



Washington
College

FOREMAN'S BRANCH BIRD OBSERVATORY 2023 ANNUAL REPORT



Foreman's Branch Bird Observatory strives to:

- **Monitor** the populations and behaviors of birds.
- **Educate** community members and students.
- **Mentor** the next generation of field scientists.
- **Collaborate** with other organizations to conduct research.

River and Field Campus

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Grassland Bird Research

The River and Field Campus' (RAFC) 200-acre grassland continue to be a valuable island of early successional habitat. Scrub-shrub is increasingly rare in the eastern United States, despite its importance to a variety of species. The RAFC grassland is managed in a mosaic pattern with a rotating schedule of prescribed fire. This allows some of the area to be burned each year while still leaving enough vegetation in the rest of the fields to provide cover for wildlife. Fire is a great tool to keep trees and other woody species at bay. Landowners looking to convert significant acreage on their property to meadows or other early successional habitats can look to Washington College's Natural Lands Project (www.washcoll.edu/nlp) which may have funds or expertise to help.

The Northern Bobwhite population using these grasslands remains stable, despite their range-wide decline. Dan Small, Natural Lands Project Coordinator, continues to carry out breeding season counts of calling males as well as fall covey counts. These counts reveal strong breeding success, however improved woody cover is needed to allow more birds to survive to the winter to the next breeding season.

Our long running investigation into the breeding biology of Field Sparrows continues to generate incredible data. Maren Gimpel, Associate Director for Foreman's Branch Bird Observatory, and Dr. Jennie Rinehimer, Associate Professor of Biology, led a crew of Washington College undergraduates during the ten-week field season that included Grayson Barshick '24, Eli Bisco-Werner '24, and Jo Perkins '24 (read more about them on pages 8-10). The team collected GPS points for all adult birds and made notes of their behaviors. They found nests using clues such as agitated parents, females carrying nesting material, or sometimes by getting lucky and flushing an incubating female off a nest. The

crew identified about 80 pairs of sparrows and found 79 nests this season.

This population of known-age color banded Field Sparrows provides a unique opportunity to assess how parental age may affect various aspects of breeding biology and reproductive success.

Many researchers have studied behavioral differences between first time breeders and the rest of the population, but few have compared the differences among narrower age categories, such as between first time breeders and 3 year-old birds. Since 2017 we have been collecting nest placement and construction data for each breeding pair of Field Sparrows on the study plot and will analyze how these data differ with the age of the parent birds.

In addition to field work, the crew attended weekly Toll Fellows lunches where students conducting summer research presented to each other on their projects. The team also made a poster which they presented during a session on campus during Homecoming weekend and at a meeting of The Maryland-



Delaware chapter of The Wildlife Society with over 50 attendees. This was a great professional experience for the students. As Grayson Barshick '24 observed, "My internship provided me with invaluable knowledge around how science is conducted in a real-world application as well as how to design and present a scientific poster as a group."

In 2023 the oldest birds on the study plot were banded five years ago, in 2018. Both birds were adults when they were banded, making them at least 7 years old. One male with color bands green, yellow, blue (GYBK) paired with a two-year old mate, nested very close to last year's location and fledged three chicks.

Other Washington College uses of the grasslands this year included Dr. Jill Bible, Assistant Professor of Environmental Science and Studies, and Natural Lands Project Coordinator Dan Small conducting a lab for her ENV 394 class Restoration Ecology comparing vegetation between plots burned at different times. Dr. Leslie Sherman, W. Alton Jones Professor of Chemistry & Environmental Science, and students in CHE 210 Environmental Chemistry compared soil chemistry in a cultivated field to that of the grasslands. The students in BIO 228 Ornithology with Dr. Rinehimer identified birds and the BIO 211 Plant Biology class of Dr. Katherine Hovanes, Visiting Assistant Professor of Biology, practiced identifying and collecting plants. We also provided tours to families during the fall homecoming weekend and hosted two paperchases for the College's Equestrian Club and Team.



