Beech Tree Preserve

Tisbury,
Massachusetts

Management Plan

April 9, 2021

Approved by the Tisbury Town Advisory Board (February 18, 2020)
Approved by the Martha's Vineyard Land Bank Commission (February 24, 2020)
Approved by the Secretary of the Executive Office of Energy and Environmental Affairs (April 9, 2021)

Julie Russell – Ecologist
Danielle Belleny – Ecology Assistant

Executive Summary

Hugging the remains of a well-trodden path, a slender stand of pre-climax trees composes Beech Tree Preserve and stretches from the Edgartown-Vineyard Haven Road around a berry-laden dell and down the steep bank of the bluff to the western shore of Lagoon Pond. Beech Tree Preserve comprises 6.6 acres of the never realized Oklahoma summer resort plan from 1872 spread over Chunx's Hill in Vineyard Haven, MA.

The Martha's Vineyard Land Bank Commission purchased the 6.6-acre woodland and 170' of Lagoon Pond shore from Malcolm and Roseann Watson on March 3, 2017 for $760,000. The preserve is in close proximity to Ramble Trail Preserve and a portion of the Wapatequa Woods Reservation and two properties owned by Sheriff's Meadow Foundation.

One commonwealth-listed wildlife species, a rare moth, was recorded during surveys on the preserve in June of 2017. Commonwealth-listed plant species were not found on the preserve.

This management plan proposes a trail connecting a 3-4 vehicle trailhead, located 300' off-premises from the preserve to the Lagoon Pond shoreline; removal of dump debris; and management of invasive species and removal of fallen trees along the coastal bank. A portion of the proposed trail is sited down a steep ravine using 150' of raised stairs, 75' of a hardened trail with water bars and 8-10' of adjustable modular stairs over the coastal bank. Viewing platforms with benches are proposed at the beginning and terminus of the ravine along with creating and maintaining limited viewshed clearings of the Lagoon Pond.

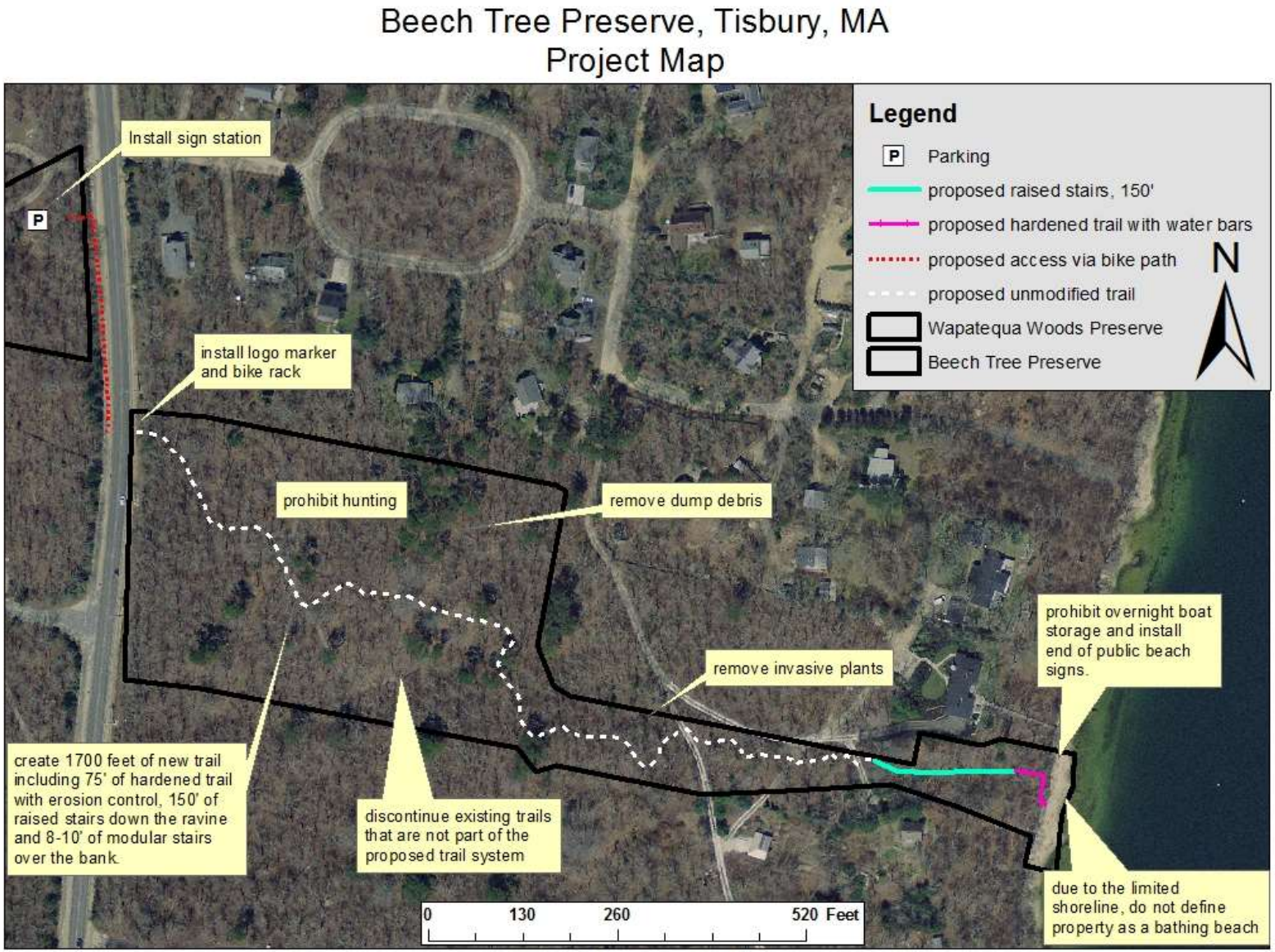
All planning goals, objectives and strategies are outlined in detail in the final section of this management plan. To be implemented, this plan must be presented at a public hearing and approved by the land bank's Tisbury town advisory board, the Martha's Vineyard land bank commission and the secretary of the executive office of energy and environmental affairs (EOEEA).

About the authors

Julie Russell is the primary author and has been the land bank ecologist since August 1999. She is certified as a Wildlife Biologist by the Wildlife Society and holds a Master of Science in zoology from the Cooperative Wildlife Research Lab at Southern Illinois University, Carbondale, and a Bachelor of Science in wildlife biology from the School of Natural Resources at the University of Vermont. Danielle Belleny is the land bank's ecology assistant and goatherd. She holds a Master of Science in agriculture and natural resource management from Tarleton State University and a Bachelor of Science in wildlife management from Texas A&M-Kingsville.

This plan is executed under the supervision of the land superintendent, Ian Peach. He attended Middlebury College and graduated with a Bachelor of Arts and has a Master of Landscape Architecture from Cornell University.

Map 1: Beech Tree Preserve Project Map



Sources: Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs:
Aerial USGS Ortho Imagery 2014, NHESP Habitat Maps 2017, USGS Topographic Quadrangle Images 1878;
Martha's Vineyard Commission (MVC): Parcel Town Assessors 2017, Soil, Watersheds, Coordinate Reference: State Plane, Mass Mainland, Meters, NAD83
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not repsonsible for end-users interpretation of the map.

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I. Natural Resource Inventory

A. Physical Characteristics

1. Locus

Beech Tree Preserve is located at roughly 41°26' 06.2'' N latitude and 70° 36' 28.4'' W longitude. The property consists of 6.6 acres with a portion fronting on Edgartown-Vineyard Haven Road and a portion on the coast of Lagoon Pond. The preserve is shown on Tisbury tax map 16A as parcels 21.1 and 22. A Locus Map (USGS Topo 1973 1:6,042) follows as Appendix A.

2. Survey Maps, Deeds and Preliminary Management Plan Goals

Larger copies of all surveys are on file at the land bank office and are available for inspection by appointment. Deeds, preliminary management plan goals and reduced copies of surveys are included in Appendix B.

3. Geology and Soils

The General Soils Map (Appendix C) depicts general classes of soils across Martha's Vineyard. The property occurs in the "outwash atop Martha's Vineyard moraine" geologic deposits (Soil Conservation Service (SCS) 1986). The outwash atop Martha's Vineyard moraine was created during the glacial standstill of the Wisconsin ice sheet during the Pleistocene. Large boulders, stones, sand, silt, and clay were deposited by the melting glacier. Vast amounts of meltwater formed "braided streams laden with sand and gravel" which leveled the landscape to form an outwash plain that extends from the moraine to the Atlantic Ocean. The mesic woodlands are supported by loamy coarse sand.

Carver soils exclusively occur on the preserve. The specific soil type for this area is Carver loamy coarse sand with slopes ranging 3-25%. It is typically identified as very deep, excessively drained loamy coarse sand soils. This soil is not suitable for suitable for agriculture use due to low available water capacity, instability and susceptibility to ground water pollution (SCS 1986).

The SCS (1986) mapped soil series that occur on the preserve are discussed in Appendix C following a detailed Soils Map.

4. Topography

Elevations on the preserve range from 100 feet at the northwest boundary along Edgartown-Vineyard Haven Road to zero at the shore of Lagoon Pond. The western half of the preserve is relatively flat with the exception of the hollowed dell that drops approximately 20 feet. The elevation precipitously decreases from 50 feet to sea level at the Lagoon Pond shoreline in the southeastern 0.28-acre corner of the preserve. The contours of the property are illustrated and labeled USGS Topographic Maps in Appendix A.

5. Hydrology

The entirety of Beech Tree Preserve is in the Lagoon Pond watershed (Hydrology Map, Appendix A). The watershed leads into Lagoon Pond, a freshwater pond particularly important to fish, shellfish, and aquatic plants. The water quality of Lagoon Pond is considered "impaired" according to the Martha's Vineyard Commission. The deteriorated water quality is caused by excessive nitrogen entering the pond via atmospheric deposition, nutrient-rich sediments and through watershed sources including septic systems, runoff, fertilizers, wastewater, landfills, and agricultural activities (MASS DEP 2015).

6. Ecological Processes

Ecological processes are the "dynamic biogeochemical interactions that occur among and between biotic and abiotic components of the biosphere" as described by the USGS (2012). There are seven major ecological processes – disturbance, structural complexity, hydrological patterns, nutrient cycling, biotic interactions, population dynamics and genetic diversity – occurring on the preserve.

- Disturbance – The natural disturbance regime for northeastern deciduous woodlands typically includes fire, wind and insect damage. Fire is a less frequent means of natural disturbance, as fire suppression is an active part of forest management. Wind remains an active force of nature, especially along the coast-facing northeast. Recent insect damage to oak species, black oak in particular, in the form of winter and gypsy moths and cynipid gall wasps has successfully altered the woodlands of various areas of Martha's Vineyard. The woodland on the preserve was not significantly affected by these insects.

Human-induced disturbance in the form of historic land clearing in the upland habitats has resulted in opportunities for different stages of the community to prosper over time. Small pockets of pitch pines and a grove of American beech trees grow within the folds of the mixed-oak woodland and are lasting indicators of both a once-open landscape and an older woodland thread. The 1846 Whiting map of north shore Martha's Vineyard indicates that a portion of the preserve was in pasture while a narrow strip remained in woodland. The pitch pine community is an early sere and often is replaced by shade-tolerant oaks growing in the understory. On Martha's Vineyard pitch pine seedlings are thought to infiltrate fields following red cedar after approximately 15 to 40 years of abandonment and remain the dominant canopy tree for 50 to 100 years before oak trees begin to appear in the overstory. Oaks dominate the woodland for 125 to 300 years before species such as sassafras (*Sassafras albidum*), beech (*Fagus* spp.), and pignut hickory (*Carya glabra*) begin to appear in the canopy (Ogden 1962).

- Structural complexity – The preserve has a complex structure of plant species ranging from low-growing herbaceous plants to taller woodland trees that allows the preserve to accommodate more species by providing a more diverse array of habitats for species to survive in. The woodland has great structural complexity and includes ground-cover vegetation such as wintergreen and mosses; taller

flowering plants and ferns such as low-bush blueberry and goldenrods; taller shrubs such as highbush blueberry and arrowwood; understory sapling trees dominated by oak species; and various canopy tree species including snags that, when leaning or fallen, add to the structural complexity of the woodland. Not all areas of the woodland share the same composition of structure. The dell, for example, supports few overstory trees and has a substantial low shrub cover of huckleberry. Areas of open canopy due to tree die-off are opportunities to mow the shrub layer and promote a diverse low-growing community of herbs and grasses. Allowing dead trees to exist; creating uneven patterns of mowing; and cutting of vegetation all contribute to spatial complexity (USGS 2012).

- Hydrological patterns – It is important to consider the impact of the vegetation communities on the water cycle in an ecosystem. Vegetation layers help catch water and aid in soil infiltration whereas larger scale cleared woodlands and various heterogeneous agricultural practices can result in increased overland flow, channel incision and fragmentation of wetland habitats (USGS 2012). Past clearing of the area in the late 18th century likely resulted in soil erosion and a greater water yield in the surrounding wetlands due to reduced interception, evaporation and transpiration. Maintaining vegetative buffers around wetland habitats and maintaining a diverse structural ecosystem help protect the hydrological patterns of the ecosystem (USGS 2012).

- Nutrient cycling – Important elements such as nitrogen, phosphorous and carbon naturally travel through ecosystems and when combined with water and sunlight determine the productivity of an ecosystem (USGS 2012). Activities that increase (use of fertilizers) or decrease (erosion) nutrients can alter the nutrient cycle and change the ecological integrity of the ecosystem. Protecting soils from erosion by installing raised trails and erosion control measures on steep trails, especially those leading directly to open water, and reducing exposure through vegetative cover and keeping snags and downed logs helps maintain the nutrient richness in the ecosystem.

Additionally, human-enhancing and -depleting nutrient practices each lead to increased invasion of opportunistic non-native plants that have different nutrient cycling characteristics and as a result alter the nutrient cycling of the invaded ecosystem (USGS 2012). Following any woodland understory disturbance, it is important to promote native plantings and seed distribution to ensure that a native vegetative cover will have the advantage over establishing invasive exotic plants.

- Biotic interactions – The distribution and abundance of species is heavily dependent on the interactions among organisms such as competition for resources, predation, parasitism and mutualism (USGS 2012). Disturbances such as introduction of exotic species, over-collection of a species and disease not only affect the “target species” but have a trickle-down effect that depends on the nature and strength of interactions that the “target species” had within its community (USGS 2012). Pollinators and exotic plants play both positive and negative roles,

respectively, in biotic interactions of an ecosystem. Spraying pesticides and introducing exotic pollinators can impact other non-target pollinators, sometimes resulting in a major decrease in species diversity of plants that are reproductively dependent on native pollinators. Protecting species with high community importance values such as scrub oak; removing exotic species before they have aggressively invaded; and implementing elastic management strategies that are modified in response to monitoring are all strategies that can reduce effects on biotic interactions.

- Population dynamics – The loss of a species can have many unseen effects on a community depending on the interactions that the species had in its environment. Species dispersion, recruitment, fertility and mortality compose a species' population dynamics and, along with genetic diversity, play an important role in the success of a species (USGS 2012). Small populations isolated by reduced habitat or habitat fragmentation are vulnerable to extinction, locally and globally. Other species are more widespread but occur in few numbers and are vulnerable due to low genetic diversity. Ecosystems are not static, and species require genetic diversity to adapt to their ever-changing world or risk extinction. Special care must be taken to consider the effects that management actions may have on the rare wildlife species known to occur on the preserve.

B. Biological Characteristics

1. Vegetation

Beech Tree Preserve comprises two general habitat communities – woodland and shoreline. They are described in detail and shown on the Ecological Communities Maps in Appendix D.

A total of 42 plant species is known to occur on Beech Tree Preserve (Appendix D, Table 1). The woodland is the dominant vegetation community type on the preserve.

Several exotic invasive plants including, but not limited to, oriental bittersweet, Japanese hedge-parsley and Japanese honeysuckle occur along the old roads and paths of the property.

