

Endangered and Nongame Species Program
Monthly Report for 16 September – 15 October 2023

Staff:

Kathy Clark, Supervising Zoologist (Acting 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

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

B. Zarate and K. Korth attended the NEFWDTTC annual meeting in Providence, RI, to represent NJ nongame program and the NJ SWAP development.

Staff worked with Bureau of Information and Education staff on field opportunities for videos and photos for outreach to highlight the NJ Endangered & Nongame Species Conservation Act 50th anniversary. NJFW is featuring stories and species in social media posts and videos this year.

Landscape Project –

ENSP staff met with OFWIS staff to discuss the 2024 LP revision and the timeline of steps to meet the revision date.

G. Fowles and Biotics staff developed a new SOA file that will be used in the 2024 Landscape Project revision.

Technical Guidance & Policy/Planning – all staff

Staff continued to review applications for Scientific Collecting permits, and issue permits and amendments for 2023.

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 assisted with two webinars for internal and external stakeholders regarding the Shore Protection Rule that would increase protection of intertidal shoreline habitats for endangered species.

Staff worked 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 finalized and uploaded for OFWIS, the version (14) of the Species Occurrence Area files to be used for the development of the next version of the Landscape Project mapping in early October. The dataset includes over 35,000 records across 203 species.

M. Hall released a social media post soliciting bat observation records from the public via the [NJ Wildlife Tracker application](#) and we received close to 20 records in a 2-week time period.

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

Staff in the Bureau of Freshwater Fisheries and DOT were trained in the Aquatic and Terrestrial modules of the North Atlantic Aquatic Connectivity Collaborative (NAACC) and will be contributing to those bridge/culvert assessments ([displayed in the CHANJ Web Viewer](#)) across the state.

DOT updated their soil erosion control standards and incorporated recommendations made by K. Schantz regarding the reduction of plastic materials, particularly netting.

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.

K. Clark gave a presentation summarizing the draft rule amendments to the list of endangered wildlife and the list of nongame wildlife, to the October 10 joint meeting of the Fish and Game Council and the Endangered and Nongame Species Advisory Committee. The meeting agenda that included the presentation was publicly posted and distributed to stakeholders prior to the meeting.

State Wildlife Action Plan – K. Korth

Work continues internally on refining threats. K. Korth finalized the survey Threat Prioritization process that Technical Advisory Group (TAG) will test. Next TAG meeting was set for November 8.

E. Crisfield (consultant) completed the crosswalk of our 2018 habitat classifications with the NE Regional database classifications. Staff finalized habitat modifiers and are working to complete habitat definitions. K. Korth continues to work with the regional biologists to standardize definitions and language in the NE Regional SWAP database. K. Korth attended the NEFWDTC annual meeting in Providence, RI, including the SWAP development meetings.

HERPTILES

Snake Fungal Disease – K. Schantz

No new report.

Snakes – K. Schantz

No new report.

SGCN Turtles – B. Zarate and B. Pitts

B. Zarate continued to participate in monthly or quarterly RSGCN turtle coordination meetings, specifically for bog and wood turtle, which are also both currently funded under active Comp SWGs. B. Zarate presented on 20 years of RSGCN turtle work by the region at the NEFWDTTC annual meeting, to update that Committee on the available products and to explore next steps for potential formalization of the NE turtle partners group.

Work continued on managing various batches of native turtles seized by law enforcement. Steps to determine final conservation outcomes (e.g., wild repatriation, permanent captive housing) for these seized turtles includes taking of health and genetic samples and using results to inform outcomes.

Planning continued for start of fall wood turtle field work and bog turtle habitat management.

Eastern Tiger Salamander – B. Pitts

Regional working group virtual meetings resumed in October, and discussion centered around a translocation proposal in Virginia and the potential interest from the NE states for submitting a proposal for an eDNA study.

B. Pitts visited the translocation pools in Cumberland County to assess the hydrological conditions. All pool complexes had water, with the lowest having around 20-30 cm of depth. Planning has started for ENSP and Herpetological Associates to survey the translocation pools this winter for evidence of breeding prior to any additional translocation.

Diamondback Terrapins - B. Zarate

B. Zarate made a request to the Division of Science and Research for assistance in analyzing external partner data collected by permitted entities, primarily consisting of road encounter observations and nest management records. The request was approved and Dr. Lori Lester and Joe Bilinski from DSR will serve as the staff to assist with this work. Next steps will be to gather a subset of partner data for DSR to review. Goals of the overall project include local population estimates and trends and any beneficial standardization of partner data collection for efficiency in any future analyses.

B. Zarate developed the agenda for the in-person terrapin partner meeting he is leading in the next reporting period, October 27.

MAMMALS

Bobcat Project – G. Fowles

Four bobcats were struck and killed by vehicles during the reporting period. All 4 carcasses were recovered and samples taken.

