

**Endangered and Nongame Species Program
Monthly Report for 16 February - 15 March 2025**

Staff:

Kathy Clark, Chief
Christina “Kashi” Davis, Principal Zoologist
Gretchen Fowles, Research Scientist II
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, Assistant Biologist
Kris Schantz, Principal Zoologist
Robert Somes, Senior Zoologist
Brian Zarate, Supervising 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’s monthly meetings. Reports for federal grants were completed and submitted for calendar 2024, for W-70 Birds/Mammals, T-1 Herps/Inverts/Habitat, T-10 State Wildlife Action Plan, and T-11 Technical Guidance/Biotics/CHANJ. ENSP documented in-kind match for grants that was valued at \$369,748 for W-70, \$85,312 for T-1, and \$68,000 for T-11. The match requirement is 25% for Pittman-Robertson and 35% for State Wildlife Grants.

Landscape Project –

No new report.

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.

C. Davis attended the Atlantic Flyway Council Nongame Bird Technical Section meeting in St. Augustine, FL. She assumed her role as Secretary of the tech section, a commitment of 2 years (4 meetings total). As usual, the tech committee addressed Flyway-wide issues related to shorebirds, landbirds, waterbirds, and raptors.

Biotics Database – G. Fowles

Biotics staff continued the ongoing work of processing rare species data from NJ Wildlife Tracker into Biotics. Biotics staff also have been working on testing a new ArcPro toolbox made available by NatureServe for batch uploading records to Biotics, and documenting and strategizing with the

Bureau of GIS the updates that will be needed for the NJ Wildlife Tracker system to work seamlessly with the new toolbox. The staff also met with the bald eagle biologists in ENSP and CWF to collaborate on the eagle nest data and status that is uploaded to Biotics.

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

G. Fowles participated in a call with the newly formed NJ Appalachians Coalition led by the Nature Conservancy to target land protection. She also participated in a couple of Northeast Transportation and Wildlife Conference steering committee calls to discuss a new group structure moving forward, including a fiscal agent, while also seeking a host for the 2026 conference. G. Fowles also participated in a webinar hosted by the Nature Conservancy entitled “Critter Crossings” (<https://www.youtube.com/watch?v=WQxIcK-5RYg>), giving an overview of CHANJ, describing elements of effective wildlife crossing structures and giving examples of such crossings across New Jersey. Lastly, the team updated the Road Wildlife Mitigation Projects GIS layer to include additional projects that will be built with wildlife mitigation strategies in place. The layer now includes 49 projects across the state and is available for download, as a Feature Service, and is a layer available in the CHANJ Web Viewer.

M. Hall had several meetings and correspondence with DEP construction manager, State Treasury, NJDOT Local Aid and our project engineers to continue advancing our Waterloo Road amphibian crossing project (installing tunnels and guide fence) toward the construction bid stage.

Habitat Conservation Management on Public Lands – All staff

This winter’s forestry activities in Stand 2 on Sparta Mountain WMA began on March 3, 2025. Staff monitored the activities 6 out of the 11 days work was conducted. Tree felling will be completed before April 1, 2025.

Species Status Review – K. Clark

The comment period for the proposal to change the conservation status of NJ Chorus Frog from U to SC closed with just three comments received. Staff will assist M. Monteschio with responses to comments for the rule adoption.

State Wildlife Action Plan – K. Korth

Biologists with Freshwater Fisheries, Marine Fisheries, and ENSP completed species profiles for state listed species. Botanists from Natural Heritage Program continue to review and finalize their Species Profiles. Contractor DJ Case created a species profile content entry form within the database to link profile content to data in the database that will enable our content and data to be displayed in an informative way on the website. All amphibian and reptile species profiles have been entered into the database. Two amazing volunteers entered all the bird profiles into the database. K. Korth and ENSP staff are working to secure a minimum of one photo for every species profile. Biotics staff R. Criollo and D. Turcios are finalizing species range maps for the profiles.