*Opposite: The 2023 Field Sparrow crew meets to review the day's assignments.
Top: Field Sparrow chicks in their nest.
Left: Male Northern Bobwhite.
Cover: Killdeer by Jonathan Irons*

The Mill
www.themillstores.com

We would like to recognize The Mill of Kingstown, located south of Chestertown, MD, for their continued support of the banding station. Thank you for keeping our bird-feeders full!

Foreman's Branch Bird Observatory



Foreman's Branch Summary

In 2023, Foreman's Branch Bird Observatory (FBBO) completed our 26th year of migration banding. We hit a major milestone, added a new species to the station list and hosted hundreds of visitors to learn about our work.

Our spring season kicked off on March 1st and ran through May 31st with seasonal banders **Jonathan Irons**, **Connor O'Hea** and **Andrew Single** helping staff Jim Gruber, Maren Gimpel, and Chesapeake Conservation Corps member **Fana Scott**. Interns **Libby Witham '24**, **Morgan Carlson '25** and **Nick Spigler '25** rounded out the crew. We operated for 87 days and banded 4,187 birds of 99 species. Our capture rate was 10.8 birds per 100 net hours. During the spring season we caught record high numbers of Brown Creeper, Veery, and Bicknell's Thrush and had four species in record low numbers: Ruby-throated Hummingbird, Orchard Oriole, Chipping Sparrow and House Wren.

The fall banding season ran from August 1st to November 30th. Seasonal banders **Rebekkah LaBlue**, **Arcata Leavitt**, and **Axel Rutter** assisted us in running for 112 days and they banded 9,010 birds of 116 species. Our capture rate was 23.5 birds per 100 net hours. In fall, we captured record high numbers of Least Sandpiper, Acadian Flycatcher and Yellow-breasted Chat. Species caught in record low numbers included Common Grackle, Grasshopper Sparrow, Slate-colored Junco, Blue Grosbeak, Indigo Bunting, Western Palm Warbler, and Tufted Titmouse. In addition to the birds highlighted



on page 7, we celebrated a specific Golden-crowned Kinglet on October 16th - it was the 350,000 bird banded at FBBO!

To document breeding birds, **Meghan McHenry '21**, our glass tunnel technician, ran nets in summer and Maren Gimpel monitored nest boxes on the property. Combining the summer effort with the migration banding, FBBO banded 15,400 birds of 129 species in 2023.

Hosting visitors allows us not only to share our passion for birds, but also to educate people about the threats they face and ways to mitigate them. Over 500 individuals in over 80 groups came to FBBO in 2023. Collegiate visitors included Washington College lab sections, as well as groups from Dickinson College and the University of Delaware. Younger students included home schoolers, 4th graders from St. Anne's Episcopal School, and the Gunston School's Bay Studies Week.

FBBO contributed to several research projects in 2023. During the spring season we collected feathers from Grasshopper Sparrows for Frank Muzio, a graduate student at the

Above: Maren Gimpel with FBBO Fall banders Rebekkah LaBlue and Arcata Leavitt. Below: Connor O'Hea and Andrew Single processing birds.

University of Connecticut, studying feather morphology. In fall, we collected blood samples from Yellow-breasted Chats for Johanna Beam of Pennsylvania State University who is studying the sub-species taxonomy of this species. We deployed a ratio tag on a Magnolia Warbler for Powdermill Avian Research Center, and we started



a new collaboration with graduate student Shelly Eshleman on Eastern Towhees (see page 6 for more info). The collaboration with the American Bird Conservancy to test avian perception of glass remains our largest endeavor. The glass testing tunnel ran for 140 days and tested 79 glass samples.

In addition to the folks already mentioned, we received help from the following individuals: Erin Betancourt, Alanis Bowman, Joelle Carbonell-Bierbaum, Lucian Davis, Medha Pandey, Liz Peterson, Laura Porter, Hanson Robbins, Danielle Simmons '26, Nathan Simmons '18, Annabel Smith, Everett Smith, CareyJo Titus, Anikó Tótha. We are grateful to these volunteers for all their help.