2. Wildlife Habitat

Formal avian surveys and invertebrate black-light traps were the primary tools used for analysis of rare wildlife habitat. Additional direct observations of wildlife occurrences and signs contribute to the understanding of the habitat value of the preserve. One commonwealth-listed wildlife species, a rare moth, was recorded on the preserve.

a. Invertebrates

Moth Species: A total of 112 moth species representing 9 families was identified from nocturnal black-light traps set throughout the preserve in the woodland habitat in June 2017 (Appendix E, Table 2). The woodland draws many moth species, including rare moths, as these habitats provide specific forage, breeding habitat and cover due to the presence of pitch pine and various oak species.

b. Birds

Nineteen bird species were observed during avian 5-minute point-count surveys conducted on Beech Tree Preserve during the summer breeding season in 2017. Additionally, land bank staff performed surveys of the preserve during the summer of 2017 using playback-calls of 7 local owls; eastern screech owls were heard during the survey period. Detailed tables and descriptive summaries of the avian fauna on the preserve are included in Appendix F (Table 4).

c. Mammals

Six mammal species – white-tailed deer, raccoon, striped skunk, eastern cottontail, grey squirrel and eastern chipmunk – or signs thereof were observed on Beech Tree Preserve (Appendix E, Table 3). Actual wildlife sightings and signs, such as tracks, scat and den evidence, were observed throughout the year.

d. Rare and Endangered Species

The Massachusetts natural heritage and endangered species program (MA NHESP) does not designate the preserve as priority or estimated habitat for rare species. The commonwealth-listed rare moth species observed on the preserve requires pitch pine/scrub oak barrens; it, however, may utilize the various oak species on the preserve. Details about the various listed species observed on the property and a copy of the Endangered Species Maps are located in Appendix G.

C. Cultural Characteristics

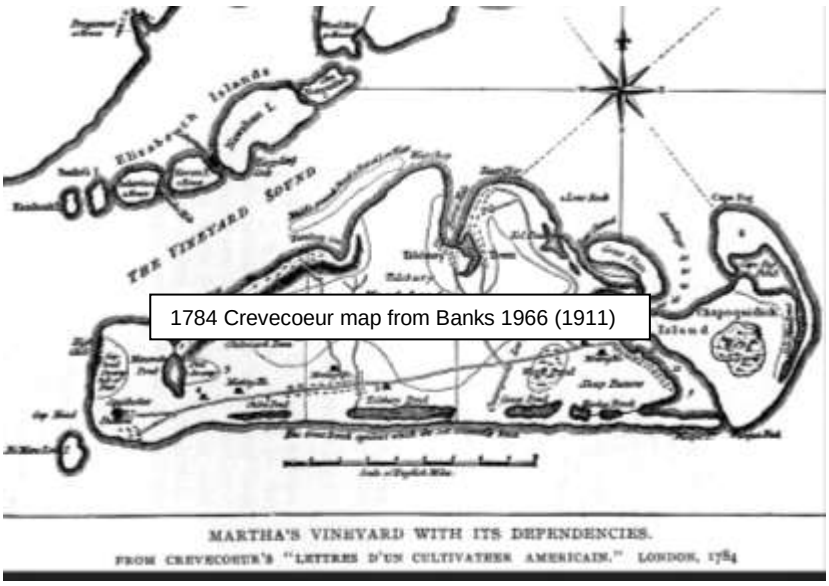
1. Land History

Pre-Settlement

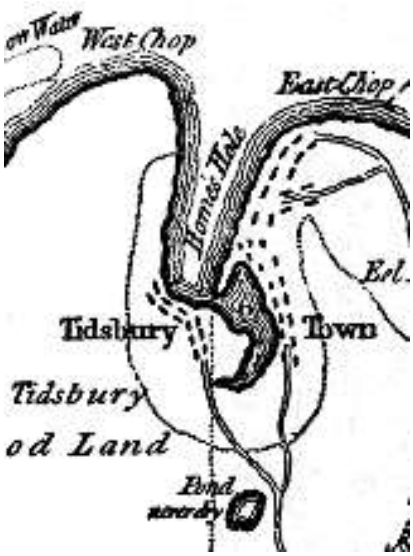
Beech Tree Preserve is located in a now wooded area of the island through which historic footpaths ran. Such paths connected the spring at Lake Tashmoo called Kuttashimmoo to the head of the lagoon, Weaquatickquayage. Both springs were locations of subordinate summer villages in the sachems of Nobnocket and Ogkeshkuppe. These paths also connected Holmes Hole to places south, west and east. The preserve is located in what was once the Nobnocket sachemship.

Settlement 1600-1800

The level area of the preserve was likely used for cultivation due to the preserve's close proximity to water and cart paths. In a map from Crevecoeur's *Lettres d'un cultivateur americain* in 1784 the preserve is located outside of the area that was referred to as the *Tidsbury Wood Land*. Settlement occurred on the outskirts of the woodlands closer to the shore where the preserve is located.



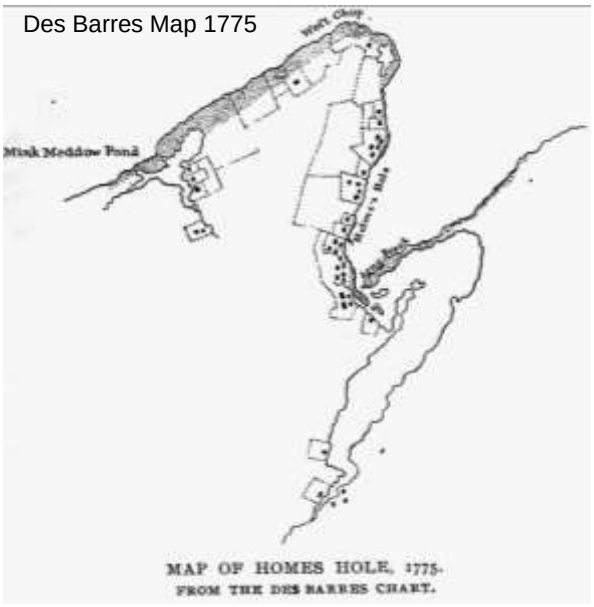
1784 Crevecoeur map from Banks 1966 (1911)



The area of the island referred to as "Holmes Hole" and "The Neck" was settled in the 1600s predominantly by three families; West, Chase and Cottle. For thirty years they were the only families to take up residency in this region. They were followed by Wheldon, Daggett and Norton. Most homesites were located along Holmes Hole with the exception of a few situated on Mink Meadow Pond, West Chop and the Head of the Lagoon. However, none are depicted on or near the location of the preserve (Des Barres 1776 Nautical Chart and Charles Blaskowitz Chart of Martha's Vineyard and the Islands 1775).

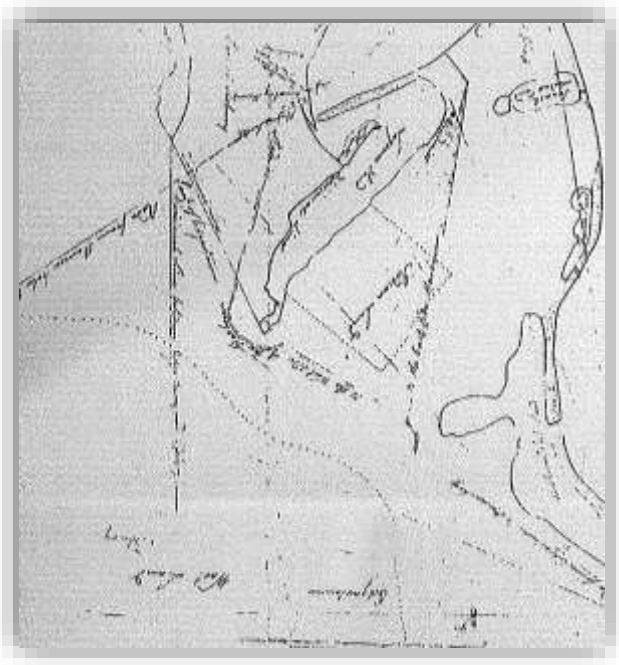
An area of interest pertaining to the preserve is the land purchased by Dr. Thomas West. He came to the island in around 1671 and first settled in what is known as West Tisbury. He was the first known practitioner of medicine and surgery on Martha's Vineyard. The West family produced many scholars and men of the cloth (Banks 1966).

Des Barres Map 1775



Des Barres Map 1781

Dr. West started purchasing land in Holmes Hole in 1682 and over many years he acquired hundreds of acres stretching from Kuttashimmoo (Tashmoo) to the west side of the Head of the Lagoon. Upon his death he bequeathed his land to his four eldest sons Abner, Thomas, Peter and William. Over time Abner acquired most of the West land through purchase from the other heirs (Banks 1966).



1795 Plan of Oak Bluffs, Massachusetts Survey (Smith 1795)

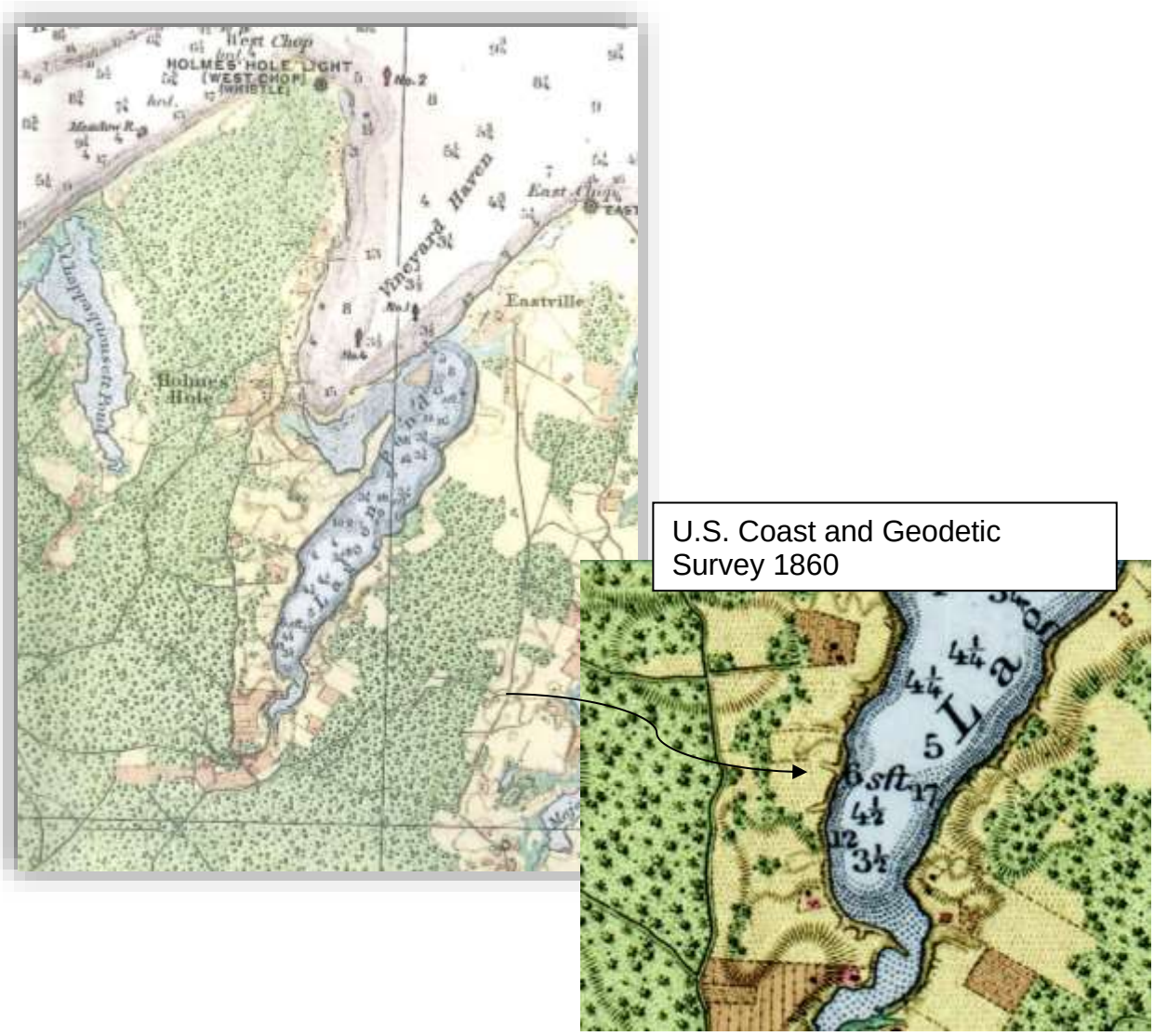
Abner West, born in 1683, was a carpenter and was married to Jane Cottle in 1707. They had six sons. In 1744, Abner granted 400 acres in Tisbury to his sons (Book 7 page 157).

The second youngest son of Abner West, Peter West, was born in 1718. Peter West was a valiant military man and was described as a man with deep courage and a splendid physique. Peter West took part

in the New York Expeditions of Crown Point and Ticonderoga. He was married to Hannah Cottle in 1769. Their dwelling place was situation near Chunx's Swamp on the north slope of Chunx's Hill. The name Chunx or *Chunk* was first described in the will of Dr. Thomas West (Hine, 1907). According to Banks (1966) the term Chunx's refers to the middle portion of the Wampanoag word "Maneh-chahhank-kanah" that means *the fenced planting field.*

1800-1900

The preserve remains uninhabited with a dwelling during the 1800's. The 1860 Whiting coastal survey maps indicate the area of the preserve was in cultivation and woodland with houses to either side.



U.S. Coast and Geodetic Survey 1860

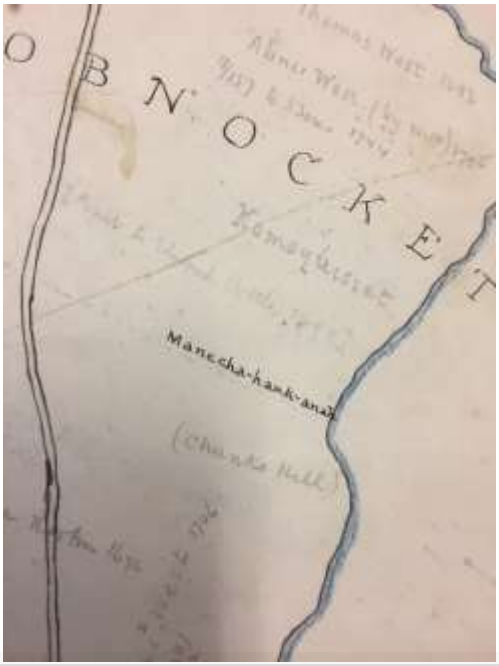
During the mid-1800's development of summer resorts was underway on Martha's Vineyard. Sheriff Howes Norris purchased a large tract of land in 1872 along the west shore of Lagoon Pond in the area of Chunk's Hill. The proposed summer resort was named "Oklahoma" (Hough 1936). One half of the development was sold to Edward Ingraham of Bristol, CT for $10,000 (Gazette September 6, 1872). Later the next year Norris and Ingraham sold off some of the lots to Wallace Barnes and Samuel Woodruff (Gazette July 4, 1873). Access was a major issue for the resort and a steam launch to and from Vineyard Haven was used initially. Only 6 cottages were built as part of the summer resort. Norris sold his stake in the resort to W.T. Gilbert in 1875. The following year the Hotel

Stan Lair, Innisfail Hotel

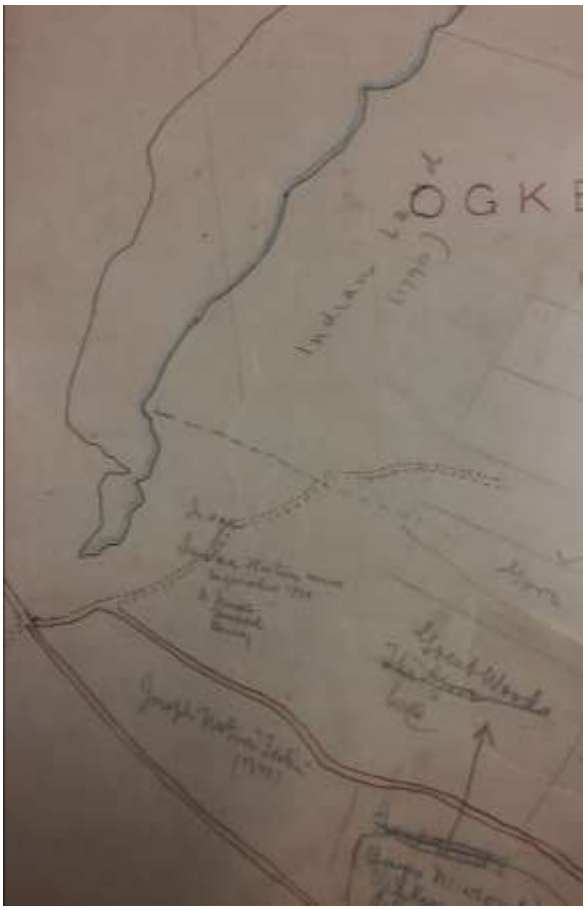
"Oklahoma" was built. The hotel became a theatrical retreat in the mid 1890's and was renamed Innisfail by the new owners Tom Karl and Dellon Dewey Jr. The unforgettable hotel towering over the western shore of Lagoon Pond burned to the ground in 1906 (Hough 1936).

