



BiodiversityWorks

wildlife research, monitoring & mentoring

455 State Rd., PMB#179, Vineyard Haven, MA 02568 (mailing)

18 Helen Ave. Vineyard Haven, MA 02568 (physical)

Phone/Fax: 800-690-0993

www.biodiversityworksMV.org

March 1, 2019

Mr. Paul Foley, DRI Coordinator
Martha's Vineyard Commission
PO Box 1447
Oak Bluffs, MA 02557
foley@mvcommission.org

RE: DRI 682 Meeting House Place Subdivision

Dear Mr. Foley,

BiodiversityWorks is a Martha's Vineyard non-profit that promotes biodiversity conservation across the island through wildlife research and monitoring and outreach to our community. The land currently protected as open space is not enough to ensure the future of our island's natural heritage (biodiversity and ecosystem health). Undeveloped habitat on private land plays an important role in providing habitat for many wildlife species as well as corridors that allow wildlife to move between tracts of conservation land. It is with this in mind that I provide these comments on the proposed Meeting House Place Subdivision because the proposed development is in one of the last undeveloped forested areas of Edgartown that provides connectivity between the Jernegan pond area and Turkeyland Cove of Edgartown Great Pond (see Figure 1).

The map of Edgartown in 1979 (Figure 2) shows a very different Edgartown than the map of Edgartown in 2018 (Figure 1). Over the last 40 years, development has claimed much of the open space north and east of Edgartown Great Pond, which highlights the importance of the remaining open space as habitat and a travel corridor for wildlife.

Psychologist Peter Kahn's work on Environmental Generational Amnesia is applicable to every DRI you review. Kahn describes how "with each ensuing generation, the amount of environmental degradation increases, but each generation tends to perceive that degraded condition as the nondegraded condition, as the normal experience." Thus, over the last 50 -100 years, each generation of islanders has grown accustomed to a more and more developed island. We can rely on locals who are 60, 70, or 80 years young to tell us of the Edgartown and Martha's Vineyard they grew up knowing, but we can also look to maps to give us a clear picture of how much the island has changed in the last several decades.

Figure 1. Parcel map of Edgartown in 2018. The area highlighted in yellow shows an arcing swath of mostly undeveloped land that provides a corridor for wildlife between Turkeyland Cove and the Jernegan Pond area.