K. Korth, Doug Rizio (I&E) and DJ Case (contractor) continue regular weekly meetings to build out and test the Wordpress framework for new SWAP website. This group also meets every other week with OIT to share results and get feedback. D. Rizio and DJ Case are actively using the herp species profiles to test layout and data linkages.

Conservation Action Prioritization: K. Korth completed edits to the merged the spreadsheets from all participants. DJ Case provided an updated spreadsheet for final review before it goes out to key

partners, DEP staff, and technical stakeholders. After merging duplicative actions, we now have the following total number of actions to prioritize: Kittatinny Ridge (82), Kittatinny Valley (100), Highlands (119), Atlantic Coast (139), Delaware Bay (118), Inner Coastal Plain (111), Marine (40), Piedmont (100), and Pinelands (94). A total of 38 actions were moved to “Statewide.” K. Korth is working on sending the Action Prioritization out to our technical stakeholders and partners on March 17, 2025.

K. Korth and K. Clark submitted a C-SWG SWAP Enhancement grant for USFWS funding.

K. Korth provided a SWAP status update to the Endangered and Nongame Species Advisory Committee (ENSAC). K. Korth also gave a Shorebird & Horseshoe Crab presentation to the Jersey Coast Anglers Association. Over 50 people were in attendance and they were an engaged crowd asking a lot of questions.

HERPTILES

Snake Fungal Disease – K. Schantz

No new report.

Snakes – K. Schantz

No new report.

SGCN Turtles – B. Zarate and B. Pitts

There were coordination calls this period for the bog turtle Competitive-State Wildlife Grants (C-SWGs) and for regional bog turtle coordination.

- Bog Turtle CSWG: Bids have been received for contracts to live-trap for bog turtles in data-deficient areas and the purchase order process will begin next pay period.
- Wood Turtle CSWG: No new report. The two main areas will be for purchase of wildlife fencing and staff time to continue to conduct standardized transect surveys this spring.

NJ, with Maryland as the host state, applied for Competitive-SWG funds for box turtle and other RSGCN turtle work, along with Pennsylvania and Rhode Island. Awarded NJ funds will allow us to continue and expand work on box turtles in the Pinelands region, in coordination with the Pinelands Commission. Funding decisions will be made in late summer.

B. Zarate finalized the “State of the Herps” presentation for Assistant Commissioner D. Golden to speak to various natural resource manager audiences this winter and spring about the need for increased attention to amphibian and reptile conservation, including funding and national coordination. Asst. Comm Golden’s first presentation on the topic was on February 26 to the national Wildlife Program Diversity Managers.

Eastern Tiger Salamander – B. Pitts

The Northeast Tiger Salamander Working Group successfully submitted the C-SWG grant proposal to the Federal grants coordinator.

B. Pitts along with Federal and NGO partners surveyed for tiger salamander egg masses on March 13. Eggs were detected only at two sites this year due to the prolonged drought.

Diamondback Terrapins - B. Zarate

B. Zarate continued coordination with NJ Innovation Institute and Marine Fisheries Administration to design and print novel terrapin bycatch devices, so these new dimensions may be trialed in controlled and field settings in commercial-style crab pots. A first batch of twenty BRDs was printed, shipped and received and trials using the novel BRDs have started, first testing the new sizes with captive terrapins and will move to live crabs later in the spring.

MAMMALS

Bobcat Project – G. Fowles

There were three reported roadkilled bobcats, and one badly injured bobcat that was hit by a car and subsequently died. The carcasses were collected, necropsies performed, and samples taken.

Bat Conservation – M. Hall

Under the coordination of NJDEP's Division of Science and Research, M. Hall reviewed and scored an additional (4 total) bat research proposals from a NJ Offshore Wind Research and Monitoring Initiative RFP that closed in late 2024. A total of 11 proposals included elements of bat migration and/or vulnerability to offshore wind energy development. Winning projects will begin no sooner than December 2025 and run for up to 3 years.