1900-Present

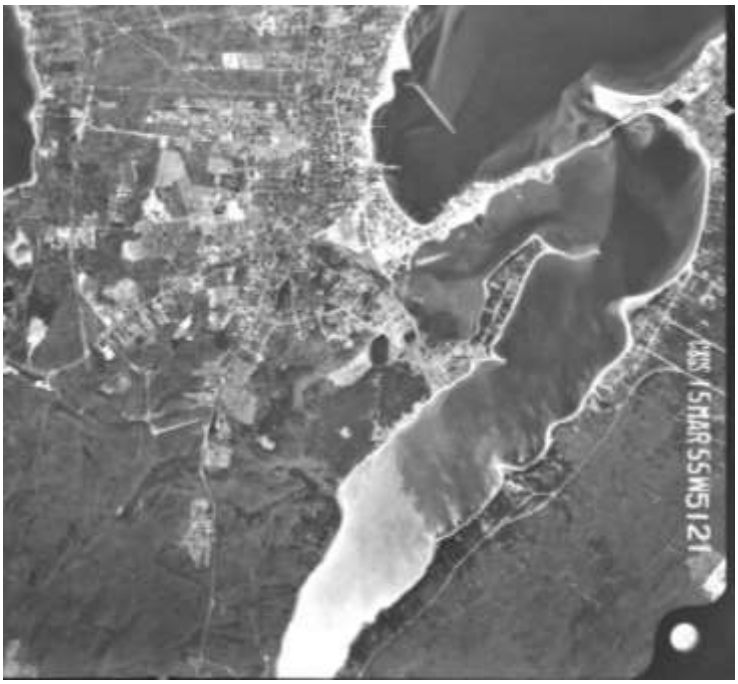
The preserve remained devoid of obvious dwelling structures well into the 1900's. In a 1944 USGS topographic map and the 1955 aerial photograph the only signs of settlement were the cart paths that run along the Lagoon Pond and a handful of dwellings, none on the preserve. Homes were built along the Edgartown Road and in Tisbury town proper.



Banks Early Sketches of Nobnocket (1900)



1944 USGS topographic map



1955 aerial photograph

2. Planning Concerns

a. Massachusetts Endangered Species Act:

No management activity proposed in this management plan is within the boundaries of priority habitat for rare species (NHESP Map, Appendix G). The creation of new trails will not impact the specific habitat requirements of the commonwealth-listed species observed on the preserve during surveys.

b. Wetland Protection Act:

The shoreline and coastal bank in the southeastern corner of the preserve are considered “wetland resource areas” under the Massachusetts wetlands protection act. The wetland resources areas and 100-foot buffer zone around the wetland resource areas and bordering vegetated wetland are subject to the jurisdiction of the Tisbury conservation commission. The shoreline and adjacent inland are located within the land subject to coastal storm flowage and are in the high velocity zone. Installing a trail over the rapid elevation change on the preserve requires a filing for a Notice of Intent with the Tisbury conservation commission for a series of raised stairs with switchbacks and elevated, removable aluminum platforms to allow access to the shoreline. The removable stairs afford the flexibility necessary to manage shoreline access in high velocity zones. The shoreline of the preserve is mapped as being in Chapter 91 jurisdiction. However, the trail system is designed to allow for uninterrupted access along the pond shore.

c. District of Critical Planning Concern

The Martha’s Vineyard Commission has the power to define and designate areas of critical planning. The preserve is within the Lagoon Pond district of critical planning. The land bank is not proposing any unpermitted uses or uses that would require a special permit in this management plan.

3. Abutters

A list of those owning land abutting or within 200 feet of the Beech Tree Preserve appears in Appendix H (Table 9), as does the Tisbury Assessors Map as it appears in the AXISGIS program.

4. Existing Use and Infrastructure

The trails of Beech Tree Preserve may be used to access the trailheads of several neighboring properties. Existing Use map (Appendix A) identifies Featherstone Farm, Little Duarte's Pond Preserve, Ramble Trail Preserve, Southern Woodlands Reservation, Tisbury Meadow Preserve, Wapatequa Woods Reservation and Weahtaqua Springs Preserve as properties of a contiguous cross-island trail system that could connect to Beech Tree Preserve. Two significant features occur on Beech Tree Preserve. An explanation for each is as follows:

1. Roads: The Edgartown-Vineyard Haven Road bounds the preserve to the west. Two unpaved roads, Oklahoma Avenue and Pond View Way, cross the preserve. These unpaved roads serve as access ways to homes of residents in the area.

2. Ravine: A ravine is located in the southeastern corner of the preserve.

3. Trails: There are several existing trails on the preserve. The plan proposes to close these trails and not incorporate them into the proposed trail system for the preserve as they pose erosion risks.

4. Old Road: The remains of an old roadbed exists on the preserve and is identified by its deep ruts and bright green mossy center mound.

II. Inventory Analysis

In this section, problems and opportunities that may arise in the management of Beech Tree Preserve are analyzed.

A. Constraints & Issues

1. Ecological Context

The preserve is located in close proximity (within 0.1-0.5 miles) to other conservation land. Wapatequa Woods Reservation is located west of the preserve, directly across the Edgartown-Vineyard Haven Road. Ramble Trail Preserve is to the north, Southern Woodlands Reservation and Featherstone Farm are to the east and Weahtaqua Springs Preserve is to the south of the preserve. The properties are connected via public and private roads and trails.

The preserve is part of a much larger woodland corridor comprising Wapatequa Woods and Tisbury Meadow Preserve. The eastern edge of the preserve is met by the shoreline of Lagoon Pond. The preserve provides an important link to the cross-Tisbury trail ultimately connecting Lagoon Pond with Vineyard Sound and Lake Tashmoo.

2. Natural and Cultural Resource Concerns

There are three main areas of concern at Beech Tree Preserve, each briefly addressed below and then addressed in more detail in the land management section of the plan:

a. *Commonwealth-listed rare species*
One commonwealth-listed wildlife species, a rare moth, was recorded during surveys on the preserve. The preserve provides general upland habitat requirements for the listed moth species. However, specific habitat requirements such as scrub oak barrens and pitch pine woodland are sparse.

b. *Erosion*
There is variable topography on the preserve from the gradual slope of the dell to the steeply sloping ravine. The hazard of soil erosion along trails may present stabilization issues if not properly managed. Routing trails around the crest of the dell, closing existing trails that cross steep slopes, using switchbacks and geogrids on proposed trails, constructing a raised stairway down the ravine and continuing to explore new management techniques to control erosion on proposed and existing trails will minimize soil loss, root exposure and rutting on the property.

c. *Invasive Species*
Invasive species are a concern on any property. Exotic, invasive species outcompete and displace native species, altering the composition of natural vegetation communities (Somers 1996). Often without natural enemies, exotic, invasive plant seedlings compete for nutrients, water and light with neighboring plants. Annual monitoring and quick control and removal of invasive species are important to maintain an ecological balance and the integrity of habitats on the preserve.

d. *Wetland Resource Areas*
One wetland resource area, the Lagoon Pond shoreline, occurs at Beech Tree Preserve. The wetlands provide important habitat for various wildlife and plant species and are groundwater recharge areas. Care must be taken to ensure erosion of soil from trails and other open surfaces does not result in siltation of a wetland and that management activities do not unduly alter habitat characteristics.

e. *Succession*
Beech Tree Preserve is undergoing natural forest succession. Absent of major disturbances, forest succession to a climax community will gradually displace pitch pine from the upland forest.

3. Sociological Context

Beech Tree Preserve is located in Tisbury in a populated section of Martha's Vineyard. The preserve is surrounded by residential developments, woodlands, and a tidal pond and is bordered on three sides by an environmental justice block. Lagoon Pond is popular for its natural beauty, fishing, and shell-fishing.

4. Neighborhood Concerns

The land bank considers the concerns of neighbors as part of the planning process. All abutting property owners and the local conservation commission are sent written notice of a public hearing on the draft plan. All neighbors – and all members of the public – are invited to review the draft plan, attend the public hearing and make written or oral comments. The land bank's Tisbury town advisory board and the Martha's Vineyard land bank commission review all comments and can change the draft plan if desired. Anyone may also express concerns at any public meeting of the Martha's Vineyard land bank commission and Tisbury town advisory board or may simply contact land bank staff.

- Concern over invasive species along the unpaved roads on the preserve and abutting woodland has been raised by neighbors.

B. Addressing Problems and Opportunities

1. Land Bank Mandate

In 1986, the voters of Martha's Vineyard created the land bank to acquire, hold, and manage land in a predominantly natural, scenic, or open condition. The land bank keeps open space open and allows modest public use. Its "shared-use" policy strives to provide a range of public benefits, from low-impact recreation and aesthetics to wildlife conservation and watershed protection. Protection of natural resources is the land bank's highest priority, yet "shared-use" demands balancing the public use of natural resources with protection of the same.

2. Goals at Purchase

The purchase of Beech Tree Preserve meets six of the land bank's nine criteria for property acquisition: forest land conservation; wildlife habitat protection; freshwater wetlands and groundwater protection; easements for trails and for publicly owned lands; scenic vistas; and sites for passive recreation. A preliminary management plan was adopted by the land bank commission and Tisbury advisory board and is attached as Appendix B.

3. Opportunities

Beech Tree Preserve offers a number of opportunities for use of the property. They are as follows:

a. *Access*: The primary access for vehicles to the preserve is proposed at an off-site trailhead that will be created at Wapatequa Woods Reservation along the western side of the Edgartown-Vineyard Haven Road. The future trailhead will feature a parking bay for three vehicles and serve as the primary access to the preserve and future trails to the west. A sign station is proposed at the start of the trail system and will include a map of the preserve and connecting trail systems as well as property rules and notices.

b. T*rails*: Approximately 0.25 miles of proposed trails meander through the woodland to the shoreline. The rapid elevation change will require a series of raised stairs with switchbacks and removable aluminum platforms to control erosion and allow access to the shoreline. A logo sign post is proposed on the preserve off the Edgartown Vineyard Haven Road to mark the start of the proposed trail.

c. *Views*: The preserve offers views of Lagoon Pond, a 2-mile long freshwater tidal pond. A viewing platform will be placed at the start of the ravine descent to provide scenic views of Lagoon pond. Additionally, benches will be located at the top and bottom of the ravine.

d. *Horseback riding and bicycling*: Bicycle and horseback riding are possible on the preserve. However, some proposed trails with steep elevation, especially those within the ravine, are not suited for these activities.

e. *Bird-watching*: The preserve offers opportunities for viewing wetland and woodland bird species.

4. Universal Access (UA)

Beech Tree Preserve does not present reasonable opportunities for universal access due the lack of a trailhead on the preserve. Additionally, limited opportunities exist on the balance of the preserve due to extremes in topography. The preserve's ROS ('Recreation Opportunities Spectrum') classification is "less-developed." Further details are included in Appendix I.

III. Land Management Planning

This final section of the management plan states goals for Beech Tree Preserve and outlines strategies for achieving them. These goals and strategies are designed to fit within the social and ecological constraints defined previously. The plan addresses five areas of planning concern: nature conservation; recreation and aesthetics; natural products; community interaction; and land administration.

A. Nature Conservation

Provide long-term protection for plants, animals and natural processes occurring at Beech Tree Preserve.

Objective 1: Protect and encourage rare and endangered species on the preserve.

Strategies:

a. Monitor the property for rare plants and animals during regular property checks.

b. Develop and implement a strategy to protect any additional rare species observed on the property.

c. Report new observations of rare and endangered species to the proper commonwealth authority.

d. Reroute or close trails in the event that the recreational use interferes with a rare species.

e. Protect and enhance existing rare moth species habitat:
   i. utilize existing trails as much as possible;
   ii. site new trails and clearings in such a way as to avoid cutting pitch pine and scrub oak; and
   iii. retain large tracts of contiguous woodland.

Objective 2: Reduce and control erosion of trails.

Strategies:

a. Reroute or temporarily close any trail where necessary.

b. Install water bars and switch-backs where necessary.

c. Explore alternative erosion control measures as such methods are discovered.

d. Cover trails with tailings and woodchips (generated from land bank tree removal) as needed to manage erosion issues and prevent further surface soil erosion.

e. Minimize trail use by heavy maintenance equipment on trails with a slope of greater than 8%.

f. Create and use a skid trail for tree removal when cutting and clearing on slopes greater than 8%.

g. Prohibit use of motorized vehicles such as dirt bikes and all-terrain vehicles on the trail system.

h. Use raised stair systems in the ravine and adjustable modular beach access stairs to provide a long-term access solution and mitigate soil exposure on steep slopes.

Objective 3: Protect the value of the preserve as migratory and breeding habitat for avian and other wildlife species.

Strategies:

a. Retain snags in woodland where these trees do not pose unacceptable safety or fire hazard.

b. Monitor changes in vegetation cover during regular property checks and by updating ecological inventory in 2029.

Objective 4: Monitor for and control the spread of invasive species.

Strategies:

a. Cut or uproot invasive species as they are observed.

b. Monitor for re-growth and continue to manage invasive plants.

c. Explore other control methods and implement with permission of the MVLBC and Tisbury Conservation Commission if physical control methods fail.

d. Dispose of invasive species following approved methods.

Objective 5: Reduce forest fire danger on the preserve.

Strategies:

a. Prohibit open campfires on the preserve.

b. Work with a forester to create a forest management plan to reduce ladder fuels in the woodland.

c. Follow the recommendation of the Community Wildfire Protection Plan, Martha's Vineyard Commission providing recommendations do not preclude attainment of natural conservation objectives.

B. Recreation and Aesthetics

Allow limited, low-impact recreational use of the area for hiking, bicycling, horseback-riding and picnicking; prohibit camping (generally) and overnight boat storage on the preserve; and maintain attractive views and landscapes provided that these uses do not preclude attainment of nature conservation objectives.

Objective 1: Maintain the property open for low-impact recreation.

Strategies:

a. Open the property for hiking, non-motorized biking, horseback-riding and other passive uses.
b. Install new trail(s) where appropriate (see Project Map).
c. Allow picnicking and maintain a "carry in-carry out" policy for litter.
d. Monitor impact of passive recreational use on the preserve annually and manage accordingly.

Objective 2: Direct visitors to access the preserve by way of the future 3-vehicle trailhead located across the Edgartown-Vineyard Haven Road on Wapatequa Woods Reservation. (see Project Map).

Strategies:

a. Install a sign station at the future trailhead with maps of the preserve and nearby conservation areas and signs designating the appropriate uses and rules of the preserve and reservation.
b. Monitor for vandalism and address as needed with surveillance equipment and working with local authorities.
c. Install a land bank logo post on the preserve off the Edgartown - Vineyard Haven Road indicating the start of the trail system.
d. Install a bicycle rack on the preserve near the trailhead entrance.
e. Site a trailhead for 2-3 vehicles on the east side of the Edgartown-Vineyard Haven Road if a future opportunity arises and the trailhead is deemed necessary.

Objective 3: Create new trails as shown on the Project Map.

Strategies:

Create new trails as shown on the Project Map:

i. create ±1700 linear feet of new trail;
ii. make trail corridors six to nine feet wide and eight feet tall when possible;
iii. install 75' of trail at the bottom of the ravine constructed with hardener, water bars and a drainage swale;
iv. install 150' of aluminum or timber stairs in the ravine with platforms between sets of connecting stairs and benches at either end;

v. install 8-10’ of adjustable, modular aluminum stairs over the coastal bank for beach access;
vi. free trails of rocks, roots and other obstacles where practical;
vii. install erosion control measures where needed;
viii. mark trails with colored markers or directional signs if needed;
ix. site trails so that they are as unobtrusive as possible to nearby homes and sensitive wildlife habitat; and
x. site trails so that they connect, as well as possible, to other conservation land, ancient ways and trail easements.

a. Screen views of houses as necessary from trails and view-points using native vegetation.
b. Minimize need for signs by siting trails appropriately.
c. Allow land bank staff discretion to close or relocate trails or add new trails, such as spur trails for off-property trail connections.
d. Allow multiple uses of trails where appropriate by hikers, Nordic skiers, horseback-riders and bicyclists.
e. Use brush or temporary fences to close unauthorized or relocated trails if necessary.
f. Prohibit visitors’ use of motorized vehicles, such as but not limited to dirt bikes and all-terrain vehicles.
g. Check and maintain trails monthly.
h. Maintain existing trail system in good condition.

