

**Endangered and Nongame Species Program
Monthly Report for 16 September– 15 October 2024**

Staff:

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

Administration – K. Clark

K. Clark worked on planning and policy issues and regional actions as part of the Northeast Wildlife Diversity Managers technical committee. K. Clark will attend this committee’s annual meeting on Sept 17-19 in DE.

Landscape Project –

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

Technical Guidance & Policy/Planning – all staff

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

Staff continued to work with the Office of Environmental Review to address issues with DEP units conducting permit and plan reviews. Staff assisted in making suggestions for site remediation rules that would improve compliance with ENSCA.

Biotics Database – G. Fowles

Biotics staff continued to work on processing data from NJ Wildlife Tracker into Biotics and rebuilding the models used to develop the SF/SOA dataset to streamline it for the next update. Biotics staff worked on building species specific range maps for the State Wildlife Action Plan update.

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

The CHANJ team, with the help of I&E and other NJDEP communications outlets, concluded the ‘Summer of CHANJ’ campaign with social media posts and content in an Office of Local Government Assistance newsletter focusing on the importance of habitat connectivity for different wildlife species (Monarch butterfly was a featured species this month) and a summary of actions

that can help preserve and restore connectivity. Finally, a post was shared about the CHANJ team's Northeastern Transportation and Wildlife Conference Regional Project of the Year Award...a great way to cap off the Summer of CHANJ!

G. Fowles and B. Zarate presented about CHANJ at a joint meeting of Monmouth County Division of Planning's Environmental and Transportation Councils. The presentation gave an overview of the CHANJ project, emphasized the concern about safeguarding functional connectivity in central NJ – particularly the need to preserve Corridors – and discussed ideas for piloting a partnership with County government.

G. Fowles coordinated and led the bi-monthly Roads and Wildlife Working Group meeting, attended by staff of ENSP, DEP's Land Resource / Watershed Protection staff, NJDOT, and USFWS. Topics included sharing take-homes from the September NETWC conference, an update on the ENSP-NJDOT-University of Delaware collaboration using cameras to monitor potential wildlife use of culverts under major NJ highways, developing a "cheat sheet" for designing and building effective wildlife underpass shelves, and photo review of a newly constructed Flood Hazard wildlife road-crossing project in Monmouth County.

Habitat Conservation Management on Public Lands – All staff

No new report.

Species Status Review – K. Clark

Staff helped review the adoption document that will adopt the species status changes to the lists of endangered and nongame wildlife sometime in December.

State Wildlife Action Plan – K. Korth

K. Korth had several meetings with database contractor. Biologists from ENSP, bureaus of Freshwater Fish, Marine, Wildlife Management, and botanists with the Natural Heritage Program completed their SGCN/habitat and region association assignment.

K. Korth met with Marine Fisheries staff at Nacote Creek to outline the overall process of the SWAP revision and specifically explain how to draft priority actions to address regional priority threats. K. Korth also met with USFWS staff to review draft priority actions and suggest improvements.

Partners submitted over 150 draft priority actions to address priority threats in all regions. ENSP staff and staff from FW Fisheries and Natural Heritage Program submitted their draft priority actions, while Marine Fisheries biologists are working on drafting their actions. K. Korth reviewed and edited all actions submitted thus far. ENSP began reviewing the edited priority actions by region for additional edits.

K. Korth worked with R. Criollo, D. Turcios, and G. Fowles to draft state range maps for SGCN. These maps will be displayed on the SGCN species profile pages in the SWAP website. R. Criollo and D. Turcios created a excel spreadsheet that includes occurrence data by county for biologists to review and edit. The range maps will include known breeding/non-breeding locations as well as depict counties our biologists expect the species to use but that no location data exists. The goal of highlighting these areas is to encourage people to submit sightings to fill in data gaps.

K. Clark, K. Springer, and G. Kopkash continue working with DOIT to approve our purchase order to pay our contractor to complete data management needs and begin consulting with ENSP, I&E, and OIT staff to begin designing the fully integrated and dynamic SWAP.

