

**Endangered and Nongame Species Program**  
**Monthly Report for 16 May – 15 June 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

**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 50<sup>th</sup> anniversary. NJFW is featuring stories and species in social media posts and videos this year. Recent posts featured NJ Wildlife Tracker, research on venomous snakes, “Fly” the detection dog’s work to locate rare turtles, and the bald eagle population recovery.

**Landscape Project** –

No new report.

**Habitat Change Analysis Project (HCAP)** –S. Petzinger

No new report.

**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

Two new temporary employees were hired as Biotics Data Managers to replace two others who resigned in earlier months to take full-time jobs with benefits.

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

M. Hall and our engineering consultants at NV5 held a second (final) virtual info session to provide a status update and share the near-final design plans for the Waterloo Road Amphibian Crossing Project. Four tunnels and guide fencing are proposed for the site to enable safe passage of salamanders, frogs and toads across this county road during their annual spring migrations. The comment period for this project has closed, but information can be found at <https://dep.nj.gov/njfw/conservation/waterloo-road-amphibian-crossing-project/>.

In other Waterloo news, we continued to coordinate with NJDOT Local Aid office (the program funding project construction) and DEP partners regarding the upcoming bid process, environmental permitting, and an intra-agency agreement for the long-term management of the project site between NJFW (proponent & manager) and State Parks, Forests and Historic Sites (landowner). We applied for and received Soil Conservation District plan certification for the project during this period as well.

Field techs B. Quade, A. Bunger & J. Martinez resumed NAACC bridge & culvert surveys at road-stream crossings within the CHANJ habitat connectivity mapping, including post-construction surveys at a few locations where state Flood Hazard Area rules required dry passage for wildlife to be incorporated during culvert replacement projects. The goal of these surveys is to document the outcomes of Flood Hazard mitigation projects for wildlife connectivity across roads, and to categorize other existing structures based on their suitability for terrestrial wildlife passage (i.e., which are barriers?).

G. Fowles attended the International Conference on Ecology and Transportation (ICOET) held in Burlington, VT and attended great session/talks, connected with many old and new colleagues, and reported back notes from the conference to the rest of the CHANJ Team.

G. Fowles organized and led the bi-monthly Roads and Wildlife Working Group (RWWG) meeting with ENSP, DOT, DLR, and USFWS in attendance. ENSP gave updates on NJ Wildlife Tracker, ICOET take-aways, and the status of the Waterloo project. DOT is in the process of updating their Soil Erosion Control standards that now eliminate plastic products. An update was given on the IJJA Wildlife Crossing Pilot project application that DOT plans to submit in collaboration with ENSP and the Wetlands Institute. Field trips to wildlife crossing projects in NJ are being planned for RWWG members, as well as additional training on CHANJ and terrestrial wildlife crossings for DOT project managers. Lastly the group reviewed a newly built project permitted through the Flood Hazard regulations that incorporates dry passage for terrestrial wildlife.

### **Habitat Conservation Management on Public Lands** – All staff

Bird surveys to monitor the response to habitat management on Sparta Mountain WMA and Weldon Brook WMA were conducted between May 15 and June 15, 2023. A territorial adult red-headed woodpecker was observed in one of the sites.

S. Petzinger conducted the second of two grassland bird surveys to monitor the bird response to grassland restoration efforts on South Branch WMA.

### **Species Status Review** – K. Clark

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

### **State Wildlife Action Plan** – K. Korth

ENSP staff continue to meet regularly with our contractor. The screening tool for a revised list of SGCN was finalized and the final draft list is in review by NJFW staff. The new Northeast Threat Lexicon is being cross walked with 2018 threats. Staff is working on updating stakeholder list and creating a Technical Advisory Group.

### **HERPTILES**

#### **Snake Fungal Disease** – K. Schantz

No new report.

#### **Snakes** – K. Schantz

No new report.

#### **SGCN Turtles** – B. Zarate and B. Pitts

B. Zarate test, test, test

#### **Eastern Tiger Salamander** – B. Pitts

No new report.

#### **Diamondback Terrapins** - B. Zarate

B. Zarate reviewed and issued scientific collecting permits and provided technical advice to partners ahead of the upcoming nesting season. Discussions occurred ongoing with Marine Resource Administration on proposed updates to blue crab harvest regulations that would limit the take of terrapins in commercial and recreational crab pots.

### **MAMMALS**

#### **Bobcat Project** – G. Fowles

There were 4 roadkilled bobcats reported and retrieved during this reporting period. Locations and samples were collected for all individuals.

#### **Bat Conservation** – M. Hall

ENSP's bat team conducted bat presence/absence inspections at 15 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. Between ENSP's surveys and those done by consultants so far this year, at least 7 more structures have found to be used by bats, including our first-in-NJ record of a Tricolored Bat (proposed for state and federal endangered listing) roosting in a large culvert below a highway.

Our 7<sup>th</sup> season of statewide acoustic bat monitoring as part of the North American Bat Monitoring Program (NABat) got underway in June. M. Hall also trained Monmouth County Parks staff to deploy detectors at parklands of interest to help with biological inventories.

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. The volume of calls we receive is highest from

May-July because bat maternity colonies are most active in attics, etc., and our bat exclusion guidelines restrict activities during these sensitive months.

**Allegheny Woodrat** – G. Fowles

G. Fowles is collaborating with Picatinny Arsenal to conduct habitat assessments of historic woodrat occupancy areas, as well as camera monitoring surveys with funding available through Picatinny.