G. Fowles continues to collaborate with researcher at Rutgers University evaluating bobcat ticks and pathogens and recently supplied them with about 20 additional samples that ENSP for analysis.

G. Fowles has been working with Dr. Lori Lester in the Division of Science and Research on updating a bobcat population analysis using scat data collected in 2022 using the detection dog, Fly.

G. Fowles met with a professor and new Master's degree student at the University of Delaware to discuss a collaborative research project analyzing bobcat habitat connectivity in NJ.

Bat Conservation – M. Hall

M. Hall and A. Protus (USFWS transportation liaison) held a second fall Bats in Bridges class to train consultants and NJDOT personnel on inspecting bridge structures for bat occupancy.

M. Hall met virtually with DEP land use regulation staff and USFWS colleagues to give updates on bat research & monitoring projects, population trends and upcoming species status changes. The group discussed the northern long-eared bat Exceptional Resource Value Wetland protocol we completed earlier this year, which is now approved and can be implemented.

M. Hall and L. Wells (Conserve Wildlife Foundation) began processing acoustic data from the summer's mobile and stationary NABat surveys. M. Hall processed results from other acoustic surveys, including from transportation structures and a collaborative effort in Monmouth County.

Allegheny Woodrat – G. Fowles

ENSP seasonal techs conducted a hard mast survey in the Palisades as part of a yearly effort started 2 years ago to better understand the trends in mast availability to the local woodrat population.

ENSP and the PA Game Commission contributed plant samples to Towson University researchers who are conducting a chloroplast DNA study of woodrat scat to better understand the seasonal diets of woodrats. The plant samples were from plants that were not available in a national genetics database.

In early October, G. Fowles, ENSP mammal techs, and volunteers conducted the annual woodrat trapping effort in the Palisades. In total, there were 49 woodrat captures over 84 trap nights with 31 unique individuals. The resultant trap index numbers have not been that high since the early 2000s!

BIRDS

Colonial Waterbirds – C. Davis

C. Davis attended the Waterbird Society Annual Meeting October 9-13 in Fort Lauderdale, FL. She presented results of the banding project that ENSP and The Wetlands Institute have partnered on during 2016-2023.

Results from the wading bird aerial survey are being compiled and initial results suggest another decline in the numbers of adults of many heron and egret species. More details will be available in next month's report.

C. Davis retrieved remaining bird deterrent materials (for use on cormorants) on Gull Island. She also attended a field trip hosted by the USACE and The Wetlands Institute to the intracoastal waterway near Gull and Sturgeon Islands to observe "sidecasting," a new technique being used for beneficial reuse of dredged materials.

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

The 2023 reports are being compiled and will be ready for distribution at the end of October. Data from the reports will be presented at various meetings in the next two months. A separate report on nesting and human disturbance at Horseshoe Island will be prepared and released in January 2024.

Migratory and staging black skimmers remain in Cape May and are regularly being observed for band resighting by seasonal NJFW staff.

Bald Eagle Monitoring - K. Clark

This year's nesting data are being compiled for the 2023 report, expected to be completed in December.

Two bald eagles were recovered, injured, in PA in September. One had been banded as B/88 in 2005 at Fort Dix, and was recovered in Bensalem, PA, after a likely vehicle collision; it was treated and released in PA. A second eagle was banded C/41 in 2007 at Round Valley Reservoir and treated by a PA rehabilitator after it (and two other eagles) got mired in mud at a landfill. All three were successfully treated and released. These were the first encounters of these eagles banded 16 and 18 years ago, and it's likely they are nesting in those areas of PA.

Peregrine Falcon Monitoring – K. Clark

This year's nesting data are being compiled for the 2023 report, expected to be completed in December.

A very late nest in Hackensack fledged two young birds in August, one of which experienced a minor leg injury and was rehabilitated at The Raptor Trust. The bird took time to develop flight skills but was released back to her parents (near the nest site) on 12 October.

American Kestrel – B. Pitts

B. Pitts met with volunteer Ron Porter and Smithsonian biologist Joe Kolowski to discuss satellite tag technology that was utilized in VA. While fairly expensive, these tags (with remote download base station) performed incredibly well and provided valuable location information during both the breeding and nonbreeding seasons, and because they are solar charged, some tags have remained active for multiple years.

Volunteers continue to analyze videos that were captured during the 2022 and 2021 nest box seasons. Once all videos are analyzed and catalogued, B. Pitts plans to reach out to other researchers to find a grad student to write up our findings.

Osprey Monitoring – K. Clark

No new report.

Other Raptors – K. Clark

No new report.

