



# Commonwealth of Massachusetts Fisheries and Wildlife Board



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## Summary of Massachusetts Rattlesnake Public Input Process

July 18, 2018

### Introductory

On February 15, 2017, the Massachusetts Fisheries and Wildlife Board opened a public comment period on a proposed project to re-establish a population of Timber Rattlesnakes to a site on Mount Zion Island in Quabbin Reservoir. This proposed project was designed to be located on this island because it is closed to the public and large enough to support a long-term viable population of Timber Rattlesnakes. The rattlesnakes on Mount Zion would have been protected from the poaching, deliberate killing, and road kills that occur elsewhere around the state. In April 2017, after establishing a Rattlesnake Working Group and completing a process to solicit public input, the Fisheries and Wildlife Board accepted the Working Group's recommendation to suspend the Mount Zion rattlesnake proposal and to focus efforts on the conservation of the state's five remaining Timber Rattlesnake populations. We received over 200 comments, and indicated during the public input process that the agency would summarize and respond to comments. The remainder of this document responds to the comments received.

### Summary of public input process

The comment period remained open from February 15 to April 14, 2017, to provide citizens who may not have had an opportunity to attend the informational meeting held February 23, 2017, in Orange; the Legislative Oversight Hearing held May 10, 2017, in Athol; or the Board-sponsored public Working Group meetings held on January 30 in Athol, on February 28 in Belchertown, and on March 22 in Ware to share their comments with the Fisheries and Wildlife Board.

Questionnaires were handed out at each meeting to solicit questions or concerns from the public about the proposed project. The questionnaire was designed to allow respondents to raise questions and offer comments on the project. In addition, the questionnaire asked each respondent to identify any new or additional scientific evidence that may have been overlooked by MassWildlife and to identify any matters of science that the respondent might wish to question.

For individuals who could not attend the meetings, MassWildlife developed a platform on its website specific to Timber Rattlesnakes that included the following information:

- a) **Rattlesnake Review Working Group:** This page was designed to provide the latest information about the meetings of the Working Group.
- b) **Massachusetts Rattlesnake Conservation Survey:** This was a digital copy of the questionnaire so that citizens who could not attend any of the public meetings could add their advice and comments.
- c) **Massachusetts Rattlesnake Conservation: Executive Summary:** This page briefly described the threats and conservation actions needed to be addressed at existing Timber Rattlesnake sites in Massachusetts

## Summary of comments received and MassWildlife responses

Approximately 204 submissions, including 151 survey responses and 53 additional comments, were received through Facebook, email, and U.S. Mail. Many of the comments and questions fell into one of seven topics or themes. MassWildlife's response addresses each of the themes below. No scientific information or scientific literature was provided by commenters to MassWildlife that the agency was not already aware of.

1. **Concerns for public safety.** Of all the comments received, this was the most frequently expressed concern. However, it should be noted that there were also other numerous comments that challenged the basis for those concerns.

There are no facts that support the concern that re-establishing a population of Timber Rattlesnakes on Mt. Zion Island in Quabbin Reservoir would put the public at risk. The Timber Rattlesnake in Massachusetts does not pose a measurable threat to public safety anywhere in the state, including at locations where a rattlesnake population has always been present and thousands of people visit annually. While this species is capable of causing human injury and even fatality, there have been no human fatalities in Massachusetts since colonial times, and the modern treatment of bites is both effective and readily available. The heightened level of fear of snakes, both venomous and non-venomous, is unique among all animal groups. Animals that present a much greater risk of injury and death do not generate a comparable level of concern.

2. **Concerns for public access**

High-ranking officials from the Division of Fisheries and Wildlife, the Department of Fish and Game, the Department of Conservation and Recreation, the Executive office of Energy and Environmental Affairs, and the Massachusetts Water Resource Authority have all clearly stated in public that there would be no justification to change any of the public access policies on the Quabbin Reservation because of this proposed project.

3. **Concerns for economic impacts**

We can find no evidence of any case, nor was one provided to us, in which the general public has avoided visiting any location or attraction because of the presence of venomous snakes, including DCR parks and forests in Massachusetts. Of the 232 U.S. National Forests, National Parks, and National Grasslands, 85.3% support populations of at least one species of venomous snake, and nearly all of these have rattlesnakes. The Great Smoky Mountains National Park has the highest number of visitors each year of all National Parks, with over eleven million (11,312,786) in 2016. The presence of Timber Rattlesnakes, which are fairly common in the park, has not been a deterrent, nor is it considered a serious threat to the public's safety. In these areas trail signs and printed material notify the public that venomous snakes may be encountered, and if they are, to leave them alone.