**BIRDS**

**Colonial Waterbirds** – C. Davis

Aerial surveys for wading birds were conducted three times in the monthly report time period. In the past, one survey has been conducted for this species group (ie herons and egrets) but as it was a single snapshot, it is difficult to surmise very much about productivity and the population. We are experimenting with multiple surveys per season to determine if we can get a better understanding of the population and the success of the season. Data has not been compiled or analyzed yet, but an early finding was that more wading birds were nesting in trees than in the past. This is possibly a response to increased flooding in the marsh areas and a welcome sign of potential adaptation.

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

Staff continued to monitor and protect beach-nesting birds across the state. Piping Plovers and American Oystercatchers productivity will be low this year due to a combination of predators and flooding. Least Terns numbers are a little on the low side but of greater concern is the low number of colonies and a possible funneling to the feral sites (which is a pattern we have seen with Piping Plovers over the last ten years but had not yet been observed in Least Terns). Black Skimmers are just getting started but the population appears stable compared to the last few years. Horseshoe Island continues as a hotbed of activity. NJFW CPOs have partnered with ENSP to tackle the human disturbance at this site and the support is very much appreciated.

**Bald Eagle Monitoring** - K. Clark

Bald eagle nest monitoring has documented 243 nests active and 12 territorial pairs. Young eagles' peak fledging time tends to be June. L. Smith of CWF-NJ is providing weekly email updates to all volunteers and cooperators.

**Peregrine Falcon Monitoring** – K. Clark

Nesting is under continued monitoring by staff and volunteers. 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

The 2023 Kestrel nest box season has increased to a new record. There were 122 known nests by 15-May. To date, there have been 15 failures, 40 boxes banded, and 51 boxes with confirmed hatching. 177 chicks have been banded (4.425/successful box), and 52 adults have been captured (26 recap, 26 not previously banded).

### **Osprey Monitoring** – K. Clark

K. Clark responded to cell companies and communication tower owners (and the public) regarding Osprey nests on towers and various man-made structures, and the timing restrictions that apply to those nests.

### **Other Raptors** – K. Clark

Cooperators are monitoring barn owl nest boxes placed in the coastal zone to improve opportunities for barn owl nesting. The best occupancy so far is in the Delaware Bay marsh ecotone.

### **Migratory Shorebirds** – B. Pitts

ENSP oversaw contract work including horseshoe crab egg surveys and Shorebird Stewards. ENSP also oversaw the management of beach closures on the Delaware Bay. Large informational signs were installed on 1-May, and the closure posts, signs, and ropes were installed on 8-May. Most shorebirds left the Bay during the week of Memorial Day, so all closure signs were removed on 2 June. Resightings data from the two staff that ENSP oversaw is being compiled and QA/QC'd for submission.

Three aerial surveys were conducted by B. Pitts and Austin Damminger of NJ Fish and Wildlife and Shawn Sullivan of DE Division of Fish and Wildlife on 16-May, 22-May, and 26-May. Aerial counts were inconsistent with simultaneous ground counts on the peak-count date of 22-May, so the agencies deferred to using the ground count for Red Knots, which was 22,266. The peak count of Ruddy Turnstone was on 26-May and totaled 23,569. In general, Delaware Bay conditions were good for horseshoe crab spawning in late April and all of May, which resulted in good shorebird feeding conditions. The number of Red Knots during the peak time (around third week of May) was higher than the previous two years and on par with the peak count in 2020.

### **Secretive Marsh Birds** – C. Davis and E. Heiser

Black Rail ARU surveys continued this month. Units were moved to a few new locations. Data analysis is not yet available so nothing of note to report yet.

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

Bird surveys to monitor the golden-winged warbler population and the bird response to habitat restoration efforts were conducted from May 15 to 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

Nothing to report.

## **INVERTEBRATES & AQUATICS**

### **Butterflies, Dragonflies and other Insect Species** – R. Somes

R. Somes and seasonal staff worked together with Cape May County Park Staff on a Frosted Elfin habitat restoration project.

Seasonal staff worked on several Frosted Elfin habitat projects in Cape May County that involved vegetation maintenance and the planting of wild indigo.

R. Somes conducted Frosted and Hoary Elfin surveys on Joint Base McGuire Dix Lakehurst, and documented populations of both species.

R. Somes attended a meeting for management planning on the Warren Grove Bombing Range and the Atlantic City Airport National Guard Base.

Seasonal staff continued surveys for rare and listed butterflies and dragonflies throughout the state and documented new populations of Frosted Elfin and Gray Petaltail.

#### Pollinators – R. Somes

Native wildflowers and pollinator host plants were distributed to several more restoration projects and plans were made for June plantings for distribution in August.

The Pollinators and Solar Management document went through final internal review.

#### Freshwater Mussels – R. Somes

R. Somes and A. Kisurin attended a Yellow Lampmussel conservation working group meeting.

R. Somes and A. Kisurin conducted Chinese Pondmussel surveys in the Raritan River and found several potential shells and a potential live specimen that was tested for genetic confirmation.

R. Somes, A. Kisurin and seasonal staff conducted Freshwater Mussel surveys in several locations in Doctor's Creek, the Raritan and Lamington Rivers, and the Paulins Kill and Lake Aeroflex. Several new occurrences for Triangle Floater, Eastern Lampmussel, and Creeper were documented.

Photo: Removing Barn Owl chick from nest box for banding. Nest boxes in coastal areas are having a good occupancy rate, likely related to additional prey populations in salt marshes. Cumberland County. 6/21/2023.

