

Quenomica Preserve

Edgartown, Massachusetts

Draft Management Plan



March 27, 2023

Approved by the Martha's Vineyard land bank Edgartown Advisory Board ()

Approved by the Martha's Vineyard land bank commission ()

Approved by the Secretary of the Executive Office of Energy & Environmental Affairs ()

Julie Russell – Ecologist
Bryn Willingham – Ecology Assistant



Executive Summary

Quenomica Preserve is a 29.4-acre area of conservation land consisting of coastal woodland/shrubland, pastureland, and saltwater pond shoreline that are divided between two areas referenced in this document as Quenomica North and Quenomica South. Quenomica North, the northern 11.7 acres, is located off Meetinghouse Way on the historic Owen Norton and Luce Farm homesteads. Quenomica South, a 17.7-acre disjunct portion of the Preserve, is located approximately 1 mile to the south along Kanomika Road abutting Edgartown Great Pond and was historically used for pasture and waterfowl hunting.

Vegetation and wildlife inventories on the Preserve revealed five commonwealth-listed moth species. The woodlands and grasslands meet primary habitat needs of each of these rare species.

This management plan proposes to create approximately 1,500 linear feet of new universal access trail that connects Quenomica South with a view platform at the point. Additionally, the plan proposes to create approximately 250 linear feet of spur trail to access a permanent duck blind with a light-penetrating deck and removable sides. To maintain and restore the open landscape on the Preserve the plan proposes to restore 4 acres of sandplain grassland at Quenomica South and lease 2.7 acres of agricultural field at Quenomica North. A 2-vehicle trailhead is proposed at Quenomica South to accommodate one universal access vehicle and one space for permitted hunters. The plan proposes to direct all other visitors to access the Preserve via an off-premises trailhead to be installed at 40-44 Meetinghouse Way. Connection of the northern and southern portions of the Preserve is proposed via an off-premises trail, at 40-44 Meetinghouse Way, and Kanomika Road. Additional access to the Preserve is proposed via kayak from the pond with access at a kayak landing area comprising adjustable stairs, tie-off system, and platform with a bench. Limited hunting for one deer archer and one duck blind to accommodate three hunters is proposed at Quenomica South. In addition, the plan proposes to address invasive species; prohibit dogs and motorized vehicles; maintain the caretaker residence at Quenomica South; and promote rare species habitat where suitable and possible.

The final section of the management plan outlines in detail all planning goals, objectives, and strategies. To be implemented, this plan must be presented at a public hearing and approved by the land bank's Edgartown town advisory board, the Martha's Vineyard land bank commission, and the secretary of the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA). Additionally, a notice of intent and Massachusetts Endangered Species Act (MESA) review will be filed with the Edgartown Conservation Commission and Massachusetts Natural Heritage and Endangered Species Program (MA-NHESP) for activity proposed in estimated and priority habitat for rare species and activities proposed in and around wetland resource areas.

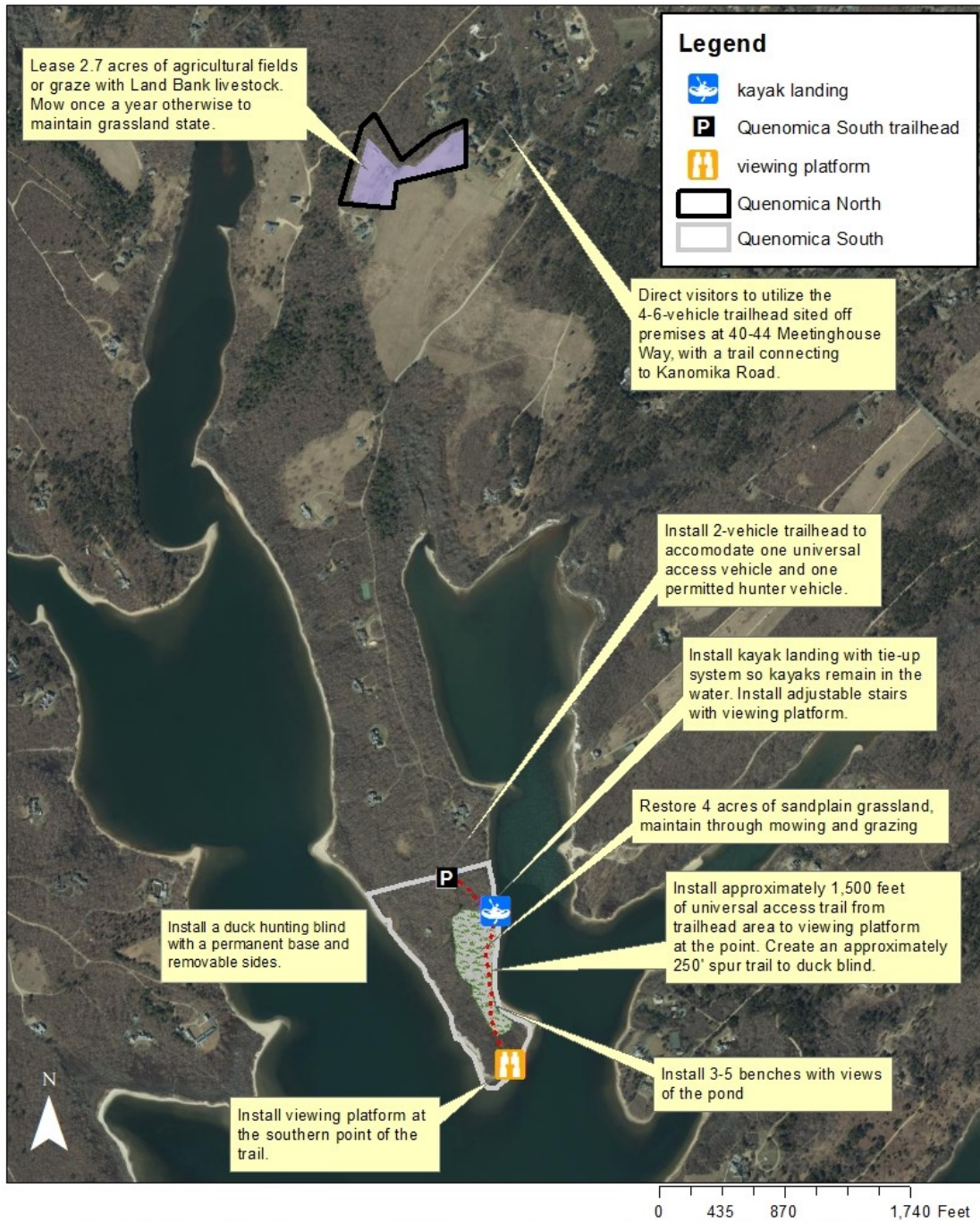
About the authors

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. She holds a Master of Science in zoology from the Cooperative Wildlife Research Lab at Southern Illinois University, Carbondale, and a B.S. in wildlife biology from the School of Natural Resources at the University of Vermont. Bryn Willingham is the coauthor of this management plan. She is the 2022-2024 recipient of the land bank's annual ecology assistantship. Ms. Willingham holds a Bachelor of Science in Natural Resources Conservation from the College of Natural Science at the University of Massachusetts Amherst.