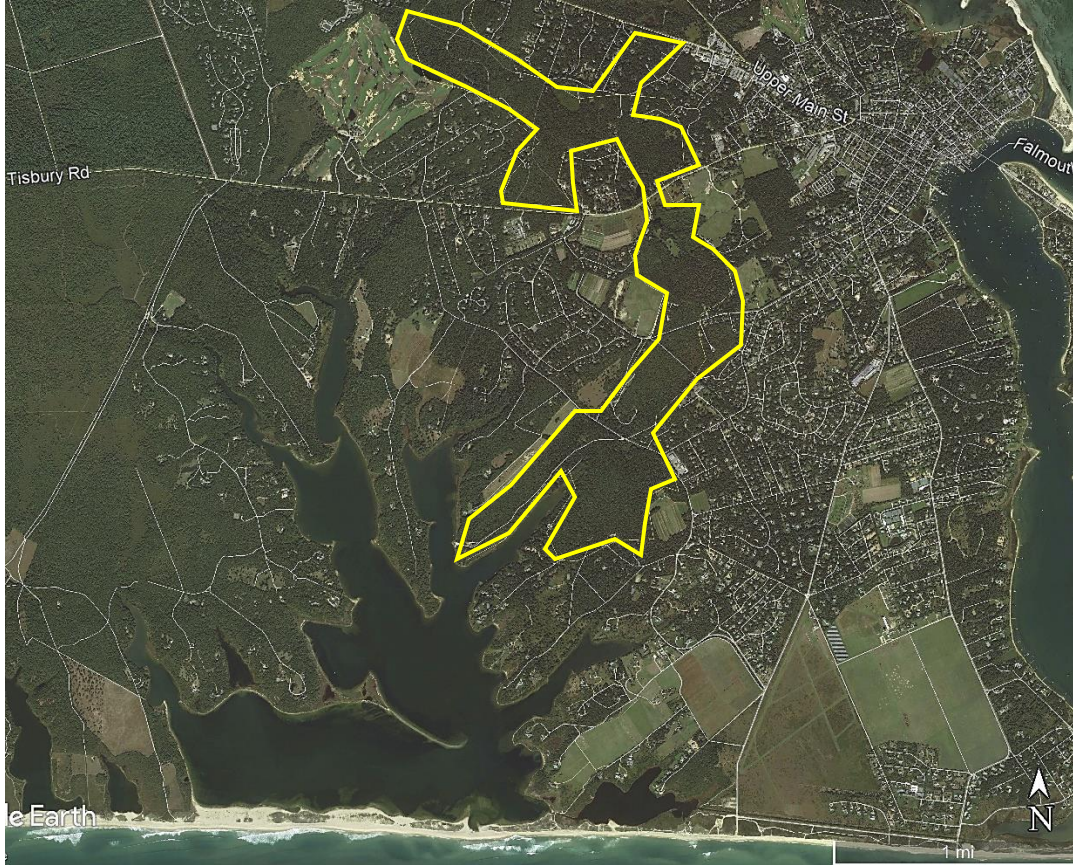


Figure 2. USGS Topographical Map of Edgartown in 1979



It is clear that through consultation with Massachusetts NHESP, the applicant understands how habitat loss and fragmentation impact rare species. The plan to preserve a 13 acre corridor of high quality habitat for imperial moths (*Eacles imperialis*) is a good start to address the net habitat loss that this development would cause. However, there are other species of wildlife to consider. Part of the Commission's mandate is to preserve the island's biodiversity; inherent in that mandate is the responsibility to prevent common, native species from becoming rare.

While the plan states that 32 of the 54 acres will be open space/undeveloped much of that land is in fragments that are far less suitable as habitat for wildlife than larger, intact areas. Large areas of habitat host more diverse wildlife populations as some species cannot survive in small patches due to lack of food. Corridors that connect habitat patches are important for wildlife to disperse as well as for genetic exchange between populations. Forested areas on the island hosting oak and pines similar to this 54 acres are home to a variety of songbirds, eastern screech owls, hawks, moths, butterflies, mice, voles, shrews, snakes, turtles, squirrels, deer, blueberries, huckleberries, sedges, trees and wildflowers that are all part of the island's biodiversity. Because this 54 acre site is connected to undeveloped land owned by the town that abuts the wetlands behind Sweetened Water Pond, it is likely that river otter use it as a travel corridor between Jernegan Pond and Turkeyland Cove. Another species of great concern is the state and federally listed Northern long-eared bat (*Myotis septentrionalis*), which we have been monitoring and studying across the island since 2014.

Northern long-eared bats are tiny bats that roost and forage in forested habitat with a 'cluttered' (or shrub and tree understory), which describes most of the forest cover across Martha's Vineyard. Northern long-eared bats were the most abundant forest bat on the island and throughout the Northeast until millions were killed by a non-native fungus over the last decade. While the species has disappeared from most of Massachusetts, BiodiversityWorks has confirmed that small populations of these bats are persisting in several areas of the island in the summer, and hibernating in at least one site. They are also persisting in small populations on Nantucket and Long Island. We now know that the islands in our region may host the only remaining Northern long-eared bats that could allow the species to survive this crisis. These little bats only have one pup a year, so it will take decades to reach the population levels we once knew in New England. These bats, and all bat species, provide us with a tremendous service eating millions of pest insects annually.



Northern long-eared bat

While we have not surveyed the oak and pine woodlands at 139 Meeting House Way, the site of DRI 682, it is very possible that Northern Long-eared bats forage or roost in the oaks and pines at this proposed development site during the summer maternity season. We base this on the fact that we have recorded calls of this species in the summer and fall along Turkeyland Cove only 0.6 miles away. From tracking northerns at 3 maternity colonies on the island in the summer, and individuals in the fall, we have seen that all persisting populations roost and feed in large tracts (> 100 acres) of oak and pine forests near freshwater. These tiny bats roost under loose bark, or inside cavities in trees.

The 54 Acres at 139 Meeting House Way is part of a wide corridor of forested habitat that extends from Caroline Tuthill Preserve to Edgartown Great Pond. While roads cross through this forested habitat, bats can and do cross roads between foraging areas. Because of its proximity to Turkeyland Cove and Mashaket Cove (freshwater sources), this forested corridor is excellent bat habitat for feeding and roosting as well as other wildlife species. In order to preserve the island's wildlife and flora, we must proactively protect connectivity between large parcels of undeveloped land.

Our conservation colleagues will speak to the impacts the clearing of this land will have on the health of Edgartown Great Pond, the carbon footprint associated with the lawns and lawn care that will come with these large houses, and the unsustainable withdrawals from our sole source aquifer for swimming pools and irrigation. We hope that those impacts, and our concerns about wildlife habitat are enough to deny this proposal.

Thank you to the Commission members and staff for your service to the island community and for taking the time to read and consider these comments.

Respectfully yours,

A handwritten signature in black ink, appearing to read 'L. Johnson', with a long horizontal flourish extending to the right.

Luanne Johnson, PhD
Director/Wildlife Biologist