Objective 4: Highlight Lagoon Pond and maintain existing views.
Strategies:

a. Cut snags if they significantly detract from the aesthetic quality of the view.
b. When cutting vegetation on slopes greater than 8%, limit soil disturbance by maintaining ground cover where possible and installing erosion control measures if necessary.
c. Install rustic benches where appropriate.
d. Remove debris.
e. Remove downed trees along the coastal bank and shore.
f. Retain stumps if they are providing erosion control.

Objective 5: Entertain possibilities for other trail links
Strategies:

a. Use existing trails on the preserve where possible and create new trails as necessary to connect the preserve to future conservation land and trail easements.

b. Maintain existing links to other conserved properties

c. Create links to other conserved land and easements

Objective 6: Require that dogs are leashed according to town of Tisbury by-laws.

Strategies:

a. Post the dog policy at the various sign stations and property entrances and in the land bank map.

b. Encourage visitors to clean up after their pets.

Objective 7: Prohibit camping and overnight boat storage.

Strategies:

a. Prohibit camping on the preserve unless special permission is granted by the land bank commission for scouting and like groups and it is in compliance with appropriate Tisbury town bylaws.

b. Monitor the preserve for squatters and remove unauthorized campers promptly.

c. Prohibit all overnight storage, including boats and outhaul anchors.

d. Prohibit boat landings on vegetated shorelines; allow short-term boat storage during the day on unvegetated beach shorelines.

C. Natural Products

Allow foraging provided that this use does not preclude attainment of nature conservation objectives.

Objective 1: Prohibit hunting on the preserve due to the size constraints of the preserve.

Strategies:

a. Notify the public of the hunting policy on the preserve, in the land bank hunting policy and on the land bank website.

Objective 2: Allow gathering of natural products according to the land bank's public use policy.

Strategies:

a. Prohibit collecting of locally rare plants and wildlife on the preserve.

b. Require that gathering occur within the immediate environs of the trail system.

D. Community Interaction

Provide helpful and interesting information about the property for visitors; promote cultural resource conservation; and allow educational use of the property.

Objective 1: Help people find the property and avoid trespassing.

Strategies

a. Mark the property on land bank website (www.mvlandbank.com) and map and provide directions.

b. Install “end of land bank property” signs where appropriate.

c. Install land bank logo markers on property.

d. Limit trespassing by closing existing trails not intended for use.

e. Install gates or fencing as needed.

f. Inform visitors, in the land bank map, how to access the preserve trailhead and its intended use.

g. Post map of property and trails as well as an aerial overview of the connecting conservation land and trails on sign station and website as they are updated.

h. Plant vegetation where residential dwellings are visible from the trail, as necessary, that blends in with the natural context of its environs in order to define and screen the boundaries.

Objective 2: Present useful and interesting information about Beech Tree Preserve to the public.

Strategies:

a. Provide the Tisbury public library and conservation commission with copies of this management plan if so desired.

b. Make a copy of this plan available at the land bank office and, when file size is not restrictive, on the land bank website.

c. Post information about the cultural and natural history of the preserve at the trailheads.

E. Land Administration

Oversee and police Beech Tree Preserve on a regular basis and develop good neighborhood relations

Objective 1: Maintain good relations with abutters and neighbors.

Strategies:

a. Establish contact and working relations with neighbors.

b. Maintain contact and working relations with the Tisbury conservation commission; send a draft copy of the plan to the Tisbury conservation commission prior to the public hearing.

c. Post the activities allowed and prohibited on the preserve.

Objective 2: Keep property well-maintained.

Strategies:

a. Inspect property at least monthly.

b. Clean up any litter and junk which may occur.

c. Promptly respond to problems.

d. Employ adequate staff to effectively implement land management goals.

Objective 3: Maintain set hours for use.

Strategies:

a. Open property every day of the year from sunrise to sunset.

b. Prohibit nighttime use unless special permission is granted by the land bank commission.

c. Post “closed at dark” signs on the sign station.

Objective 4: Keep well-maintained boundaries.

Strategies:

a. Locate and GPS corners.

b. Walk boundaries annually.

c. Post boundary flags where appropriate.

d. Correct encroachments as they occur.

Objective 5: Keep good records of all land management activities and natural events.

Strategies:

a. Record all significant events, natural or otherwise.

b. Continue to update plant and wildlife inventories.

c. Maintain photographic record of landscape appearance.

Objective 6: Comply with all applicable regulations and agreements.

Strategies:

a. Comply with Massachusetts endangered species act.

b. Comply with wetlands protection act and Tisbury town wetland by-laws.

c. Request recommendations from the Massachusetts historical commission regarding the proposed activities in the plan.

IV. Literature Cited

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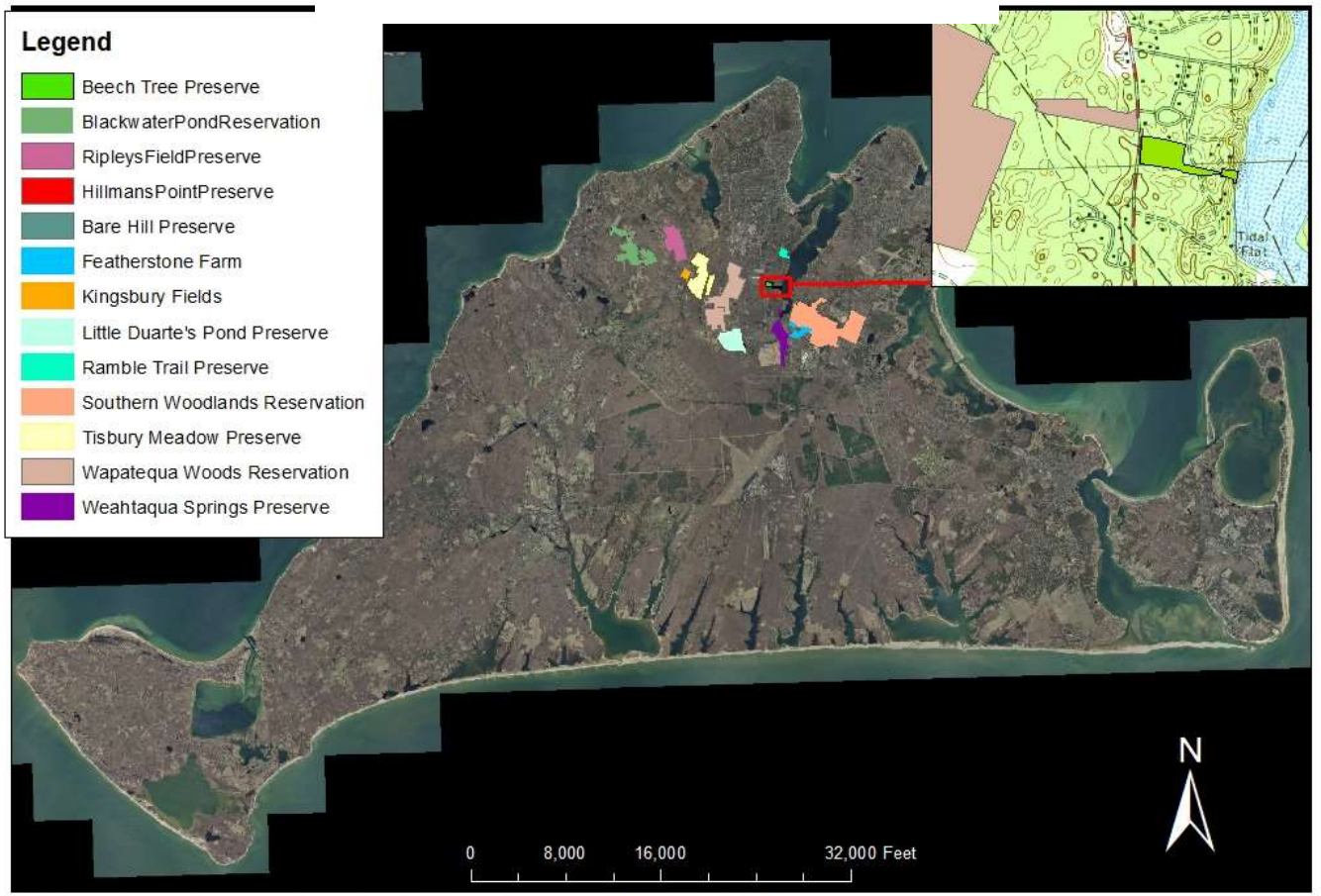
Appendix A. Locus, Topography and Site Management Maps

Map 2: Beech Tree Preserve Locus Map

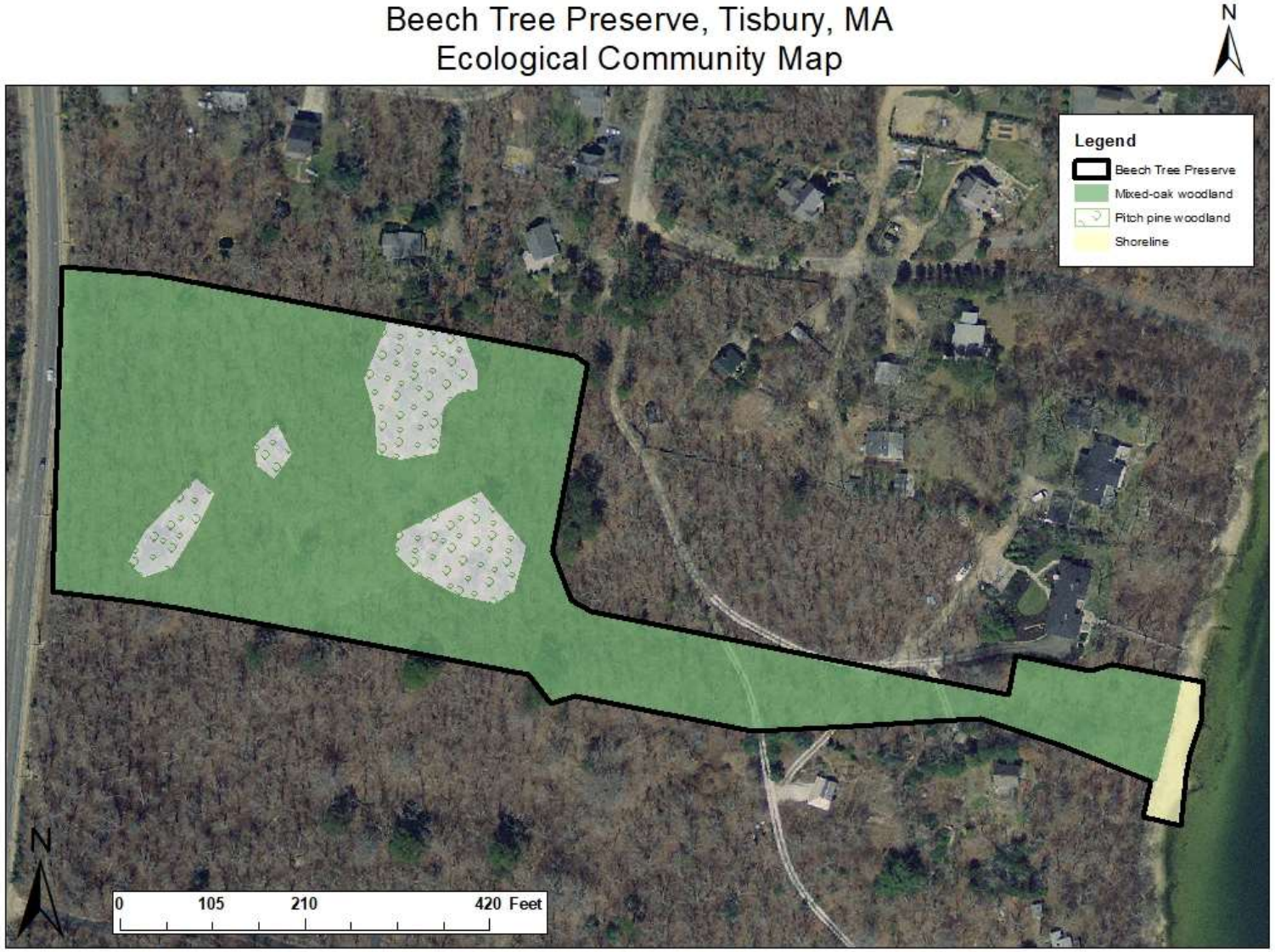
Map 3: Beech Tree Preserve Topography Map



Sources: Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs;
Aerial USGS Ortho Imagery 2014, NHESP Habitat Maps 2017, USGS Topographic Quadrangle Images 1878;
Martha's Vineyard Commission (MVC): Parcel Town Assessors 2017, Soil, Watersheds, Coordinate Reference: State Plane. Mass Mainland, Meters, NAD83
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not repsonsible for end-users interpretation of the map.