This plan is executed under the supervision of the Martha's Vineyard Land Bank land superintendent, Harrison Kisiel.

draft

Proposed Project Planning Map Quenonica Preserve, Edgartown, MA



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. Sources: 2019 ortho phtograph, U SG S topography, hydrology and parcel data - MassGIS and MVC. File: Quenonica_ProjectPlanning_map_2023.jpg Date: March 14, 2023.

Table of Contents

EXECUTIVE SUMMARY	2
FIGURE LEGEND	6
MAP LEGEND	6
TABLE LEGEND	7
I. NATURAL RESOURCE INVENTORY	2
A. PHYSICAL CHARACTERISTICS	2
B. BIOLOGICAL CHARACTERISTICS.....	8
C. CULTURAL CHARACTERISTICS	10
D. PROPERTY AND DEVELOPMENT CHARACTERISTICS	11
II. INVENTORY ANALYSIS	20
A. CONSTRAINTS & ISSUES	20
B. ADDRESSING PROBLEMS AND OPPORTUNITIES	22
III. LAND MANAGEMENT PLANNING	24
A. NATURE CONSERVATION GOALS	25
B. RECREATION AND AESTHETICS	28
C. NATURAL PRODUCTS.....	30
D. LAND ADMINISTRATION	31
LITERATURE CITED	33
APPENDIX A: LOCUS, TOPOGRAPHY AND SITE MANAGEMENT MAPS	37
APPENDIX B. SURVEYS, DEEDS AND PRELIMINARY MANAGEMENT PLAN GOALS	43
APPENDIX C. SOILS MAPS AND DESCRIPTIONS	91
APPENDIX D: VEGETATION	95
APPENDIX E. WILDLIFE	103
APPENDIX F. ENDANGERED SPECIES	116
APPENDIX G. LAND USE HISTORY IN DETAIL	118
APPENDIX H. ABUTTERS	129
APPENDIX I. UNIVERSAL ACCESS	132

Figure Legend

Figure 1: 1938 aerial photograph of Quenomica.....	7
Figure 2: River otters on the pond shore.....	104
Figure 4: White-tailed deer grazing near the pond.....	105
Figure 3: Eastern coyote walking along the pond shoreline at night.....	105
Figure 1. Charles Banks sketch circa 1900 MV museum.....	118
Figure 2. First Division of Old Purchase, Marna Waller 1998.....	119
Figure 3. Charles Banks sketch circa 1900.....	119
Figure 4. Ditch and mound example from Williamsburg, VA.....	120
Figure 6. William Vincent house, 1672,.....	120
Figure 5. William Vincent house, 1672.....	120
Figure 7. Quenomica division; Excerpt from Town Records I, 109.....	121
Figure 10. 1784 Crèvecoeur. Carte De L'Isle de Martha's Vineyard avec ses dependencies.....	122
Figure 11. Plan of Edgartown and Tisbury, made by Benjamin Smith, dated June 1, 1795.....	122
Figure 8. 1776 Des Barres. Eastern Half of Martha's Vineyard and Nantucket.....	122
Figure 12. Norton Homestead, 1789.....	123
Figure 13. Henry F. Walling 1858 Map of the Counties of Barnstable, Dukes, & Nantucket, Massachusetts.....	123
Figure 14. Plan of Edgartown made by Henry H. Crapo, dated 1830.....	124
Figure 15. 1850 Whiting Map.....	124
Figure 16. Annotated map of Martha's Vineyard circa 1909.....	125
Figure 17. Atlas of Massachusetts, Walker 1981.....	126
Figure 18. Eldridge Map of Martha's Vineyard, 1913.....	126
Figure 19. Fixed blind from John MacKenty's book "Duck Hunting" 1953.....	126
Figure 24, Aerial photograph 2008.....	128
Figure 24, Aerial photograph 2019.....	128
Figure 23, Aerial photograph 2001.....	128
Figure 22, Aerial photograph 1990.....	128

Map Legend

Map 1: Locus Map	1
Map 2: Generalized geological map of Martha's Vineyard	3
Map 3: Conservation restriction and covenant map of Quenomica Preserve, Edgartown, MA.	12
Map 4: Wetland resource areas and buffer zones of Quenomica Preserve	14
Map 5: Jurisdiction pursuant to Chapter 91 regulations at 310 CMR 9.04 at Quenomica Preserve, Edgartown, MA.	15
Map 6: Districts of Critical Planning Concerns within Edgartown, MA	17
Map 7: Existing use map of Quenomica Preserve. See Section 1.D.3 for descriptions of these features.	19
Map 8: Private and public conservation land surrounding Quenomica Preserve, Edgartown, MA	20
Map 9: Hunttable area with a firearm at Quenomica Preserve and zone of no discharge of a firearm 500' from occupied dwellings. See Section B.3.F for descriptions of these features.	24
Map 10: Aerial image of Quenomica Preserve, Edgartown, MA	37
Map 11: Topographic Map of Quenomica Preserve, Edgartown, MA	38
Map 12: Hydrologic map of Quenomica Preserve, Edgartown, MA	39
Map 13: Flood zones (FEMA 2016) of Quenomica Preserve, Edgartown, MA	40
Map 14: Sea level rise scenarios and the resulting impact zones of Quenomica Preserve, Edgartown, MA	41
Map 15: Proposed project planning map of Quenomica Preserve, Edgartown, MA	42
Map 16: General Soil Map of Martha's Vineyard	91
Map 17: Surface geology of Martha's Vineyard; star indicates location of Quenomica Preserve.	92
Map 18: Surface geology of Quenomica Preserve, Edgartown, MA	93
Map 19: Soil types of Quenomica Preserve, Edgartown, MA	94

