

FINAL MINUTES

**Natural Heritage & Endangered Species Advisory Committee
(NHESAC)**

January 12, 2017

DFW Field Headquarters, Southwest Meeting Room #103
1 Rabbit Hill Road, Westborough, MA 01581

MEMBERS:

Present: Kathleen Anderson, Mark Mello, Thomas Rawinski, Gwilym Jones

Absent: Jennifer Ryan, Joseph Larson, Wayne Petersen

ASSOCIATE MEMBERS:

Present: Dave Small, William Brumback, Kevin Powers, Mark Pokras, Timothy Flanagan

Absent: Karen Searcy, Bryan Windmiller, Andy Finton

AGENCY STAFF:

Present: Tom French, Eve Schluter, Dave Wattles, Karro Frost, Katie Thitherington

– The meeting was called to order at 1:43 p.m. –

1. Approval of December Minutes

Tom Rawinski motioned that the minutes be accepted, Gwil Jones seconded, and members voted unanimously to approve.

2. Chair's Comments

Kathleen Anderson shared recent news stories of conservation interest. One such story discussed how clam beds of the Taunton River were being restored via transport of 800 bushels of quahogs. Another article described a nursery for Great White Sharks that had been discovered off Montauk, Long Island. Kathleen also brought in one of her many journals in which she has recorded natural history observations since the 1950s.

3. Board Member's Comments – Joseph Larson

Dr. Larson was absent from the meeting, but provided this report, dated January 9, 2017, to the Committee:

All:

I regret that I have three meetings seeking my attendance on Thursday. I can only attend one, in Berkshire County, at noon.

In place of my Board report to the NHESP Committee, I can report now that significant progress has been made on starting the review of the Rattlesnake Conservation Project. Former Chairman George Darey appointed myself, Dr. Van Roo, and Ernie Foster III as a Working Group to get the review process underway as a Board function. We met and crafted a recommended process for Board consideration. We were fortunate to have received a list from the Secretary's office of key Quabbin Valley persons who are available to serve as Participants in the process.

The Board adopted our recommendation with two additions to the Participant list. Director Buckley, Commissioner Peterson and Deputy Commissioner King and I then met with the Secretary and his staff in Boston to discuss some of the details regarding the procedures we will be following. This was a productive meeting and everyone seems to be on the same page at this point. I believe that I had copies of our recommendation sent to each of you.

I recently met with Director Buckley and several staff members who will provide administrative support for the review. We are fortunate to have Jen Longsdorf in this group. We expect that the first of four meetings of the Participants will be held this month, probably in Athol. This will be an open meeting where the public will be able to attend as observers. I have asked that each of you be specifically invited to attend this or any of the other three meetings.

Sincerely, Joe Larson

4. NHESP Report – Eve Schluter

- The Program will be conducting interviews for the prescribed fire ecologist position.
- The Program is piloting a new system for tracking habitat management activities occurring on Division lands.
- Mitigation funds for the Piping Plover have been directed toward predator control and other kinds of management.
- The Division hosted a public hearing for the Department of Agricultural Resources wherein comments for and against the listing of Hardy Kiwi (*Actinidia arguta*) as an invasive species were presented. Program Botanist Karro Frost was involved in mapping infestations of the species in Lenox, and shared a fine report.

5. Assistant Director's Report – Tom French

- Tom distributed copies of the 2015 Massachusetts State Wildlife Action Plan to Committee members, an impressive publication indeed!
- As announced by State Senator Gobi on December 21, 2016, the Quabbin Rattlesnake Working Group is comprised of 14 individuals representing broad interests. Dr. Larson will chair the Group. A meeting is scheduled for January 30 in Athol. There is also a science advisory group. Tom envisions a website where the public can view the locations of the released transmitter-equipped rattlesnakes.
- Four rattlesnakes at the Blue Hills were lost to predation, apparently by Red-tailed Hawks.