Migratory Shorebirds – B. Pitts

B. Pitts and K. Clark participated in the Atlantic State Marine Fisheries Council (ASMFC) joint meeting of the Adaptive Resource Management (ARM) Subcommittee and the Delaware Bay Ecosystem Technical Committee (DBETC) to discuss the results of the 2023 trawl surveys and the

Delaware Bay shorebird season. VA Tech did not conduct Delaware Bay trawls in 2022, but throughout the rest of their study area they observed an overall decrease in immature males, an increase in newly mature females and a weak overall positive trend in females since 2016. The 2022 NJ horseshoe crab ocean trawls had the highest number of crabs caught since 1999. The 2022 DE trawls showed no real trend, with decreased adults, and the lowest count of juveniles in the past two years. The recommendation of the committees was to increase overall Atlantic Coast female harvest from 150,000 females to 175,000 females, and to increase males from 475,000 males to 500,000 males.

B. Pitts met with Lisa Ferguson from The Wetlands Institute to discuss the 2024 Return the Favor season. A key collaborator on the project will not be returning next year, so the plan is to conduct rescue walks only during May 7 – June 7 to correspond with the beach closure dates for the peak of shorebird migration. ENSP will update publicly available beach closure maps to reflect changes that have occurred over the past years.

Secretive Marsh Birds – C. Davis and E. Heiser

C. Davis attended the Black Rail North American Meeting on October 14 in Fort Lauderdale and heard updates on a variety of new restoration techniques for Black Rail habitat restoration. More staff and resources are needed in NJ if similar projects are to take place here, but it does seem as though there is funding available for these efforts. C. Davis retrieved the remaining ARUs that were in the marsh and will work over the winter on analyzing the sound files collected to see if any Black Rails were detected.

Scrub-shrub/Open Field birds (GWWA) – S. Petzinger
Nothing to report.

Regional & National Bird Coordination – S. Petzinger
No new report.

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes and seasonal staff conducted surveys for Leonard's Skipper at one known site and documented over 14 individuals with several of them being found in new locations within the overall area. Over 20 Monarchs were observed at this location as well and shows the multispecies value of this site. This site also has populations of several listed, spring flying skipper species.

R. Somes met with Cape May County Park and USFWS staff to plan a Frosted Elfin/Monarch/Pollinator habitat management and conservation project on county and adjacent public property. USFWS is providing funds that assist with habitat management and plantings. Several potential sites were assessed, and plans were made to begin habitat work during this fall and winter with a larger planting effort planned for next spring. This lower Cape May area is important to a variety of listed butterfly species, is a large concentration point for migrating Monarchs, and supports some of our last remaining Frosted Elfin populations.

R. Somes met with Woodbridge Township staff to plan pollinator/Monarch/Checkered White conservation projects on municipal property and several areas of State Blue Acres property within the township.

R. Somes met with seasonal staff to plan upcoming habitat management projects for Northern Metalmark this fall and winter. Several invasive plant species control efforts have been successful at improving the habitat and we are looking to expand on the work done last season.

Pollinators – R. Somes

R. Somes and the State Tree Nursery finished distribution of pollinator plant kits to several projects in northern New Jersey.

R. Somes gave a Pollinator Conservation talk to the Hunterdon County Native Plant Society monthly meeting. There is a lot of interest within this organization to assist the State with pollinator and rare butterfly conservation efforts and we discussed partnering on habitat management projects in the future.

R. Somes met with Palmyra Cove Nature Center staff to look at potential pollinator habitat management projects on the property. This site provides a unique oasis for migrating wildlife along the Delaware River.

Freshwater Mussels – R. Somes, A. Kisurin

R. Somes provided a Freshwater Mussel Conservation Workshop to the New Jersey Watershed Ambassadors. The Watershed Ambassadors work statewide and may assist with aquatic conservation and research projects. The workshop covered life history and ecological needs, plus hands-on identification and field survey techniques.

R. Somes met with Palmyra Cove Nature Center staff to survey some of the freshwater mussels habitat along the Delaware River near their facility. A variety of mussels species were documented including 4 listed threatened and endangered species.

R. Somes and A. Kisurin participated in the Yellow Lampmussel Conservation working group meeting.

Contracted surveys for Brook Floater and Dwarf Wedgemussel were conducted in several Northern NJ streams and rivers.

Crayfish – A. Kisurin

A. Kisurin conducted an experimental crayfish trap survey at a small spring fed brook in Middlesex County, to assess the crayfish species inhabiting the area. Preliminary survey results revealed the presence of two distinct crayfish species within Ireland Brook: the native White River Crawfish (*Procambarus acutus*) and the invasive Red Swamp Crayfish (*Procambarus clarkii*). Further surveys

eDNA Technology – A. Kisurin

A. Kisurin continues to assist Fisheries by advising on projects related to fish monitoring and health via eDNA.

A. Kisurin continues to attend monthly GEDWG (government eDNA working group) meetings, a group that is looking to help standardize eDNA methods and practices across the U.S.