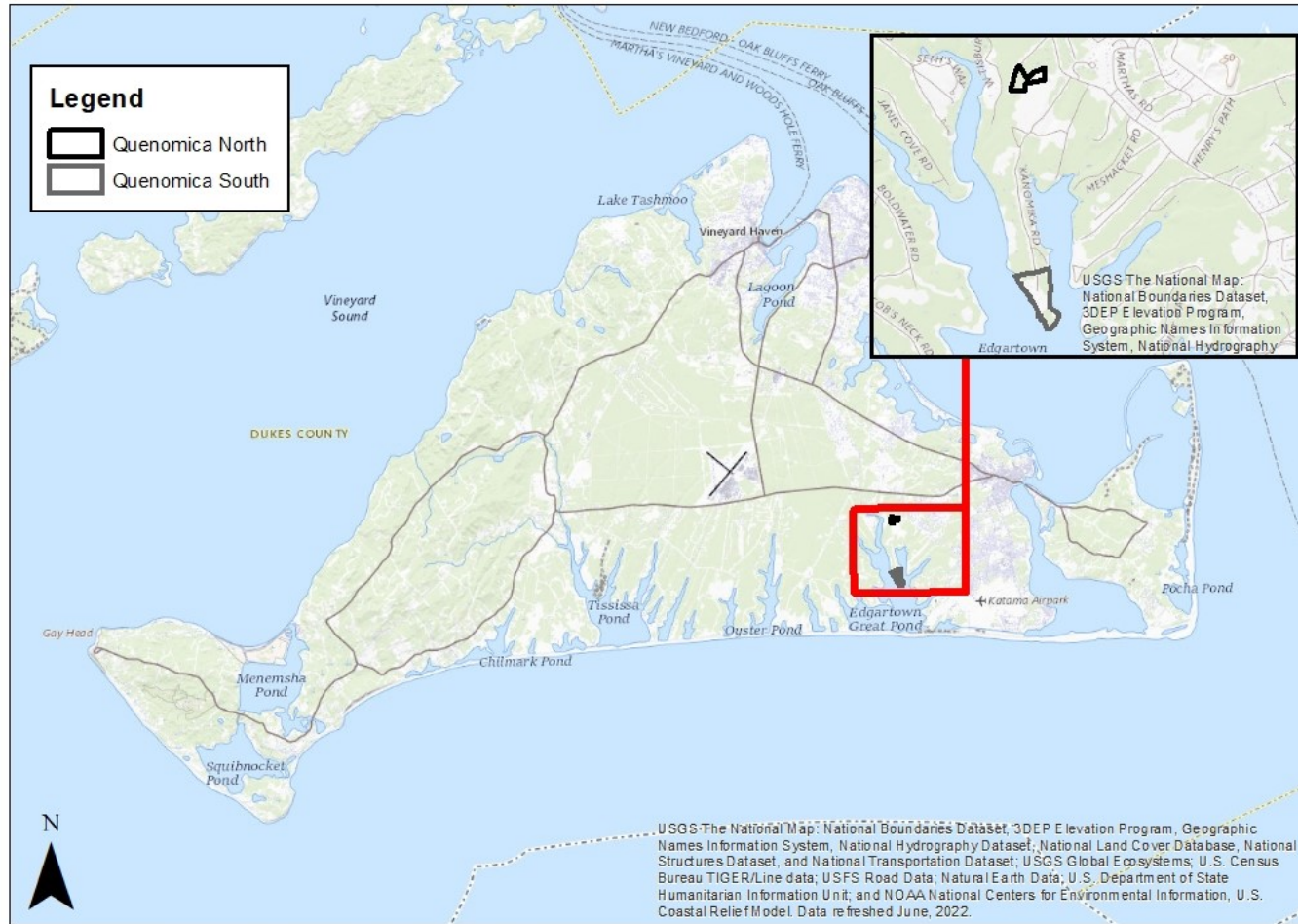
Map 20: Ecological communities of Quenomica Preserve.....100
Map 21: Former grassland area based on 1938 aerial image at Quenomica Preserve, Edgartown, MA.103
Map 22: Plant and wildlife survey locations at Quenomica Preserve, Edgartown, MA.107
Map 23: NHESP priority habitat and estimated habitat in Quenomica Preserve, Edgartown, MA.....117
Map 24: Map of abutters to Quenomica Preserve within 200ft of property boundary.129

Table Legend

Table 1: Flora of Quenomica Preserve.....96
Table 2: Wildlife observations in Quenomica Preserve, Edgartown, MA.105
Table 3: Summary of macrolepidoptera species recorded from Quenomica Preserve, Edgartown, MA.....108
Table 4: Bird species observed in Quenomica Preserve during the spring and summer of 2022.114
Table 5: List of Abutters.....130

draft

Map 1: Locus Map of Quenomica Preserve, Edgartown, MA



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. Sources: 2019 ortho phtograph, USG S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Locus_map_2023.jpg Date: February 3, 2023.

0 6,250 12,500 25,000 Feet

I. Natural Resource Inventory

A. Physical Characteristics

1. Locus

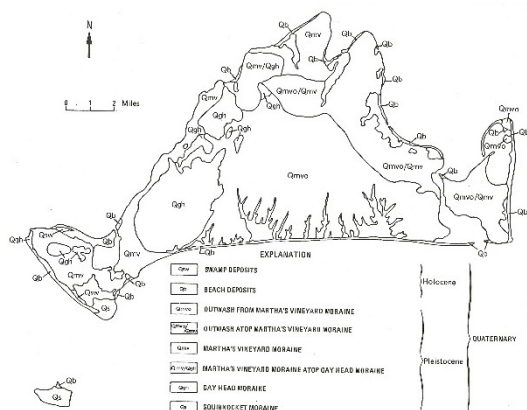
The Quenomica Preserve is located at roughly 41° 22' 47.017" N, 70° 33' 17.923" W (Quenomica North) and 41° 21' 54.038" N, 70° 33' 12.19" W (Quenomica South) in Edgartown, Massachusetts. The property comprises three separate parcels amounting to 29.4 acres of woodland, pond shoreline, and grassland that are divided between two areas referenced in this document as Quenomica North and Quenomica South hereinafter. The Preserve is accessible by Meetinghouse Way. See locus map above (Map 1, page 1) and aerial map (Map 10, page 37). The property is shown on Edgartown tax maps: 27-8.18, 27-8.19, 43-5.

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, land bank preliminary management plan goals, and reduced copies of surveys are included in Appendix B.

3. Geology

Martha's Vineyard was formed during the most recent ice age. The convergence of the Cape Cod Bay lobe and Buzzards Bay lobe of the Laurentide formed the triangular shape of the island of Martha's Vineyard. The Laurentide ice sheet, a glacier over one-mile thick in places, grew and retreated over thousands of years, churning and depositing sediments on top of bedrock to form the region's landscape as it is viewed today. Movement of the ice eroded underlying substrates that were absorbed into the base of the ice sheet. The variable sized material called till either stuck to the surface of the advancing/retreating glacier or was deposited by glacial meltwater. Retreating glaciers left behind many features on the land: moraines (large heaps of unsorted sediments); glacial erratics (oversized boulders made of rock atypical for the region); and outwash plains (relatively flat, sandy and gravelly deposits from the meltwater of a glacier) (Oldale 1992).



