Endangered and Nongame Species Advisory Committee
Meeting Minutes
November 22, 2024

Assunpink Central Region Office
1 Eldridge Road, Robbinsville, NJ

Members in attendance: Rick Lathrop, Russ Furnari, Howard Geduldig, Martha Maxwell-Doyle, Erica Miller, David Mizrahi (online), Eliot Nagele, Howard Reinert, Catherine Tredick.

Absent: Ty Gould-Jacinto, Marion McClary

Staff in attendance: Dave Golden (Assistant Commissioner), Jason Hearon (Assistant Director, NJFW), Kristen Meistrell (Assistant Director), Kathy Clark (ENSP chief); Kim Korth (ENSP), Gretchen Fowles (ENSP), Bill Pitts (ENSP), Alex Kisurin (ENSP), Mary Monteschio (NJFW Regulatory Officer)

Public: Emile DeVito, Grace Dougan, Dr. Chandler Navara, Virginia Osnatu (Duke Farms)

Chair convened the meeting at 10:04 AM.

The public notice for this meeting was read by K. Clark. The meeting agenda was provided to the New Jersey Secretary of State's office and two NJ newspapers.

Introductions of those in attendance.

Approval of Minutes
H. Geduldig made a motion to approve the minutes of the July 24 meeting and the September 20 meeting, seconded by M. Maxwell-Doyle. Motion was approved unanimously.

Report by Assistant Commissioner Dave Golden
AC Golden welcomed Kristen Meistrell who will be moving into the Assistant Director position that oversees the Bureau of Wildlife Management, Bureau of Freshwater Fisheries, and Office of Wildlife Health & Forensics. He also announced that Pete Winkler was promoted to the chief of the Bureau of Land Management.

In regulatory news, the updated species status lists will be adopted as of January 6, 2025. A new version of the Landscape Project mapping will be released at the same date to support the amended species statuses. The "shore protection" rule that will allow Fish & Wildlife to restrict access to tidal areas and associated shoreline habitats for endangered species will be proposed December 16. This regulation will not be adopted in time for the May-June shorebird season, but will be available later in the summer and in future seasons.

The Site Remediation technical rules that were amended to include consideration of endangered species are in the public comment stage now and are available for viewing here:

https://dep.nj.gov/wp-content/uploads/rules/proposals/proposal-20241021a.pdf. The comment period has been extended to Friday, January 31, 2025.

The Garden State Preservation Trust's budget for capital needs, at $6 million, was approved.

Legislative Updates
M. Monteschio reported there are no updates.

Public Input
E. DeVito thanked the Committee for including rodenticides on today's agenda.

Old Business
Nominations Committee
H. Geduldig reported that two seats will become open with the April term limits on Dr. Lathrop's and Dr. Miller's positions. K. Clark posted a notice on the Fish & Wildlife website on November 15 seeking candidate applications for the two seats; that notice will be open through 12/31. When R. Lathrop leaves, a new chair will be appointed. D. Golden noted the ENSAC chair is also a member of the Fish & Game Council that meets monthly.

State Wildlife Action Plan (SWAP) – Kim Korth
K. Korth gave a brief presentation as an update on Plan revision progress.

Selection of the Species of Greatest Conservation Need (SGCN) is complete, and there are 613 animal species and 128 plant and fungi species.

Species profiles with range maps will be developed for all E, T, and SC species and plants. Habitats are the foundation of the 2025 SWAP; there are 9 regions defined, with "urban" as an unmapped region. There are 19 broad habitat types, and species are associated with habitats and regions. We will use the Conservation Blueprint map (Rowan) and CHANJ mapping to create static maps identifying locations and relative conditions of key habitats, a USFWS requirement of the SWAP.

Plan Actions: staff and the Technical Advisory Group have created over 400 actions that we (and technical experts) will be refining and prioritizing at the region levels.

The website will be on the DEP page and integrate all the elements – species, habitats, and priority management actions.

HPAI in Peregrine Falcons – Kathy Clark
In 2024 we found a high rate of turnover in the state's peregrine falcon population. We can identify most nesting individuals because a high percentage of falcons are banded. Normal turnover rate is about 15%, but in 2024 the turnover was 48% (21 of 44 known individuals gone). That loss of birds was concentrated in the coastal area where 63% of nesting birds were gone and not all replaced; similar results were measured in coastal Virginia. In the last two months, more researchers have voiced concerns with declines in peregrine populations in Arctic areas, Alaska, the Pacific Northwest, Sweden, and other areas. Researchers and some of the

Flyway organizations are reaching out to the USFWS, which will soon release a population assessment that, at this time, does not consider effects of HPAI on populations.

D. Mizrahi noted surveillance of shorebirds in spring is ongoing and generally HPAI is not detected except in ruddy turnstones. There was additional discussion on the concerns. NJ staff are committed to close monitoring in the coming seasons.

Anticoagulant Rodenticides and wildlife impacts – Dr. Erica Miller
AC Golden introduced the topic that was spurred by a letter sent to the DEP concerning the wildlife impacts of anticoagulant rodenticides (ARs).

