

Endangered and Nongame Species Program
Monthly Report for 16 June– 15 July 2024

Staff:

Kathy Clark, Chief
Christina “Kashi” Davis, Principal Zoologist
Gretchen Fowles, GIS Specialist
MacKenzie Hall, Environmental Specialist II
Emily Heiser, Assistant Biologist
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.

Landscape Project –

Staff are meeting regularly with Office of Information Services on the tasks of revising the Landscape Project mapping, primarily the review and testing of species models.

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 have begun reviewing the build process for the SF/SOA dataset and streamlining it for the next update. Biotics staff also updated the Migratory Raptor Concentration Site in Biotics to remove new urban based on the 2020 LULC dataset and expand it to the lower 20k of Cape May. Biotics staff are also evaluating the newest version of NatureServe bulk upload tools and their compatibility with NJ Wildlife Tracker.

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

The CHANJ team, with the help of I&E and the DEP Communications Office, kicked off the ‘Summer of CHANJ’ communication campaign with a press release and several social media posts, along with an email that went out to the DEP Local Government Assistance email list.

The CHANJ team completed and shared a statewide CHANJ priority parcel layer with upper management and Green Acres.

The CHANJ team participated in a call with the South Jersey Transportation Planning Organization about using CHANJ products in their work and will have follow-up discussions with them.

The CHANJ team had a follow-up meeting with NRCS from the State of CHANJ meeting a few weeks ago regarding ways that we can work more closely to help advance habitat connectivity goals.

ENSP seasonals continue to work on surveying high priority culverts/bridges that fall within CHANJ mapped areas following the North Atlantic Aquatic Connectivity Collaborative (NAACC) protocol to help populate the NAACC Culvert Inventory layer in the CHANJ mapping and inform decision making. The seasonals are also helping to advise DOT personnel who were recently trained in the NAACC methodology and begin their surveying efforts also in CHANJ mapped areas.

Habitat Conservation Management on Public Lands – All staff

S. Petzinger conducted the second grassland bird survey at the South Branch WMA-Merck Tract on June 28, 2024.

Species Status Review – K. Clark

The rule amendment to update the lists of endangered and nongame wildlife was published in the NJ Register on June 3. Public comment is open until August 2.

State Wildlife Action Plan – K. Korth

K. Korth had several meetings with database contractor. Staff from ENSP, bureaus of Freshwater Fish, Marine, Wildlife Management, and the Natural Heritage Program are working on their Species/Habitat association assignment.

Working with our contractor, K. Korth and K. Clark finalized the Action form. The form will be sent to our Technical Advisory Group, engaged partners, and Technical Stakeholders, providing the basic format for stakeholders and staff to write actions. Korth determined that the first step in creating regional actions would not require meetings.

K. Korth continues work on content for the digital-enabled SWAP, participated in the NE Regional SWAP Coordinator's monthly meeting, and attended the SWAP Learning Series meeting.

HERPTILES

Snake Fungal Disease – K. Schantz

No new report.

Snakes – K. Schantz

K. Schantz continues to work on a data backlog (data from ENSP, consultants, and researchers).

SGCN Turtles – B. Zarate and B. Pitts

B. Zarate participated in a monthly bog turtle coordination call and another quarterly or bi-monthly call on communicating regional turtle work.

As part of planned box turtle release project of Law Enforcement-seized turtles, ENSP held internal meetings with Bureau of Land Management and F&W management to review the release plan on state lands.

ENSP staff participated in the first of five weeks of what is now the annual Youth Inclusion Initiative. ENSP herp staff have now participated since the program's inception in 2022. We review the responsibilities of being a state herpetologist, talk about reptiles and amphibians of New Jersey, showcase some live animals, and do a hands-on radio telemetry demonstration.

Eastern Tiger Salamander – B. Pitts

No new report.

Diamondback Terrapins - B. Zarate

ENSP seasonal staff ground-truthed 10 locations to consider for ground-based terrapin headcount surveys beginning in 2025. Site locations were primarily selected where fewer records of terrapins exist and in places where existing partners are not actively working. These areas primarily were in and around Raritan Bay and surrounding drainages. When regional headcount protocols are available, ENSP will work to identify volunteers to monitor these areas and/or ENSP staff will conduct the surveys.

MAMMALS

Bobcat Project – G. Fowles

There was one reported roadkilled bobcat. The carcass was recovered, mapped, and sampled.

ENSP worked with students from the University of Delaware and staff from EcolSciences to assemble, label, and organize equipment for a bobcat focused camera study targeting potential crossing structures (culverts and bridges) under 6 major highways in NJ to assess the extent to which structures are being used for safe wildlife passage under the highways. The project is a collaborative one between ENSP, the University of Delaware, and NJDOT. It is a Master's thesis project for one of the University of Delaware students and is funded in part by NJDOT. Eighty cameras were deployed at the end of June.