Map 2: Generalized geological map of Martha's Vineyard

Quenomica Preserve constitutes outwash plains from the Martha's Vineyard Moraine dating back to the Pleistocene (Fletcher and Roffinoli 1986; Map 2, page 3). The geomorphology of Edgartown Great Pond was largely influenced by the glacial meltwater lake that is now Nantucket Sound. Spring sapping, a process by which gravel and sand are carried away by water discharged from a spring to a wetland, likely caused the headward erosion of the tributaries of Edgartown Great Pond. The coves of the Pond filled with sea water as they

were eroded by groundwater seepage, leaving the Pond with multiple embayments (Howes et. all 2007).

4. Soils

The General Soils Map (Appendix C, Map 16, page 91) depicts general classes of soils across Martha's Vineyard. The Preserve sits within the Carver complex that is characterized by "loamy and sandy soils formed in glacial outwash; on outwash plains" (Fletcher and Roffinoli 1986).

Carver series dominates the complex at 52% and is most pronounced on Quenomica North and the northeastern corner of Quenomica South in both grassland and woodland areas. A moderate swath of Klej loamy coarse sand on Quenomica South abuts a coastal saltwater pond, supporting associated saltmarsh and shoreline vegetation. A detailed map and discussion of the soil types associated with the property, as described by Fletcher and Roffinoli (1986) can be found in Appendix C (Map 19, page 94).

5. Topography

Quenomica Preserve is situated in the lowland outwash plains of the Martha's Vineyard moraine. The Preserve is mostly flat, with a maximum elevation of 20 feet in the eastern side of Quenomica North. The landscape gradually slopes towards Quenomica South and Edgartown Great Pond. The lowest elevations are reached at the point adjacent to the pond.

A map of the topography of the Preserve is located in Appendix A (Map 11, page 38).

6. Hydrology

Quenomica Preserve sits within the Edgartown Great Pond watershed, a 4,850-acre watershed falling almost entirely in Edgartown with a small area

extending into West Tisbury (MVC 2023). Almost all of Quenomica North lies within the Wintucket Cove sub-sub-watershed, with the remainder in the Quenomica Neck sub-sub watershed. Quenomica South is split between the Mashacket Cove sub-sub-watershed on the eastern side of the property and the Quenomica Neck sub-sub-watershed on the western side of the property (Map 12, page 39).

The Preserve is bordered on either side by Mashacket Cove and Wintucket Cove of Edgartown Great Pond. There are 14 acres of wetland resource area on the property including the 300-foot buffer zone from Edgartown Great Pond, protected through the Edgartown wetlands protection bylaw (Map 4, page 14).

Due to the Preserve's proximity to Edgartown Great Pond, Quenomica South is situated within the 2-10-foot LiDAR sea-level rise projection in the base floodplain. Quenomica North is located outside the 10-foot LiDAR sea-level rise projection (Map 14, page 41) in an area of minimal flood hazard (FEMA Flood Zones) (Appendix A, Map 13, page 40).

7. Ecological Processes

Ecosystems comprise the physical environment and all the living organisms (biotic components) in a defined area that interact with the abiotic components such as air, water, and mineral soil. Biological, physical, and chemical processes link abiotic and biotic components together. These ecological processes cycle water and nutrients, transfer carbon, produce oxygen, move nutrients, build soils, and enable reproduction. Ecosystems are impacted by external and internal factors over various temporal and spatial scales from seasonal changes in temperature to climate change and pesticide use to land use changes (EPA 2020).

Hydrological Processes

The southern point of Quenomica Preserve borders Edgartown Great Pond, an 890-acre brackish pond with multiple embayments. Though some water enters the pond from streams, surface run-off, and rainfall, the primary source of water to the pond is groundwater. A 4,200-acre groundwater recharge area continually provides the pond with fresh water. The groundwater recharge area contains conservation land, agricultural land, residential development, and the Edgartown wastewater treatment plant. The pond is thus subject to potential contamination from any of these sources (Gaines 1992). The pond's many coves and inlets make for a coastline of 15.5 miles, providing shelter and habitat for aquatic wildlife (Gaines 1992). The Preserve comprises 4% of the coastline of Edgartown Great Pond. The pond is used for recreational activities such as fishing, swimming, duck hunting, and boating, in addition to commercial fishing and shellfishing (MVC 2020).

The health and quality of Edgartown Great Pond have major implications for the wildlife and vegetation communities present at Quenomica Preserve. The

Pond has historically supported a variety of wildlife including a native herring run. Currently one drainway from Edgartown Great Pond connects to Crackatuxet Pond and then to Katama Bay by way of the Mattakesett Herring Creek. The 2002 Herring Creek Restoration Project in 2002 re-opened the herring run after multiple disruptions to its flow originating with the Great New England Hurricane in 1938 (Howes et. al 2007). The town of Edgartown artificially breaches the barrier beach four times a year by excavating a trench to the ocean. Water exchange between the Pond and ocean decreases water temperatures, increases salinity for fish and shellfish populations, and flushes excess nutrients (MVC 2020). The barrier beach naturally closes after a period of a few days to several weeks.

A 2007 study published by the Massachusetts Estuaries Project (MEP) found a moderate level of habitat impairment in the pond ecosystem due to low dissolved oxygen levels and algae and nitrogen levels exceeding desired limits. High concentrations of nitrogen close to and above the threshold of impairment values exacerbate plant, phytoplankton and algae growth in the pond and result in decreased oxygen and visibility. Eelgrass populations experienced a decline in response to increased nutrients and low dissolved oxygen levels (Howes et. al 2008). The eelgrass population decline has ecological, economic, and recreational consequences. Eelgrass plays a central role in the stability of the pond's ecosystem by providing important habitat and foraging areas for all organisms, including invertebrates, shellfish, finfish, migratory waterfowl, river otters, and ospreys. Ecosystem services such as carbon sequestration, shoreline stability, and commercial fisheries are directly influenced by the presence or absence of eelgrass (Great Pond Foundation n.d.).

Restoration efforts from local conservation organizations have drastically improved Edgartown Great Pond's water quality. Increased monitoring, additional barrier beach breaches, and oyster restoration produced increases in eelgrass populations, dissolved oxygen levels, and water clarity. High nitrogen levels from abutting septic systems, fertilizer application, and run-off continue to pose a threat to pond health despite an otherwise improving system. The water quality of Edgartown Great Pond was considered moderate to high for the 2020 season, with a water quality index (W.Q.I.) of 72.9 (MVC 2020). Continuing restoration strategies such as increased tidal flushing and oyster farming for water filtration could improve water quality and wildlife habitat opportunities for Quenomica Preserve (MVC 2023).