M. Hall had a web meeting with one County's Parks System staff to plan a bat-friendly gate project at a site where endangered bats were recently discovered hibernating, and met on-site with another County's Parks & Recreation staff about potential improvements to and re-gating of the entrance to an abandoned mine on their land. M. Hall is communicating with bat gate specialists on feasibility and design of both projects.

M. Hall and D. Fisher (Rutgers University) deployed environmental DNA (eDNA) samplers at the entrances of two additional bat hibernacula (4 total this winter) as a pilot to test this method to passively confirm bat species presence.

M. Hall coordinated with Dr. Ford and graduate student A. King (Virginia Tech) about 2025 plans and property access to continue another year of acoustic monitoring and mist-netting to determine northern long-eared bat occupancy and habitat use in central and southern NJ.

M. Hall and Passaic County engineer continued to discuss a bridge deck replacement project now underway at a known bat roost location, to limit potential disturbance to the colony and monitor the bats' response to construction activities. We also met (virtually) with NJ's USFWS Transportation Liaison and MN DOT biologists for guidance.

Allegheny Woodrat – G. Fowles

No new report.

BIRDS

Colonial Waterbirds – C. Davis

C. Davis worked with the Conservation Delivery Specialist for the Atlantic Flyway Council Nongame Bird Technical Section to create an electronic form to collect wading bird aerial data for 2025, which should greatly decrease the amount of time doing data entry for this effort. She met with The Wetlands Institute to finalize plans for their third year of funding for work at Gull and Sturgeon Islands. She worked with procurement to get the paperwork for the aerial survey contract finalized

and recruited observers for the survey (scheduled for may). She coordinated with USDA-APHIS for their planned work on Gull and Sturgeons Islands this field season.

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

Seasonal technicians have been hired and are due to begin regular season monitoring in April. Planning is underway for the 2025 nesting season including ordering supplies and alerting towns when the usual symbolic fencing will be put in place. Most municipal sites will be fenced the first week in April. Several sub-projects are to be continued in 2025 including fecal sample collection for Black Skimmers, American Oystercatcher chick provisioning, and monitoring/management of restoration areas for Piping Plovers.

Bald Eagle Monitoring - M. Roach

There have been 197 active Bald Eagle nests documented so far this season, 9 of which have already failed. At least 40 nests are known to have hatched young. We have also documented 13 new pairs this year. The Duke Farms eagle camera is providing excellent views of their 3 chicks:

<https://www.youtube.com/user/dukefarmsfdn/live>

There have been 5 new Bald Eagle mortalities the past month. Three were found dead, one of which was tested and found positive for HPAI (which brings the total of confirmed infected Bald Eagles this year to 11). Two were taken to wildlife rehab but were either euthanized or died while in care.

There are currently 3 other Bald Eagles in wildlife rehab: one is recovering from injuries from eagle combat; one is recovering from minor injuries (likely from a vehicle strike); one is being treated for Pb poisoning.

Peregrine Falcon Monitoring – M. Roach

The nesting season for Peregrine Falcons is just getting started with two nests confirmed in the egg-laying stage. Staff and volunteers are monitoring nest sites to determine which are occupied and active. M. Roach and Z. Bohm have started checking trail cameras on coastal nests that were left operating all winter. They are already providing lots of Peregrine band resightings, but none of these nests are actively laying eggs as of 3/16.

American Kestrel – B. Pitts

B. Pitts installed three new boxes with Readington Twp and moved an additional box in Burlington Co. B. Pitts and seasonal staff will begin preparing nest boxes for the upcoming season around the beginning of April

B. Pitts gave a presentation on the kestrel project for the Raritan Headwaters Kestrel Kickoff on 3/26. New volunteers will receive additional field training for box monitoring and data entry. B. Pitts and seasonal staff met with one new volunteer so far.