K. Korth presented ENSP's work plan to meet the SWAP submission deadline to ENSAC and F&W leadership. She continues drafting content for the digital-enabled SWAP, including working with seasonals on Species Profiles; and participated in the NE Regional SWAP Coordinator's monthly meeting.

HERPTILES

Snake Fungal Disease – K. Schantz

No new report.

Snakes – K. Schantz

ENSP personnel, with assistance from two northeast state herpetologists, are reviewing applications for the Eastern Copperhead Survey Techniques Grant.

SGCN Turtles – B. Zarate and B. Pitts

B. Zarate participated in a regional box turtle call where partners provided updates on projects from throughout the northeast. There was some discussion about pursuing a regional box turtle project, such as a C-SWG, but there was no current momentum for this and/or competing interests for this next, upcoming round of CSWG. NJ is considering applying for a single state C-SWG to continue and expand work on box turtles in the Pinelands region, in coordination with the Pinelands Commission.

Much time was spent this reporting period coordinating with the Bureau of Freshwater Fisheries on modifications to the Fish Code with relation to snapping turtles, a species managed under Fisheries with both recreational and commercial seasons. Along with internal meetings, B. Zarate met with the Fish and Game Council fish subcommittee and then presented Fish Code modification recommendations to the Fish and Game Council and ENSAC at the October 8 Joint Council meeting. The revised Fish Code, voted on by the Fish and Game Council, will include changes to the harvest season (will become July 15 – October 31) and minimum shell size for harvest (12-inches to 13-inches), applicable to both commercial and recreational take. Commercial harvest will also have updated eligibility requirements for applicants and new daily and annual bag limits of 10 and 250, respectively. These changes will be in effect in calendar year 2026.

The box turtle “re-wilding”/release/repatriation project continued into its second month. All released turtles continue to be tracked weekly, often requiring 3-4 days per week of tracking by ENSP seasonal biologists. A number of partners and volunteers were assembled to gather all of the turtles for a fall round of health assessments on October 7 and 9. Health work to detect for pathogens and viruses had been conducted prior to release and this new round of health work will allow us to monitor the individual turtles health now when in a wild setting and not in captive conditions. We can then compare an individual's health over time from both pre and post-release. B. Zarate provided an introduction and update on the project to ENSAC on September 20 and worked with F&W I&E Bureau to pull together content for a video about the project, set to be released during the next reporting period across our social media channels.

B. Zarate did a turtle presentation to southern region F&W Conservation Police Officers on 9/27 to talk about illegal turtle trade and decision-making at time of interception.

Eastern Tiger Salamander – B. Pitts

B. Pitts and A. Kisurin are developing an eDNA surveillance project focused on distinguishing environmental signatures of high- and low-density tiger salamander breeding sites. When paired with physical surveys of biotic and abiotic factors, this tool should greatly aid in a better understanding of species habitat requirements and movement on throughout the landscape. BP and AK have met with staff from the Division of Science and Research, and are planning to meet with staff from Cornell University, who have been doing similar work in Long Island, NY. Monthly regional working group calls are planned to start back up in November.

B. Pitts is also in the beginning stages of partnering with the Conserve Wildlife Foundation to mark breeding individuals with Visible Implant Elastomers at our translocation project site in the Menantico Ponds WMA. As other nearby pools may have confirmed breeding in future years, these tags should help determine if individuals display strong site fidelity, or if they use different pool complexes from year to year.

Diamondback Terrapins - B. Zarate

B. Zarate and Bureau Chief Jeff Brust of Marine Fisheries gave a presentation on terrapins to local residents in Fortescue on September 28. Close to 50 people were in attendance. Material included general state and partner conservation efforts for statewide terrapin and Marine's trial work on bycatch reduction devices.

MAMMALS

Bobcat Project – G. Fowles

There were 4 reported roadkilled bobcats during the reporting period. The carcasses were collected and included 2 young individuals less than 6 months old. Necropsies were performed and samples taken.

