

**Endangered and Nongame Species Program**  
**Monthly Report for 16 June – 15 July, 2021**

**Staff:**

John Heilferty, Chief  
Kathy Clark, Supervising Zoologist  
Jeanette Bowers-Altman, Principal Zoologist  
Christina “Kashi” Davis, Environmental Specialist II  
Amanda Dey, Principal Zoologist  
Gretchen Fowles, GIS Specialist  
MacKenzie Hall, Environmental Specialist II  
Emily Heiser, Assistant Biologist  
Sharon Petzinger, Senior Zoologist  
Bill Pitts, Senior Zoologist  
Kris Schantz, Principal Zoologist  
Robert Somes, Senior Zoologist  
Brian Zarate, Senior Zoologist

**Administration** – J. Heilferty

In July, the Department began developing a plan for DFW employee’s return to work in the office setting. While most staff continued to work from home or perform field work, staff will soon be directed to work from home no more than 3 days per week, with the remaining two days either in the field or in their formal office location.

ENSP staff are finalizing the 2022-2024 grant proposals in the new federal Tracking and Reporting on Actions for Conservation of Species (TRACS) format in preparation for review and ultimately, input into TRACS online.

**Landscape Project** – J. Heilferty

No new report.

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

No new report.

**Technical Guidance & Policy/Planning** – all staff

J. Bowers-Altman continued reviewing scientific collecting permit applications relating to freshwater mussel surveys for the 2021 season.

J. Bowers-Altman provided comments to DLRP staff on several proposed instream projects relating to impacts on listed freshwater mussels.

S. Petzinger and G. Fowles attended and provided updates at the NRCS Technical Committee meeting on June 29, 2021.

ESNP staff continued discussions with DLRP staff concerning a 17 acre floating solar panel that is being proposed in the immediate vicinity of an active bald eagle nest.

As part of her duties as Shorebird Chair for Atlantic Flyway Council Tech Section, C. Davis co-led (with USFWS) coordination of a NFWF proposal relating to camera guidance that will inform predation management. The proposal will include representatives from multiple agencies and many state across the Atlantic Flyway.

**Biotics Database** – G. Fowles

Biotics staff continue to work on developing the NJ Wildlife Tracker online submittal application in collaboration with the Bureau of GIS. The final back-end scripting is being written and tested, with an updated soft release anticipated in August.

Training of the new temporary service data managers continues as they also work on entering the backlog of data that has built up over the past 1.5 years into NJ Wildlife Tracker.

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

Progress continues to be made on the Waterloo Road amphibian tunnel project, which is now in the final design and permitting stage. Environmental, historic, and long-term maintenance details and agreements are being worked out with stakeholders.

G. Fowles gave a presentation to the NRCS Technical Committee on CHANJ.

The CHANJ Team met virtually with Raritan Headwaters to plan their NAACC culvert inventory survey effort in CHANJ mapped areas.

Approximately 60 native mammal genetic samples collected by volunteers and staff were sent to the National Genomics Center for Fish and Wildlife as part of the gene flow study. The total samples collected for the study is over 1,600.

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

The Addendum to the 2017 approved Sparta Mountain WMA Forest Stewardship Plan was finalized and released on July 9, 2021.

Forest management activities to create open-canopy forests and allow for regeneration of young forests in Stand 9 of Sparta Mountain WMA are being planned for the fall/winter 2021/2022.

Information pertaining to these activities were submitted for internal Land Management Review, sent out for municipalities and technical stakeholders to comment, and posted for the public to comment. Comments are due August 12, 2021. A request for bids was also sent out to hire a forester to assist with the forest management activities.

Bird surveys were conducted on South Branch WMA-Merck to evaluate the grassland restoration efforts being conducted.

Bird surveys were conducted on Sparta Mountain and Weldon Brook WMAs to evaluate the young forest restoration work being conducted.

**Species Status Review** – K. Clark

No new report.

**State Wildlife Action Plan** – All staff

Select ENSP staff contributed information to the on-going work to identify associations between the conservation threats/action drivers and the 11 broad habitats, 49 Conservation Focal Areas, and 21 Counties.

## **HERPTILES**

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

No new report.

### **Snakes** – K. Schantz

K. Schantz has been drafting a policy for DEP review and implementation on DEP-owned and managed lands regarding minimizing the use of soil and sediment control products that include plastic or other synthetically-made netting. This requires summarizing a literature review and developing guidance for on-the-ground implementation.

K. Schantz has been developing a request for proposal/possible grant focused on identifying northern copperhead critical habitat features (i.e., dens, gestation/rookeries). The concept was presented to the Endangered and Nongame Species Advisory Committee and K. Schantz, J. Heilferty, and K. Clark continue to work internally to determine the most appropriate path forward (i.e., as an RFP or as a grant).

