

**Endangered and Nongame Species Program**  
**Monthly Report for 16 November – 15 December 2023**

**Staff:**

Kathy Clark, Supervising Zoologist (Chief)  
Christina “Kashi” Davis, Principal Zoologist  
Gretchen Fowles, GIS Specialist  
MacKenzie Hall, Environmental Specialist II  
Emily Heiser, Assistant Biologist  
Alex Kisurin, Biologist Trainee/Aquatics  
Kim Korth, Biologist Trainee/Planner  
Sharon Petzinger, Senior Zoologist  
Bill Pitts, Senior Zoologist  
Kris Schantz, Principal Zoologist  
Robert Somes, Senior Zoologist  
Brian Zarate, Principal Zoologist  
Robert Criollo, Biotics temp services  
Daniel Turcios, Biotics temp services

**Administration** – K. Clark

A press release, Governor’s Proclamation, and NJFW video were all released on December 14 to highlight the NJ Endangered & Nongame Species Conservation Act 50<sup>th</sup> anniversary. Kudos to staff and I&E staff M. Hencheck and J. Carlucci for producing a fantastic ENSP video.

K. Clark worked on agency planning and policy issues, and regional actions as part of the Northeast Wildlife Diversity Managers technical committee.

**Landscape Project** –

Staff are meeting monthly with Office of Information Services on the tasks of revising the Landscape Project mapping.

**Technical Guidance & Policy/Planning** – all staff

Staff edited and released a new 2024 Scientific Collecting permit application.

Staff reviewed and commented on DEP land use permit applications, energy project reviews, and internal NHR land projects.

Staff contributed to reviews of DEP draft rules and rule amendments.

Staff continued to work with the Office of Environmental Review on outreach to other DEP Divisions conducting permit and plan reviews (e.g., Site Remediation, Solid Hazardous Waste) to discuss the apparent exclusion of E/T species concerns.

**Biotics Database** – G. Fowles

Biotics staff worked on catching up on entering backlogged data from the past several years into the Biotics database.

**Connecting Habitat Across New Jersey (CHANJ)** – G. Fowles, B. Zarate, M. Hall

CHANJ Team members M. Hall, G. Fowles, and B. Zarate, along with C. Albizati and S. Olivera from Watershed Protection and Restoration provided a training to DOT on the CHANJ Tools and Flood Hazard Rules on Dec. 5. This was the third such training for DOT staff this year, this time targeting project managers. The audience included 41 people.

G. Fowles led the bi-monthly Roads & Wildlife Working Group meeting (Dec 7), which was attended by 20 members from NJDEP, NJDOT, and USFWS. Main topics included reviewing DOT's and DEP's environmental review processes for road projects and how each incorporates wildlife considerations. We also talked about how NJ had just received notification that we did not receive a Wildlife Crossings Pilot Project grant through the Federal Infrastructure Law for the terrapin road mitigation project that DOT had submitted in collaboration with ENSP. We talked about next steps, including getting feedback on the project application from FHWA and looking into other sources of funding, including formula fund dollars available through the Infrastructure Law for project focused on wildlife habitat connectivity and reducing wildlife vehicle collisions.

The CHANJ Team worked on updating the CHANJ tutorial video to reflect Fish and Wildlife's new website with the help of M. Hencheck.

G. Fowles attended a NJ Conservation Blueprint Steering Committee meeting hosted by The Nature Conservancy, Rowan University and New Jersey Conservation Foundation focused on re-energizing and reimagining land protection in NJ and previewing a new version of the Blueprint. Blueprint mapping incorporates the CHANJ layers.

G. Fowles participated in a 2-part webinar hosted by DEP and Rutgers University on Wetlands Function mapping that is being developed. CHANJ layers are being incorporated into the scoring schema.

**Habitat Conservation Management on Public Lands** – All staff

No new report.

**Species Status Review** – K. Clark

D. Jenkins and M. Monteschio continued working on a rule amendment to revise the lists of endangered and nongame wildlife.

**State Wildlife Action Plan** – K. Korth

K. Korth participated in the monthly "Paperless SWAP" call coordinated and spearheaded by AFWA. Most states plan on submitting a paperless 2025 SWAP revision to the USFWS and state SWAP Coordinators are working on establishing the framework and requirements to do so.

K. Korth worked with the Northeast Fish and Wildlife Diversity Technical Committee to update the NE Threat Lexicon, making it more usable and understandable. This revised Threat Lexicon will be the one used by all the northeast states.

