

**Endangered and Nongame Species Advisory Committee
Meeting Minutes
November 16, 2022
Remote meeting via GoToMeeting**

Members in attendance: Howard Reinert (vice-chair), Jim Applegate, Emile DeVito, Robin Dougherty (late), Russ Furnari, David Mizrahi, Jane Morton Galetto, Howard Geduldig, Erica Miller.

Absent: Rick Lathrop, Joanna Burger

Staff in attendance: Dave Golden (Assistant Commissioner), Lisa Barno (Assistant Director), John Heilferty (Chief ENSP), Kathy Clark (ENSP), Robert Somes (ENSP), Gretchen Fowles (ENSP), Joe Cimino (Marine Fisheries)

Public: Marion McClary, Barbara Sachau, Jason Hafstad (NJ Natural Lands Trust)

Meeting called to order at 9:05 am.

The public notice for this meeting was read by J. Heilferty.

Introductions of those in attendance.

Approval of Minutes

J. Galetto made a motion to approve the minutes from the May meeting, seconded by R. Furnari. There was no discussion and the minutes were approved.

Report by Assistant Commissioner Dave Golden

AC D. Golden talked about the reinstatement of the black bear hunt that was approved at yesterday's Fish & Game Council meeting.

Also last week, the ASMFC met to discuss the horseshoe crab ARM and voted to accept the revised model, which would allow some harvest of female horseshoe crabs; however, the member states voted unanimously to keep the female horseshoe crab harvest closed for 2023.

RAWA, the "Recovering America's Wildlife Act," has a chance of passing in the lame duck portion of this Congress. It may be adopted in omnibus legislation that has a 12/16 deadline. The apportionment to NJ would be \$15 million annually, a roughly one-third increase to NJFW budget, should it go through. D. Golden is working with the DEP commissioner regarding state-level funding that would be important for the required matching funds.

Legislative Updates

M. Monteschio had provided the legislation list as of 11/1/22 and there are no significant updates since the October joint meeting.

Public Input

B. Sachau shared that she attended yesterday's Fish & Game Council meeting and remains upset about the Council's action to reopen the bear season. She feels that most of NJ's wildlife faces extinction, and she is against hunting. She feels that some species on the game list should be moved to the endangered/nongame list and protected, and that the ENSP is underfunded and undersupported.

Updates

J. Heilferty announced he intends to retire in February 2023. He will share more at the January ENSAC meeting when there is a personnel replacement plan.

J. Heilferty notes that **RAWA** continues to need support from the public and the conservation non-profit organizations. RAWA would fill the funding gap for endangered and nongame wildlife conservation that has existed for the last 90 years.

If RAWA passes, it will bring an additional \$15 million annually for SGCN conservation, up from the current funding level of about \$1 million. This work would be guided by the State Wildlife Action Plan (SWAP) that is now under revision with a 2025 due date. The SWAP identifies Species of Greatest Conservation Need, threats to species and habitats, and conservation actions for species and habitats. ENSP will be contracting to get some of the Plan revision accomplished, along with input from all NJ Fish & Wildlife biologist staff. The revision requires public input that will be part of the Plan revision.

Update on the **Northern Diamondback Terrapin "white paper."** DFW staff have taken the issue to the Marine Resources Administration and to the Marine Fisheries Council's blue claw crab subcommittee. That subcommittee will be discussing the issues and recommendations at their January meeting, which may result in recommended regulatory changes. J. Galetto asked that this be a "pending action item" to revisit at the January meeting.

J. Heilferty provided an update on the **NJ Pollinator Standards document**. This document was required by legislation for BPU-permitted grid-supply solar facilities. J. Heilferty and R. Somes developed the "standards" document, a draft of which was made available to ENSAC members earlier this year. It identifies planning and implementation for creating pollinator habitat, and also addresses the unique issues at solar facilities. J. Heilferty built in the six elements that developers will need to accommodate to show compliance with the BPU directive for a successful habitat result. This is an initiative that is expected to be instituted and monitored by BPU.

R. Furnari noted there is much more interest in pollinator habitat development and maintenance that could be used by businesses, such as grazing. J. Galetto asked if there's a finalized document, and J. Heilferty said it can be shared once it is final, and NJFW is passing this to BPU once final. This document will apply to the Community Solar Program, a new initiative and thus applying to new facilities, and is not retroactive.

R. Somes noted that many solar facilities have habitat opportunities outside of the panels area. E. DeVito noted that grazing sheep at solar facilities may not be good for pollinator habitat and that running a de minimus number of sheep does not constitute agricultural use.

LB congratulated J. Heilferty and R. Somes for creating this standards document, and noted that John's regulatory background was invaluable for creating guidance that was directly related to the regulatory requirements.

