



Audubon | FLORIDA

EagleWatch

Annual Report 2018 - 2019



Behind the Binoculars:

NOTES FROM THE EAGLEWATCH PROGRAM MANAGER

It is my privilege to partner with the army of amazing EagleWatch volunteers and share in the incredible experiences of this season. The EagleWatch Program grew again this year, monitoring and protecting more nests than ever before. As we grow, we are also innovating our processes for improved data collection and offering online volunteer trainings in order to better meet our goals.

Hurricane Michael

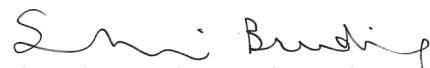
The 2018-2019 Bald Eagle nesting season started with a bang — literally. Hurricane Michael tore through the Florida Panhandle in early October, devastating habitat and destroying nests. Despite this setback, the majority of the eagles that lost original nests in the hurricane carried on, rebuilding and successfully raising young. Their resilience and determination serve as a reminder of what Dianna Flynt, Rehabilitation Supervisor for the Audubon Center for Birds of Prey, meant when she said: “Raptors don’t think about the past or worry about the future; they focus on today.”

First Nests on Artificial Structures for Duval County

Eagles have always called Duval County home, nesting and raising their young in large stick-nests within the trees. Until now.

In other urban areas, a number of eagles have shifted their breeding activities to nest on artificial structures. Eagles in Duval County had bucked this growing trend, but this year, EagleWatch documented the first Bald Eagle nests built on cell towers in Duval County. Although we prefer to see eagles nesting in trees, both of these cell tower nests were successful; one of them fledged three chicks!

Thank you,



Shawnlei Breeding, EagleWatch Program Manager
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Photo: Doreen Steinhauser

2018-2019 BREEDING SEASON BY THE NUMBERS

1.32



EAGLE FLEDGLINGS PER OCCUPIED NEST

742



NESTS MONITORED IN 45 COUNTIES

94%



(770 OF 821) NESTLINGS FLEDGED

41



EAGLES BANDED AND RELEASED AS PART OF ONGOING STUDY

Monitoring:

THE KEY TO PROTECTION

Florida hosts one of the largest populations of breeding eagles in the lower 48 states and one of the highest rates of development in the U.S. As a result, eagles in Florida face pressures from human encroachment, including loss of habitat, poisoning, environmental toxins, disturbance from development, vehicle strikes, and electrocution from power lines. The Audubon EagleWatch Program works to protect nesting eagles in Florida through nest monitoring, data collection, education, and advocacy.

EagleWatch seeks to ease these pressures by coordinating with state and federal wildlife agencies to guide development near active Bald Eagle nests, informing utility companies of electrocution incidents in order to direct installation of avian protection equipment, and working with wildlife rehabilitators statewide to rescue and release sick and injured eagles. EagleWatch volunteers act as advocates in their local communities, attending meetings about rezoning projects that would impact eagle nests, working with local developers to reduce nest disturbances, and providing key data to guide management decisions at the state and federal level. A recent example? Fish Island.

EagleWatch Data Helps Save Fish Island From Development

This season, a new application threatened Fish Island in St. Johns County with rezoning for development. The applicant initially claimed that a Bald Eagle nest on the island was inactive. Local EagleWatch and St. Johns County Audubon volunteers presented photos and data showing the nest was active. The misinformation about the eagle nest presented by the developer led to a second Zoning Board meeting. Audubon partners Matanzas Riverkeeper and Save Fish Island turned out a vocal opposition to the application, which was denied by the Zoning Board 6-0. Fortunately, the Fish Island landowner began negotiating with the North Florida Land Trust, and both parties reached an agreement to preserve Fish Island. Purchased through the statewide Florida Forever program, the land will eventually become a public park.



Photo: Scott S. Smith | Monarch Studio



Photo: Deborah Howell

EagleWatch is monitoring eagles for reduced nesting success due to proximity to harmful algal blooms.



Photo: Kimberly Rexroat

Volunteers for EagleWatch help ensure that protections are provided for eagles near construction sites.

Algal Blooms and Bald Eagles

Red tide and other algal blooms are regular occurrences along Florida's coasts, but in recent years they have intensified, making headlines around the country. Scientists believe increased nutrient pollution from human waste and fertilizer run-off from landscaping and agriculture are to blame. Toxins in the environment rise through the food chain and concentrate at the top.

