

Endangered and Nongame Species Program Monthly Report for 16 April - 15 May 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. The Endangered & Nongame Species Advisory Committee’s 14 May meeting recognized the retirement of long-time Committee members Dr. Rick Lathrop (27 years) and Dr. Erica Miller (17 years). The Committee welcomed two new members, Dr. Brooke Maslo and Dr. Chandler Navara.

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.

Staff continued to work with other staff in NJFW on addressing public comments that were submitted regarding the “Shore Protection Rule”.

Biotics Database – G. Fowles

Biotics staff continued the ongoing work of processing rare species data from NJ Wildlife Tracker into Biotics. Biotics staff also continue to test 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.

Biotics staff also worked on finalizing species range maps based on Biotics data.

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

G. Fowles participated in a couple of Northeast Transportation and Wildlife Conference steering committee calls that finalized a new direction for the group, including a new name, now calling itself the Northeast Transportation and Wildlife Collaborative to better represent regional efforts outside of just the conference that the group would like to embrace even more going forward. The steering committee also signed a contract with an official fiscal agent to manage the group's finances, and will be working toward a more formal group structure over the course of the year.

The CHANJ Team continued to work with Green Acres to finalize parcels to target for acquisition as part of a new prioritized central corridor initiative. The CHANJ also continued to meet with members of NJDEP's WLM E&T Unit to collaborate on revisions to the Road Mitigation section of the CHANJ Guidance Document and the Flood Hazard Area Control Act Technical Manual, as well as additional shorter references to go out to permittees to incorporate more explicit guidance on designs and proper calculations to improve road mitigation projects going forward.

G. Fowles attended the International Conference on Ecology and Transportation virtually. One of the talks was a new Northeast Habitats and Highways educational video that the CHANJ Team, others in NJ DEP and DOT participated in filming. A near final draft of the 1.5 hour training video (broken up into 5 sections) was sent around to collaborators across the region for one final review.

The CHANJ Team sent out an Earth Day listserv post encouraging the public to use NJ Wildlife Tracker to report sightings of rare and on-road wildlife sightings, featuring a few species (porcupine, northern diamondback terrapin and eastern spadefoot) related to habitat connectivity. The post was also shared on NJFW's social media.

Habitat Conservation Management on Public Lands – All staff

S. Petzinger conducted the first of two grassland bird surveys at South Branch WMA on May 8, 2025. The second survey will be conducted after June 13, 2025.

Bird surveys in at least 18 locations on Sparta Mountain and Weldon Brook WMAs will be conducted sometime between May 16 and June 13, 2025.

Species Status Review – K. Clark

No new report.

State Wildlife Action Plan – K. Korth

Botanists from Natural Heritage Program continue to review and finalize their species profiles.

K. Korth, Doug Rizio (I&E), and DJ Case (contractor) continue regular weekly meetings to build out and test the WordPress framework for the SWAP website and they meet every other week with OIT. Doug Rizio and DJ Case continue to test layout and data linkages. Dan Baldwin (DJ Case) created updated mock-ups and a movie that walked through how a user might click through pages. Home Page => Region => Species Profile Page => back to Home. K. Korth presented this to ENSAC.

Conservation Action Prioritization: Final prioritization of Conservation Actions was completed.

A Fatal Flaw review of the “Priority Actions” assignment was sent to our engaged technical stakeholders along with Fish & Wildlife and DEP staff to conduct the review. Contractor DJ Case created a simplified agree/disagree and comment fields for the Fatal Flaw review. We received over 30 responses. Responses were sent to DJ Case to merge for review by FW staff, DEP staff, and engaged technical stakeholders. Two regional in-person meetings, one in Cape May and one at CRO, have been scheduled to conduct a final review of the results. Invitations to attend a final review were sent.

K. Korth and B. Zarate met with USFWS staff Dee Blanton and Kyle Welsh to discuss our Review Form, how we were addressing each element, and identify areas we needed to work on. This meeting was designed to ensure the submission of all required information making the review and approval of our 2025 SWAP easier.

HERPTILES

Snake Fungal Disease – K. Schantz

No new report.