Bat Conservation – M. Hall

ENSP field techs continued work to survey bridges for bats, as part of our collaboration with the NJDOT and USFWS. M. Hall continued to co-manage an inflow of data and reports from DOT consultants doing these surveys as well.

A 7-night passive acoustic bat survey was done at two locations within Hunterdon County's Hoffman Park after coordinating access with the County Naturalist.

M. Hall met with animal control operators and veterinarians at the Monmouth County SPCA, by request, for a bat presentation and to discuss best handling of various situations their staff encounter.

A collaborative project with USGS/Virginia Tech continued during this period. ENSP coordinated access to several state-owned lands in central and southern NJ, where acoustic bat detectors were deployed at 15 new locations in mid-July to record bat activity for at least 1 month.

Maternity colony monitoring continued at bat houses, barns, and other annual roost sites that participate in the NJ Summer Bat Count. The Conserve Wildlife Foundation of NJ provides much of the access coordination and field support for the project.

M. Hall gave guidance to approx. 20 homeowners and nuisance wildlife control companies related to issues with bats in buildings during this period.

Allegheny Woodrat – G. Fowles

ENSP released two juvenile woodrats (one male and one female) from Virginia to NJ at the end of June after they were evaluated at Mercer County Wildlife Center. The woodrats were among 13 that needed to be re-homed after being found in human structures in VA, as part of a collaborative project between the homeowners and VA Department of Game and Inland Fishers and Radford University. Radford University lived-trapped the individuals, took genetic samples and applied ear tags and the 13 were distributed between NJ, PA, IN, the Maryland Zoo, ZooAmerica, and the Toledo Zoo for either translocation or as founders for Allegheny Woodrat captive breeding programs that are being initiated at the 3 zoo facilities. The effort was coordinated by a Regional Allegheny Woodrat Working Group that ENSP helps lead. In the case of NJ, the woodrats will contribute to increased genetic diversity and abundance in the Palisades population, similar to the outcome of previous translocation efforts of woodrats from PA a few years ago. Dr. Patrick Connelly and I&E attended the release.

BIRDS

Colonial Waterbirds – C. Davis

C. Davis and seasonal staff began preliminary data entry for aerial surveys of wading birds, gulls, and terns. No summary data is available at this time. As usual with strong storms, many residential area Yellow-Crowned Night-heron chicks were blown out of nests during intense storms in this reporting period.

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

Beach-nesting bird activity remains high on all nesting sites across the state. Some sites have dropped off due to inactivity or nest/brood losses. Technicians continue to survey sites regularly and through the weekends when recreational activity is at its peak.

Across state and municipal nesting sites, Piping Plovers appear to have had some success in areas and have failed in others. Final pair count and productivity will be available in September/October. Plovers are beginning to wrap up for the season.

The chick provisioning study looking at American Oystercatcher chick success on various habitat types continues. Techs are surveying broods as they hatch until fledging.

Colonial nesting species activity is particularly critical at Horseshoe Island where large colonies of Royal Terns, Black Skimmers, Least Terns and Common Terns are located. Chicks are being regularly recorded. Staff plan to band a portion of the Royal Tern colony on Horseshoe. Additional large colonies are located at Holgate and Stone Harbor Point this season.

Bald Eagle Monitoring - M. Roach

To date, ENSP and CWF-NJ have reported 248 active eagle nests statewide, plus 21 territorial and 56 in the unknown category. Data and observations from volunteer nest monitors will continue to come in through early August.

One nestling fell from an Ocean Co. nest and spent a few days in a rehab facility before being placed in a temporary nest at the site. The bird jumped from that twice, so will be held in rehab until he is fully capable of flight. At a Camden Co. nest, a recent fledgling was recovered after being grounded; it

died shortly after being taken into care due to West Nile Virus infection (but negative for HPAI). Dr. E. Miller conducted the necropsy and will have tissues tested to confirm.

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.

Peregrine Falcon Monitoring – M. Roach

Staff and volunteers continued to monitor nests, maintain trailcams, and band nestlings. As of July 15, most known nests are inactive (through successful fledging or nest failures). Three fledglings were taken into rehab from two different nests (one euthanized due to injuries); two will be released at a later date.

American Kestrel – B. Pitts

With three new nests and three renests, the total for 2024 is now 144 nesting attempts. This is double the best pre-COVID total of 72 attempts (2017, 2019). There are three remaining boxes on eggs (2.1%), 115 banded (79.9%) 24 failures (16.7%), and banding was missed at 2 boxes (1.4%).

There have been 60 adults captured so far this season (52 female, 8 male), with 25 newly banded and 35 recaptures (58.3%). Total chicks banded in 115 nest boxes stands at 477 (4.15 young/box). This is three times more young than were banded prior to partners taking larger roles in box placement and landowner outreach in 2015.