E. Miller presented a summary of the rodenticides issue. There are two groups of Anticoagulant Rodenticides: first generation that require multiple feedings by rodents and are less toxic; and second generation (SGAR) (e.g., brodifacoum, diphacinone, bromadialone, difethialone) that are more toxic and persist in tissues in active form.

SGARs in raptors: a Canadian study found SGARs in 70% of owls found dead in 1988-2003, a figure that increased to 96% in 2005-2011. Similar results were found in MA (Tufts). At PennVet/NJDFW in 2011, 22% of raptor blood samples and 89% of great-horned owl livers had exposure. Project SNOWstorm (2013-23) documented 36% of snowy owls had exposure; 52 of those had >0.03ppm (Stone et al. showed that raptors with levels >0.03 ppm in their livers had hemorrhaging related to death).

In NJ BAEA necropsied in 2013-23, 100 were tested, 54 had exposure, 50 with brodifacoum. Twelve had >0.03 ppm that could be the lethal level. In GA, 83% of bald eagles had exposure.

In NJ bobcats, vulnerable due to their diet of rodents and other small mammals, 54% of 188 bobcats tested had exposure. Sublethal effects are likely to cause compromised immune function as well as make them more vulnerable to predation and vehicle strikes.

There are alternatives to anticoagulant rodenticides that are less toxic. Nature-based solutions include "Raptors Are The Solution," such as improving barn owl populations in agricultural systems. There are also less toxic rodenticides with lower secondary poisoning impacts.

Jim Wright (online) shared that he became aware of the prevalence of this problem and effects on raptors in his town, which moved him to research the topic and talk to wildlife rehabilitation managers. He appreciates the consideration to draw attention to this issue.

Discussion followed about where these are used and what options are available. The DEP will be discussing possible responses with other divisions. It was suggested that Fish & Wildlife's social media could help spread the message of alternative solutions.

New Business
2025 meeting schedule
January 22 (normal date is 1/15 but Chair has a conflict)
March 12 (same reason)

May 21
July 16
September 17
November 19
Joint meeting Oct. 14

Lunch, 12:00 – 12:30

<u>New Camera Project for wildlife crossings at NJ highways – Grace Dougan, Univ of Delaware</u>
Grace is a Master's student at University of DE studying bobcats and the limitations to its range in NJ. She illustrated the range and current status in NJ. Roads are barriers to bobcat movement, with the Route 78 area being the most southern occurrences. She is assessing crossing structures associated with highways for their status for safe terrestrial passage. These include culverts, underpasses, stream crossings, etc. The study objectives: identify which structural characteristics and physical elements are important for bobcat use, and which crossing structures are currently suitable for bobcat use.
She is using 80 cameras at 38 sites that are motion-triggered, 24/7, year round. The survey sites are on highways 1, 80, 78, 95, 202, and 206. CHANJ mapping was used to select sites. Camera surveys started end of June 2024 and have collected thousands of photos of wildlife using crossing structures. Bobcats have been observed at five structures along I-80 and Rt 206.

The study results will be used to make a predictive model on the characteristics suitable for bobcat use. Ultimately these results will inform the design of crossing structures.

<u>Proposal to use eDNA to detect Eastern Tiger Salamander – Bill Pitts and Alex Kisurin</u>
Eastern tiger salamander historically ranged throughout NJ but is now limited to the most southern counties and breeding populations are disjunct. They are threatened by sea level rise, variable hydrology at vernal pools, predation, emergent diseases, and habitat fragmentation. Some challenges to the project include difficulty surveying large areas and finding suitable breeding ponds.

Past conservation work included surveys, new breeding pool creation and improvement, translocation of egg masses to augment populations or improve genetic variation. Current work is identifying opportunities for creating new populations within an area that will support connectivity of populations for long term viability.

For the goals of identifying the locations and habitats of tiger salamander, we seek to:
1. Standardize physical survey methods and eDNA surveys: this will make comparisons and collaborations easier, and possibly lead to a CPUE ("catch per unit effort") equivalent to compare methods. 2. Determine abiotic factors to measure for habitat models for presence/absence and breeding density; 3. Understand eDNA signature in vernal pools, including understanding the abiotic characteristics that may affect the eDNA signatures to determine true negatives vs. true positives, and understanding DNA baselines signatures in NJ pine barren vernal pools. Cornell created a species-specific primer/probe for tiger salamanders from

populations in similar vernal pools in NY. We need to ensure that is it specific enough for our NJ populations.

There was discussion of the approaches and uses of eDNA technology for surveys and identifying habitat potential.

The Committee thanked the presenters for both topics.

Other Business

January 22 will be the next regular meeting of the ENSAC.

M. Maxwell-Doyle motioned to adjourn, seconded by E. Miller, and the meeting adjourned at 2:00 PM.

Summary of Action Items
Provide the Committee with the DEP response on the rodenticide issue when it's available.