

Endangered and Nongame Species Program
Monthly Report for 16 August– 15 September 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.

C. Davis attended the Atlantic Flyway Council Nongame Migratory Bird Technical Section meeting September 9-12 in Dewey, Delaware, where she acted as the NJ voting representative.

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 the DEP Communications Office, continued the ‘Summer of CHANJ’ communication campaign with several more social media posts focusing on five (5) focal species: Bobcat, River Otter, Bog Turtle, Spotted Salamander, and Black Swallowtail along with the importance of habitat connectivity for their populations. The CHANJ Team helped prepare slides for a

DEP Commissioner's Team broadcast that AC Golden gave highlighting the Summer of CHANJ campaign.

The CHANJ team met with Green Acres about incorporating the CHANJ mapping into their review of offers. Team presented an overview of the CHANJ project to the Land Acquisition Review Committee and discussed the concern about the status of functional connectivity in central NJ and the need for preserving habitat, particularly in CHANJ mapped Corridors.

The CHANJ Team participated in a day of filming for an upcoming regional Habitats & Highways training program, patterned after Vermont's award-winning program. Joining MacKenzie, Brian, and Gretchen were staff from DOT, DEP's Division of Watershed and Land Management, along with staff from the Nature Conservancy. The result will be a 90-minute film highlighting wildlife crossing and habitat connectivity solutions across the northeastern states.

The CHANJ Team attended the biennial Northeastern Transportation and Wildlife Conference held in CT. G. Fowles gave two podium talks on the 'State of CHANJ' and ENSP's NJ Wildlife Tracker system and collection of 'on road' wildlife data within the system, that informs CHANJ. G. Fowles also sat on a panel with three (3) other states talking about our experience participating in the development of a regional Habitats & Highways training program; G. Fowles represented NJ in the 'State of the States' panel. The CHANJ Team was honored to receive the Regional Achievement Award for the CHANJ project at the conference. The award, given to one project across the Northeast region, including the Eastern Canadian provinces, "exemplifies innovative science, design, partnership or cost effectiveness in meeting the needs of fish & wildlife movement and safe and reliable transportation infrastructure."

G. Fowles continues to work with the Bureau of GIS to develop a standardized Roadkill survey application that feeds into ENSP's NJ Wildlife Tracker system. G. Fowles made updates to the CHANJ Web Viewer to include more recent data layers.

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 continue working on associating habitats and regions to SGCN.

Biologists/Botanists from Marine Fisheries, Lands Management, Fresh Water Fisheries, and Natural Heritage Program were invited to ENSP's staff meeting to work on priority actions addressing regional priority threats. K. Korth explained the process of using the action template developed by contractor to create complete action statements. The template directs writers to draft actions in a consistent manner allowing actions to be uploaded to the SWAP database.

K. Korth, K. Clark, met with I&E staff A. Ivany, D. Rizzio, and OIT staff R. Hyjack, G. Curtis, and contractor DJ Case staff to plan for the development of a fully integrated and dynamic website instead of a GIS based query tool.

K. Clark continued to work on securing a PO for a contractor to complete work on data management and website design and development.

K. Korth continues drafting content for the digital-enabled SWAP, including working with seasonals on Species Profiles; 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

Six (6) potential timber rattlesnake incidents (involving at least four rattlesnakes, possibly five) occurred in Cedar Glen Lakes retirement community (Manchester, Ocean County), creating a stressful situation for the residents. This is an area that neither the ENSP nor the Manchester Police have previously received calls. The Venomous Snake Response Team responded to four calls that included three different adult males and a fourth snake that had moved back into the forest before a responder arrived. No photograph of the fourth snake was provided to the ENSP so the sex was undetermined. However, the resident showed a photograph to the responder who confirmed the identification. The resident claimed the snake was “darker and smaller” than the one caught previously at his neighbor's house, suggesting it was a different snake than the previous three yellow-phase males. If accurate, this snake *may* have been a female rattlesnake and, if true, the males may have been scent-trailing her to mate. One of the adult males we relocated returned to the community and was killed by a resident (photograph posted on Facebook and the information was shared with Bureau of Law Enforcement). The fourth snake (third male) had been run over by a car before the responder arrived (within 15-minutes of ENSP receiving the call). A fifth potential rattlesnake was reported by multiple residents to the community's support staff who mapped its movements by the residents' addresses. ENSP was not called as the snake left the properties before residents reported it to support staff. It is unclear if this snake was a rattlesnake and if so, if it was a different rattlesnake than previously documented. A preliminary assessment of the landscape does not show meaningful habitat changes that might lead to activity range changes and as such, the theory of males following at least one female is the most reasonable explanation. The community residents remain extremely concerned.

SGCN Turtles – B. Zarate and B. Pitts

No regional bog turtle, wood, or spotted turtle meetings were attended by B. Zarate this reporting period.

