

Endangered and Nongame Species Program
Monthly Report for 16 June – 15 July 2023

Staff:

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

Administration – K. Clark

K. Clark worked on agency planning and policy issues, and regional actions as part of the Northeast Wildlife Diversity Managers technical committee.

Staff worked with Bureau of Information and Education staff on field opportunities for videos and photos for outreach to highlight the NJ Endangered & Nongame Species Conservation Act 50th anniversary. NJFW is featuring stories and species in social media posts and videos this year. New posts featured bog turtle habitat management and the peregrine falcon project.

Landscape Project –

ENSP staff met with OFWIS staff to discuss the 2024 LP revision and the timeline of steps to meet the revision date.

Technical Guidance & Policy/Planning – all staff

Staff continued to review applications for Scientific Collecting permits, and issue permits and amendments for 2023.

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

Staff contributed to reviews of DEP draft rules and rule amendments.

Biotics Database – G. Fowles

G. Fowles and A. Mitchell worked on training the 2 new temp service employees in the Biotics and NJ Wildlife Tracker protocols, and getting them properly set up with software, connections and equipment.

G. Fowles compiled and delivered requested data to OFWIS regarding proposed species status changes and upcoming species name changes in preparation for a Landscape Project mapping update.

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

G. Fowles participated in a field meeting with colleagues from DOT and Watershed and Land Management regarding a terrestrial wildlife crossing project under Rte. 280 in northern New Jersey.

Habitat Conservation Management on Public Lands – All staff

Bird survey data from monitoring the response to habitat management on Sparta Mountain WMA and Weldon Brook WMA have been entered and are being summarized. In 2023, 56 species (25 of which are SGCN) were observed in at least one of the eleven sites where open-canopy forests were restored on Sparta Mountain WMA. Based on observations from 2012 through 2023, 89 different bird species, 36 of which are SGCN, have been observed using these restored open-canopy forest sites on Sparta Mountain WMA. Just over 50% of the bird species observed in these sites are declining, including “Tipping Point” species like the prairie warbler and “On-Alert” species like the black-billed cuckoo, Canada warbler, wood thrush, and red-headed woodpecker. Those categories of conservation status were published by the North American Bird Conservation Initiative in the U.S. State of the Birds, 2022, report.

Species Status Review – K. Clark

D. Jenkins continued working on a rule amendment to revise the lists of endangered and nongame wildlife.

State Wildlife Action Plan – K. Korth

The Database Design contract was awarded to SSI – Strategic Stewardship Initiative. The cross walk of the current 2018 threats to the Northeast Threat Lexicon was completed and the new Threat document was sent to bureau staff for review (BMF, BFF, BWM). Staff is working on cross walking the 2018 Action to the Northeast Action Lexicon. Staff are taking the lead on adjusting/modifying the NE Lexicon language with the NE SWAP Coordinators. K. Korth is working with I&E staff to create a public comment page for the process of SGCN selection. K. Korth is working to set a date for the new Technical Advisory Group to discuss processes.

HERPTILES

Snake Fungal Disease – K. Schantz

No new report.

Snakes – K. Schantz

There have been fewer snake complaints to date this year, but more social media fake postings and claims of the presence of both native and non-native venomous snakes throughout NJ than previous years (est. approximately six to date this year).

Seasonal field technician, Leah Wells-Borer, continues to track three timber rattlesnakes and two eastern ratsnakes that had been exposed during winter construction excavation to assess how the snakes will respond to the altered den structure.

Copperhead research by Tyler Christensen continues in both central and northern NJ; an isolated population vs. local populations with the ability to interact, respectively. Mr. Christensen has documented some differences in regional populations’ activity ranges and dispersal distances.

The Pinelands Commission continues their research on pinelands snakes, primarily corn snakes. Telemetry research initially led by Herpetological Associates, Inc. (Bob Zappalorti, President) and Dr. Howard Reinert (The College of New Jersey) in partnership with and continued by the Pinelands Commission has resulted in the discovery of numerous corn snake dens (some shared with other snake species).

SGCN Turtles – B. Zarate and B. Pitts

B. Zarate continued to participate in monthly coordination calls for bog and wood turtle. Calls for box and spotted turtle have mostly ended with the end of their respective grant periods. B. Zarate traveled to the Conservation Symposium for Wood, Blanding's, and Spotted Turtles, and related Emydine turtles, held July 10–12, 2023 at Juniata College in Huntingdon, Pennsylvania. Presentations were made on highly relevant work to what we're doing here in the state, including the topics of population monitoring, habitat restoration, and population management, such as nest protection and headstarting.

Field work for bog and wood turtles ended for the season and there was a final box turtle plot survey completed this period in coordination with Monmouth University staff and students, and Gretchen Fowles from staff and our scent detection dog, Fly.

Eastern Tiger Salamander – B. Pitts

No new report.

Diamondback Terrapins - B. Zarate

The states have now received all of the proposals for the RCN 3.0 terrapin grant, and those proposals have been organized and distributed with ranking sheets by our counterparts in Maryland. B. Zarate has completed ranking of each of the proposals and the state leads will convene on July 18 to review the respective scores and aim to identify contractors for the jobs based on the scores and discussion.

MAMMALS

Bobcat Project – G. Fowles

One bobcat was reported struck and killed by a vehicle during the reporting period. The carcass was retrieved and location and samples taken.

Bat Conservation – M. Hall

ENSP's bat team conducted bat presence/absence inspections at 3 more bridges where maintenance activities are planned by NJDOT, as part of ongoing coordination between the DOT, US Fish and Wildlife Service and ENSP to document bats' use of transportation structures and to schedule operational activities during times of year which minimize impacts to protected species. Guano samples collected from three structures will be sent to a genetics lab to identify the species of bat present; one site is believed to be used by one of the rarer *Myotis* species.