Map 3: Beech Tree Preserve Topography Map

Map 4: Beech Tree Preserve Ecological Community Map



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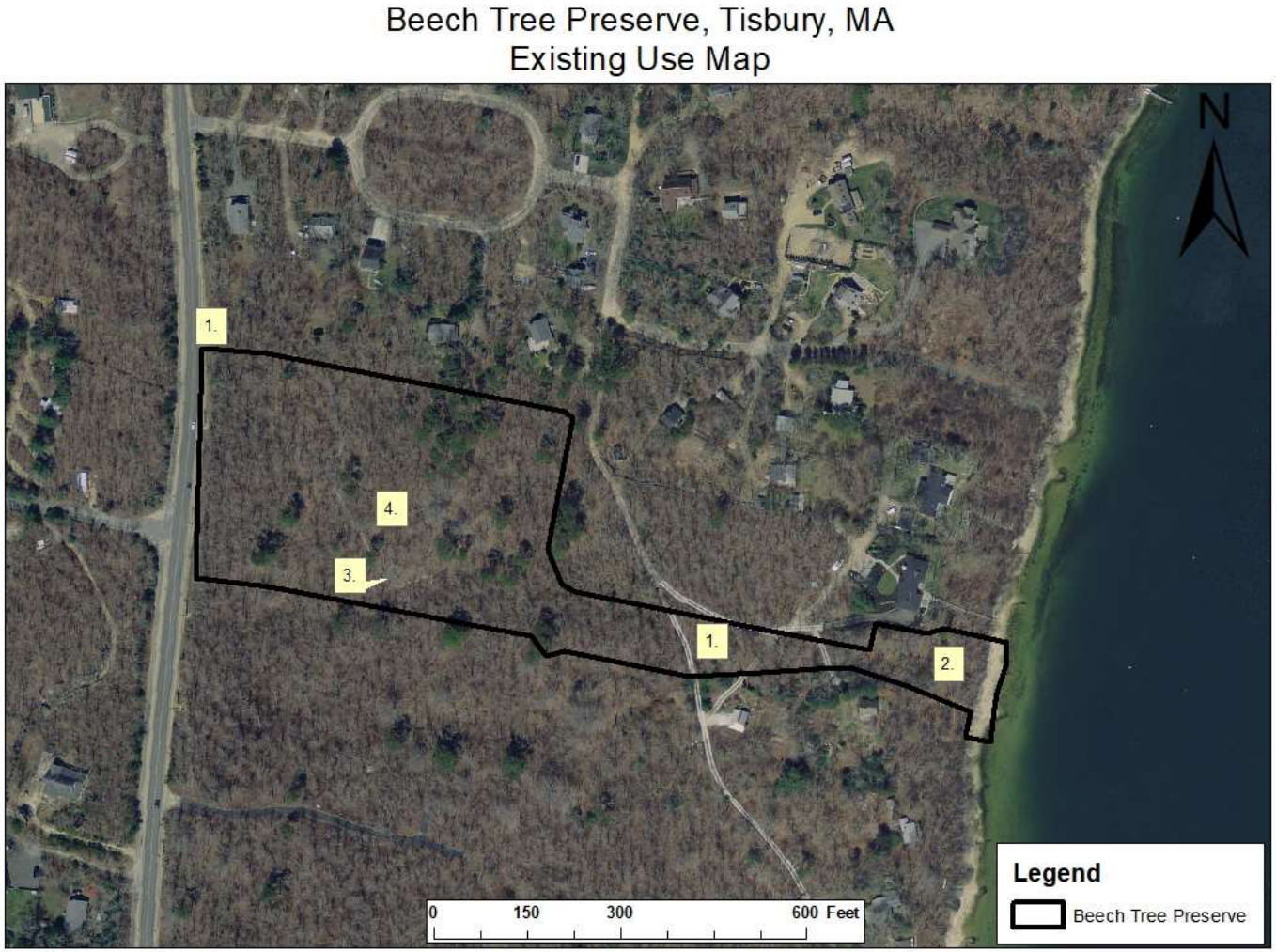
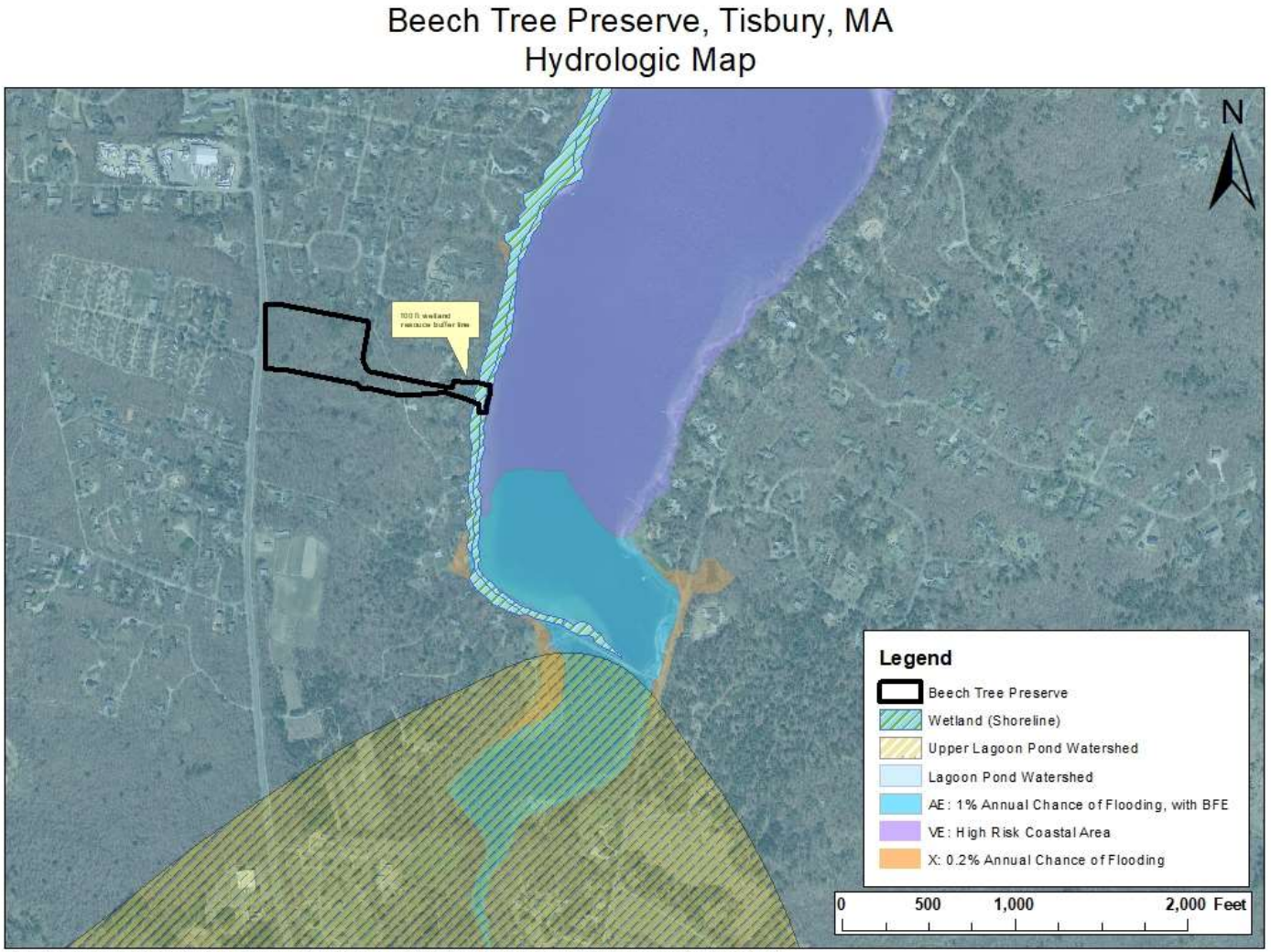
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not repsonsible for end-users interpretation of the map.

Map 5: Beech Tree Preserve Existing Use Map



Map 6: Beech Tree Preserve Hydrologic Map



Sources: Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs:
Aerial USGS Ortho Imagery 2014, NHESP Habitat Maps 2017, USGS Topographic Quadrangle Images 1878;
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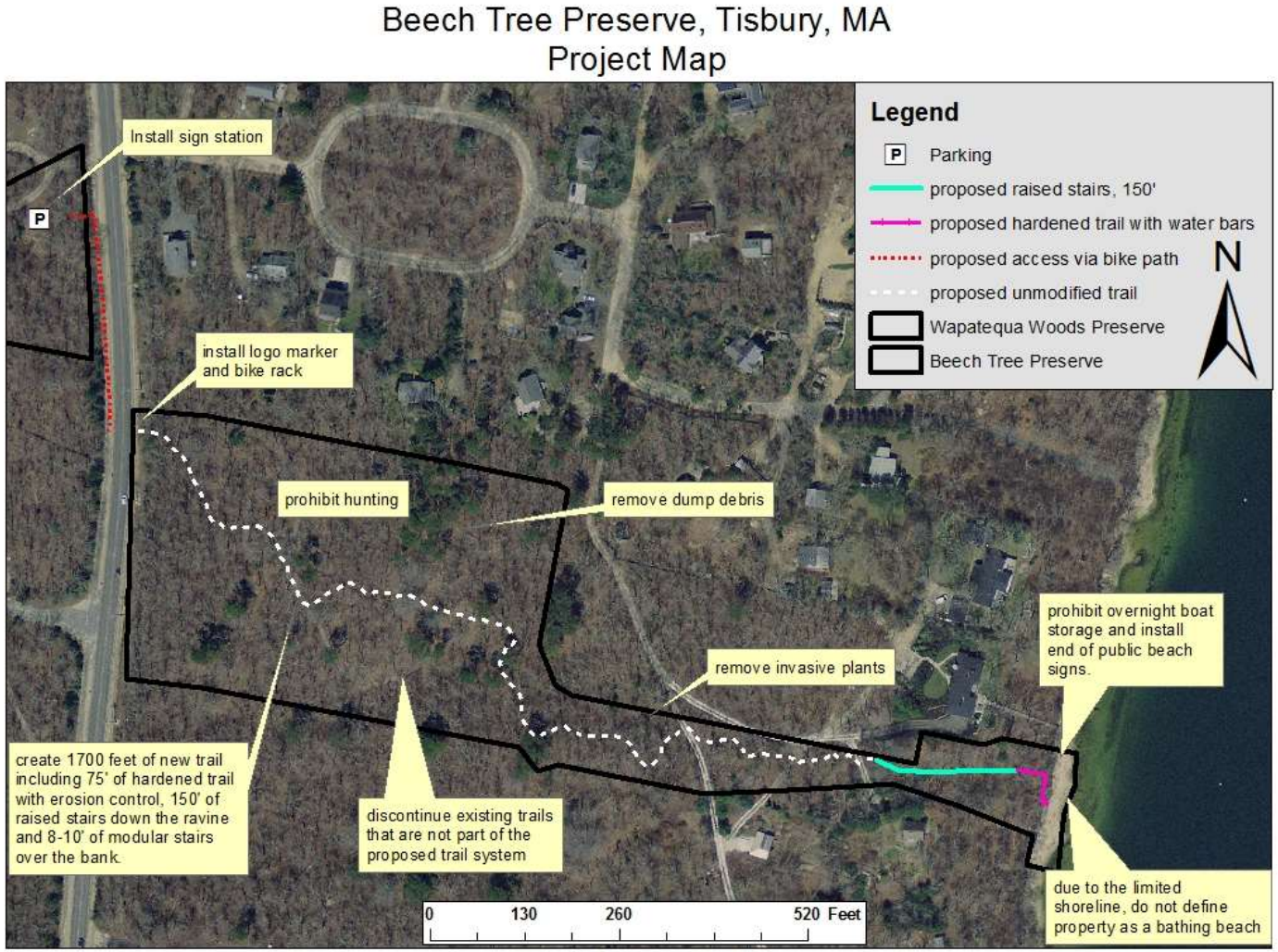
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not repsonsible for end-users interpretation of the map.

Map 7: Beech Tree Preserve Project Map



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Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not repsonsible for end-users interpretation of the map.

Appendix B. Surveys, Deeds and Preliminary Management Plan Goals

Deeds and larger copies of the surveys are on file at the land bank office. They include the following:

October 17, 2016

Martha's Vineyard Land Bank Commission

Beech Tree Preserve
preliminary management plan

acreage		6.6 acres
tax parcel nos.		16-A-21.1 and 16-A-22
nature conservation goals	(1)	conduct biological survey to serve as base for formulation of management objectives
	(2)	identify rare and endangered species, if any, and create plan to protect their populations; manage any exotic and/or invasive species
natural products goals	(1)	prohibit hunting, given lot's configuration and adjacency to developed neighborhood
recreational goals	(1)	open property for hiking, non-motorized bicycling and horseback-riding and other passive uses; install trail system for this purpose and integrate it into neighborhood and nearby conservation properties
	(2)	install trailhead on locus and/or on the land bank property on the other side of the Edgartown Road
	(3)	provide pedestrian access to the Lagoon Pond beach
administrative goals	(1)	oversee and police land on regular basis in order to maintain property as an attractive conservation area

approved by vote of the Tisbury town advisory board: October 5, 2016

approved by vote of the land bank commission: October 17, 2016

P.O. Box 2057 • Edgartown, Massachusetts 02539 • 508 627-7141 • Fax 508 627-7415

printed on recycled paper

2017 00001301
Bk: 1433 Pg: 803 Doc: DEED
Page: 1 of 3 03/17/2017 10:26 AM

PROPERTY ADDRESS: Off Edgartown-Vineyard Haven Road, Tisbury, , MA 02568 (portion of Assessor's Map 16-A, Parcels 21.1 and 22)

QUITCLAIM DEED

We, **MALCOLM G. WATSON, JR. and ROSEANN WATSON,** of 20 Woods Grove Road, Westport, CT 06880

for consideration of **SEVEN HUNDRED SIXTY THOUSAND and 00/100 ($760,000.00) DOLLARS,**

hereby grant to the **MARTHA'S VINEYARD LAND BANK COMMISSION,** a corporate body politic, with a principal place of business at 167 Main Street, P.O. Box 2057, Edgartown Massachusetts 02539

with ***quitclaim covenants:***

Two (2) certain parcels of land in Tisbury, County of Dukes County, Commonwealth of Massachusetts, being more particularly bounded and described as follows:

PARCEL ONE

Being shown on a certain plan of land entitled "Plan of Land in Tisbury, Mass. Surveyed for MALCOLM G. WATSON, JR. et ux. May 3, 1973 Scale: 1" = 100' Dean R. Swift Reg'd Land Surveyor Vineyard Haven, Mass." recorded in the Dukes County Registry of Deeds in Book 310, Page 421, and being bounded and described as follows:

Northerly by Lot 626 on said plan, 103.78 feet, by Martha's Vineyard Ave. on said plan, 41.82 feet and by Chestnut Street on said plan, 438.43 feet, and by Central Ave. on said plan 26.09 feet;

Easterly by the centerline of Central Ave. on said plan, 319.99 feet;

Southerly by Lot 634 on said plan, 100.00 feet, and by Martha's Vineyard Ave. on said plan and by Lots 320,322, 324, 326, 328, and 331 on said plan, a total of 448.59 feet; and by Central Ave. on said plan 27.97 feet;

Westerly by Vineyard Haven-Edgartown Road on said plan 350.06 feet.

Together with all the grantor's right, title, interest and share in the said Maple Street, Martha's Vineyard Avenue, Chestnut Street, and Central Ave.

PARCEL TWO

Being shown as "Lot 1" on a certain plan of land entitled "Plan of Land in Tisbury, Mass. Surveyed for TISBURY LAND BANK ADVISORY BOARD Scale: 1" = 30' January 23, 2017" (the "Plan") prepared by Vineyard Land Surveying & Engineering, Inc., and recorded in the Dukes County Registry of Deeds in Plan Book 18, Page 62; containing 1.41 acres, more or less, according to the Plan.

Parcels One and Two are conveyed subject to the rights of others in "Old Oklahoma Road," "Existing Driveways," "Existing Dirt Road," shown on the Plan and the roads shown on the "Plan of Oklahoma Martha's Vineyard, Mass." recorded in the Dukes County Registry of Deeds in Plan Book 13, Page 49; and are conveyed subject to and together with all easements and other matters of record, to the extent the same are applicable and now in effect.

For our title to Parcels One and Two see deed from Edmond A. Meras, John E. Meras, and Phyllis L. Meras to Malcolm G. Watson, Jr. and Roseann Watson, dated May 4, 1973 and recorded in the Dukes County Registry of Deeds on Book 310, Page 421; and deed from Cecilia J. Meras to Malcolm G. Watson, Jr., dated November 19, 1979 and recorded in the Dukes County Registry of Deeds on Book 371, Page 813.

The undersigned do under oath hereby state that no person occupies, or intends to occupy the above-described premises as his or her principal residence and therefore no one is entitled to claim the benefit to an estate of homestead under M.G.L. 188 in said premises.

[Remainder of page intentionally left blank. Signature page follows.]

Executed as a sealed instrument under the penalties of perjury this 16 day of March, 2017.

Malcolm G. Watson, Jr.

Roseann Watson

COMMONWEALTH/STATE OF Connecticut

Fairfield County, ss. Westport

On this 16 day of March, 2017, before me, the undersigned notary public, personally appeared Malcolm G. Watson, Jr. and Roseann Watson, proved to me through satisfactory evidence of identification of the principal, which was CT drivers license to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of their knowledge and belief.

Notary Public

My commission expires:

DANIELLE PAOLOZZI
NOTARY PUBLIC STATE OF CONNECTICUT
My Commission Expires September 30 2018

AFFIX :
NOTARIAL :
SEAL :

ATTEST: Paulo C. DeOliveira, Register
Dukes County Registry of Deeds

MARTHA'S VINEYARD LAND BANK FEE
STAMP A
EXEMPT
5702 3/17/17 MLH
DATE CERTIFICATION

2017 00001902
Bk: 1433 Pg: 806 Doc: DEED
Page: 1 of 2 03/17/2017 10:26 AM

PROPERTY ADDRESS: Off Edgartown-Vineyard Haven Road, Tisbury, MA 02568 (portion of Assessors' Map 16-A, 13)

QUITCLAIM DEED

We, **MALCOLM G. WATSON, JR. and ROSEANN WATSON,** of 20 Woods Grove Road, Westport, CT 06880

for consideration of valuable consideration, but no monetary consideration, the receipt and sufficiency of which is hereby acknowledged

hereby grant to the **MARTHA'S VINEYARD LAND BANK COMMISSION,** a corporate body politic, with a principal place of business at 167 Main Street, P.O. Box 2057, Edgartown Massachusetts 02539

with ***quitclaim covenants:***

The land in Tisbury, County of Dukes County, Commonwealth of Massachusetts, being more particularly bounded and described as follows:

Being shown as "Lot 3" on a certain plan of land entitled "Plan of Land in Tisbury, Mass. Surveyed for TISBURY LAND BANK ADVISORY BOARD Scale: 1" = 30' January 23, 2017" prepared by Vineyard Land Surveying & Engineering, Inc., and recorded in the Dukes County Registry of Deeds in Plan Book 18, Page 62 (the "Plan"); containing 1,200 square feet of land, more or less, according to said Plan.

The above described premises are conveyed subject to and together with all easements and other matters of record, to the extent the same are applicable and now in effect.

For title, see deed of David C. Dandridge, dated ~~February~~ MARCH 1, 2017, and recorded herewith.

The undersigned do under oath hereby state that no person occupies, or intends to occupy the above-described premises as his or her principal residence and therefore no one is entitled to claim the benefit to an estate of homestead under M.G.L. 188 in said premises.

Executed as a sealed instrument under the penalties of perjury this 16 day of March, 2017.

Malcolm G. Watson, Jr.

Roseann Watson

COMMONWEALTH/STATE OF Connecticut
Fairfield County, ss. Westport

On this 16 day of March, 2017, before me, the undersigned notary public, personally appeared Malcolm G. Watson, Jr. and Roseann Watson, proved to me through satisfactory evidence of identification of the principal, which was CT Drivers license to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of their knowledge and belief.