The box turtle “re-wilding”/release/ repatriation project – returning turtles that had been seized over the years by USFWS and/or NJFW law enforcement to the wild – is now in full motion with 68 turtles on the landscape: 30 released during the August 5th reporting period and another 38 turtles released on August 26th, each affixed with a radio transmitter. As of 9/14, we've collected 239 relocations of the released animals (some turtles have been relocated more than others), one potential transmitter failure (no signal), and two turtles died (both found on Sept. 5) with cause of death unknown even after necropsy by Patrick Connelly, NJFW veterinary pathologist. The majority of the turtles have remained relatively close to their release areas and less than 10 have been “reset” (brought back to the initial release location) due to movements toward roads, private parcels, or inaccessible habitats for monitoring. We plan to conduct another round of health assessments in October before brumation.

B. Zarate plans to provide a turtle presentation to southern region NJFW CPOs on 9/27 to talk about illegal turtle trade and decision-making at time of interception.

Eastern Tiger Salamander – B. Pitts

No new report.

Diamondback Terrapins - B. Zarate

B. Zarate coordinated with Jeff Brust of Marine Fisheries on an upcoming ENSAC presentation on Marine's trial work with BRDs on commercial-style crab pots. B. Zarate registered to listen in on a Mid-Atlantic Terrapin Working Group meeting scheduled for the next reporting period.

MAMMALS

Bobcat Project – G. Fowles

Six (6) road killed bobcats were reported after over two (2) months of zero (0) reports. Five (5) of the carcasses were collected, including 3 (three) young individuals less than 6 months old.

A bobcat was caught on camera for the first time using one of the 40 culverts under 6 major highways that are being monitored as part of a collaborative research study between ENSP, the University of Delaware, and DOT. The study's focus is on the use of existing crossing structures under 6 major highways in NJ by bobcats and other mammals.

Bat Conservation – M. Hall

M. Hall continued co-managing the inflow of data and reports from NJDOT staff and consultants doing bridge surveys for bats and working with the DOT and US Fish and Wildlife Service to prescribe timing restrictions on maintenance activities at structures found to be occupied by bats and/or native nesting birds. M. Hall and A. Protus (USFWS NJ Field Office) coordinated details and began planning this year's annual Bats in Bridges training class for consultants and DOT staff, taking place in late September.

M. Hall helped to plan and attend a bat session at the Northeastern Transportation and Wildlife Conference (NETWC) in Connecticut, that included two presentations on NJ's bats in bridges efforts, findings, and innovative techniques.

M. Hall (and E. Heiser, for birds) received inquiries from potential respondents to a Request for Proposals that was posted by NJ's Offshore Wind Research & Monitoring Initiative this summer. One focus area within the RFP is the need for "Assessments of bird and bat abundance, migration patterns, and risk exposure associated with offshore wind," that our program helped to conceptualize and write. The RFP is being administered by the New Jersey Sea Grant Consortium; our staff will likely be involved in reviewing proposals involving birds and bats.

The first leg of a "fall swarm" bat survey began in late August at one of NJ's most significant bat hibernacula. Because the former mine is not safe to enter for a physical winter bat census, a standardized survey effort is done outside of the mine once every three years to monitor the bat population at this location. The 3-night August visit was done by consultant/researchers from Sanders Environmental.

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

G. Fowles led a regional woodrat working group meeting with representatives from several states and zoos across the region to decide on the placement of eight (8) woodrats from VA that need to be “re-homed”. This is the second set of individuals from VA in this situation. The woodrats are being distributed to zoos to start up captive breeding programs and to states that can use translocated individuals for an abundance and genetic boost to existing populations.

ENSP technicians conducted a woodrat camera survey at a historic woodrat site in the Bearforts with the assistance of trail crew staff from State Parks. The resultant photos are still being reviewed.

BIRDS

Colonial Waterbirds – C. Davis

C. Davis attended the Waterbird Committee meeting at the AFCMBTS meeting in early September, where committee members continued to discuss how the 2024 colonial waterbird survey data will be entered into the AKN (Avian Knowledge Network). She started working on internal reports for the aerial survey data results.

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

The beach-nesting bird season wrapped for the year. Staff worked to remove fencing and all equipment from nesting beaches. C. Davis and E. Heiser are working on collating the statewide beach-nesting bird data from partners. Reports will be available at the end of October. The Horseshoe Island closure remains in place and is being managed by ENSP and NJFW Law Enforcement staff through the end of September. C. Davis and E. Heiser began planning the NJ beach-nesting bird meeting, which is set for Tuesday, December 17th at the Edwin B. Forsythe National Wildlife Refuge.

Bald Eagle Monitoring - M. Roach

Season totals for Bald Eagle are now finalized. There were 264 active nests this season, with an additional 29 territorial pairs. Of the active nests, 182 were successful, 59 failed, and 23 had unknown outcomes. There were 288 young produced, resulting in a productivity rate of 1.20, the second lowest in the past ten years. The failure rate, 24.5% was higher than the 19.6% long-term average.

There were multiple reports of injured or dead eagles. Of the nine (9) deaths, four (4) have been necropsied. Causes of death include electrocution, impact, and drowning (likely caused by impact trauma).

An immature eagle was successful released after spending 4 months in wildlife rehab.