Climate change and sea level rise impact all coastal communities (Kulp and Strauss 2019), including this property. Reduction of sandy shoreline areas, salt marsh encroachment, and expansion of Edgartown Great Pond into inland areas are predicted with the current rate of sea level rise (Map 14, Appendix A).

Nutrient cycling

Human activities have major impacts on nutrient dynamics via fertilizers, septic leaching, and land-use changes. Leach fields associated with updated septic systems are generally adequate at filtering wastewater of bacteria and pathogens before entering a watershed. However, the updated Title 5 systems are not designed to remove nitrogen from wastewater. The combination of well-drained permeable soils that are prolific on the cape and islands and nitrogen loaded filtered wastewater contribute to high nutrient levels reaching groundwater and surface water systems (Gibb 2018, Pasakarnis 2022). In combination with fertilizers and land-use that causes erosion, excess nutrients entering watersheds can cause eutrophication of downstream lakes, ponds, and estuaries. Eutrophication is a process in which nutrient additions cause an overabundance of algae; as the algae die, decomposing bacteria use oxygen and break down the material, thus decreasing oxygen levels. Water bodies can become shallower with eutrophication resulting in increased water temperatures that in turn cause decreased dissolved oxygen. Decreased oxygen and acidification (due to excess carbon dioxide) are harmful to fish and mollusks and can lead to “dead-zones” (NOAA 2023a).

Anadromous alosine species such as river herring (*Alosa pseudoharengus*) rely on inlets such as the barrier beach breaches and herring run in Edgartown Great Pond to access freshwater for breeding. Atlantic herring populations have experienced a decline in response to habitat loss (or access) and overfishing (NOAA Fisheries 2023). The herring population decline has ecological and economic consequences. River herring are important prey for larger fish such as striped bass, cod, and haddock as well as osprey, otters and other piscivores. Increased restoration efforts and pond openings should decrease water temperatures and increase rates of tidal flushing with the Atlantic Ocean that could improve herring habitat in the pond (MVC 2020).

Sea level rise

Quenomica South is situated within the 2-10-foot LiDAR sea level rise projection in the base floodplain (FEMA Flood Zones, Map 13, Map 14). Acceleration of sea level rise due to anthropogenic climate change puts low-lying coastal areas like Quenomica South at risk for ecologically harmful impacts. Sections of the coastal pond shoreline are composed of salt marshes that provide important ecosystem functions, including refugia and foraging habitat for shellfish and finfish; run-off filtration; and excess sediment and nutrient storage (NOAA 2023b). Higher water levels leave salt marshes along the pond shoreline particularly vulnerable to excess flooding and potential drowning.

As water levels increase beyond the tolerance of marsh vegetation, salt marsh plants will migrate into upland areas (Fagherazzi et. al 2020). The transition from salt marsh to woodland at Quenomica South is abrupt, without a significant gradient of shrubland or grassland between them. The lack of a

gradual ecotone leaves nowhere for the salt marsh to retreat, as the woodlands are too shaded to provide adequate conditions for salt marsh species. Conversion of woodland to the historic grassland/shrubland mosaic (Figure 1, page 7) could create refuge for transgressing salt marsh vegetation and establish a more resilient floodplain landscape (Fagherazzi et. al 2020).

Habitat complexity

Species diversity and ecological resilience are greatly influenced by the complexity of habitat. Habitat complexity, or heterogeneity in physical habitat structure, allows for a greater number of species to coexist and use available resources differently and with less competition (Smith et. al 2014). Habitat complexity also plays a vital role in promoting ecological resilience to disturbance. Ecological resilience refers to an ecosystem's ability to recover and adapt to changing environmental conditions such as flooding, insect infestation, invasive species, and wind. Greater complexity in ecological communities and landscape can diversify the way species respond to disturbance and offer alternative resources when one ecological community is disproportionately affected (Oliver et. al 2015).

Quenomica Preserve represents a gradient of habitats from grassland and woodland to salt marsh and coastal pond shoreline that support a variety of plant and wildlife species. Despite a range of ecological communities, parts of Quenomica Preserve lack habitat complexity that could increase biodiversity and ecological resiliency on the property. Coastal woodland constitutes 67% of the property (Map 20, page 100). Historical aerial images of Quenomica

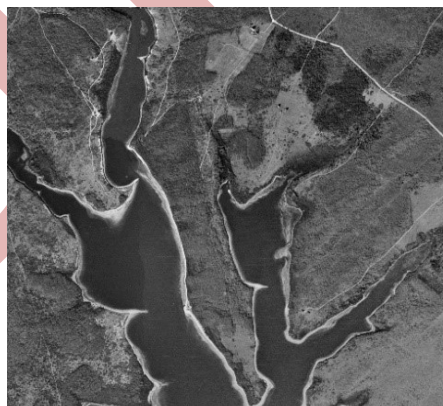


Figure 1: 1938 aerial photograph of Quenomica

South from 1938 show approximately 7.5 acres on the eastern side of the point as open grassland (Map 21, page 103, Figure 1). The point was likely cleared as early as the late 18th century to use as pastureland and was kept in early successional habitat as a result of grazing.

Apart from the coastal pond shoreline, Quenomica South is currently entirely woodland, with much of the former grassland area lacking structural complexity. The overstory is dominated entirely by oaks and sassafras and the open understory is largely homogenous, with a low-growing vegetation profile of black huckleberry and low bush blueberry. Restoring parts of the woodland to its former grassland mosaic could increase habitat complexity. The eastern half of Quenomica South's point is likely to have seedbanks of sandplain grassland species, as it was maintained as grassland for decades. Opening the canopy could encourage the growth of grasses, shrubs, and heaths, diversifying both the species of vegetation and the vertical and horizontal habitat structure they provide. A more open canopy could also create refugia

for salt marsh species retreating inland in response to sea level rise.

Biotic interactions

Biotic interactions require knowing the characteristics of individual species and the network within which interact. Species in a network are connected through processes like predation, competition, and mutualisms. Alterations of these biotic interactions through the introduction of exotic species, over-collection of a species and disease can cause sweeping cascades in the network depending on the nature and strength of interactions a specific species had within the community (Bennett et al. 2009, 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. Invasive species, for example, can outcompete native species due to some advantage in their life strategy and/or a lack of pests and predators. Asiatic bittersweet (*Celastrus orbiculatus*) is a good case study of these effects; this invasive species was introduced from China as early as 1860. This fast-growing vine can hurt native woody species by girdling trunks as it climbs and decreasing the amount of sunlight reaching native leaves. Infestations of this species can quickly alter the compositions and health of a forest stand.