Technical stakeholders (123 total) completed the Statewide Level 2 Threat prioritization. K. Korth compiled results and will present them to the Technical Advisory Group. A second survey round is expected.

K. Korth is working with D. Rizzio and SSI (contractor) to finalize the SGCN list for public comment. K. Korth continues to work on revising Level 4 threats.

## **HERPTILES**

### **Snake Fungal Disease** – K. Schantz

No new report.

### **Snakes** – K. Schantz

Staff continued to collect venomous snake response team time/mileage sheets and observations (a task proven difficult each year), coordinate with the Div. of Parks, Forests, and Historic Sites on conservation efforts to replace human-debris used rattlesnake gestation and birthing areas with natural materials, develop a copperhead NOFO, and work on data backlog.

### **SGCN Turtles** – B. Zarate and B. Pitts

B. Zarate continued to participate in monthly call on regional coordination for the bog and wood turtle. B. Zarate and B. Pitts also were part of the planning for the Piedmont Recovery Unit bog turtle meeting that was held on December 12, hosted by PA Fish and Boat Commission. The meeting was attended by state and federal biologists, along with members of the private sector consulting community, NGOs, and academics who work on bog turtle conservation within this federal recovery unit. The goal of the meeting was to provide state and federal updates from states, FWS, and NRCS partners and to capture ideas on next steps in bog turtle recovery planning.

B. Zarate continued coordination on outcomes for turtles seized as a result of law enforcement activities. Planning is being done to identify healthy turtles that may be eligible for release into the wild in summer of 2024.

### **Eastern Tiger Salamander** – B. Pitts

This year's first egg masses were found in Cape May County on December 3, which is at least two weeks earlier than last year, and about a month ahead of the bulk of breeding this past winter. B. Pitts and a volunteer surveyed one other breeding population on December 7 but did not find any egg masses, but they did find 4 egg masses at the Cumberland County site where eggs have been translocated the past three winters. Staff from Herpetological Associates followed up with surveys two days later, and while they did not find any additional egg masses, they did find 5 breeding adults in the pool complex.

Matt McCann from the Delaware Riverkeeper was awarded a grant to do additional egg translocation at another pool complex on the Cumberland County property. Eggs for this project will only come from a Cape May County site with a high likelihood of future saltwater inundation.

### **Diamondback Terrapins** - B. Zarate

The final set of external partner data was shared with Division of Science and Research (DSR) staff as part of a collaborative effort to analyze terrapin encounters across several study areas. DSR expects to provide preliminary results in the first quarter of 2024 and next steps will be determined at that time.

## **MAMMALS**

### **Bobcat Project** – G. Fowles

Three bobcats were struck by vehicles, 2 killed, and just one carcass successfully recovered during the reporting period. There were also eight bobcats reported trapped during the reporting period.

### **Bat Conservation** – M. Hall

As winter hibernation season began, M. Hall and J. Martinez (seasonal) deployed climate loggers in two tunnels known to be used by bats, to record temperature and humidity throughout the winter for the first time at these sites.

M. Hall and K. Clark collaborated with staff of the State Parks, Forests and Historic Sites (NJ Forest Service and Forest Fire Service) on an application for USFWS funding to create a NJ Bat Habitat Conservation Plan, which will prioritize bat management zones and outline mitigation and monitoring efforts while giving state and enrolled forest managers some relief from federal restrictions related to listed bat species.

### **Allegheny Woodrat** – G. Fowles

G. Fowles led a regional woodrat working group meeting on Dec. 1 with representatives from several states and zoos across the region. The focus of the call was discussion of a captive breeding protocol for a pilot program at the Toledo Zoo and the Maryland Zoo in Baltimore.

### **BIRDS**

#### **Colonial Waterbirds** – C. Davis

C. Davis continued processing data from the 2023 aerial survey counts, sending in all spatial data to the Biotics staff for inclusion in state databases and the Landscape Project.

#### **Beach-Nesting Birds** - C. Davis & E. Heiser

The annual beach-nesting bird meeting was held in December for all partners and stakeholders to discuss the 2023 nesting season. The meeting covered habitat restoration, human disturbance, metrics from the nesting season and challenges to overcome in 2024. Davis and Heiser completed processing the 2023 survey data and sent in all spatial data to the Biotics staff for inclusion in state databases and the Landscape Project.

A report on Horseshoe Island will be made publicly available in the second week of January.