Snakes – K. Schantz

The Grant Agreement for Friends of Hopewell Valley Open Space (FoHVOS) to fulfill the awarded Eastern Copperhead Survey Technique Development and Assessment grant has been fully executed and FoHVOS began their surveys and assessments.

K. Schantz has been working to re-enlist and recruit new members for the Venomous Snake Response Team. Additionally:

- A “Request for Bid” has been issued to qualified personnel to take over venomous snake handling and lecture trainings. Bids are due in June.
- She and personnel at Fort Dix military base have developed a coordinated protocol for the relocation of venomous snakes from neighboring residential communities onto Fort Dix property as is biologically appropriate.

K. Schantz continued to work with Larry Torok and Sally Florio (Division of Watershed Protection and Restoration) to revise the northern pinesnake Habitat Evaluation Model (HEM) used to determine the mitigation requirements that would offset the loss of suitable habitat to development. The revised HEM relies on the same variables as the original version but provides additional variable details and metrics based on the most current data available to the ENSP to reduce subjectivity. The revised HEM is near completion and once completed, will require peer review.

K. Schantz continues to work with Rutgers University and the DEP procurement office to compile and review Rutgers’ 2023 expenditure packet for their 2023 completed work as part of their contract for eastern copperhead research. Once this is finalized (i.e., procurement approves the final packet of supportive documents), procurement will issue payment, and Rutgers will compile their 2024 expenditure packet for review and submittal.

SGCN Turtles – B. Zarate and B. Pitts

There were no regional coordination calls this period, as they are generally suspended during peak field seasons.

We are in the final year of two C-SWG grant projects:

- Bog Turtle C-SWG: Remaining funds will be used to trap sites in both the southern and northern parts of the state. The trapping work is ongoing during this reporting period.
- Wood Turtle C-SWG: A purchase order was issued to acquire fencing to make improvements to an existing crossing project. We expect to begin the install in the summer. The bulk of the remaining grant funds are covering staff time to conduct standardized transect surveys. Those staff surveys have finished during this reporting period at three sites.

Bog Turtles: Coordinated group surveys continued this reporting period at three sites. ENSP staff also worked with CWF staff to select sites for camera trap placement. The group surveys will extend through June 15 or end sooner based on meeting minimum number of site visits.

Box Turtles: We await a decision on a submitted C-SWG proposal to expand box turtle work in NJ. We anticipate an award, or rejection, announcement within the next two months. Separately, field work has started on the box turtle repatriation project. ENSP coordinated three group visits to collect a new round of health samples from the released group, which is important to continue to understand the dynamics of turtle disease pre- and post-release. General tracking of the turtles has also resumed and we expect to track twice per week or more, as time allows. B. Zarate provided an update on the project to ENSAC in coordination with Dr. Patrick Connelly.

Eastern Tiger Salamander – B. Pitts

No new report.

Diamondback Terrapins - B. Zarate

NJFW did not apply for Delaware NFWF funds this year and will consider an application in 2026.

B. Zarate provided an update to ENSAC on May 14 with a brief overview of 2024 field trials conducted by Marine, the winter tank trials with novel BRD sizes, and plans for 2025 field trials.

MAMMALS

Bobcat Project – G. Fowles

There were no reported roadkilled bobcats during the reporting period.

G. Fowles and Fly continued to survey for bobcat scat at sites in central NJ.

G. Fowles met with the University of Delaware Master's Degree student and DOT finalizing funding for this next year for the study underway using cameras to monitor 40 structures under 6 major east-west running highways in CHANJ mapped areas for use by bobcats and other mammals. G. Fowles and K. McCarthy at the University of Delaware also conducted interviews for a postdoctoral candidate to work on a bobcat project.

Bat Conservation – M. Hall

M. Hall and contractor L. Wells (Conserve Wildlife Foundation) prepared for the 2025 mobile acoustic bat survey, which takes place every other year with the help of volunteers. We prepped equipment, recruited new and returning volunteers and developed a virtual training session to be held in late May. M. Hall worked with NJFW's Bureau of Information & Education videographer on a short video about the project, to be posted on NJFW's social media in June.

Planning was done for other summer acoustic monitoring projects as well, including our biennial statewide stationary point surveys for the North American Bat Monitoring Program (NABat), supplemental monitoring on state lands for the newly endangered tricolored bat, and a continued partnership with Monmouth Co. Parks.