Notary Public
My commission expires:

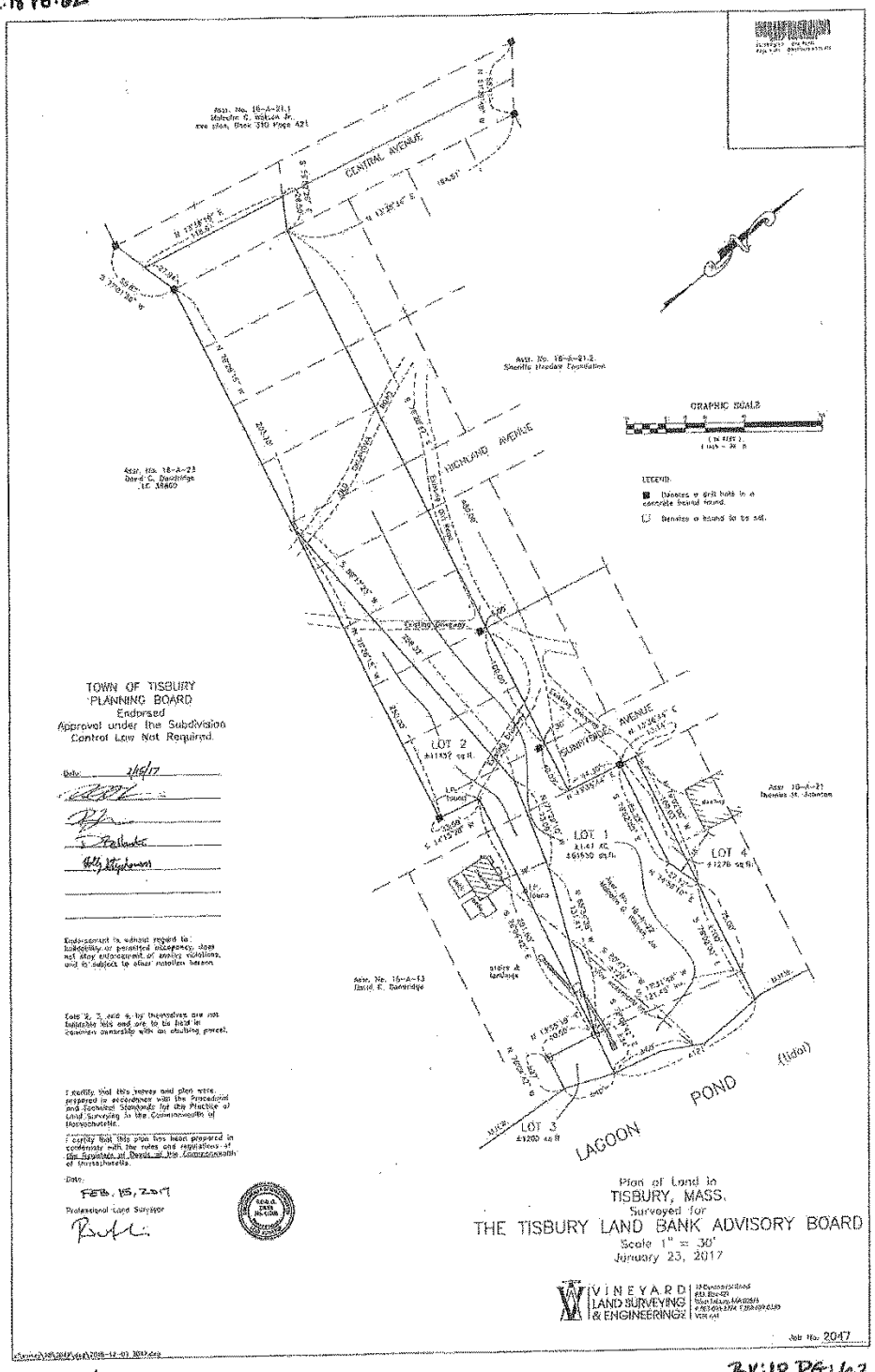
AFFIX :
NOTARIAL :
SEAL :

DANIELLE PAOLOZZI
NOTARY PUBLIC STATE OF CONNECTICUT
My Commission Expires September 30 2018

ATTEST: Paulo C. DeOliveira, Register
Dukes County Registry of Deeds

BK:18 PG:62

BK:18 PG:62



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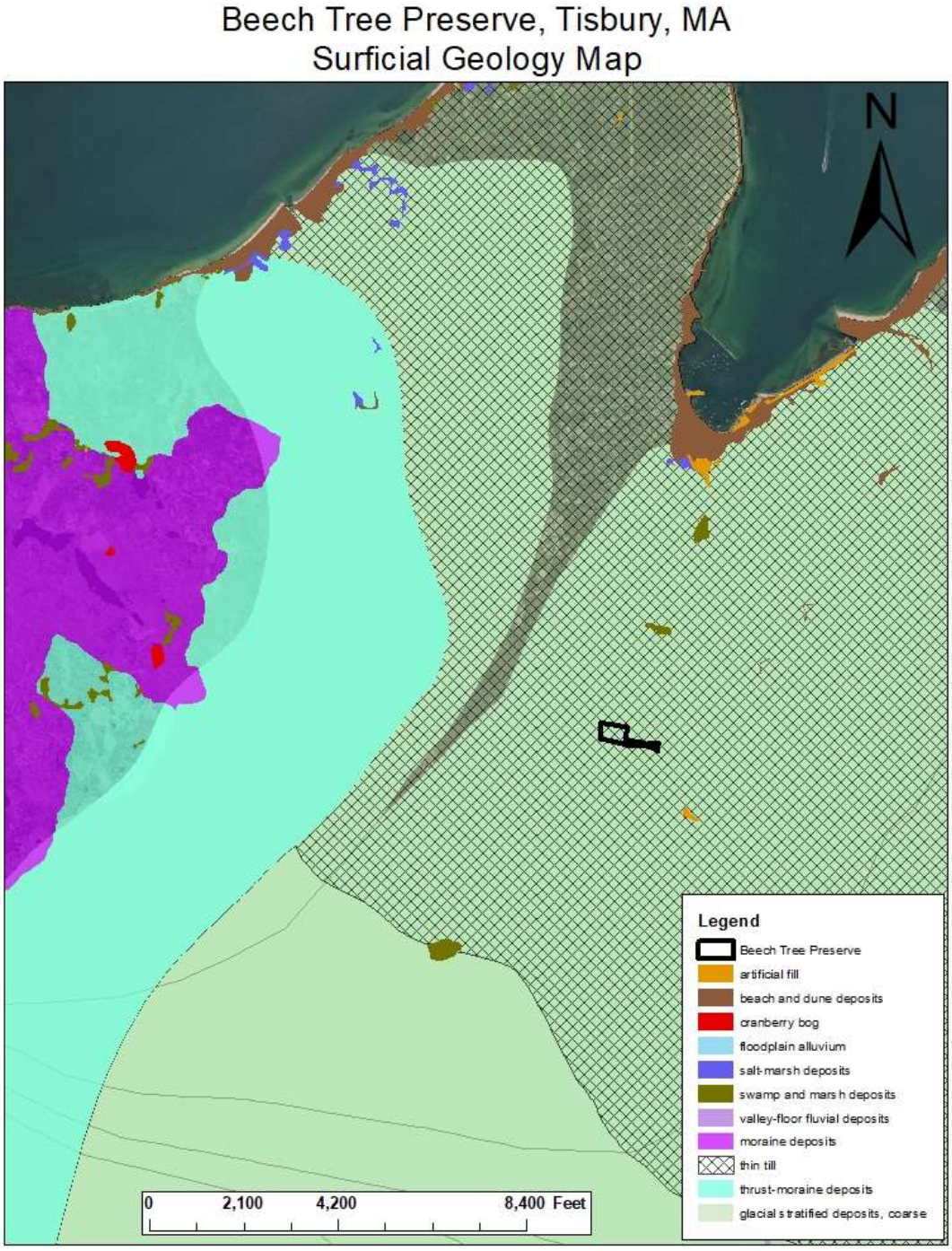
BK:18 PG:62

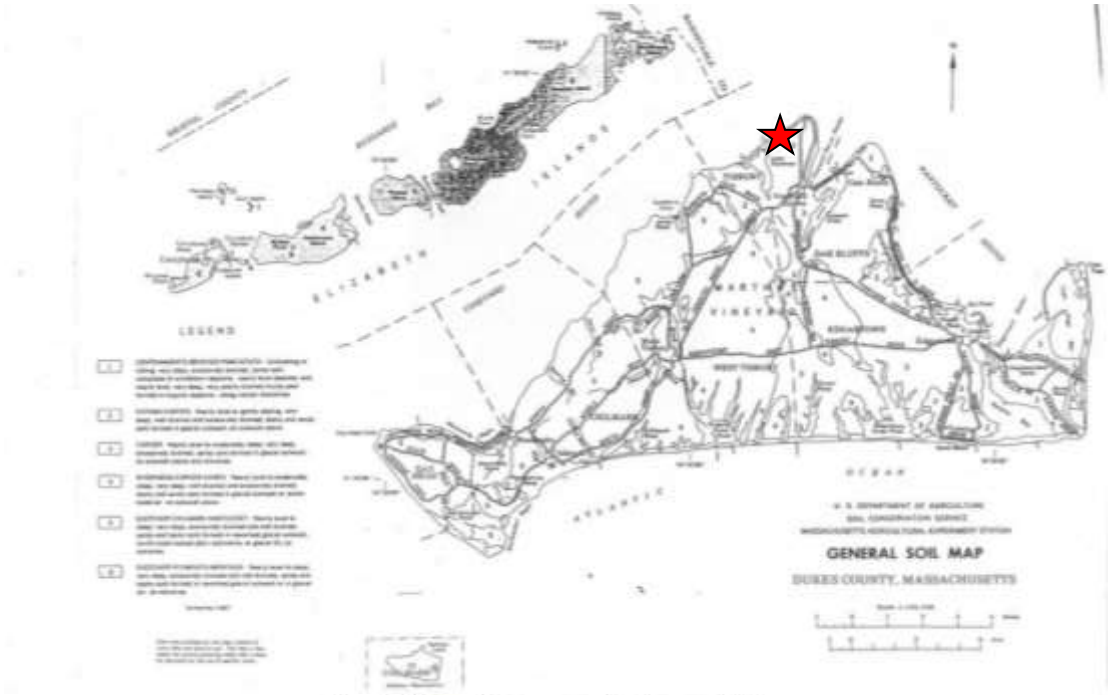
Appendix C. Soils Maps and Descriptions

Map 8: Beech Tree Preserve Surficial Geology Map

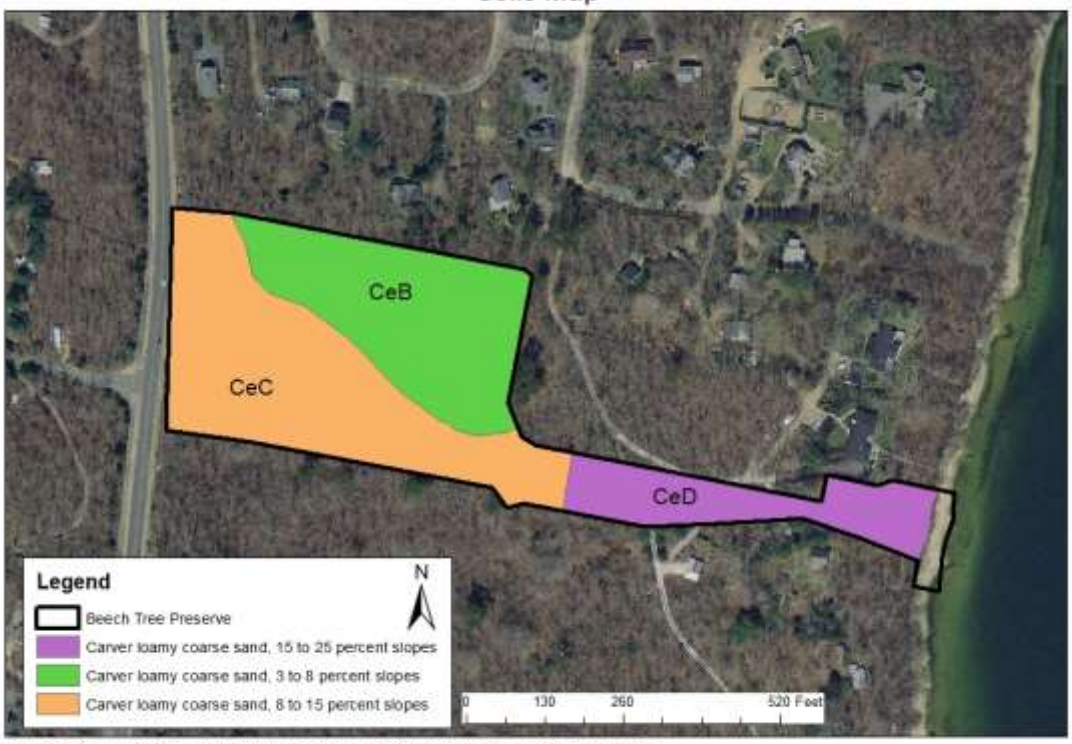


Sources: Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs;
Aerial USGS Ortho Imagery 2014, NHESP Habitat Maps 2017, USGS Topographic Quadrangle Images 1878;
Martha's Vineyard Commission (MVC): Parcel Town Assessors 2017, Soil, Watersheds, Coordinate Reference: State Plane. Mass Mainland, Meters, NAD83
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not repsonsible for end-users interpretation of the map.

Map 9: Beech Tree Preserve Soils Maps



Beech Tree Preserve, Tisbury, MA
Soils Map



Sources: Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs
Aerial USGS Ortho Imagery 2014, NHESP Habitat Maps 2017, USGS Topographic Quadrangle Images 1978;
Martha's Vineyard Commission (MVC), Parcel Town Assessors 2017, Soil, Watersheds, Coordinate Reference: State Plane, Mass Mainland, Meters, NAD83
Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map.

The soils on the preserve are from the Carver loamy coarse sand soils series. The following soil descriptions are derived from SCS (1986) Dukes County Soil Surveys.

a. Carver loamy coarse sand (CeB,CeC,CeD)

CeB – A very deep soil on a gently slope of 3-8% that is excessively drained. Low available water capacity makes this soil unsuitable for cultivated crops, hay and pasture and woodland productivity.

CeC – A very deep soil strongly sloping 8-15% that is excessively drained. Risk of erosion and low water capacity make this soil poorly suited to woodland productivity or cultivated crops, hay, and pasture. Slope also limits building capability. Erosion is a concern for trails, landings, and access roads.

CeD – A very deep soil moderately sloping 15-25% that is excessively drained with a low water capacity. This soil is unsuitable for farming because of slope, low water capacity and erosion hazard which also limit woodland productivity and building. Erosion presents a management hazard for trails, landings and access roads.