Nominations subcommittee

H. Geduldig reported for the Nominations subcommittee that Dr. Catherine Tredick is the nominee for the ENSAC position being vacated by Dr. Applegate's retirement. The nomination was moved by J. Galetto, seconded by E. Miller. Discussion: Dr. Tredick is a mammologist at Stockton University. J. Galetto commented that ENSAC members should also reflect and advocate for how people use state lands and wildlife. **There was a vote and the motion passed unanimously. The ENSAC will recommend to the DEP Commissioner that Dr. Catherine Tredick be appointed to the ENSAC.**

H. Reinert thanked the Nomination subcommittee for their work to research potential nominees.

New Business

There are two presentations today.

1. Connecting Habitat Across New Jersey (CHANJ) Project Update – Gretchen Fowles, ENSP

CHANJ has been publicly released since mid-2019. It provides information about habitat connections across NJ's landscape including the dense network of roads in NJ. CHANJ and improving habitat connectivity are important elements of the NJ State Wildlife Action Plan.

The project sought to evaluate gene flow of wildlife across the NJ landscape. There were over 100 volunteers collecting samples from road-killed wildlife over the last five years, and genetic analysis of 5 species determined that yes, human infrastructure does seem to have altered genetic connectivity, while 5 species (otter, raccoon, grey squirrel, deer and opossum) show relatively good genetic connectivity. NJ has about one-third of the state in preserved land, which makes connectivity across transportation systems more important, and spurred the partnership with NJ Dept of Transportation (NJDOT). CHANJ staff produced a guidance document to land protection, habitat management and restoration, and road mitigation. The next product is interactive mapping in the CHANJ Web Viewer that includes many habitat layers, including habitat cores, habitat corridors, road segments where habitats could connect, and "stepping stones" to help inform connectivity planning. The mapping includes interactive links to take a user to the relevant sections of the Guidance document. Map layers also include filtered preserved lands that are likely terrestrial wildlife habitat, and the culverts that were inventoried and scored for terrestrial wildlife passability. Over 75% of the 650 inventoried culverts in NJ CHANJ areas have been categorized with moderate to severe impassability scores.

Wildlife passage is now required under the 2016 amended Flood Hazard Area Control Act rules. Where a new or existing bridge, culvert, and/or railroad or roadway it serves would cause (or does cause) fragmentation of habitat for terrestrial E/T/SC wildlife, the rules now require a passage structure and guide fencing around it. J. Heilferty helped to guide this rule amendment when he was still in DEP's land use program.

The mapping also includes a layer representing road wildlife mitigation projects that have been accomplished. Where crossings have been improved, the mapping shows habitats that might be targeted for preservation. There is also opportunity for targeting outreach toward private landowners who may want to improve habitat conditions.

Benefits of CHANJ:

- Common vision of connectivity
- Usable at local and statewide scales
- Enables more proactive and collaborative planning efforts.

This September, NJ ENSP staff co-hosted the Northeast Transportation and Wildlife Conference (NETWC) in Atlantic City with South Jersey Transportation Authority and NJDOT for the first time. It was a good opportunity to showcase CHANJ. Over 200 people attended from 18 states and 4 provinces, including all states in the NE region. It was hybrid, difficult to run, but resulted in good attendance and recorded talks.

The recent federal Infrastructure Investment and Jobs Act will result in additional funding for improving wildlife crossing in the US. L. Barno pointed out that the CHANJ project positions us in NJ to take advantage of this funding to make real headway in improving connectivity for wildlife.

Lessons learned: CHANJ fully includes NJDOT and helps engage with potential partners inside and outside of DEP in improving connectivity. Monitoring of projects is critical to learning and success. Developing and offering trainings on habitat connectivity and road mitigation is important (VT has a habitat & highways program that is a good model). Outreach is always important.

GF encourages everyone to sign up for CHANJ listserv to stay engaged with the project.
www.CHANJ.nj.gov.

2. Freshwater Mussel Conservation – Robert Somes, ENSP

Mussels are important in aquatic ecosystems. In NJ there are 9 Endangered and Threatened species and 6 non-listed species (including 2 introduced species and 1 historic species). The mussel life cycle includes juveniles (glochidia) that attach to a host fish develop to a juvenile stage; they drop off once grown and live as adults where they dropped off the fish. Some have short life spans (10-12 years) while others can live 100 years. Habitat is highly variable (rivers, streams, lakes, ponds) and substrates vary, although pH is limiting.

Threats: Freshwater mussels are the most rapidly declining animal group due to habitat degradation, invasive exotic species, and stream alterations. Dams alter physical, chemical and biological environment, but they can create habitat as well. Other threats include contaminants (pesticides and sewage); and mussels are highly sensitive to aquatic herbicides (including salts). Invasive exotics may outcompete natives and include Asian clam, zebra mussel, and Chinese pondmussel.