4. **Timber Rattlesnakes should be eradicated or more should be done to help rattlesnakes than what's been proposed**

Conservation of Massachusetts' native fauna and flora is the statutory responsibility and purpose of the Division of Fisheries and Wildlife. The Timber Rattlesnake is one of the most iconic of the state's native animal species, and one of the most endangered. This species has occurred in the area now encompassing Massachusetts for over 6,000 years, and there is evidence that it was widely distributed in up to ten of Massachusetts' fourteen counties. At this latitude, the Timber Rattlesnake requires relatively rare bedrock features with deep fissures, accumulations of deep talus below cliffs, or deep boulder fields of glacially plucked bedrock in order to survive the winter. All Massachusetts populations of Timber Rattlesnake are anchored by these unusually deep hibernation sites.

The Timber Rattlesnake and the Wild Turkey, identified with the first Thanksgiving, are the two most symbolically important wildlife species associated with the history of Massachusetts. The Timber Rattlesnake has repeatedly been chosen as an iconic symbol of strength. In 1622, the Chief of the Narragansets, delivered a bundle of arrows, bound with a rattlesnake skin, to Governor Winthrop in Plymouth as a challenge to war. In 1775, the Gadsden Flag "Don't

Tread on Me” was designed for the Continental Marines in the American Revolution, and today, the Department of Defense has chosen the Timber Rattlesnake along with the American Flag as the center of the logo for their DoD Partners in Amphibian and Reptile Conservation (PARC). In their own description, DoD explains that “By intertwining the rattlesnake with the tasseled American flag, the DoD PARC logo harkens back to the original Gadsden flag image which served as ‘an emblem of vigilance... of magnanimity and true courage.’”

**5. *The proposed Quabbin project is not needed because Timber Rattlesnakes are not in jeopardy in Massachusetts***

There is overwhelming evidence that the Timber Rattlesnake is at risk of extirpation throughout New England. The species historically occurred at hundreds of locations across New England, but has already disappeared from Maine and Rhode Island, and has declined to one remaining population in New Hampshire, two in Vermont, two in Connecticut, and five in Massachusetts. Two other Massachusetts populations became extirpated within the past 50 years, and two of the remaining five Massachusetts populations are currently in serious jeopardy.

In Massachusetts, Timber Rattlesnakes face all of the typical threats to survival, especially predation and disease. These sources of mortality can be significant, but the species has evolved to cope with these sources of mortality, as well as good and bad years of reproduction. However, the added losses from deliberate and persistent killing or removal by people and road mortality are causing rates of additive mortality that are very difficult to mitigate. The Quabbin proposal was designed to create a sustainable population at a likely historic site large enough to sustain a population of Timber Rattlesnakes in perpetuity and at which it is already unlawful for members of the public to trespass.

**6. *If head-started juvenile Timber Rattlesnakes were released at a hibernation site on the north end of Mount Zion island, they would leave the island, survive, and begin to spread throughout the Quabbin region***

In the Northeast, the survival of Timber Rattlesnakes is dependent on unusually deep hibernation sites in bedrock features. Any snake that were to swim or crawl off the island and was unable to return to a suitable overwintering site will die over the winter. Sites at which Timber Rattlesnakes can successfully hibernate are unusual and scarce features on the landscape, so any snakes that were to leave the vicinity of the release site would not be able to get to another appropriate hibernation site off the island and would die before establishing in a new area. The proposition that a rattlesnake would leave the island, would survive the winter, then would be joined by others and initiate the spread of the species, is an event that has never been observed at any location in New England. Arguments that wild-caught subadult and adult rattlesnakes translocated outside of their established home ranges will seldom stay where they are released are well known and well reported in the literature. However, these arguments are not relevant to the release of head-started individuals, as was proposed in the Quabbin project.

**Note:** After soliciting public input, MassWildlife and the Fisheries and Wildlife Board suspended the proposed plan to re-establish a population on Mount Zion Island. Efforts to conserve the Commonwealth’s five remaining Timber Rattlesnake populations are ongoing.