Statewide acoustic bat monitoring for the North American Bat Monitoring Program (NABat) continues through July. M. Hall fielded approx. 15-20 nuisance bat calls from members of the public or their pest control contractors to help address issues of bats in buildings.

Allegheny Woodrat – G. Fowles

No new report

BIRDS

Colonial Waterbirds – C. Davis

No new report available.

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

No new report available.

Bald Eagle Monitoring - K. Clark

Bald eagle nest monitoring has documented 243 nests active and 12 territorial pairs. Staff and CWF were involved in rescues at two nests after nests collapsed due to rain and wind. No nestlings were lost and they were banded and re-nested in rebuilt nests. L. Smith of CWF-NJ is providing weekly email updates to all volunteers and cooperators.

Staff and volunteers have picked up several dead eagles, mostly a result of electrocution on power distribution lines. Necropsies will confirm and locations are provided to the power company for evaluation for mitigation.

Peregrine Falcon Monitoring – K. Clark

The nesting season is wrapping up and nestling banding was completed in mid-June. Several cases of early fledging resulted in grounded birds that were checked out and re-nested to their natal site. Successful fledging was confirmed at two Palisades sites and two other natural sites. Data will be compiled on all sites in the next two months. About 40 pairs have been documented statewide, but not all are actively nesting. Staff banded all accessible nestlings to date, on buildings, bridges, marsh structures, and one cliff site. Nine cameras are deployed to record data on prey delivered to nests, all in the coastal zone.

American Kestrel – B. Pitts

This season was another record year for the nest box project. Final data is still coming in from banding partners on the project; 125 total nesting attempts were documented, and 102 successful boxes produced >400 nestlings. Fifty-five adult Kestrels were captured (30 newly banded, 25 recaptures).

Osprey Monitoring – K. Clark

Volunteers and CWF staff have checked nests in all the major Osprey colonies. The early June storm caused a period of low fish availability that resulted in nest failure in some colonies, but overall productivity appeared to be fairly normal. Follow-up nest checks into July suggested additional failures related to fish supply, so more surveys are planned through July.

Other Raptors – K. Clark

No new report.

Migratory Shorebirds – B. Pitts

B. Pitts submitted red knot resighting data for entry into the bandedbirds.org database, and ratio scan counts for baywide population turnover analysis. The final project report for the Shorebird Steward project was received from the contractor (CWF-NJ), and ENSP is awaiting the final report for the horseshoe crab egg density survey. Payments for all contracted work are being processed and paid.

Secretive Marsh Birds – C. Davis and E. Heiser

No new report.

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

Bird survey data from monitoring the golden-winged warbler population and the bird response to habitat restoration efforts were entered and are being summarized. S. Petzinger surveyed 94 different locations between May 15 and June 15, 2023. Golden-winged warblers were detected and continue to breed in NJ, but a final number is not yet available until all the data are submitted and summarized.

Regional & National Bird Coordination – S. Petzinger

S. Petzinger conducted a Breeding Bird Survey route on June 17, 2023, and submitted the data to the BBS office.

The annual AMJV Technical Committee meeting will be held August 1-2, 2023. S. Petzinger submitted a travel request to attend in person.

INVERTEBRATES & AQUATICS

Butterflies, Dragonflies and other Insect Species – R. Somes

R. Somes conducted surveys for the Northern Metalmark butterfly at several known populations and found 6 individuals at one site. We are working on habitat management but invasive plant species are causing challenges.

Pollinators – R. Somes

R. Somes and NJ State Tree Nursery Staff planted 3,000 tubes of native wildflowers and butterfly larval host plants for fall conservation project plantings.

Freshwater Mussels – R. Somes

R. Somes and A. Kisurin participated in a meeting with NJDEP Pesticide Control, NJFW Freshwater Fisheries, and NJ Conservation Foundation staff to review potential control strategies for the Chinese Pondmussel population in Hunterdon County.

R. Somes and A. Kisurin participated in a Brook Floater Conservation Working Group meeting to discuss eDNA and rearing Brook Floaters in hatcheries was discussed.

R. Somes and A. Kisurin conducted several freshwater mussel surveys in the Raritan River with focus on surveying for Brook Floater and Chinese Pondmussel. They found a live specimen of a Giant Floater, confirmed by DNA analysis. This is the first documented live occurrence in NJ.

A. Kisurin is investigating biotic identifiers associated with mussel populations (tessellated darters[+] vs brown trout[-]) to guide survey effort and to identify habitat for potential mussel restocking effort.

eDNA Technology – A. Kisurin

The ENSP's eDNA working group is online. A. Kisurin is creating a living database of papers and references to help guide decision making for projects and innovative methodologies for sampling effort. Also creating the framework to set up proactive monitoring plan for NJ wildlife.

A. Kisurin spoke with personnel from Biomeme to design field-deployable rapid assessment qPCR kits to augment existing sampling methods and obtain results quickly and effectively.

A. Kisurin is looking at Passive Sampling technology for aquatic and possibly terrestrial applications.

A. Kisurin is investigating pathogenic work to be able to field diagnose visibly sick wildlife in rapid assessment / management. Also investigating in-house sequencing technology to couple with in-field qPCR for rapid and cost-effective information (metabarcoding) regarding cryptic species ID, community analysis.

Photo: Sandhill Crane with one of two chicks, Fort Dix, 7/25/2023. By R. Some