Peregrine Falcon Monitoring – M. Roach

Final season numbers and report still to come. Banding data have been submitted to the Bird Banding Lab. Thirty-one individuals were banded this season; all were nestlings except for two newly fledged birds that were taken to wildlife rehab.

One of the banded fledglings from the Union County Courthouse nest was killed by a plane strike.

As fall migration picks up, re-sightings of banded Peregrines are starting to come in.

M. Roach and Z. Bohm continue to maintain a subset of nesting towers with trail cameras. This is the first year that cameras remain active all year.

American Kestrel – B. Pitts

B. Pitts compiled all kestrel banding data and uploaded to the Bird Banding Lab banding database. With sub-permittee Steve Eisenhauer's data from Pennsylvania combined with New Jersey's data, over 1,300 records were submitted in 2024. B. Pitts worked with a seasonal on compiling all backlogged nesting attempt data in NJ for submission into the Biotics database.

Osprey Monitoring – M. Roach

Final Osprey numbers are still being tallied by Conserve Wildlife Foundation (CWF) staff with a season report to follow.

Other Raptors – M. Roach

An injured/ill Barred Owl was picked up in Cape May County but died before making it to wildlife rehab. Currently being held for necropsy.

Migratory Shorebirds – B. Pitts

B. Pitts compiled aerial survey and horseshoe crab egg data for the Division of Science and Research's Environmental Trend Reports for Red Knots. B. Pitts compiled aerial survey data and banding summary data for the Horseshoe Crab Adaptive Resource Management (ARM) and Delaware Bay Ecosystems Technical Committee meeting held on 13-September. K. Clark and B. Pitts attended the online meeting and B. Pitts presented the aerial survey data to be used in the revised 2024 ARM modeling.

Secretive Marsh Birds – C. Davis and E. Heiser

C. Davis and E. Heiser began planning for the NJ Black Rail and Saltmarsh Sparrow meeting taking place on Wednesday, November 13th as a virtual Teams meeting. C. Davis is working on internal reports for Black Rail and beginning to prepare that data for inclusion into Biotics.

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

No new report.

Regional & National Bird Coordination – S. Petzinger

S. Petzinger submitted an excerpt for the Appalachian Mountains Joint Venture (AMJV) Summer Technical Digest.

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes met with Bureau of Lands Management Staff to plan Frosted Elfin Habitat management on Fish and Wildlife Lands.

R. Somes met with Joint Base Dix McGuire Lakehurst (JBDML) staff to plan habitat management on the Base for Frosted and Hoary Elfin and other insect species.

R. Somes, seasonal staff, and JBDML staff conducted surveys for Arogos Skipper in the Range and Impact areas of JBDML. Although it was late in the flight season for Arogos Skipper, a single individual was observed in a new site. A large population of Helicta Satyr's was also documented at two different and new locations with over 50 individuals observed. This area suffered an intense fire during the previous spring and might require another year or two to recover and be recolonized.

Seasonal staff conducted surveys for Arogos Skipper in Penn and Wharton State Forests with none observed at sites surveyed. Several large populations of Helicta Satyr's were observed at known sites.

R. Somes and seasonal staff conducted surveys for Leonard's Skipper at all known southern NJ occurrences and the three (3) known northern NJ occurrences. No Leonard's Skippers were observed in any southern NJ locations; it has been more than five (5) years since this species has been observed in this portion of NJ raising concerns that the populations have been extirpated in this area. Surveys in northern NJ continue to find this species at several known sites (up to five (5) individuals observed). Several of these populations are facing encroachment of invasive vegetation into their habitats. Invasive plant control needs to be conducted before remaining sites are lost.

R. Somes and the USFWS purchased 1000 *baptisia tinctoria* plants for Frosted Elfin habitat enhancement in Cape May County.

R. Somes conducted surveys of historic and potential Frosted Elfin sites in Cape May and Cumberland Counties. These surveys will help target future habitat management projects.

Pollinators – R. Somes

R. Somes met with State Park Service and State Forest Service staff to plan pollinator habitat management at Spruce Run Recreation area in several areas of old fields that have become overgrown with invasive vegetation.

Freshwater Mussels – R. Somes, A. Kisurin

R. Somes helped run a Freshwater Mussel Identification and Conservation workshop along with the Raritan Headwaters Association and the USFWS. Classroom lectures included freshwater mussel life history, identification, and conservation followed by a hands-on classroom session on identification of shells and specimens. This was followed by an afternoon field component where freshwater mussel survey techniques and methodologies were taught. Twenty people, from a variety of conservation organizations and environmental consultants, attended.

A. Kisurin conducted mussel surveys at four (4) sites along the Millstone River targeting rare mussel species and Silty Pond Mussels. Although no rare species or Silty Pond Mussels were found, healthy populations of Giant Floater (*Pyganodon grandis*) were observed at most of the locations.

A. Kisurin and R. Somes met with Fisheries staff to discuss future steps for mussel propagation.

eDNA TECHNOLOGY – A. Kisurin

No new report.

Photo of the month:

Helicta Satyr from recent surveys on the JBDML - R. Somes.