Returns of Note

In 2023, we recaptured 1,987 birds of 61 species banded at FBBO in a previous season and over 20 of those individuals were at least 9 years old. Reaching that age is an impressive feat for wild birds considering all the threats they face. The oldest bird recaptured this year was **Great-Crested Flycatcher** #2411-74131, banded as a second year in May of 2011, making it 12 years, 11 months old on its last capture date of May 5, 2023. Amazingly, it was well short of the current age record for this species of 14 years, 11 months. Another exciting return was **Blue Grosbeak** #2571-64824, who once again broke her own age record when we recaptured her on May 16, 2023. She was banded as a second year in May of 2012, making her 11 years, 11 months old. She set the previous North American age record last year when she was recaptured at 10 years,

11 months old. We were delighted to recapture **Pileated Woodpecker** #924-51225 in June. We have recaptured her almost every year since she was banded as an after third year in May of 2016, making her at least 10 years old at the date of her last capture. Some other older returns of note include male **Orchard Oriole** #2581-08625 (10 years, 2 months old), female **American Goldfinch** #2680-18525 (9 years, 10 months old) and female Indigo Bunting #2591-06417 (10 years old). The station continued to recapture a large number of older **Northern Cardinals** as well, with the oldest being 12 years and 4 months old.



Golden-crowned Kinglet - the 350,000th bird banded at FBBO.

Top Ten Table – 2023 Spring and Fall Migration

Spring 2023			Fall 2023		
Species	Total	Last Year's Rank	Species	Total	Last Year's Rank
1. Red-winged Blackbird	673	3	1. White-throated Sparrow	1,677	1
2. Gray Catbird	437	1	2. Song Sparrow	1,105	2
3. White-throated Sparrow	398	2	3. Ruby-crowned Kinglet	833	3
4. Common Yellowthroat	378	4	4. Gray Catbird	487	4
5. American Goldfinch	256	5	5. Swamp Sparrow	420	7
6. Song Sparrow	158	10	6. Common Yellowthroat	398	5
7. Swamp Sparrow	156	7	7. Hermit Thrush	333	10
8. Northern Cardinal	111	9	8. Field Sparrow	203	-
9. Common Grackle	110	-	9. Ovenbird	170	-
10. Brown-headed Cowbird	108	6	10. Golden-crowned Kinglet	160	-

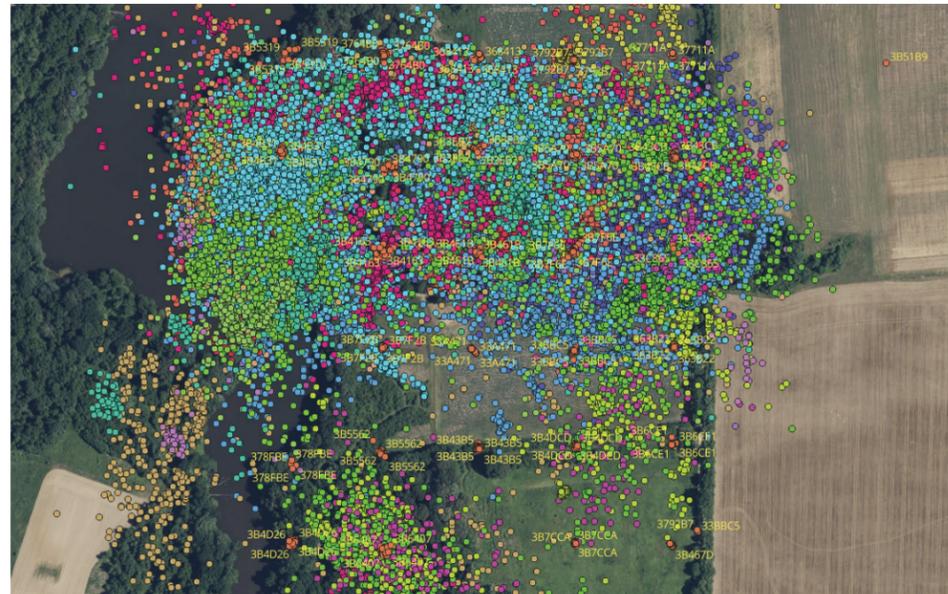
Foreman's Branch Bird Observatory



Female Eastern Towhee.