Current projects:

There is high degree of regional interest in freshwater mussels, and in NJ, interest in detecting mussel populations related to roads and bridges where construction may impact the aquatic environment.

Chinese pondmussel – Hunterdon County had the first North American occurrence of this invasive exotic species. There was an extensive eradication effort, but eDNA surveys (by Rutgers and USFWS) still detect this species, including one hit in the Raritan River near the D&R Canal.

Delaware River Basin Mussel Conservation Working Group is a regional effort across NY-NJ-PA to map habitat and occurrences for basin-level conservation planning.

Raritan River Basin conservation and research: this includes watershed level inventories, using eDNA surveys and genetic specimen collection (for species representation).

Dwarf Wedgemussel Working Group is focusing on this federal and state endangered species, with NJ and USFWS staff.

Yellow Lampmussel Working Group: a new NE regional working group looking at range-wide conservation concerns. This species is limited in NJ to the Delaware River.

Brook Floater Working Group: NJ has a grant for species research and a feasibility study of building a hatchery that could produce mussels for wild repopulation. NJ is doing survey/inventory work to identify populations; this is a low-density species that makes it difficult to understand their population structure. In Mass, they paired survey results with eDNA data, revealing that visual surveys miss detecting mussels.

Dam removals: There is a lot of interest and general support for dam removals, but many smaller dams support mussel diversity, where small dams may replace the loss of natural features like beaver dams and log jams. Removal of dams has the potential to increase spread of invasive aquatic species. Relocation of mussels is best done near to dam removals, which is not possible in many situations. Mussel conservation around dam removals requires consideration of the existing and potential habitat, and mussel populations at and near the dam.

M. McClary asked about Pascack Brook in Bergen County, and R. Somes said that's a site of historic information but no recent surveys.

Multi-Agency FAQs - Red Knots and Horseshoe Crabs – Kathy Clark, ENSP

J. Cimino addressed the Committee regarding the ASMFC meeting last week where there was a unanimous decision to not allow a female horseshoe crab harvest despite adoption of the new ARM (Adaptive Resource Management) model that could allow it.

D. Mizrahi asked about the need to (ever) harvest female horseshoe crabs given their importance to the ecosystem. J. Cimino agreed and suggested the need for more research on the ecosystem values. J. Galetto asked about the level of support in the ASMFC, to which J. Cimino said there

is good support for horseshoe crab ecosystem value but garnering larger stakeholder involvement can be difficult. He sees continued support for such conservation in coming years.

K. Clark reviewed the FAQ document produced by NJFW, DE Fish & Wildlife, and USFWS as a resource needed for the public and media to understand the shorebird and horseshoe crab populations in Delaware Bay. It presents background and context for the wide array of information on these species and the shorebird stopover.

D. Mizrahi commented that while the population estimates by the USFWS mark-resight model have resulted in fairly consistent population level, the level of uncertainty has increased; that is, the estimated population range has increased. He said this suggests that red knots are spending less time or avoiding Delaware Bay. There was additional discussion about the causes of lower red knot counts during the spring stopover. There were some comments on the FAQ answers, and J. Galetto suggested that alternatives to LAL (lysate) be included in the answer to question number 17. J. Cimino said if there are FAQ answers that suggest a lesser relationship between horseshoe crab eggs and red knots then it should be addressed

J. Heilferty responded to J. Galetto's question about continued shorebird project work. The ENSP will be maintaining the project and shifting some staff toward coastal avian projects. We are still hoping for RAWA passage that would greatly improve our ability to research, monitor and manage this project and all coastal wildlife.

J. Galetto asked about alternative habitats to Delaware Bay, and D. Mizrahi responded that the lack of surveys in surrounding states makes that hard to know.

K. Clark asked that specific comments on the FAQ document be emailed to Kathy.Clark@dep.nj.gov to take back to the larger authoring group.

Other Business

Next regular ENSAC meeting is scheduled for Wednesday, January 18. It will be an in-person meeting. J. Heilferty will provide a list of all 2023 meeting dates.

J. Galetto made a motion to adjourn, seconded by J. Applegate. Meeting adjourned 12:42 AM.

Summary of Action Items

- 1) Nominating Subcommittee will send a letter requesting nomination of C. Tredick, which J. Heilferty will advance to the Commissioner.
- 2) J. Heilferty will provide a final copy of the Pollinator Standards document when it is done.
- 3) Report on the Marine Fisheries Council's blue claw crab subcommittee review of the Diamondback Terrapin issues.
- 4) (Continuing item) Identify a longer term strategy for ENSAC involvement in ASMFC's actions.