Appendix D: Vegetation

Vegetation inventories and surveys of Beech Tree Preserve were conducted in 2017, 2018 and 2019. The woodland survey was completed in 2018 and followed the point-sampling method as described by Avery and Burkhart (1994). Woodland trees were surveyed in 5 non-point plots positioned 228' apart. Density and percent cover of understory vegetation were recorded for all points using the Avery and Burkhart method in $3m^2$ circular plots. Percent canopy and ground cover were measured using a densitometer. Rare plant species were inventoried on the preserve during ongoing plant inventories conducted by land bank staff from 2017 – 2019. Flora observed in 2017 – 2019 at Beech Tree Preserve is listed in Table 1 with proper nomenclature according to Haines (2011). A description of each cover type and quantitative summary of surveys follows:

Table 1. Flora of Beech Tree Preserve from 2017-2019

Scientific name	Common name	Rank[ab]	Morphology	Mixed oak woodland	Shoreline
Bryophytes					
Polytrichum species	haircap moss	AN	moss	x	
GRAMINOID					

Carex spp.	Sedge species	AN	graminoid	x	
Scirpus americanus	saltmarsh threesquare	UN	graminoid	x	
Juncus tenuis	path rush	AN	graminoid	x	
Agrostis spp.	48renulat species	AN	graminoid	x	
Holcus lanatus	velvet grass	AI	graminoid	x	
Schizachyrium scoparium	little bluestem	FN	graminoid	x	
FERN					
Dennstaedtia punctilobula	hay-scented fern	FN	fern	x	
HERB					
Verbascum thapsus	Common mullein	FI	herb		x
Hieracium paniculatum	panicled hawkweed	AN	herb	x	
Solidago sempervirens	Seaside goldenrod	FN	herb		x
Lactuca serriola	prickly lettuce	UI	herb	x	x
Chimaphila maculata	striped wintergreen	AN	herb	x	
Trifolium repens	white clover	FI	herb	x	
Fragaria virginiana	wood strawberry	ON	herb	x	
Solidago rugosa	Rough-stemmed goldenrod	FN	herb		x
Arctium minus	Common burdock	OI	herb		x
Phytolacca americana	American pokeweed	ON	herb		x
Torilis jopanica	Japanese hedge-parsley	AI	herb	x	
Linaria canadensis	blue toadflax	FN	herb	x	
SHRUB					
Rhus copallinum	winged sumac	FN	shrub	x	
Viburnum dentatum	southern arrowwood	UN	shrub	x	
Gaylussacia baccata	black huckleberry	AN	shrub	x	
Vaccinium corymbosum	highbush blueberry	FN	shrub	x	
Sassafras albidum	sassafras	F/AN	shrub	x	
Myrica pensylvanica	bayberry	AN	shrub	x	
Comptonia peregrina	sweet-fern	AN	shrub	x	
Prunus serotina	black cherry	AN	shrub	x	
Rosa virginiana	virginia rose	FN	shrub		
Staphylea trifolia	American bladdernut	Xp	shrub	x	
Rhododendron	rhododendron sp.	Xp	shrub	x	
TREE					
Abies sp.	Fir species	ON	tree	x	
Acer rubrum	red maple	AN	tree	x	
Thuja occidentalis	northern white cedar	RI	tree	x	

Juniperus procumbens	dwarf juniper	Xp	tree	x	
Fagus grandifolia	American beech	FN	tree	x	
Quercus alba	white oak	AN	tree	x	
Quercus coccinea	scarlet oak	AN	tree	x	
Quercus velutina	black oak	AN	tree	x	
Carya sp.	Hickory species	ON	tree	x	
Pinus rigida	pitch pine	AN	tree	x	
Pinus alba	white pine	ON	tree	x	
Torillus jupanica					
VINE					
Lonicera japonica	Japanese honeysuckle	AI	vine	x	
Celastrus orbiculatus	Asian bittersweet	AI	vine	x	
Rubus allegheniensis	common blackberry	FN	vine	x	
Rubus flagellaris	prickly dewberry	FN	vine	x	
Smilax rotundifolia	common greenbrier	AN	vine	x	
Solanum dulcamara	bittersweet nightshade	OI	vine	x	
Toxicodendron radicans	poison-ivy	AN	vine	x	
Parthenocissus quinquefolia	virginia creeper	AN	vine	x	

Habitat Description

a. Upland

Woodland (6.64 acres)

The woodland is the dominant ecological community on the preserve, comprising mixed-oak woodland with a 6.64-acre area of pitch pine, beech, and oaks.

Mixed-oak woodland: A hardwood woodland, dominated by black and white oak trees in the overstory, spans 4.24 acres of Beech Tree Preserve. Individual scarlet oak, red maple, pitch pine, American beech and hickory trees stand scattered among the black and white oaks. Black and white oaks comprise approximately 52% and 28% of the stand, respectively. Larger trees may reach 23 inches in diameter at breast height ("dbh"), although the average diameter of these trees is 10.5 inches. In comparison, the average dbh for all dominant trees (i.e., those with crowns that dominate the stand) in 2018 was 11.5 inches. The basal area of the woodland is 90 square feet per acre. Portions of the mixed-oak woodland along ridges and peak elevations lack overstory trees.

Black huckleberry dominates the understory of the mixed oak woodland; it occurs in 75% of random plots; and has the greatest importance value of the species surveyed. Black huckleberry covers an average of 36% of sample areas. Bracken fern is the second most important species in the understory on the preserve

followed by highbush blueberry. Bracken fern has an average cover of 40% compared with high-bush blueberry with an average percent cover of 20%. Black and white oak saplings are the dominant species regenerating the woodland.

A number of herbs, grasses and ferns occurs in the mixed oak understory where small openings in the shrub and vine cover are present. These include panicled hawkweed, wood strawberry, blue toadflax, and striped wintergreen. Hay-scented fern and common woodland graminoids such as path rush, saltmarsh three square, velvet grass, little bluestem, and 50renulat species.

Pitch Pine woodland: The pitch pine forest is a small 2.4-acre stand that is 85% pitch pine and 15% black oak. The average stand diameter is 9 inches with some trees reaching 15 inches. The average stand height is 55 feet.

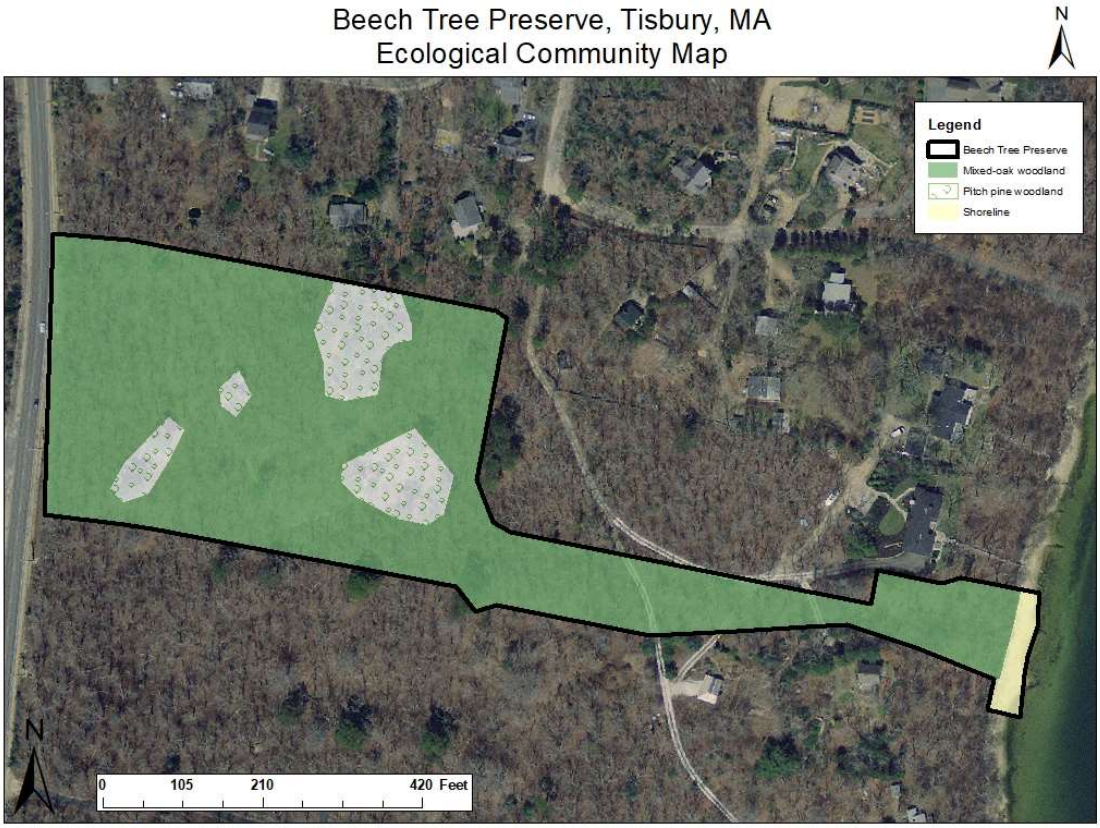
Path Edge

There are approximately 200 linear feet of unpaved road on the preserve. The width of the road ranges from 7 to 10 feet. The unpaved roads serve as access ways to homes of residents in the area and provide opportunities for plants to establish.

Shoreline

There is approximately 170 feet of shoreline on the preserve. It comprises a rocky substrate with minimal vegetation cover due to fluctuating water levels and salinity.

Map 10: Beech Tree Preserve Ecological Community Map



Appendix E. Wildlife

Beech Tree Preserve provides opportunities for nesting, roosting, and foraging wildlife species; fruiting shrubs and vines (i.e., huckleberry, blueberry, greenbrier, and bayberry) provide for summer and fall foraging; the woodland provides cover for ground-nesting birds and small mammals as well as forage for larger mammals and invertebrates.

Several moth species use the trees on the preserve for at least a portion of their life cycle (Table 1). The nectar-producing flowering plants and deciduous trees growing in the woodland are a superb food source for invertebrates such as butterflies and others in the Lepidoptera order. These pollinating insects help promote plant dispersal on the preserve and elsewhere.

Wildlife species were observed on the preserve through general property surveys, UV black-light surveys and diurnal Lepidoptera surveys. Wildlife species seen or heard and evidence of wildlife species such as tracks and scat were recorded during general observations, vegetation surveys and avian point counts. Nocturnal moth species were surveyed using a stainless-steel rigid vein 18-24 inch “leptrap” with a 32-40 Watt quantum black light. Traps were set using a photoelectric switch from dusk to dawn on five trap

nights in June of 2017. Species were collected, packaged and sent to Mark Mello, an entomologist with the Lloyd Center for the Environment, in Dartmouth, MA, for positive identification.

A complete list of moth species trapped during nocturnal and diurnal Lepidoptera surveys and a table of the wildlife species known to occur on the preserve follows.

Table 2. Summary of macrolepidoptera recorded from Beech Tree Preserve, Tisbury, MA in 2017

MONA #	ZOOK #		total occurrence	14-Jun	23-Jun	5-Jul	20-Jul	30-Aug
		DREPANIDAE						
		Oretinae						
6255		*Oreta rosea*	1		1			
		GEOMETRIDAE						
		Ennominae						
6273		*Speranza (=”Itame”) pustularia*	1				1	
6282		*Speranza (“Itame”) argillacearia*	1		1			
6339		*Macaria transitaria*	2		1		1	
6342		*Macaria bisignata*	1		1			
6352		*Macaria granitata*	2		1			1
6443		*Glenoides texanaria*	1					1
6449		*Glena cribrataria*	1		1			
6582		*Iridopsis vellivolata*	1		1			
6590		*Anavitrinelia pampinaria*	1					1
6597		*Ectropis crepuscularia*	1					1
6598		*Protoboarmia porcelaria*	1		1			
6654		*Hypagyrtis unipunctata*	1			1		
6720		*Lytrosis unitaria*	1			1		
6739		*Euchlaena irraria*	1		1			
6754		*Pero ancetaria (=”hubneraria”)*	1					1
6796		*Campaea perlata*	1		1			
6798		*Ennomos subsignaria*	1					1
6826		*Metarranthis hypochraria*	1		1			
6884		*Besma endropiaria*	2		1	1		
6885		*Besma quercivoraria*	2				1	1
6941		*Eusarca confusaria*	2			1		1
6964		*Tetracis cachexiata*	1		1			
6974		*Patalene olyzonaria puber*	1			1		
6982		*Prochoerodes lineola*	1					1
7046		*Nemoria bistriaria*	3			1	1	1

7136		*Cyclophora packardi*	1				1	
7139		*Cyclophora pendulinaria*	2				1	1
7159		*Scopula limboundata*	3		1	1	1	
		Larentiinae						
7206		*Eulithis explanata*	1				1	
7416		*Costaconvexa centrostrigaria*	1				1	
7625		*Psaphida rectangulata*	1		1			
		MIMALLONIDAE						
7659		*Lacosoma chiridota*	1		1			
X		*[Redacted]*	X		X			
		LASIOCAMPIDAE						
		Lasiocampinae						
7698		*Malacosoma disstria*	1			1		
7701		*Malacosoma americanum*	1			1		
		SATURNIIDAE						
		Ceratocampinae						
7719		*Anisota senatoria*	2			1	1	
		Hemileucinae						
7746		*Automeris io*	2		1	1		
		Saturniinae						
7757		*Antheraea polyphemus*	1					1
7758		*Actias luna*	1				1	
		SPHINGIDAE						
		Sphinginae						
7810		*Sphinx gordius*	1			1		
7816		*Lapara coniferarum*	1					1
7817		*Lapara bombycoides*	1			1		
		Smerinthinae						
7824		*Paonias excaecatus*	1					1
		Phalerinae						
7902	930033	*Datana ministra*	1					1
7904	930035	*Datana drexelii*	2			1	1	
7906	930037	*Datana contracta*	2			1	1	
7915	930046	*Nadata gibbosa*	3		1	1		1
7920	930049	*Peridea angulosa*	3			1	1	1
		Heterocampinae						
7975	930067	*Macruocampa marthesia*	3			1	1	1
7983	930075	*Heterocampa obliqua*	1				1	
7990	930082	*Heterocampa umbrata*	2		1			1
7994	930086	*Heterocampa guttivitta*	2		1	1		
7998	930090	*Lochmaeus manteo*	1					1
8007	930100	*Schizura unicornis*	1		1			
8017	930110	*Oligocentria lignicolor*	1					1
		Nystaleinae						

7951	930127	*Symmerista albifrons*	1			1		
		EREBIDAE						
		Lymantriinae						
8318	930141	*Lymantria dispar*	1				1	
		Arctiinae						
8072	930189	*Cisthene packardi*	1		1			
8045.1	930219	*Crambidia pallida*	1					1
8118	930297	*Virbia (="Holomelina") opella*	3			1	1	1
8134	930309	*Spilosoma congrua*	1		1			
8137	930316	*Spilosoma virginica*	1		1			
8203	930360	*Halysidota tessellaris*	3			1	1	1
8322	930469	*Idia americalis*	3		1	1		1
8323	930471	*Idia aemula*	4		1	1	1	1
8326	930474	*Idia rotundalis*	2				1	1
8328	930476	*Idia julia*	1		1			
8329	930477	*Idia diminuendis*	3			1	1	1
8334	930482	*Idia lubricalis*	1					1
8341	930490	*Zanclognatha theralis*	2				1	1
8347	930494	*Zanclognatha obscuripennis*	1		1			
8349	930496	*Zanclognatha protumnusalis*	1			1		
8352	930499	*Zanclognatha marcidilinea*	1		1			
8353	930500	*Zanclognatha jacchusalis ("orchreipennis")*	4		1	1	1	1
8355	930502	*Chytolita morbidalis*	1		1			
8370	930520	*Bleptina caradrinalis*	3		1	1	1	
8378	930529	*Renia salusalis*	2		1	1		
8381	930532	*Renia discoloralis*	1					1
8386	930538	*Renia "adspergillus" (small, plain)*	1					1
		Pangraptinae						
8490	930559	*Pangrapta decoralis*	2		1			1
		Hypeninae						
8465	930588	*Hypena scabra*	1				1	
		Hypenodinae						
8428	930671	*Dyspyralis nigellus*	1					1
		Erebinae						
8846	930832	*Catocala sordida*	2			1		1
8876	930857	*Catocala micronympha*	2				1	1
8878.1	930860	*Catocala lineella*	1					1
8699	931034	*Zale obliqua*	1		1			
8707	931042	*Zale metatoides*	1		1			
		Eulepidotinae						
8587	931089	*Panopoda rufimargo*	3			1	1	1
		NOLIDAE						
		Nolinae						

8983	931121	*Meganola minuscula*	3		1	1		1
		NOCTUIDAE						
		Plusiinae						
8904	931186	*Chrysanympha formosa*	1		1			
		Pantheinae						
9182	931396	*Panthea furcilla*	1		1			
		Raphiinae						
9193	931412	*Raphia frater*	1		1			
		Acronictinae						
9228	931445	*Acronicta hasta*	1		1			
9243	931463	*Acronicta ovata*	4		1	1	1	1
9245	931466	*Acronicta haesitata*	2			1	1	
9249	931467	*Acronicta increta (+"inclara")*	2		1	1		
9247	931469	*Acronicta tristis*	1		1			
9254	931471	*Acronicta afflicta*	1				1	
9259	931476	*Acronicta noctivaga*	1		1			
9266	931480	*Acronicta lithospila*	1		1			
		Amphipyrinae						
9638	931544	*Amphipyra pyramidoides*	1				1	
		Noctuinae	0					
9618	932208	*Phosphila turbulenta*	1				1	
9681.1	932233	*Elaphria alapallida*	1		1			
9815	932672	*Cosmia calami*	2			1	1	
9556	932713	*Chytonix palliatricula*	1				1	
10301	932883	*Spiramater lutra*	1		1			
10585	933136	*Orthodes 55renulate ("55renulate")*	1		1			
10587	933138	*Orthodes cynica*	1		1			
11010	933547	*Lycophotia phyllophora*	2		1	1		
11012.2	933551	*Noctua pronuba*	2		1			1
11029	933680	*Abagrotis alternata*	1				1	
		total # species	112	0	53	37	36	42

note: commonwealth-listed species are highlighted

Table 3. Wildlife at Beech Tree Preserve, Tisbury, MA from general observations during property inventories conducted 2017-2019

		Woodland	Shrubland	Grassland	Vernal Pool
Scientific name	**Common name**				
Kingdom Metazoa (Animalia)					

Phylum Chordata					
Subphylum Vertebrata					
Class Mammalia					
Order Lagomorpha					
Family Leporidae					
Sylvilagus floridanus	**eastern cottontail**	F	SP, F, W		
Order Carnivora					
Family Mustelidae					
Mephitis mephitis	**striped skunk**			F	
Family Procyonidae					
Procyon lotor	**raccoon**	F	F		
Order Artiodactyla					
Family Cervidae					
Odocoileus virginianus	**white-tailed deer**	S,F,SP,W	S,F,SP,W	S,F,SP,W	
Order Rodentia					
Family Sciuridae					
Sciurus carolinensis	**grey squirrel**	S,F,SP,W			
Tamias striatus	**eastern chipmunk**	S,F,SP,W			

[a]Season and frequency of occurrence: SP = spring, S = summer, F = fall, W = winter.
[b] complete list of moth species known to occur on the property is included in Appendix F.