Bat Conservation – M. Hall

M. Hall coordinated and co-led the final 6 nights of "fall swarm" bat surveys in mid-September and early October outside one of NJ's most significant bat hibernacula in Morris County, with help from Sanders Environmental, NJFW seasonal staff, the USFWS, Conserve Wildlife Foundation, and Rutgers University. This concluded the three rounds of surveys done throughout the fall season, as bats returned to the former mine for winter. The survey effort followed a standardized protocol, which is repeated once every three years to monitor the bat population at this location. Capture and re-sighting info (from previously banded bats) are being compiled, but one highlight of the survey was the recapture of a male Indiana bat who was originally banded during a summer survey in the Great Swamp NWR in July 2009. He was an adult at the time, making him at least **16** years old now.

M. Hall and A. Protus (USFWS NJ Field Office) co-led our annual Bats in Bridges training class for NJDOT staff and consultants in late September, consisting of a half-day webinar and a field day visiting bridge structures, practicing using equipment to identify signs of bat occupancy, and performing an evening emergence survey and using acoustic bat detectors. M. Hall also continued co-managing the inflow of data and reports from 2024 bridge-bat surveys and working with the DOT and USFWS to prescribe timing restrictions on maintenance activities at structures found to be

occupied by bats and/or native nesting birds. More than 200 bridge-bat inspections were performed this year, with at least 685 completed to-date and bats/bat evidence found at a total 47 structures (6.9% of those surveyed).

M. Hall sent out a seasonal email to our network of approx. 150 Nuisance Wildlife Control Operators (NWCs) who perform bat exclusion work in NJ, along with the NJ Pest Management Association, reminding everyone about NJFW's guidelines and "safe dates" for bat exclusion. Details are found on our NJFW [Bats in Buildings webpage](#).

Allegheny Woodrat – G. Fowles

G. Fowles led the bi-monthly regional woodrat working group meeting with representatives from several states and zoos across the region. Topics discussed included a captive breeding program update from the Maryland and Toledo Zoo and Zoo America, an update on a second set of woodrats from VA relocated in August, and a presentation by biologists from WV on their use of antenna-less collars from Lotek on woodrats, and a discussion about formally or informally changing the common name of Allegheny woodrats for better PR appeal.

ENSP technicians reviewed camera data from a survey involving the placement of 9 baited cameras near a historic woodrat site in the Bearfort Mountains. No woodrats were detected. An additional 13 baited cameras were placed during the reporting period at 4 sites in the area of Green Pond where there were records of historic sites.

G. Fowles and technicians and volunteers, including a member of the State Parks trail crew, a WLM hourly, and CO J. Parham conducted the annual woodrat trapping in the Palisades in early October. In total, there were 38 woodrat captures over 84 trap nights and included 24 unique individuals. The resultant trap index numbers were a bit lower than the last couple of years, but in line with results from 2021. One of the five trapped sites had particularly low capture rates. The 2 individuals that were released in June from VA were not recaptured during this effort.

BIRDS

Colonial Waterbirds – C. Davis

C. Davis continued to work on data collected during the spring aerial waterbird surveys. The relatively calm spring/summer weather appeared to help ensure an accurate as possible count, free from complications of flooding and storms. A draft report has been written with the results, with a final version expected next month (which will be posted on the website). C. Davis continued to work on spatial data from this survey, which will be entered into state databases and shared with the AKN (Avian Knowledge Network) for the regional survey effort across the coast.

C. Davis and E. Heiser also continued to meet with various government agencies in an effort to find funding for a habitat enhancement project in Hoboken for Common Terns nesting in an urban environment.

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

C. Davis and E. Heiser are working on finalizing data from the 2024 nesting season. The final report will be available at the end of October. Horseshoe Island officially reopened to the public on September 30. All signage and posts were removed for the year. The individual Horseshoe Island report will be available after the new year.