Because eagles are apex predators, there is concern that these unprecedented blooms may impact the population nesting near Florida's coastline. Combining this season's EagleWatch nest data with red tide occurrence data available from the NOAA Harmful Algal Blooms Observing System, 27 nests monitored by EagleWatch were identified within two miles of high algal bloom levels.* So far, fledgling success is similar near the algal bloom locations compared to inland nests, but EagleWatch will continue to closely monitor these populations.

Northeast Florida's Fish Island will now be a park, thanks in part to the efforts of Audubon's EagleWatch.

*defined as > 1 million cells *Karenia brevis*/liter

Where do Bald Eagles Nest and Why?

ONGOING AUXILIARY BANDING STUDY WILL SHED LIGHT ON NEST CHOICE

Approximately 20% of nests monitored by EagleWatch occur on man-made structures, including cell or power line transmission towers. In some counties — like Pinellas and Hillsborough — more than half of the monitored nests are on artificial structures. Statewide, wildlife officials estimate the number of eagles nesting on artificial structures to be closer to 8%. EagleWatch seeks to understand how nest substrate may impact nesting success and predict future trends in nest site choice through analysis of monitoring data and the Auxiliary Banding study.

The goal of the Auxiliary Banding study is to determine if the type of nest structure a chick hatches in influences its future nest site choice once it has matured. Working with EagleWatch, all juvenile eagles treated and released by the Audubon Center for Birds of Prey are given a colored auxiliary leg band with a unique and easy-to-read alphanumeric code. The color of the band is tied to the type of nest in which the chick is born: green bands for chicks from nests in trees and black bands for chicks from nests on artificial structures. Because it takes juvenile eagles five years to reach sexual maturity, this is a long-term, ongoing study. Now in its third year, the study has banded and released 41 juvenile eagles.

Knowing it can take up to eight years or more for a banded bird to be resighted, the Center for Birds of Prey staff were thrilled to receive three band reports this season.



Center for Birds of Prey band resightings this season

Fledgling auxiliary band no. K20, released in Central Florida in June 2018, was seen all the way in West Virginia a few weeks later on his first migration north.

In February, a Pinellas County EagleWatch volunteer at Lake Tarpon spotted **Immature auxiliary band no. K05** which had been released two years earlier in Orlando, providing data on both the long-term survival and interstate movement of juvenile eagles.

A third, **Pre-fledgling auxiliary band no. K22**, was placed in a foster nest in Eustis in February. After fledging, he was reported in Ohio two weeks after his last sighting in Florida. Sadly, this eagle was recovered after a fatal vehicle strike, highlighting the stark reality that 50% of juvenile eagles don't survive their first year.

The juveniles banded during the inaugural year of the study should begin nesting in about two years. We are eagerly anticipating future findings from this study!

41
JUVENILE
EAGLES
BANDIED+
RELEASED



New Intern Tackles Historic Dataset

Before the advent of the EagleWatch online database in 2015, EagleWatch data was submitted in hardcopy. Lots, and lots of hardcopies. While overall season data had been analyzed for each year, new technology has made analyzing individual observations easier and more accessible. The EagleWatch Program hosted its first intern this summer. Cameron Ugan began to back-enter paper nest observations submitted prior to the advent of the new EagleWatch online data entry system in 2015. Cameron is a Central Florida native currently pursuing a biology degree at the University of Notre Dame. With a diverse background, including environmental conservation, theater, ROTC, and competitive sports, Cameron tackled this data entry project with gusto. She joined the team in May and entered more than 4,200 historic nest observations by the end of her internship in July. Her hard work will help provide the program with a larger, more robust data set for analysis of long-term nesting trends for eagles in Florida. As Cameron returns to college this fall, we want to thank her for her dedication and impressive contribution to this project.



Thank you to dedicated EagleWatch intern Cameron Ugan for her hard work this summer with EagleWatch's historic dataset! Cameron's efforts will make EagleWatch's analysis of long-term nesting trends in Florida even more powerful.