#### **Bald Eagle Monitoring** - K. Clark

The first eagle nest was reported incubating on December 15, the earliest date ever recorded in NJ.

Staff worked together to review the 2023 nesting data for updates to Biotics and created maps for the 2023 annual report.

Staff documented and took possession of several deceased eagles found across the state or died while in rehab care. Dr. E. Miller has been conducting the necropsies to document causes of death.

During 2023, 55 eagles were recovered and of those, seven were treated and released. The remaining birds were found dead, died while in care, or were euthanized for these reasons: electrocution (13); impacts with vehicles (8), impact trauma (7) impact with train (1); eagle-eagle combat (3); lead toxicosis (2); nest fell (1), imprinted (1), and unknown circumstances (12). Electrocution is a significant risk for bald eagles everywhere, because power distribution relies on smaller poles where “hot” wires are often positioned less than six feet apart and where an eagle’s wingspan can result in wire connections. ENSP works with power suppliers (Atlantic Electric, PSE&G, and JCP&L) to retrofit poles and mark lines where they are high risk. Vehicle impacts can occur at any time, but

eagles may feed on road carrion during the lean winter months, making them vulnerable. Among the eagles that died from undetermined cause (often due to deteriorated condition), disease (like West Nile Virus) and lead exposure could have been involved.

**Peregrine Falcon Monitoring** – K. Clark

K. Clark prepared data for the annual report.

**American Kestrel** – B. Pitts

Partners from Hunterdon County Parks and Union Twp have plans for a scout project to repair and install up to a dozen kestrel boxes. An additional 10 boxes are also in the works with Readington Twp. These municipalities are adjacent to some of the most productive kestrel routes administered by ENSP, and their addition fills in important gaps in our nest box coverage.

B. Pitts met with staff from NJ Natural Lands Trust to discuss placement of nest boxes on Petty's Island. Birds are regularly encountered there, and there is plenty of suitable habitat on the island. A deceased kestrel was reported to ENSP at the base of the Ben Franklin Bridge a few years ago, so an unknown population could be present in the area. Discussion of having the Camden Youth Corps monitor the boxes would also help establish a relationship between the community and NJFW.

**Osprey Monitoring** – K. Clark

The annual report will be completed in January.

**Other Raptors** – K. Clark

No new report.

**Migratory Shorebirds** – B. Pitts

Staff have scheduled a planning meeting for the 2024 field season to be held on December 20.

**Secretive Marsh Birds** – C. Davis and E. Heiser

No updates

**Scrub-shrub/Open Field birds (GWWA)** – S. Petzinger

The 2023 survey data are being summarized. Preliminary analyses show a decline in the number of golden-winged warblers breeding in NJ in 2023 compared to 2022.

**Regional & National Bird Coordination** – S. Petzinger

S. Petzinger virtually met with members of the Atlantic Flyway to develop nightjar surveys in NJ.

S. Petzinger virtually participated in the Appalachian Mountains Joint Venture meeting to discuss the finalized state-specific population and habitat objectives for golden-winged and cerulean warblers, how to track progress on the habitat objectives, and comparing eBird and BBS data for broad-scale bird monitoring.

S. Petzinger virtually participated in the Golden-winged Warbler Working Group meeting to discuss ways to track and publicize projects creating and enhancing forest habitat for golden-winged warblers.

**INVERTEBRATES & AQUATICS**

**Butterflies, Dragonflies and other Insect Species** – R. Somes

R. Somes and met with Xerces Society Staff to discuss SGCN Firefly surveys for the 2024 field season.

R. Somes met with NJ State Museum Staff to discuss the upcoming Wildlife Conservation Exhibit at the State Museum.

R. Somes and seasonal staff met to discuss upcoming habitat management projects for the Northern Metalmark.

Pollinators – R. Somes

No new report

Freshwater Mussels – R. Somes, A. Kisurin

R. Somes met with USFWS staff to discuss survey needs and opportunities related to post dam-removal freshwater mussel population monitoring.

eDNA Technology – A. Kisurin

A. Kisurin and B. Zarate met with Montclair researchers in preparation for future bog turtle eDNA surveys.

A. Kisurin met with USGS researcher Katy Klymus to discuss using metabarcoding methods to survey for SGCN mussels.

A. Kisurin provided technical support to fisheries staff by assisting with fin clipping Pearl Dace in preparation for genetic sequencing.

A. Kisurin continues to attend monthly meetings of GEDWG, a government working group that is dedicated to enhancing and using eDNA to guide their work with wildlife conservation.