M. Hall compiled our hibernaculum survey results from past two winters into NABat's data template and uploaded it to NABat, where the data will contribute to regional and continental population trends analyses for various species and can be easily requested and shared with researchers (with locations and names obscured due to sensitivity).

M. Hall and technician A. Bunker made a coordinated effort to reach out to individuals who have submitted NJ bat sightings through iNaturalist, encouraging them to report their sightings using NJ Wildlife Tracker as well. As a result, about 50 out of the approx. 160 iNaturalist sightings have been reported to our NJ Wildlife Tracker so far, including 2 endangered tricolored bat records. A cluster of sightings of grounded migratory bats around buildings in Newark has led to conversation with the observers and a potential research collaboration.

Allegheny Woodrat – G. Fowles

No new report

BIRDS

Colonial Waterbirds – C. Davis

C. Davis made final preparations for the aerial survey for wading birds, due to take place in late May. She worked with the WMI Conservation Delivery Specialist to ensure that data can be collected in the format needed for regional data collection (this year it is through Survey123 versus an Excel spreadsheet).

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

Full-time and seasonal staff entered peak field season, where all the beach-nesting birds are present in the state and nesting. Staff nest searched, protected nesting areas with fence, collected data on all known breeding individuals, and conducted public outreach as more people started to use the beaches. Davis and Heiser spent significant time implementing Beach Management Plans and meeting with a number of municipalities to coordinate beach maintenance, beach patrol, and law enforcement activities. Piping Plover populations are dramatically down (for ENSP and also state-wide). American Oystercatchers appear to be stable. It is too early to determine how the Black Skimmer, Least Tern, and Royal Tern populations are faring, but early indications appear comparable to 2024.

Bald Eagle Monitoring - M. Roach

There have been 240 active Bald Eagle nests documented this season, 43 of which have failed. The first fledgling was reported on May 3, and there are currently four nests that have successfully fledged young (and this number will continue to rise in the next few weeks).

Staff were able to band nestlings at two more eagle nests this past month, one of which was new to the banding schedule.

There were five Bald Eagle mortalities this past month. Two were found dead, one of which tested positive for HPAI. Two were hit by vehicles. And one was euthanized due to a serious wing injury.

On the flip side, three eagles were treated in wildlife rehab and released this month. One was a poisoned individual that responded to treatment. One was (likely) stunned by a vehicle strike but did not suffer any serious injury. And one was a younger nestling that was found walking near a road. This bird was kept in rehab until he was old enough to fly, then released near his nest location in Cumberland County. Staff and volunteers are currently operating an eagle feeding station at his release site in case this youngster needs supplemental food and to create a scenario where he can interact and learn from other eagles.

Peregrine Falcon Monitoring – M. Roach

There have been 18 Peregrine nests confirmed to have laid eggs this season, much lower than a typical year. Of these 7 have already failed, so this will almost certainly be a very low productivity year for our breeding population. We have been banding as many nests as possible though and are currently at four nests (12 nestlings), that were on inland bridges (2), urban building (1) and natural cliff (1).

There was one Peregrine mortality reported this month. One of the breeding females in Atlantic City was found dead on a roof near her nest site. This was an 11-year-old female that had been nesting in AC since 2017. Her necropsy has not been conducted yet.

American Kestrel – B. Pitts

Volunteers and partner organizations are monitoring around 300 American Kestrel nest boxes in 2025, and as of May 15 there are 120 active boxes. B. Pitts and D. Brant have captured 15 adult birds (13 female, 2 male) to date with 9 recaptures (60%) and 6 previously unbanded birds (40%).

Osprey Monitoring – M. Roach

The nesting season for Osprey continues with territorial and incubating pairs. M. Roach and K. Clark continue to field questions from the public and cell tower contractors about issues concerning Osprey nests in less-than-ideal locations. There have already been instances of fires on utility poles with Osprey nests.

Other Raptors – M. Roach

The first American Barn Owl nestlings (4) were banded this season. A total of four Barn Owl boxes were banded last year, and (as of right now) it looks like we will have more occupied/active nest boxes this year.

