in the company of others can be a supportive, community-building activity that encourages regular practice. Each session is a stand-alone event — come when you are able. Registration is open through the morning of the workshop. *Registration required: Sign Up Online.*

Walk for Wildlife Closing Event — Sunday, November 6, 2:00 – 4:00 pm, Catoctin Creek Distillery. Join us for a nature-enthusiast gathering at Catoctin Creek Distillery in Purcellville to celebrate Walk for Wildlife. We'll hand out prize medals and share some highlights from the event along with celebrating citizen science efforts and the positive impact they have on our community. Vultures, A Love Story — Tuesday, November 15, 7:00 – 9:00 pm, Broadlands Association Community Center. Did you know the Turkey Vulture, just one of two types of vultures found in Virginia, is the most migratory of all vultures? Learn more about this fascinating species, from its winter migration patterns to the critical role the scavenger plays in the health of our ecosystem. Program hosted by Loudoun Wildlife Conservancy in conjunction with Karen Schaufeld, Loudounbased author of *Vultures, A Love Story*. Released in 2022, *Vultures, A Love Story* is a fact-based children's tale about appreciating our differences and our skills and recognizing that we all deserve love. *Registration required: Sign Up Online.*

Giving Tuesday — Tuesday, November 29.

Loudoun Wildlife Conservancy is a membershipbased, volunteer-driven, nonprofit organization committed to preserving, protecting, and restoring wildlife habitat in Loudoun. This year our organization is celebrating our 27th anniversary, and we accomplished some incredible feats thanks to the hard work, dedication, and determination of our members. You can help us inspire, motivate, and engage people in Loudoun to celebrate this milestone with us by spreading the word about #GivingTuesday. Your contributions support our education, citizen science, habitat conservation, and advocacy programs. #GivingTuesday is an online global movement that engages millions of participants worldwide to give back to causes they care about. This is your opportunity to give back and help us spread the word about our work to create healthy habitats for wildlife.

Advocacy 101: The Zoning Ordinance — Wednesday, November 30, 7:00 – 8:30 pm, Virtual. Join Loudoun Wildlife Conservancy on

Virtual. Join Loudoun Wildlife Conservancy on Zoom for our third Advocacy 101 session to learn about what is currently one of Loudoun's biggest projects: the Zoning Ordinance rewrite. As the fastest-growing county in Virginia, Loudoun has changed a lot since the last Zoning Ordinance in 1993. The new Zoning Ordinance will set standards for development, and it is critical that the community speak up when these regulations are being set to minimize impact on critical wildlife habitat and to include provisions that will allow wildlife to thrive in Loudoun. Learn about the process and how you can have an impact. Registration required: Sign Up Online.

Birding at Broad Run Stream Valley Park — Saturday, December 3, 8:00 am. Join Loudoun Wildlife Conservancy in search of birds at this surprisingly rich park along Broad Run. The park combines several different habitat types, including

a rich floodplain on both sides of the stream, edge and meadow habitat, and multiple ponds. The varying habitats should provide the participants with a good variety of overwintering birds. Limit 14. *Registration required:* Sign Up Online.

Gate House at Morven Park Open House — Saturday, December 10, 11:00 am – 3:00 pm.

Stop by Loudoun Wildlife Conservancy's office for some refreshments and fellowship. We love to get to know our members and hope you'll come and spend some time with President Jim McWalters, Executive Director Michael Myers, Board members, and other key volunteers. Come socialize and get a behind-the-scenes look at our operations!

Christmas Bird Count — Wednesday, December

28. Join Loudoun Wildlife Conservancy in participating in the National Audubon Society's annual Christmas Bird Count. Our count circle has a 15-mile diameter and covers 177 square miles of Loudoun's countryside: north to Waterford, south to Aldie, east to Ashburn, and west to Purcellville. The count includes a number of Loudoun's very special places, such as Banshee Reeks Nature Preserve, Dulles Greenway Wetlands, Beaverdam Reservoir, Morven Park, Ball's Bluff, Waterford's Phillips Farm, some private estates, much of the rural western portions of the county,

and in Maryland, about five miles of the C&O Canal around White's Ferry. Everyone is welcome; amateurs are teamed with experienced birders, and every eye and ear helps! Counters share their wonder of the wild beauty of feathered creatures with like-minded people and sometimes find truly rare birds. It is always lots of fun! After the counting we may meet for a Tally Rally, where we will share stories of the day's highlights. If you are interested in participating in the count for just a couple of hours or for the entire day, please join us. *Registration required: Sign Up Online* by December 22 or *contact Joe Coleman* (jcoleman@loudounwildlife.org).

Dulles Greenway Wetlands Bird Walk — Sunday, January 8, 8:00 am. Join Loudoun Wildlife Conservancy for a bird walk at the Dulles Greenway Wetlands. Built in the early 1990s to replace wetlands lost when the Dulles Greenway was constructed, this wetlands along Goose Creek near Oatlands is a great place to observe a wide variety of birds, including small sparrows with their cryptic plumage, beautiful waterfowl, stately wading birds, and a magnificent pair of Bald Eagles who have successfully nested there for over a decade. Expect to encounter rough terrain where walking is difficult. Limit 12. Registration

required: <u>Sign Up Online</u>. Questions: Contact Joe Coleman at <u>jcoleman@loudounwildlife.org</u>.

Searching for Birds of Prey — Sunday, January 22, 1:30 pm to dusk. Join Loudoun Wildlife Conservancy on a winter raptor search. We will drive the backroads of Loudoun, with frequent stops to find and identify the many hawks, and hopefully an owl or two, who winter here. Space is limited, so please register early. Registration required: Sign Up Online. Questions: Contact Joe Coleman at jooleman@loudounwildlife.org.

Advocacy 101: Writing Your Public Official — Wednesday, January 25, 7:00 – 8:30 pm, Virtual. Join Loudoun Wildlife Conservancy on Zoom for our fourth Advocacy 101 session to learn about practicing effective written advocacy. Know what to say and how to say it when standing up for wildlife by contacting those who represent your voice in local decision making. *Registration required:* Sign Up Online.

Dates and locations are subject to change. For up-to-date information on our programs or to register, visit our website at www.loudounwildlife.org or contact info@loudounwildlife.org.

"Fall, leaves, fall; die, flowers, away;
Lengthen night and shorten day;
Every leaf speaks bliss to me
Fluttering from the autumn tree."

- Emily Brontë

Native blooms fill a meadow at Bles Park in early autumn. Photo by Allison Gallo

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to have an innate sense of direction allowing them to fly for days in a straight line over open water. Scientists generally agree that birds must have some photoreceptor that allows them to orient to the earth's magnetic field, although the mechanics of this sense are in dispute. Whether humans have that ability, even vestigially, is unclear.

Another contentious sense is the ability to perform acts like closing your eyes and touching a finger to your nose. The ability to do that does not implicate any of the other senses (except touch at the very end), so it suggests there might be another sense at work, which scientists tentatively call a sense of bodily awareness.

Sentient is an eye-opening, jaw-dropping, mind-expanding tour of our senses, and a great read. Most of all, it makes perfect sense.



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