Tagging Along with Towhees

An interesting collaboration for FBBO in 2023 was with Shelly Eshleman at the University of Delaware and the Willistown Conservation Trust. Her graduate research on Eastern Towhees seeks to determine which populations (or individuals within populations) are sedentary or migratory, and whether birds have site fidelity to wintering locations. FBBO, one of eight study sites across the mid-Atlantic, deployed over 30 radio tags on towhees of both sexes, some during the breeding season and others on wintering and resident birds. Tagged towhees can be detected by the Motus network of receiver towers as they migrate. To investigate behaviors of towhees that are wintering at FBBO, a network of small receivers has been deployed within the banding area to understand winter habitat use on a finer scale. This network of “nodes” allows for the multilateration of an individual bird’s positions and has already provided us with amazing insight on our local towhee hot spots.



Above: Map showing locations of tagged towhees around the banding station. Each color is a different individual.

FBBO Recoveries

“Recoveries” are birds found away from the location where they were banded. These selected recoveries are of note due to their distance from FBBO or the circumstances in which they were encountered.

Species and Banding Date	Recovery Details
Tree Swallow June 7, 2022	Killed in nest box by House Sparrow, Centreville, MD (9.5 miles south of FBBO)
House Finch November 14, 2021	Photographed at feeder, Camden-Wyoming, DE (20 miles east of FBBO)
Northern Saw-whet Owl November 7, 2021	Caught and released by another banding station, Spring Valley, PA (89 miles northeast of FBBO)
Gray Catbird September 28, 2018	Killed by cat, Pomfret, CT (279 miles northeast of FBBO)
White-throated Sparrow October 29, 2023	Found dead, Greensboro, NC (304 miles southwest of FBBO)
Brown-headed Cowbird March 27, 2022	Found dead, Holliston, MA (505 miles northeast of FBBO)



Standout Captures

The fall season started off with a bang, as we netted our first ever **Osprey** on August 7th. Though we have banded flightless chicks from their nests for decades, we never expected to find an Osprey in a mist net. Banded as an adult bird of unknown sex, it was caught in a mist net that spans across Foreman’s Branch. As Osprey are seen frequently in this area, it presumably got caught after diving for fish.

The bridge nets continued to spoil us, yielding our second ever **Killdeer** weeks later on September 8th. The first Killdeer we banded was also caught at the bridge back in 2008. Named for their call, Killdeer are plovers that enjoy large open fields and mudflats where they can forage for

insects. They are common residents on the Eastern Shore and if you’ve ever stumbled across their nests, you know they will feign a broken wing to distract you away from their eggs.

Saving the best for last, we added a new species to the FBBO list when we netted a **Western Flycatcher** on October 8th. Several species of flycatchers look very similar, so we took multiple measurements to ensure we correctly identified this individual. As the name implies, this species is usually found west of the Rockies, though they are found in the east as vagrants from time to time. If accepted by the Maryland-D.C. Bird Records Committee, this will be the 5th individual documented in Maryland.