Protecting species with high community importance values; removing exotic species before they have aggressively invaded; and implementing elastic management strategies that are modified in response to monitoring efforts are all strategies that can reduce effects on biotic interactions.

B. Biological Characteristics

1. Vegetation

Quenomica Preserve comprises three general habitat communities – coastal woodland, cultural grassland, and salt pond shoreline. They are described in detail and displayed on the Ecological Communities Map 20 (Appendix D, page 100). Woodlands mark the edge of the cultural grassland at Quenomica North and cover almost all of Quenomica South. Coastal shrubland, salt marsh and sandy beach compose the pond shoreline along Edgartown Great Pond.

A total of 134 plant species is known to occur on the Preserve (Appendix D, Table 1, page 96). The property acreage is majority woodland, with a total of 19.8 acres designated as coastal woodland. Cultural grassland comprises two former pastures at Quenomica North at 3.6 acres. Salt pond shoreline makes up 0.87 acres of Quenomica South.

No commonwealth-listed plant species are known to occur on the property in the woodland. Exotic invasive plants – including dooryard knotweed and bull thistle – occur abutting the grassland fields and along the salt pond shoreline

of the property.

2. Wildlife

Wildlife Surveys

Formal avian point-count surveys were performed during the spring and summer of 2022. Two survey points were established at Quenomica South and a third survey point was added at Quenomica North. One survey point was located in each of the three ecological communities – coastal woodland, cultural grassland, and salt pond shoreline – as marked on Map 22 (Appendix E, page 107).

Night flying moth community composition and abundance was assessed using black-light traps during the summer of 2022. One trap was placed over a period of seven nights in the woodland between June 7 and September 14 (Map 22).

Bat species were surveyed in 2022 using an acoustic monitor from April 26-May 21.

Observations of other wildlife (mammals, reptiles, amphibians, and invertebrate) took place opportunistically while on the property or through the use of camera traps. Direct and indirect (tracks and scat) sightings aided in creating a running inventory of species. The lists of these groups in Table 2 (Appendix E, page 105) are not exhaustive but provide an assessment of common occupants of Quenomica Preserve.

A. Birds

Thirty-five avian species were detected at Quenomica Preserve during survey periods. A full list of species and their frequencies is included in Table 4 (Appendix E, page 114).

B. Invertebrates

A total of 194 (including five listed species) lepidoptera species, belonging to thirty-three families, was collected during the summer and fall of 2019. Four species (*Hyperstrotia pervertens*, *Nola cereella*, *Baileya dormitans*, *Meropleon diversicolor*) were new detections for land bank properties in 2022. A detailed list of Macrolepidoptera species observed on the property is included in Table 3 (Appendix E, page 108).

C. Mammals

Seven mammal species were detected on the property through direct (sightings and camera trap photos) or indirect (tracks, scat) observations. A full list of mammal species observed on the property is included in Table 2, Appendix E.

D. Reptiles and amphibians

One amphibian species was observed on the property and is included in

Table 2, Appendix E.

E. Fish

No fish were surveyed in compiling this management plan.

3. Rare and Endangered Species

All of Quenomica South is designated as priority habitat for rare species by the Natural Heritage and Endangered Species Program (NHESP) (Map 23, Appendix F, page 117). Priority habitat is the geographic extent of commonwealth-listed plant/wildlife species that fall under Massachusetts Endangered Species Act (MESA) rulings. Estimated habitat is the extent of listed wetland wildlife species alone and is protected by wetland protection act (WPA) and MESA rulings. Projects proposed within these habitats that are not exempt (e.g., agriculture, maintenance of existing roads, rare species habitat management) must be approved by NHESP and, in the case of wetland habitat, both the Edgartown conservation commission and NHESP, in order to ensure that activities are not harming protected species or their habitat.

Much of the property is wooded with a moderately closed canopy and sparse understory. The Preserve provides breeding and feeding habitat for various moth species. Five of the moth species observed on the Preserve are protected by the commonwealth Endangered Species Act.

Promoting structural diversity is a management goal that would benefit listed species associated with the property, as well as create opportunities for additional listed species to propagate. Opening parts of the woodland canopy at Quenomica South could restore former grassland habitat and encourage the growth of rare sandplain grassland species.

C. Cultural Characteristics

1. Land History

Quenomica Preserve is named after the neck of land, Quenamaueag, upon which it sits. The word Quenamaueag means the “long fishing place” in Wampanoag. The neck abuts an area known as Mashakomuket to the east. Mashakomuket means “enclosed place” or “the great house” suggesting the sachem had his dwelling here. The Preserve was part of one of the early divisions of land to proprietors under Matthew Mayhew’s direction as patentee. Two prominent proprietor families, the Vincent family and the Norton family, owned and farmed the Preserve and surrounding land for several centuries between the 17th and 19th centuries. Quenomica South was historically used for duck hunting from the 19th century to the present day.