Osprey Monitoring – M. Roach

No report. Ospreys should be arriving back in force soon.

Other Raptors – M. Roach

A dead Snowy Owl that was picked up on 2/7/2025 in Ocean County tested positive for HPAI. A pair of Barn Owls seem interested in nesting in one of our managed Peregrine Falcon towers.

Migratory Shorebirds – B. Pitts

B. Pitts has started preparing purchase orders for the Shorebird Steward Project and the Horseshoe Crab Egg density survey. B. Pitts is also working with staff from the Division of Science and Research to update the Red Knot environmental trends report.

Secretive Marsh Birds – C. Davis and E. Heiser

Plans continue to be developed for the Black Rail/Saltmarsh Sparrow technician that will begin work the second week of April. The Black Rail project will remain similar to years past (except without nocturnal surveys) while the addition of Saltmarsh Sparrow work is new and developing. Using SHARP (Saltmarsh Habitat Avian Research Program) protocols, point counts, rapid assessment surveys and acoustic recording units will be used to monitor and record breeding saltmarsh sparrows at ongoing and/or planned saltmarsh restoration sites. Four locations have been identified for this effort in 2025: Seven Mile Island Living Laboratory sites, Avalon, Abbott's Meadow, and Shaw/Ephraim Islands. Plans for this project continue to be developed with the hopes of expanding work in the coming years.

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

Nothing to report.

Regional & National Bird Coordination – S. Petzinger

S. Petzinger virtually attended the monthly Appalachian Mountains Joint Venture Monitoring Team meeting.

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes gave a presentation to the New Jersey Forestry Association on the relationship between listed and SGCN butterfly and bee species and grassland, early successional, and disturbance-dependent habitats in NJ. Particular focus was placed on the influence of fire on these habitats and the species that depend on them. Many of our rarest insect species depend on grasslands, savannahs and other early and mid-successional habitats that are in significant decline across NJ.

R. Somes began several habitat management projects for the Northern Metalmark butterfly. The biggest threat to this species is through the loss of habitat through competition with invasive plant species and from habitat succession.

R. Somes conducted habitat assessments and scouting for Frosted and Hoary Elfin sites for the upcoming spring field season. A meeting was also held with Bureau of Lands Management staff to plan several planting and habitat management projects for the Frosted Elfin in Cape May and Cumberland counties.

R. Somes met with Ocean County Parks and Natural Lands Trust staff to plan management actions at several sites for Frosted and Hoary Elfin conservation. Populations of Frosted Elfin in Ocean County are highly isolated from other populations of this species and facing threats due to habitat loss from illegal off-road vehicle use and habitat loss due to succession/lack of natural fire disturbance to maintain the habitat.

R. Somes has been reviewing the State's dragonfly data to plan survey needs for the upcoming field season with a particular focus on older and historic records for listed and SGCN species.

Pollinators – R. Somes

R. Somes and NJ State Forest Service staff planted 4,000 tubes of 27 different species of native wildflowers and butterfly host plants. Particular focus was placed on planting several species of milkweed (Monarch host plant), yellow wild indigo (Frosted Elfin host plant) and native warm season grasses (host for several listed skipper species). These plants will be used for plantings at conservation projects across the State as well as for creating kit pollinator gardens at public property sites. We also looked at potential areas for pollinator conservation projects on State Forest Service property.

Freshwater Mussels – A. Kisurin

A. Kisurin attended the Brook Floater Working Group meeting, which featured a presentation on modeling spatial and temporal variables using a single-species occupancy model. The primary goal was to evaluate the effectiveness of the Rapid Assessment Protocol for occupancy. The group also sought feedback on the protocol and discussed plans for the final two years of the C-SWG.

A. Kisurin and R. Somes, along with Freshwater Fisheries S. Collenburg and USFWS counterparts, conducted a site visit to a central New Jersey brook to assess fish and freshwater mussel assemblages.

eDNA TECHNOLOGY – A. Kisurin

No new report.