Top from left to right: Osprey; Killdeer; Western Flycatcher. Above: Liz Peterson

Volunteer Spotlight

Liz Peterson started volunteering with Foreman’s Branch Bird Observatory in spring of 2022, not too long after she and her husband moved to Chestertown from Frederick, MD. Liz was drawn to hawks earlier in life. She used to volunteer with the New Jersey Raptor Association and fondly recalls college trips to Hawk Mountain in Kempton, PA. As part of the FBBO team, she’s used her weekly visits to refresh her bird handling and extracting skills (mostly songbirds, since we don’t capture many hawks). She’s also shared book recommendations as well as much-appreciated baked goods, and hosted several end of season parties for our staff at her home. Why is she willing to get up in the dark and spend her mornings with us? She gave two reasons: “Holding a wild bird in one’s hand for a few minutes and observing its beauty up close is indescribable.” Another reason was getting to know our seasonal staff. “To see the bird banders’ passion for their work and how they collaborate is inspiring,” she said. Liz also volunteers with the Chestertown Environmental Committee and is a member of the Washington College Academy of Lifelong Learning Council. Perhaps one of her biggest joys is travel. She and her husband Jon have enjoyed the food, wine, birds, and cultures of dozens of places around the world including 14 countries in 2023 alone. We are most grateful to Liz and her dedication to FBBO.

Washington College Student Interns



Environmental science major **Lauren Albert '26**, joined FBBO in the fall as the Avian Glass Testing intern. During this internship, the Ellicott City, MD native assisted in running test flights to determine effectiveness of bird-friendly glass patterns of samples sent from companies all over the world. She was drawn to this internship because she has always been passionate about wildlife conservation and was excited to contribute toward a reduction in avian window collisions. A highlight of her internship was the interaction with birds, saying “getting to be one-on-one with the birds everyday was a great learning experience, and it was really awesome to handle birds instead of seeing them through binoculars.” She was thankful to learn real-world scientific method

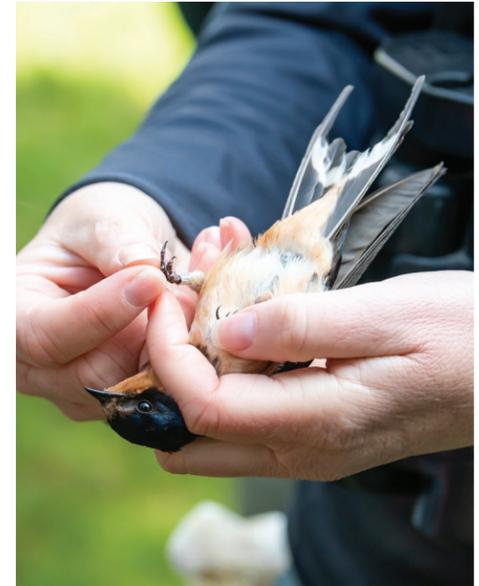
applications through this opportunity and would recommend this internship to any student interested in field science.



Avian glass testing tunnel at FBBO.



One of the spring 2023 FBBO interns was **Morgan Carlson '25**. As an environmental science major, they first visited the banding station their freshman year and felt this internship was a unique opportunity to explore their career goals. Over the course of the season, the Berlin, MD native enjoyed learning how to extract birds from mist nets, correctly identify different bird species, and help with data collection. They are grateful for the real world experience this opportunity has provided, saying they have “gotten a better understanding of how I can apply my knowledge,” and prepared them well for taking Ornithology the following semester. Morgan observed that students in this internship “will learn something new every day no matter your previous experience.”



Checking the band number of a Barn Swallow.



Grayson Barshick '24, from Catonsville, MD, joined the 2023 Summer Field Sparrow crew where he helped identify and map territories of breeding Field Sparrows and find their nests at the River and Field Campus' experimental grasslands. He was drawn to this opportunity because it “seemed like a great mix of hands-on field work and real-world science.” He enjoyed seeing how collaboration with his other crew members helped lead to a finding a nest which was “always a rewarding feeling.” The environmental science major felt this internship gave him good insight into how science is conducted out in the field.



Grayson and Jo learning to search for nests of Field Sparrows.



Northern Virginian **Jo Perkins '24**, was another member of the 2023 Summer Field Sparrow crew. The environmental science major especially enjoyed spending summer mornings out in nature and sharpening their observational skills, saying “My favorite part of the internship was getting up early and seeing the River and Field Campus in its full glory.” They felt this internship taught them the ins and outs of fieldwork and how much work goes into designing a good study. Additionally, Jo recognized many of the skills they used over the summer would be transferable to the rest of their college career and beyond, including entering and managing data, and familiarity with GIS.