D. Property and Development Characteristics

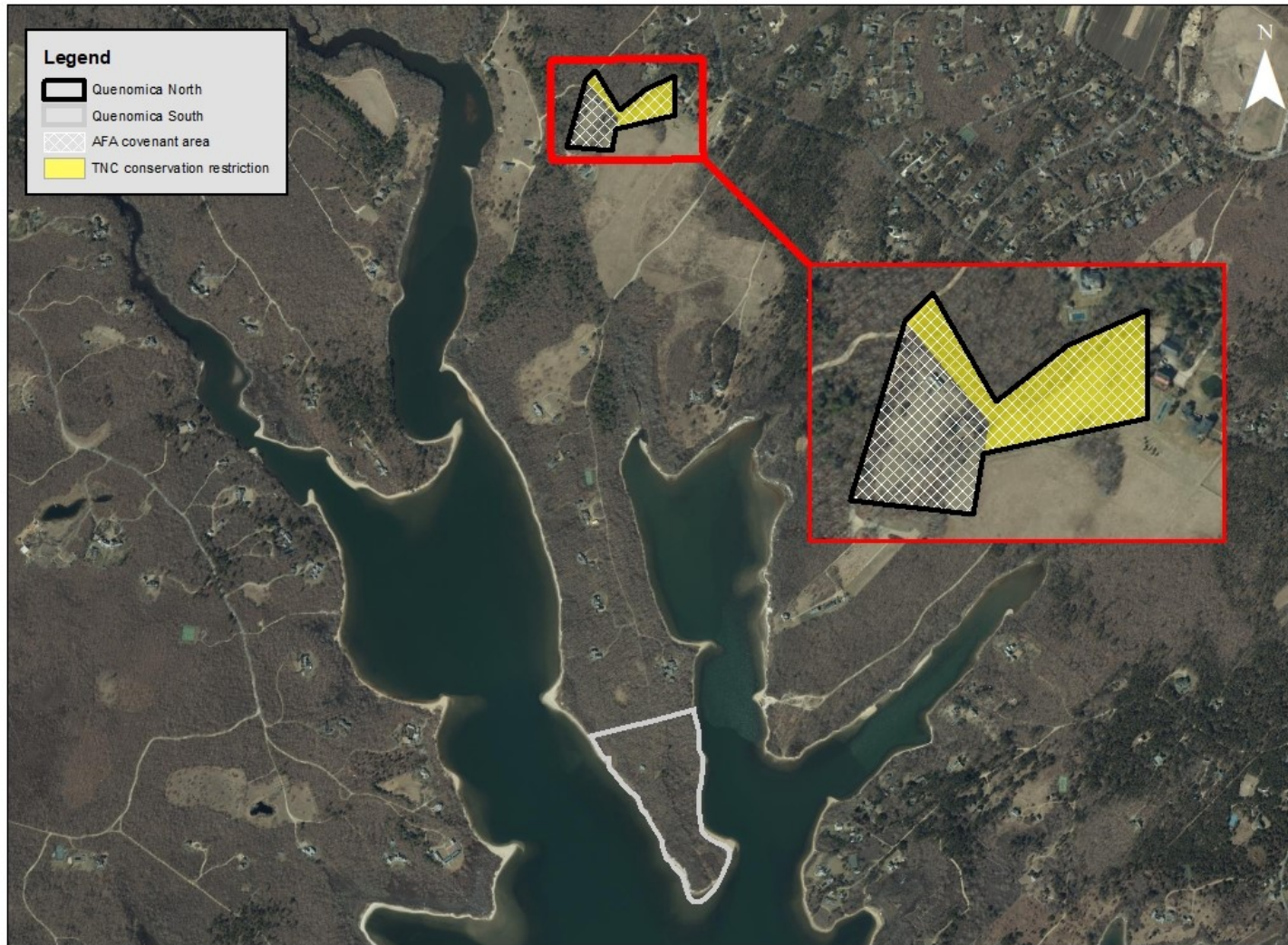
1. Planning Concerns

Easements, Rights and Restrictions

A portion of Quenomica North is under a conservation restriction established and agreed upon in 2004 by Ellen A. Harley, the previous owner, and The Nature Conservancy (TNC). The conservation restriction prohibits structural additions; commercial use; equipment storage; plowing; hunting; and subdivision on the restricted portion of the property, among other provisions. A 10,000-square-foot building envelope is located in the northeastern corner of the restriction that allows for limited construction. Additionally, the conservation restriction permits the keeping and grazing of up to eight farm animals; selective mowing and cutting of vegetation; non-motorized recreational activities; and the introduction of plant species native to Martha's Vineyard as listed in "The Flora of Martha's Vineyard" published by the Martha's Vineyard Sandplain Restoration Project.

Quenomica North is also subject to a covenant with the Ashakomaksett Farm Association (AFA). The covenant limits nitrogen loading at Quenomica North to 60.2 pounds per year from sources including farming, landscaping, and septic systems. The covenant also restricts structural development on the property and prohibits equipment storage and commercial activities. The location of the conservation restriction and covenant on the Preserve is depicted in Map 3, page 12.

Map 3: Conservation restriction and covenant map of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, USG S parcel data - MassGIS and MVC.
File: Quenomica_CR_map_2023.jpg Date: March 1, 2023.

0 500 1,000 2,000 Feet

Massachusetts Endangered Species Act

Prior to implementation of the management plan a Massachusetts Endangered Species Act application must be filed with NHESP for the entirety of the project proposed in Priority Habitat along with a Notice of Intent for work proposed in Estimated Habitat. There are approximately 17.7 acres of priority habitat, located in the woodlands of the Preserve, that account for 60% of the property. The MESA filing will include a detailed description of management actions proposed in this plan that mitigate any possible impacts to listed-species.