Dedication of EagleWatch

VOLUNTEERS GIVES EAGLET SECOND CHANCE AT LIFE



Photo: Lou Ulrey

Palm Beach County volunteer Lou Ulrey loves visiting the nest he monitors in a small wooded area tucked into the urban landscape between strip malls and housing communities. Lou found and reported the nest to EagleWatch last season, joining our team to help monitor the eagles.

In March, Lou didn't see any signs of the 10-week-old eaglet he'd been observing, either in the nest or adjacent trees. Noting the silent presence of the adults in the nest area, Lou soon believed the worst: the eaglet must have fallen to the ground. After days with no sign of the eaglet, he fought the dense thicket of scrub to canvass the area. After finally locating the young bird, Lou contacted a local wildlife rescue organization, Busch Wildlife Sanctuary, to rescue the chick. Lou named the eaglet Liesl.

After a lengthy rehabilitation at Busch, Liesl was ready for flight evaluation to determine if she could be released. Lou worked tirelessly with the EagleWatch Program Manager to coordinate the transfer of Liesl to the Audubon Center for Birds of Prey in May for flight testing in their 100 foot flight barn. He recruited fellow Palm Beach county EagleWatch volunteer Linda McCandless, rented a van, and transported the bird to Maitland. Because fledgling eagles stay with their parents for several weeks to gain critical hunting skills, Liesl needed to join a foster family when she was ready for release.

Thanks to the up-to-date nest data entry by volunteers, the EagleWatch Program Manager was able to identify one eagle nest that remained active in a neighborhood in Seminole County. On release day, Lou drove up from Palm Beach County and met the monitors for the foster nest, Paul and Susan Murray, and Center staff at the nest site. Liesl was banded with a green auxiliary band before release as part of the research study and will hopefully thrive and contribute to the population one day by raising her own family.



Lou and Liesl personify the importance of partnerships with other wildlife organizations and the ability of passionate EagleWatch volunteers to make a difference in the lives of the eagles we monitor and protect.

Volunteers Soar to New Heights

Volunteers are the heartbeat of the EagleWatch Program. Their passion and commitment drives the success of our conservation efforts.

This season, 420 volunteers monitored 742 nests in 45 counties, donating 5,900 volunteer hours and submitting 11,700 nest observations to our online database!

Many volunteers are Audubon Chapter members, helping to broaden the Audubon Network. All are eagle advocates and caring community scientists, helping to increase the level of protection for eagles in our state.

Volunteers played a key role in protecting nests by reporting 95 new nest locations in the 2018-2019 season.



Knowing where nests are is the first step in protecting them.

Volunteers also reported 98 potential nest disturbances, working with state wildlife law enforcement and other entities to guard active nests from unpermitted activity. To celebrate their hard work and accomplishments, five end-of-season volunteer celebrations were held across the state in June. Thank you, volunteers, for all you do to protect Bald Eagles! Because of you, the EagleWatch Program was able to monitor and protect more nests than ever before.

FLORIDA'S EAGLES NEED YOU

Effective conservation takes active collaboration between volunteers, nonprofit organizations, government entities, corporations, and concerned citizens. Will you join our efforts? There are several ways to get involved:

VOLUNTEER

Join others in your community to monitor nests in your area. For more information, email Program Manager Shawnlei Breeding at eaglewatch@audubon.org.

DONATE

Join Friend of Eagles, a membership program with benefits, in support of EagleWatch. Funding directly supports the improvement and expansion of Audubon's EagleWatch Program to help secure the future of this iconic species. Learn more at FL.Audubon.org/EagleFriend.

ADVOCATE

Be an ambassador for Bald Eagles by sharing this program with others in your circle of influence and encouraging them to take action to protect nesting eagles in our state. To learn more, visit cbop.audubon.org/conservation.

Special Thanks to Eagle Watch Donors

Batchelor Foundation | American Eagle Foundation | Stanley and Mildred Zamo Charitable Trust | Central Florida Foundation | Florida Power & Light Co.

Thank you to our Friends of Eagles 2018-2019 Rising Eagle and Flying Eagle supporters

Ann Harwood-Nuss | Ann Megler | Clare Berry | David Foster | Mary A. Gans | Michael and Christine Attardo

EagleWatch exists because of the generous support of many private individuals, foundations and corporate sponsors. Thank you to all of the donors who make our work possible. These partnerships are vital in the fight to ensure an enduring population of Bald Eagles in Florida.