Osprey Monitoring – K. Clark

Staff and CWF biologists conducted nest surveys in mid-June that will continue through July. Early reports suggest greater asynchrony in egg-laying and hatching than normal.

Other Raptors – M. Roach

Staff (M. Roach, Z. Bohm) and partners are conducting nest checks and banding of Barn Owls in Cape May and Cumberland counties.

Migratory Shorebirds – B. Pitts

Vouchers have been submitted for all vendors, and ENSP is awaiting reports on banding and horseshoe crab egg densities.

Secretive Marsh Birds – C. Davis and E. Heiser

C. Davis and the Black Rail hourly technician finished call-playback surveys; no Black Rails were detected. However, the technician continued analyzing acoustic data and was able to find at least two calling birds on that dataset. Analysis is on-going but staff is relieved that there were some confirmed calling birds in the state this year. C. Davis also worked with I&E to create a Black Rail video, which was posted on social media this reporting period.

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

S. Petzinger participated in an advisory team meeting on the federal status assessment for GWWAs and is compiling data to help inform the assessment.

Regional & National Bird Coordination – S. Petzinger

S. Petzinger and her team deployed eight nanotags on Wood Thrush on public lands near existing MOTUS stations between June 16 and June 26, bringing the total number of nanotags deployed to 20.

S. Petzinger participated virtually in the monthly Appalachian Mountains Joint Venture Full Annual Cycle Team meeting on June 26, 2024, and in the monthly Appalachian Mountains Joint Venture Monitoring Team meeting on June 27, 2024.

S. Petzinger surveyed a Breeding Bird Survey route on June 29, 2024.

S. Petzinger attended the Partners in Flight Eastern Working Group Meeting near Chicago, IL from July 9 – 11, 2024.

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes and seasonal staff conducted surveys for Northern Metalmark at 3 existing occurrences for this species and observed 4-6 individuals at each location. Poor weather conditions have made surveying challenging. One powerline right-of-way site had been recently herbicided, which negatively impacted the habitat. One site where we have been expanding habitat management and invasive plant control had the highest number we have ever documented there with 4. Prior to this, only single individuals were ever observed at this location, dispersed from another nearby population. Habitat surveys were also conducted at one potential location with no butterflies observed but an area of suitable habitat present. The property owner is interested in conducting habitat work to benefit this and other butterfly species.

R. Somes and Bureau of Lands Management staff met to look at a variety of projects in the Pinelands region to benefit native pollinators and Hoary and Frosted Elfin specifically. Lands Management has several ongoing projects that are creating large areas of suitable habitat for rare pinelands insects and how to expand on these projects and tweak them to benefit specific species was discussed.

Seasonal staff and volunteers continue statewide surveys for a variety of listed and SGCN insect species. Some interesting notes have been the documentation of a new Gray Petaltail population in Morris County as well as several new occurrences of SGCN fireflies in southern NJ.

Pollinators – R. Somes

R. Somes and NJ Forest Service staff met and planted seed for this year's pollinator and butterfly host plant plantings at the State Tree Nursery. The goal is to produce around 6,000 seedlings ready to be planted in September. R. Somes and Forest Service staff also met to plan pollinator habitat management projects on the State Tree Nursery and Forest Resource Education Center property.

R. Somes met with NJ State Museum staff to plan fall pollinator habitat projects on the museum property and to work on the upcoming Ecosystems of New Jersey exhibit.

Freshwater Mussels – R. Somes, A. Kisurin

A. Kisurin attended the monthly Brook Floater Working Group, a coalition of federal and state agencies, non-profits, and researchers collaborating to preserve the declining freshwater mussel.

A. Kisurin conducted a snorkel survey for mussels on the Millstone River near Carnegie Lake alongside USFWS representatives. The purpose of the survey was to locate any live mussels in under-surveyed waterways. Biological swabs of specimens were taken to send to the USFWS Northeast

genetics lab to contribute to a freshwater mussel genetics database. Future surveys are scheduled for this field season.

R. Somes gave a presentation to the New Jersey Corporate Wetlands Restoration Partnership on the ecology and status of Chinese Pondmussel in NJ.

A treatment was conducted to eradicate Silty (Chinese) Pond Mussel from the NJ Conservation Foundation property where the species still persists. It is hoped that this last effort will eradicate the remaining individuals found in the ponds. During vegetation sampling, what appeared to be juvenile mussels were found among cattail roots.

R. Somes met with Bureau of Lands Management staff to discuss listed freshwater mussel conservation and survey needs at the Hyper Humus (Paulinskill) WMA restoration site. R. Somes and seasonal staff conducted surveys at the WMA and documented Triangle Floater (T) in the project area in very low numbers (2 individuals) in areas of largely poor mussel habitat. Restoring the river at this location will be highly beneficial to rare mussel populations and help to enhance the habitat at the site.

eDNA TECHNOLOGY – A. Kisurin

No new report.