The Venomous Snake Response Team has been very active in northern New Jersey. It seems this is either a good breeding year for multiple populations and males are on the move, or more residents are soliciting our assistance for venomous snake removal rather than ignoring or killing them.

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

Monthly coordination calls continued for CSWG bog and CSWG/RCN wood turtle regional projects. We had several email exchanges with partners planning for late summer/fall/winter bog turtle habitat management at both northern and southern sites in partnership with CWF and USFWS-NJFO staff.

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

No new report.

### **Diamondback Terrapins** - J. Bowers-Altman and B. Zarate

B. Zarate and J. Bowers-Altman accompanied J. Wnek (MATES) and several of his students to sites in Stafford/Manahawkin where terrapin nesting research is currently being conducted.

B. Zarate and J. Bowers-Altman attended several meetings pertaining to the upcoming release of a terrapin held in captivity after being illegally removed from her population several years ago.

## **MAMMALS**

### **Bobcat Project** – G. Fowles

Necropsies were performed on one roadkilled bobcat and one emaciated kitten during the reporting period.

### **Bat Conservation** – M. Hall

Summer acoustic surveys are underway at our 24 long-term monitoring locations and 12 driving routes statewide, which are part of the North American Bat Monitoring Program (NABat). Acoustic surveys were also done at a number of points during this period as a scouting method for upcoming

migratory bat nanotagging effort, for which plans are being finalized with a collaborator from Virginia Tech.

Inspections for bats roosting in bridges continue to be done by NJDOT and consultants related to maintenance scheduling; results are compiled by ENSP and NJDOT. One additional bridge over water was confirmed to house a small colony of bats during this period. M. Hall trained two additional consulting biologists in bridge-bat inspection techniques and how to document and report findings of bat presence/absence.

M. Hall gave technical guidance to approx. seven homeowners and building managers during this period to help address issues with bat colonies roosting in buildings.

#### **Allegheny Woodrat** – G. Fowles

G. Fowles led the Allegheny Woodrat regional working group bi-monthly call, which focused on mast survey protocols and included presentations by a biologist from the NC Wildlife Resources Commission and a graduate student from University of Wisconsin in Stephens Point. The group also had a follow-up discussion about initiating an Allegheny woodrat captive breeding program to support conservation efforts. The Toledo Zoo and The Maryland Zoo in Baltimore have received approvals to initiate programs at their facilities. The group decided to form a subgroup to develop a protocol for the program.

Camera surveys continue at historic woodrat sites in the vicinity of the Delaware Water Gap.

### **BIRDS**

#### **American Kestrel** – B. Pitts

The 2021 Kestrel nest box season is winding down, and it appears that the total number of nesting attempts will fall just short of 100; right now it stands at 98. This beats the project best from 2020 of 92 attempts, up from 72 attempts in 2017 and 2019. Another milestone for the project was reached in 2021: to date, we have banded 307 chicks in 76 successful boxes, which is the first year we have cracked the 300 threshold! Forty-eight adults have been captured by ENSP and partners with 24 newly banded birds and 24 recaptures. Two more boxes have hatched and are awaiting the chicks reaching banding age, and one last box is still on eggs.

The breakdown of this year's 98 attempts is as follows: 31 attempts in Natural Lands (NL) boxes, 14 attempts in Friends of Hopewell Valley Open Space (FoHVOS) boxes, 4 attempts in Raritan Headwaters (RH) boxes, and 49 attempts in ENSP boxes. This increase would not be possible without the increased participation from our NGO partners over the past seven years. Our previous best year was 2012, when we banded 158 fledglings in 40 successful boxes (52 total attempts). With targeted box placement in some of the best habitat throughout the State, we have managed to practically double our productivity while sharing the responsibility for nest box installation and monitoring.

#### **Colonial Waterbirds** – C. Davis

C. Davis responded to a number of issues relating to Yellow-crowned Night-herons nesting in residential areas. She also received information about a drone harassing one of the largest colonies in the state and passed the information of the pilot on to Law Enforcement.

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

In what is traditionally a slower time of year for beach-nesting birds, things have stayed very busy with a late batch of nests hatching around the 4<sup>th</sup> of July. Many nests and chicks were lost during the Memorial Day nor'easter storm, which extended the season for Piping Plovers and American Oystercatchers because of re-nesting. While pair numbers for Piping Plovers will increase statewide this season, productivity will fall well below the federal recovery goal (1.5 chicks/pair). By mid-July, approximately 10 chicks have fledged for the 41 pairs that ENSP monitored. American Oystercatchers also had a fairly difficult season throughout the state though the population seemingly remains stable. In areas where they have traditionally fledged chicks, they struggled to successfully hatch nests this year.