Appendix F. Avian Checklist and Seasonal Tables

Land bank staff conducted 5-minute point-count surveys of birds at Beech Tree Preserve June through August 2017. The presence of occasional migrant and resident birds throughout the summer breeding season was recorded during a total of 5 visits in 2017. Birds were sampled from 1 point-count survey locations located in the woodland. All birds seen or heard during a 5-minute period were recorded. Birds seen or heard outside of the count period were noted as present on the property But were not included in quantitative analyses.

Additionally, land bank staff conducted a nocturnal owl survey on the preserve in July of 2017. Owls were called in using a Foxpro Ar4 wildlife caller. Calls of seven owl species were played from smallest to largest one at a time in the four cardinal directions. Responses to the calls were recorded.

The presence of bird species on the preserve is seasonally-dependent. Some birds occur in more than one habitat type and during more than one season. Total species counts do not include multiple sightings of an individual species and dominant species varied among seasons. About half the birds that occur on the preserve during the breeding season comprises tree/shrub nesters (52%), and half (48%) are cavity-nesters and ground-nesting species. The preserve provides suitable habitat for all three types of nesting species.

Overall black-capped chickadee, blue jay, eastern towhee, northern flicker, and grey catbird were the most common species observed during the summer; the northern flicker and black-capped chickadee were the most common observed birds (Table 4).

Observations in behavior of birds nesting or rearing young – such as adults carrying nesting materials or food, carrying fecal sacs from a nest, or attending hatchlings – can confirm that a species is breeding on the property. Locating an active nest as well as identifying multiple singing territorial males within suitable habitat are recognizable indications of breeding adult birds. Out of the 20 bird species observed on the preserve during the summer breeding season, 7 are confirmed breeders; 7 are probable breeders; 5 are possible breeders; and 1 is non-breeding due to lack of occurrence in required habitat during the survey (Table 4).

Table 4. Summer abundance of avian species on Beech Tree Preserve, Tisbury, MA.

Species	Nest Placement	Breeding	Woodland 2017 (n=5)
Year-round			
American crow	tree/shrub	PR	U
American robin	tree/shrub	CO^{a+y}	U
Black-capped chickadee	cavity	CO^{n}	C
Blue jay	tree/shrub	CO^{f}	C
Carolina wren	cavity	PR	O
Downy woodpecker	cavity	PO	U
Eastern towhee	ground	CO^{f}	C
Mourning dove	tree/shrub	CO^{A+Y}	U
Northern cardinal	tree/shrub	PR	U
Northern flicker	cavity	PO	C
Song sparrow	tree/shrub	CO^{a+y}	U
White-breasted nuthatch	cavity	CO^{a+y}	O
Summer-breeding			
Eastern phoebe	building	NB	U
Eastern screech owl	cavity	PO	P
Eastern wood-pewee	tree/shrub	PR	U
Great-crested flycatcher	cavity	PR	O
Pine warbler	tree/shrub	PO	U
Osprey	tree/shrub	PO	U

Red-eyed vireo	tree/shrub	PR	U
Tufted titmouse	cavity	PR	O

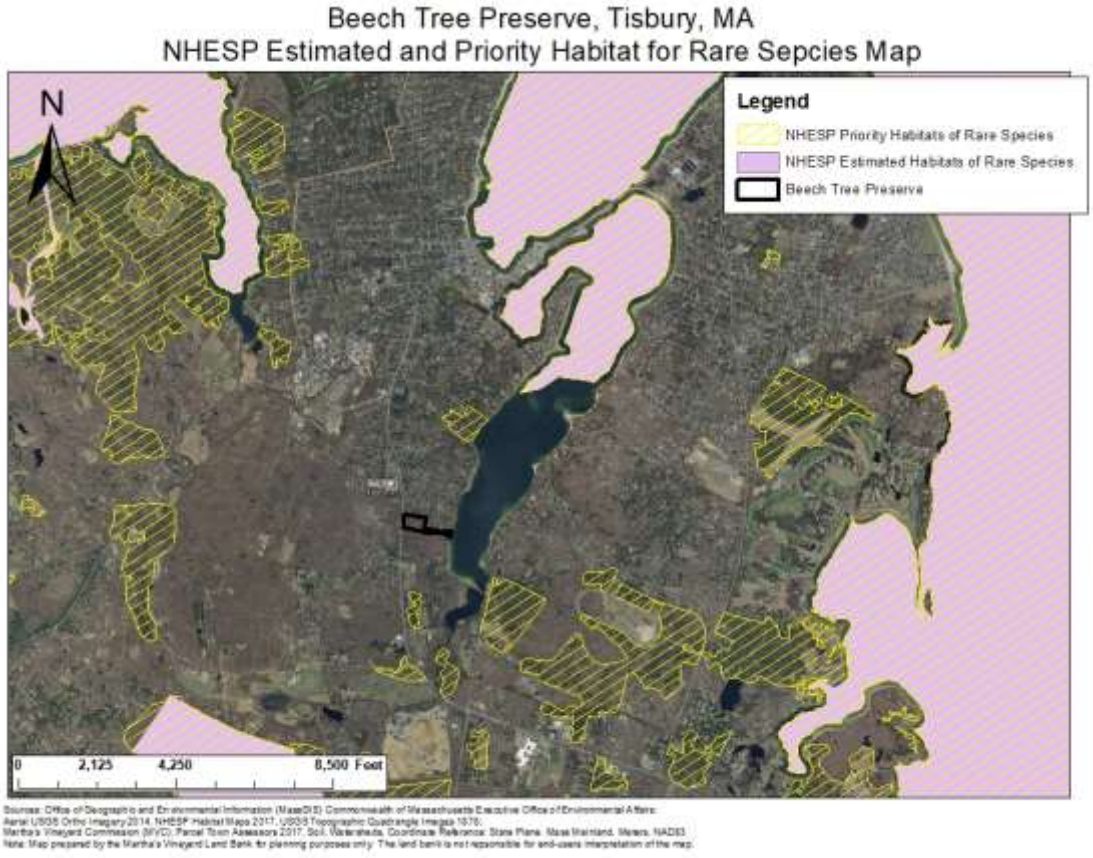
[a] Seasonal grouping organized according to Cornell All About Birds (www.allaboutbirds.org/guide)
[b]C=common birds (detected in more than 50% of the survey visits), O=occasional birds (detected in 26-50% of the survey visits), U=uncommon birds (detected in 25% and fewer of the survey visits) and P=present birds (not detected during a survey period but observed on the property).
[c] Breeding status: NY=nearby habitat, NB=nonbreeding, PO=possible breeding (species detected in suitable breeding habitat), PR=probable breeding (species heard singing on two occasions over one week apart in suitable; breeding habitat). CO=confirmed breeding (species carrying food, “cf”; feeding young, “fy”, with begging hatch-year fledglings “a+y”; fledgling “f”, pair “p”or a located nest “n”).

Appendix G. Endangered Species

Beech Tree Preserve does not fall within priority or estimated habitat for commonwealth-listed species. This plan includes management goals that balance the needs of rare species and ensures protection of listed species and their habitats that are known to occur on the preserve. The plan protects 6.3 acres of woodland and 0.3 acres of shoreline habitat of the listed moth species observed on the preserve.

The commonwealth-listed Lepidoptera species, a rare moth, was observed on the preserve require pitch pine/scrub oak barrens; they, however, may utilize the various oak species on the preserve.

Map 11: Beech Tree Preserve NHESP Estimated and Priority Habitat for Rare Species Map

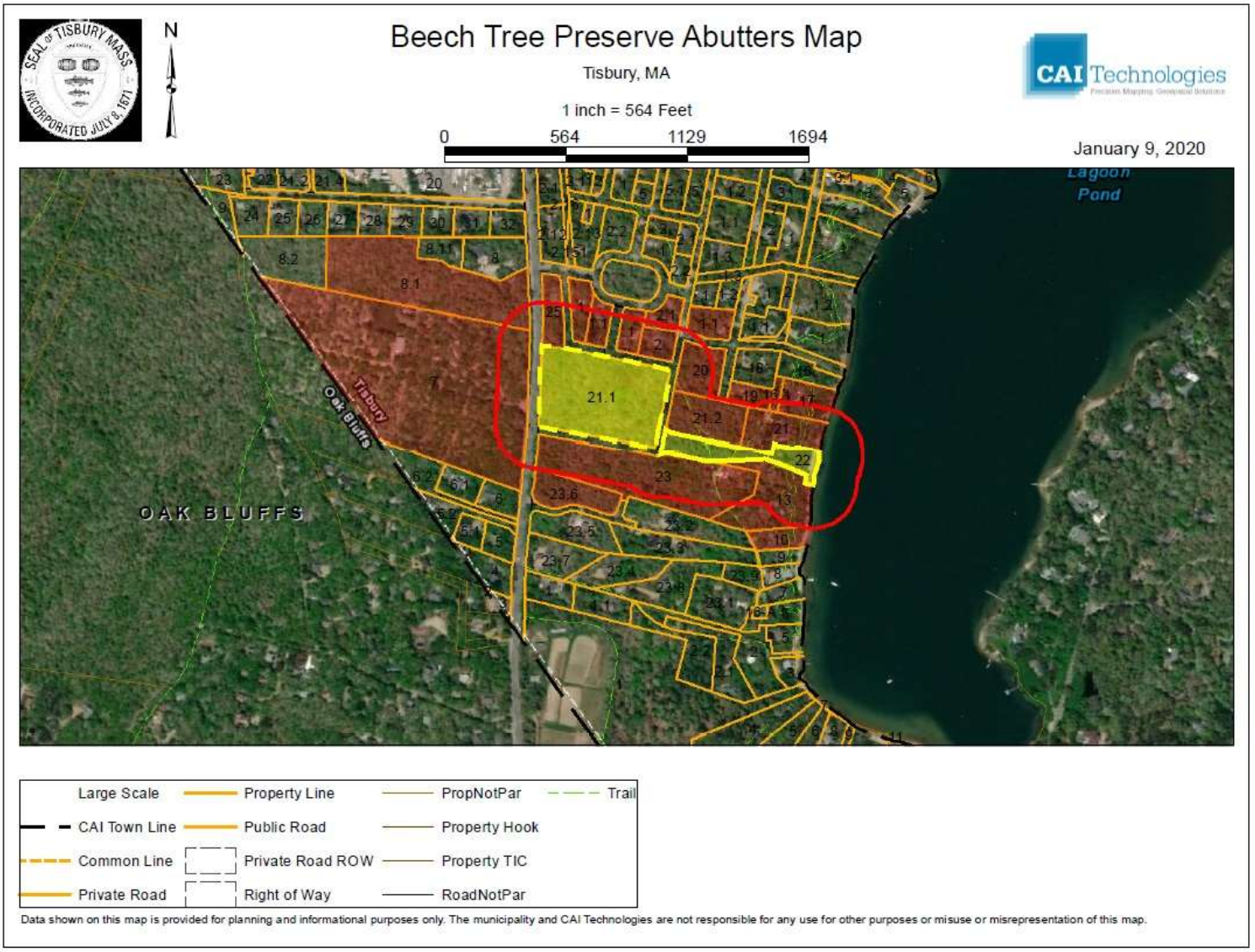


Appendix H. Abutters
Table 5. Beech Tree Preserve Property Abutters, Tisbury, MA.

Parcel Number	Property Address	Owner Name	Co-Owner Name	Owner Address	Owner State	Owner City	Owner Zip
16-A-10	57 OLD OKLAHOMA RD	57 OLD OKLAHOMA LLC		143 RIDGE AVE	MA	NEWTON	02459
16-A-13	21 POND VIEW WY	DANDRIDGE DAVID C		BOX 187	MA	VINEYARD HAVEN	02568
16-A-17	51 POND VIEW WY	FOX THOMAS K		31 SHADY KNOLL LN	CT	NEW CANAAN	06840
16-A-19	104 HIGHLAND AV	CHAPUT JOAN E	CHAPUT DYLAN J	PO BOX 1232	MA	WEST TISBURY	02575
16-A-20	9 CRONIG AV	MCGOURTY WILLIAM F	NOLAN DIANE M	PO BOX 1	MA	WEST TISBURY	02575
16-A-21	34 POND VIEW WY	JOHNSON THOMAS M	JOHNSON SHARON E	34 POND VIEW WY	MA	VINEYARD HAVEN	02568
16-A-21.2	CENTRAL AV	SHERIFFS MEADOW FOUNDATION INC		57 DAVID AV	MA	VINEYARD HAVEN	02568
16-A-23	89 OLD OKLAHOMA RD	DANDRIDGE DAVID C		P O BOX 187	MA	VINEYARD HAVEN	02568
16-A-23.6	MARIONS WY	HABITAT FOR HUMANITY OF MV		PO BOX 1093	MA	VINEYARD HAVEN	02568
16-A-25	3 PARK AV	DIXON-WOOLFOLK CAROL TR		71 STOCKTON AVE	NJ	ORANGE GROVE	07756
16-B-1	15 PARK AV	PINKHAM CHERYL J		33 PARK AV	MA	VINEYARD HAVEN	02568
16-B-1.1	25 PARK AV	PINKHAM GLEN S		25 PARK AV	MA	TISBURY	02568
16-G-1	33 PARK AV	PINKHAM CHERYL		15 PARK AV	MA	VINEYARD HAVEN	02568
16-G-1	33 PARK AV	PINKHAM CHERYL J		33 PARK AVE	MA	VINEYARD HAVEN	02568
16-G-2	97 CENTRAL AV	PEARLSON LESLIE		PO BOX 1705	MA	WEST TISBURY	02575
16-G-2.1	79 CENTRAL AV	CARTER ROBERT B TRUSTEE		118 ANDOVER ST	MA	WILIMINGTON	01887-1241
16-H-1.1	26 CRONIG AV	HENNESSEY AMANDA TRS, GOOD TREVOR TRS	HORTON SAMANTHA TRS	BOX 2790	MA	VINEYARD HAVEN	02568

18-A-7	569 EDGARTOWN RD	FEENEY CHARLES J JR TRUSTEE	FEENEY JEANNE E TRUSTEE	PO BOX 1557	MA	VINEYARD HAVEN	02568
18-A-8.1	EDGARTOWN RD	FEENEY THOMAS J		985 RT 16	NH	OSSIPEE	03864

Map 12: Beech Tree Preserve Abutters Map



Appendix I. Universal Access

The Recreational Opportunities Spectrum (ROS) classification for Beech Tree Preserve is “Semi-Primitive Non-motorized”. The ROS is a model designed and used by the U.S.D.A. Forest Service to categorize conservation areas or universal access planning. The land bank framework for describing the accessibility of its properties is applied to Beech Tree Preserve as follows.

Property Name: Beech Tree Preserve
Size: 6.601 acres
Primary Activities: birding, hiking, picnicking, horseback riding, bicycling
Primary Elements: three-vehicle trailhead, two sign stations, two benches, raised stairs, viewing platform
Primary Spaces: Lagoon Pond views, glacial hollows
Obstacles that Limit Accessibility: Topography
Existing or Potential Alternatives: Ramble Trail Preserve
Proposed ROS Classification: Semi-primitive non-motorized
Proposed Expectation of Accessibility: Extremely limited

For all less-developed land bank conservation areas, the Universal Access Plan states the following (Potter 1997):

> Use outdoor recreation access routes to link primary elements and primary spaces within one-quarter mile of a trailhead or drop-off and use accessible recreation trails to connect other primary elements and primary spaces on all less-developed land bank conservation areas, but only if modifications are minimal, will provide continuous barrier-free access, do not require a fundamental alteration of the setting, and are not in conflict with natural and scenic resource protection goals.

Additional universal access is not feasible due to the topography of the preserve and separation between trail head parking and preserve by the Edgartown-Vineyard Haven Road.