Washington College Student Interns



Nick Spigler '25, a biology and environmental science double major from Bel Air, MD, was the second Foreman's Branch Bird Observatory spring intern for 2023. Already an avid birder, Nick was drawn to this internship as a way to expand on his prior banding experience. His favorite part was "having a behind-the-scenes look at the variety of songbirds present in the area." He also enjoyed applying what he learned in the field to topics in the classroom, and vice versa, feeling that this internship overlapped significantly with his courses' themes. "If you've been involved with birds before, try it out! If you haven't, this is a great place to start," says Spigler, who would highly recommend this internship as an introduction to how field work is conducted, and a great way to appreciate birds.



Examining the wing of a Solitary Sandpiper to determine its age.



Seemingly perennial intern **Libby Witham '24** joined the team for her 3rd and 4th season at FBBO as a banding intern in both the spring and fall this year. With an interest in field work, the environmental science and biology double major has gained confidence in her ability to contribute to field research upon entering the workforce, and appreciates the time spent in nature through this internship. The New Egypt, NJ native is grateful for the connections she has made from her internship, saying "I truly value all of the relationships I've built during my time at FBBO as I've come to learn of the many opportunities to explore my interests after graduation."



Eli Bisco-Werner '24, from Bordentown, NJ, was the third member of the 2023 Summer Field Sparrow Crew. During his internship, the environmental science major gained experience with spotting scopes, GPS mapping, and nest searching. He really appreciated the diversity of wildlife he was exposed to each day, saying "Even though you are searching for the same things every day (Field Sparrow nests), each day is a different, new, and exciting experience because something unexpected always happens!" Eli also liked the challenge of finding each nest, and the rewarding feeling afterwards. This internship made him confident in his decision to pursue a career involving wildlife, and helped steer him toward courses that will help him to achieve this goal.



Field Sparrow



The Center for Environment & Society is dedicated to providing excellent, challenging and inspiring experiential internship opportunities.

For more information on our student internships, or to make a gift, please visit our website:

washcoll.edu/learn-by-doing/ces/index.php or call our office 410-810-8405.

FBBO 2023 Annual Report



Bird Campus

We are excited to announce that Washington College became a Bird Campus in May 2023. Awarded by the Maryland Bird Conservation Partnership, the designation recognizes a campus' commitment to reducing threats to birds by creating, protecting and restoring bird habitat. Washington College is only the third institution of higher education in Maryland to have earned the status. The lengthy application process was the capstone project of **Fana Scott**, a Chesapeake

Conservation Corps (CCC) member for the 2022-2023 program year.

Programs that helped Washington College demonstrate its commitment to birds included FBBO's migration banding program, the Natural Lands Project's creation of acres of habitat, and the collaboration with the American Bird Conservancy to test effectiveness of bird-friendly glass designs in an effort to reduce avian window collisions. The College also earned points for its use of

native plants, using integrated pest management, hosting a campus garden, encouraging composting, recycling, and using green energy.

One requirement of the certification is hosting a campus celebration of World Migratory Bird Day each year. In 2023 the event hosted dozens of Washington College students for a bird walk at the River and Field Campus and to see a bird banding demonstration.

"People at Washington College are doing great work to protect and reduce threats to birds, and I wanted to help acknowledge and celebrate that," Scott said. "I also wanted to complete a project that would have a lasting impact on Washington College. My hope is for the continual renewal of the recognition based on my application and the resources I gathered as well."

The Bird Campus designation joins Washington College's status as a Tree Campus (bestowed in 2020 by the Arbor Day Foundation) and as a Bee Campus (earned in 2018 from Bee Campus USA).

Celebrating Washington College receiving its Bird Campus designation.



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Gifts may be earmarked for the Bird Observatory.
Please contact April Lucas at alucas3@washcoll.edu or 410-810-8405. Thank you.

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