Colonial nesting birds – Black Skimmers and Least Terns – largely missed the catastrophic Memorial Day storm as most were just arriving and beginning to nest when the storm rolled through the coast. The most notable colony of skimmers and terns this year is on the offshore island from Little Beach and Holgate – dubbed “Horseshoe Island.” The island holds the largest colony of Least Terns in the state and has nesting Royal Terns – the furthest northern extent for nesting in North America. With the help of the Bureau of Marine Fisheries, ENSP staff has been able to access the colony on a weekly basis.

#### **Bald Eagle Monitoring** - K. Clark

To date, almost 220 nests have been identified as active, 8 as territorial, and 40 as unknown status. Nest monitors continued to watch nests to report number of nestlings and fledging. Three recent fledglings were picked up with injuries: two in Toms River and one in Three Bridges (see below); they are in treatment at The Raptor Trust, Toms River Avian Care, and Tri-State Bird Rescue.

The nest camera at the Three Bridges nest, installed by PSE&G and streamed by Conserve Wildlife Foundation of NJ, continued to be popular. Unfortunately, one of the two fledglings ended up grounded close to the nest and was picked up by the neighbor. He is being treated at The Raptor Trust for a fracture of the coracoid bone, which most often occurs with a frontal impact. This type of injury takes 4-6 weeks to heal. The camera, meanwhile, was documenting the other eagle fledgling returning to the nest regularly and the adults continuing to feed him.  
(<http://www.conservewildlifenj.org/education/threebridges/>).

#### **Peregrine Falcon Monitoring** – K. Clark

The nesting season is mostly complete, and results are being tallied. Most fledging occurred in June, but several late nests were fledging in early July.

#### **Osprey Monitoring** – K. Clark

B. Wurst of Conserve Wildlife Foundation helped organize osprey nest checks that are conducted mostly by volunteers who are licensed bird banders. In addition, citizens can report nest outcomes using [www.osprey-watch.org](http://www.osprey-watch.org). Results of the nest surveys and nest success will be tallied in the next two months. Young ospreys begin fledging in late July.

#### **Other Raptors** – K. Clark

No new report.

#### **Migratory Shorebirds** – A. Dey

No new report.

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

Most of the 2021 bird surveys ended on June 15, 2021. Data have been submitted and entered but still waiting for all the data from NJ Audubon staff, who assisted with surveys again this year. Thus far data have been submitted and entered for about 139 locations. Out of these 139 locations, five golden-winged warblers, ten red-shouldered hawks, and one red-headed woodpecker were observed during the surveys.

**Secretive Marsh Birds**– C. Davis & E. Heiser

The Black Rail survey season was completed on July 15<sup>th</sup>. Overall, this was a successful season, multiple rails were detected this year, higher than the zero that were detected in 2019 (2020 survey was cancelled). Rails were detected on both call-playback and acoustic recording devices. Data will be compiled and reported on in the fall.

**Monitoring Avian Productivity & Survivorship (MAPS)** – S. Petzinger

Nothing to report.

**Regional & National Bird Coordination** – S. Petzinger

Nothing to report.

**INVERTEBRATES & AQUATICS**

**Freshwater Mussels/Shortnose Sturgeon/Aquatics** – J. Bowers-Altman

J. Bowers-Altman participated in the Brook Floater Working Group's monthly meeting.

Brook floater (T) surveys in the NB Raritan River are ongoing.

J. Bowers-Altman, with assistance from B. Neilan (BMF), completed the annual NMFS Section 6 renewal application.

**Pollinator Conservation** – R. Somes

R. Somes and seasonal staff worked together with the NJ State Forest Service to plant 3200 tublings of 26 species of native wildflowers and butterfly larval hostplants at the State Tree Nursery in Jackson for planting this fall.

R. Somes coordinated with several Girl and Boy Scout units to create pollinator plantings and gardens at three different locations.

Remaining pollinator seedlings that were held over from last season were planted at several State Parks and Wildlife Management areas.

**Lepidoptera, Odonata, Coleoptera**- R. Somes

Surveys for Northern Metalmark were conducted at six known colonies as well as in areas of ongoing habitat management. One colony continues to have a large population with 86 individuals observed. The other sites were found to hold smaller numbers with counts ranging 1 to 11 individuals observed. Invasive plants continue to be an ongoing threat to the persistence of this species in NJ. Staff and volunteers worked on invasive plant removal and control at 3 different known Northern Metalmark sites.

Surveys for Baltimore Checkerspot documented two new populations during their flight window.

Surveys for Georgia/Helicta Satyr continue to monitor known populations in the NJ Pinelands Region.

A new Bronze Copper population discovered last year was documented again this season with 5 individuals observed, and a known population was surveyed with 4 individuals observed.