Bald Eagle Monitoring - M. Roach

There were 8 Bald Eagle mortalities this month. Six have already been necropsied by Dr. Erica Miller: 2 were impact /trauma, 2 the result of eagle-eagle combat, and 2 were electrocutions. Samples are collected for toxicology.

Peregrine Falcon Monitoring – M. Roach

No significant updates. Resightings of banded birds have been trickling in as the birds migrate south.

American Kestrel – B. Pitts

B. Pitts met with staff from Readington Township and Raritan Headwaters to discuss a multi-year project to install 20-50 new nest boxes on township properties and Preserved Farmland throughout the Township. This will fill in an important gap between highly successful nestbox clusters on the South Branch WMA on the south, Duke Farms to the east, and Tewksbury Township to the north. Three previous partnerships of this scale with Natural Lands, Friends of Hopewell Vally Open Space, and Raritan Headwaters have led to a tripling of young kestrels banded in NJ since these efforts began; 481 young were banded in 2024, ENSP's previous best prior to 2015 was 158 young in 2012.

Osprey Monitoring – M. Roach

No new update.

Other Raptors – M. Roach

No new update.

Migratory Shorebirds – B. Pitts

No new report.

Secretive Marsh Birds – C. Davis and E. Heiser

C. Davis and E. Heiser continued planning the NJ Black Rail and Saltmarsh Sparrow meeting they are leading scheduled for Wednesday, November 13 as a virtual Teams meeting. C. Davis is working on finalizing internal reports for Black Rail (which will be posted on the NJFW website) and preparing spatial data for inclusion into Biotics.

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

S. Petzinger presented about forest management for wildlife at the Woodland Stewards Program.

S. Petzinger presented alongside NRCS and NJ Audubon about bird declines in NJ and ways people can help address those declines.

S. Petzinger attended a virtual meeting with USFWS to discuss the federal Species Status Assessment and decision to federal list GWWAs under the ESA and continued to compile and summarize NJ GWWA data to inform the process.

Regional & National Bird Coordination – S. Petzinger

S. Petzinger attended the monthly eastern grassland bird working group meeting.

S. Petzinger attended the monthly AMJV (Appalachian Mountain Joint Venture) bird monitoring meeting.

S. Petzinger summarized the movements of Wood Thrush nanotagged in NJ during the breeding season. By 10/11/24, 16 of the 20 tagged individuals had begun migration, the majority of which were in South Carolina and Georgia.

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes and seasonal staff planted approximately 600 Baptisia plants at several habitat management project locations in Cape May and Burlington counties for Frosted Elfin conservation work. The ongoing drought has hampered additional planting efforts.

R. Somes met with NJ Audubon staff to discuss habitat management work for migrating Monarchs in Cape May County and looked at several potential project locations.

Pollinators – R. Somes

R. Somes and State Park and Forest Service staff distributed approximately 3,000 wildflower and butterfly host plant seedlings for pollinator garden and habitat restoration projects across NJ.

Freshwater Mussels – R. Somes, A. Kisurin

A. Kisurin and R. Somes, along with USFWS staff, conducted freshwater mussel surveys in the Delaware River near Washington's Crossing State Park. The survey documented several Yellow and Eastern Lampmussels at this location. DNA swabs were taken from several individuals to add to the USFWS genetic database to help support future eDNA surveys. This was the first time Eastern Lampmussel was documented in this area of the Delaware River.

eDNA TECHNOLOGY – A. Kisurin

A. Kisurin collaborated with US Fish and Wildlife Service personnel to complete the final round of environmental DNA sampling for Freshwater Mussel metabarcoding across various New Jersey waterways. This marks the conclusion of sampling efforts for the season and will contribute to a deeper understanding of mussel community compositions and support the expansion of an increasingly comprehensive native genetic library.

Photo of the month: Indiana Bat #24247, recaptured during fall swarm surveys in northern NJ. He was originally banded as an adult in 2009 in Great Swamp NWR, so he is at least 16 years old!