Migratory Shorebirds – B. Pitts

ENSP staff posted beaches restrictions along the Delaware Bay shoreline on May 7. The first flocks of red knots (approx. 1,500 birds) began arriving a couple of days prior to that. B. Pitts led the first shorebird census flight on May 15, but the pilot was only able to fly the NJ side of the Bay due to thunderstorms in DE. The red knot count at this time was just short of 5,000, but later in the day larger flocks arrived. The next scheduled flight is set for Thursday May 22.

Secretive Marsh Birds – C. Davis and E. Heiser

After a delayed start, a Black Rail/Saltmarsh Sparrow technician began working under the direction of C. Davis and E. Heiser, on placing acoustic recording units, conducting point count surveys and rapid assessment surveys on coastal saltmarshes throughout southern New Jersey. ENSP organized

and attended a SHARP field training for the rapid assessment protocol. They also conducted a site visit with staff from BLM on Ephraim Island near Wildwood plan this year's monitoring.

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

Bird surveys on private lands enrolled in Working Lands for Wildlife began on May 13, 2025. About 50 WLFW locations plus around 40 natural control sites are planned to be surveyed through June 13, 2025.

Regional & National Bird Coordination – S. Petzinger

S. Petzinger virtually attended the monthly Appalachian Mountains Joint Venture Monitoring Team meeting on April 17, 2025.

S. Petzinger virtually attended the monthly Golden-winged Warbler Working Group meeting on April 21, 2025

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes and seasonal staff conducted surveys for Frosted Elfin at sites throughout Atlantic, Cape May, and Ocean counties. This year's survey season has been challenging with extremely poor weather conditions throughout the flight window after a closer to normal cold winter (after several years of mild winter) and record drought conditions. This led to delayed emergence and diminished numbers to butterflies in general this spring. Only 1-2 individuals were observed at 2 sites in Cape May County (that had ~30 last season) and only 1 individual was observed in a large metapopulation area that usually has 30-50 individuals in Atlantic County. Surveys at the Atlantic County site were also limited due to changes in access. Two sites in Ocean County were surveyed with a maximum of 10 individuals at one site and 0 at the other. Changes to access and permission for survey effort prevented access to a third Ocean/Burlington County site in this vicinity.

Many of the sites exist on utility rights-of-way that were recently mowed, which was highly beneficial to reverse vegetative succession. The recent mowing spawned extensive germination and growth of baptisia and most sites had improved habitat conditions than the last 5 years. Our extensive baptisia planting efforts over the last several seasons have also been successful with many new patches. Poor elfin numbers were observed across all sites regardless of whether they had been recently mown or not. Butterflies are highly irruptive and their flight times can be highly variable based on weather conditions. Boom and bust years are expected, but this season's poor elfin numbers highlight the risk of reduced populations and distribution leading to vulnerability to stochastic events (like this past year's drought and this spring's poor weather).

R. Somes met with Stockton University staff and Cape May County Park staff to plan research and management activities for Frosted Elfin and other listed and rare butterfly species.

R. Somes met with Ocean County Parks staff to discuss and plan habitat management projects at several county sites for Frosted and Hoary Elfin.

Pollinators – R. Somes

R. Somes met with State Forest Service and State Park Service staff to plan pollinator habitat management projects for the spring and coordinate the wildflower and butterfly host plant plantings at the State Nursery for spring conservation projects and distribution.

Freshwater Mussels – A. Kisurin

A. Kisurin finished the initial site surveys in coordination with the Brook Floater Conservation–State Wildlife Grant (C-SWG) to identify potential locations for intensive surveys targeting Brook Floater populations. Based on the findings, 44 sites along the South Branch Raritan River and 14 sites on the Millstone River were selected for further habitat and mussel assessments. A contractor has been awarded the survey contract, and ENSP staff will conduct additional accessory surveys at other suitable sites within these waterways. Surveys are scheduled to commence in late May through early June.

A. Kisurin attended the Brook Floater Working Group meeting, which featured a presentation on ongoing Brook Floater reintroduction efforts in neighboring states.

eDNA TECHNOLOGY – A. Kisurin

No new report.

Photo of the month: A freshly emerged Frosted Elfin on Yellow Wild Indigo in Ocean County.