- The U.S. Fish and Wildlife Service recently listed the Rusty Patch Bumble Bee as endangered. The species was once relatively common and widespread in Massachusetts, and no one really knows why it has declined so precipitously.
- Tom mentioned that in the New York City area, Italian Wall Lizards use railroad tracks as dispersal corridors.
- Tom credited Gwil Jones for calling attention to the diverse birdlife of Boston's Fenway district, and its significance as a migration corridor. Featured in *The Boston Guardian* (December 16, 2016), Gwil has recorded 191 bird species there over a 25 year period.
- Ten stranded Risso's Dolphins were rescued in Wellfleet on New Year's Day.
- Finally, members received in their packets the obituary for Peter G. Mirick, beloved friend and long-time Editor of *Massachusetts Wildlife*.

6. *The Effects of the Road Network and Thermal Constraints on Moose Movement and Habitat Selection in MA* – Dave Wattles, Black Bear & Furbearer Biologist

Dave presented an overview of the moose population in Massachusetts and then summarized much of his PhD research while he was a student at UMass.

The Massachusetts moose population has grown considerably in recent decades, and, with that, some inevitable conflicts with humans. Moose-vehicle collisions in MA average 30 to 40 per year and have resulted in three human fatalities. Three human fatalities from 423 total collisions equates to a 0.7% risk of a person dying in a collision with a moose in Massachusetts. 87% of the collisions occur on interstate highways (e.g., I-90) or state highways (e.g., Rte. 2).

Moose are near their southern range limit in Massachusetts. They are most common on the Worcester Plateau and in the Berkshires. They are absent from heavily suburbanized eastern Massachusetts.

Dave immobilized many moose, equipped them with radio transmitters, and observed their transmitted movement patterns. Home ranges were 60 to 80 square kilometers. In their travels, moose tend to avoid larger roads and especially intersections. Much of their time was spent in regenerating forests, i.e., cut-over lands, where browse was most plentiful.

Dave discussed thermal stress to these animals, introducing terms such as 'upper critical temperature' (UCT). Summer temperatures have been high in recent years. Moose mitigate thermal stress by seeking thermal shelters, consuming more forage, or physiologically by 'thermal panting'.

It is difficult to isolate the effect of one stress factor – thermal – on the Massachusetts moose population. In addition to roadkill mortality, the moose population may be suffering losses from winter tick, liver flukes, brain worms, and other such maladies. It's complicated. Dave's outstanding up-close photographs of Massachusetts moose thrilled us all, and made us glad to have these animals in the state.

7. Member's and Associate Member's Comments

Tom Rawinski – Tom mentioned his recent success on Long Island, doing his part to reduce a burgeoning deer population.

Gwilym Jones – Gwil brought in two columns written by Mak Blazis of the Worcester Telegram & Gazette, dated December 30, 2016 and January 6, 2017, one of which was a tribute to outgoing Fisheries and Wildlife Board Chairman, George Darey. Gwil thought the columns were excellent.

Kevin Powers – Kevin gave a brief overview of 2016 findings reported by the Center for Coastal Studies, located in Provincetown. More than 400 Humpback Whales are now individually recognizable. Of the 500 remaining Right Whales, 178 fed and passed through Cape Cod Bay during the summer. Entanglements are increasing. Kevin thought there were already a large number of cold-stunned sea turtles picked up on Cape Cod. Looking at the data compiled by the New England Aquarium, it was found that this fall/winter (from October 20, 2016 through January 4, 2017) there have been 476 recovered sea turtles. These include 391 Kemp's Ridley, 54 Loggerhead, 30 Green, and 1 unidentified sea turtle. The majority of these were found alive, and many have been shipped to other care facilities as far away as south Florida.

Tim Flanagan – Tim called attention to a relevant paper in the current (December, 2016) issue of *Frontiers in Ecology and the Environment*. The title is: Assessing data quality in citizen science. It can be read at: <http://onlinelibrary.wiley.com/doi/10.1002/fee.1436/epdf>

Mark Pokras – Mark extended his greetings from Maine, and said it was good to be back at a meeting. He is still puzzling over a mysterious hair-loss condition observed recently in three Massachusetts white-tailed deer.

– The meeting adjourned at 3:45 p.m. –

Drafted & Submitted by: Thomas J. Rawinski, Secretary