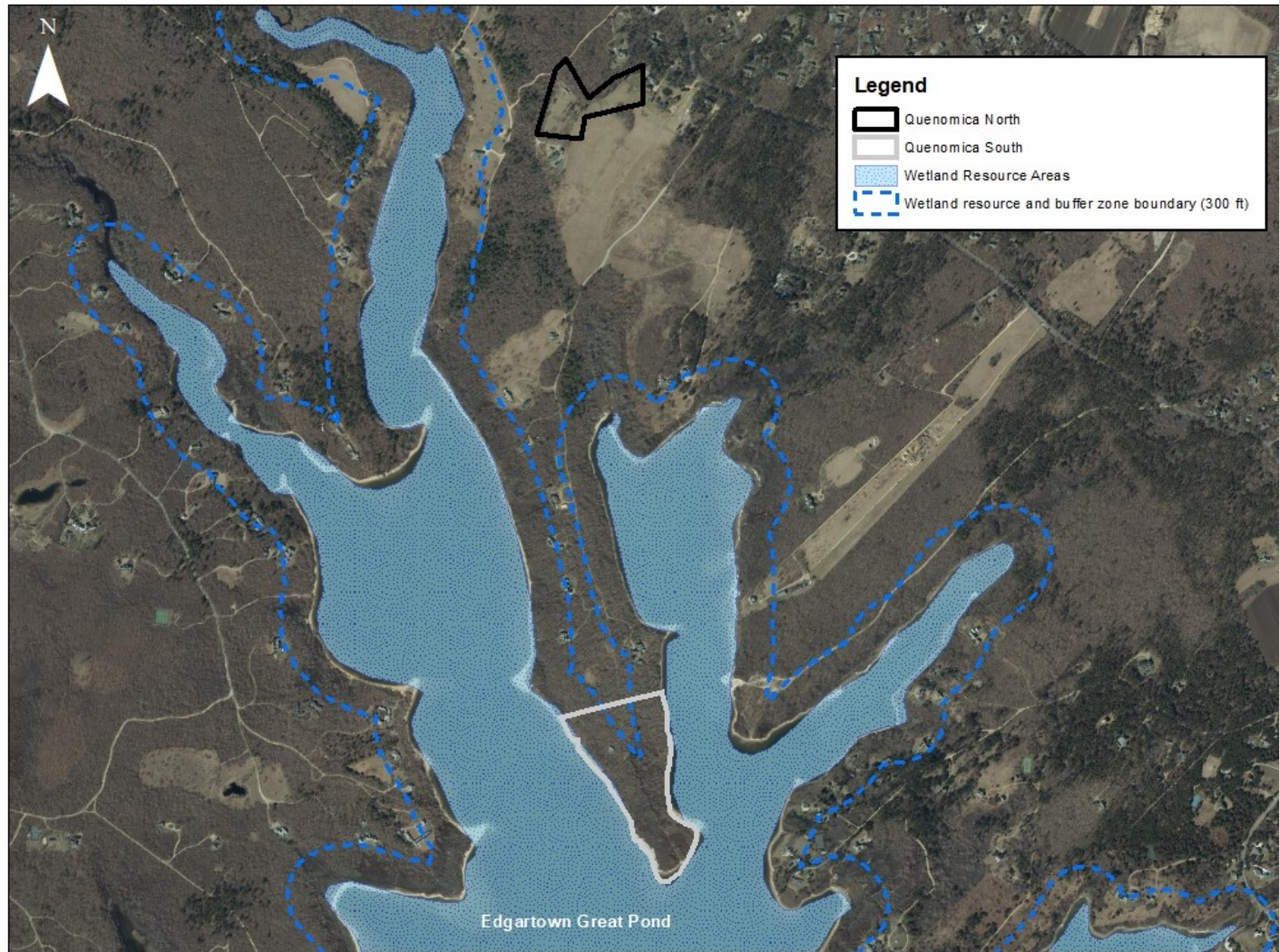
Wetland Protection Act

The shoreline along Edgartown Great Pond is considered a “wetland resource area” under the Edgartown Wetlands Bylaw and Massachusetts Wetlands Protection Act; see wetlands Map 4: Wetland resource areas and buffer zones of Quenonica Preserve page 14. The wetland resource area includes a 300-foot buffer zone and is subject to the jurisdiction of the Edgartown conservation commission. Installing trails and boardwalks over these resource areas requires a filing for a Notice of Intent with the Edgartown conservation commission and Massachusetts Department of Environmental Protection (MA DEP). A total of 0.24 acres is proposed to be impacted with the implementation of this plan.

Chapter 91

Quenonica Preserve is not mapped in the presumed tidelands jurisdiction of MassDEP under M.G.L. c. 91 and the Waterways Regulations in 310 CMR 9.00 (Map 5, page 15).

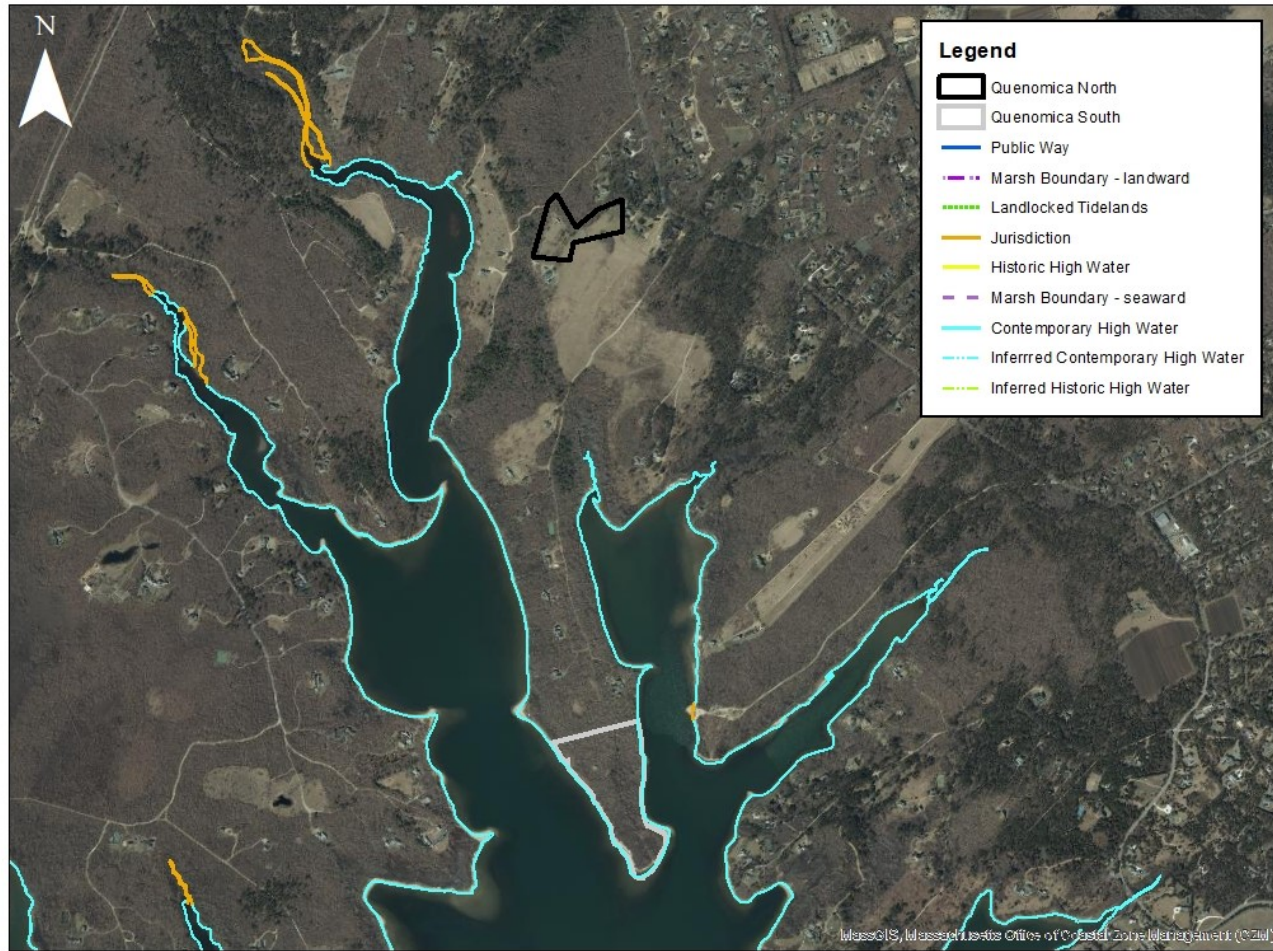
Map 4: Wetland resource areas and buffer zones of Quenomica Preserve



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. Sources: 2019 ortho photograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_WetlandResourceArea_map_2023.jpg Date: February 3, 2023.

0 500 1,000 2,000 Feet

Map 5: Jurisdiction pursuant to Chapter 91 regulations at 310 CMR 9.04 at Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho photograph, Tidelands Jurisdiction MassGIS and MVC. File: Quenomica_Chpt19_map_2023.jpg Date: February 20, 2023.

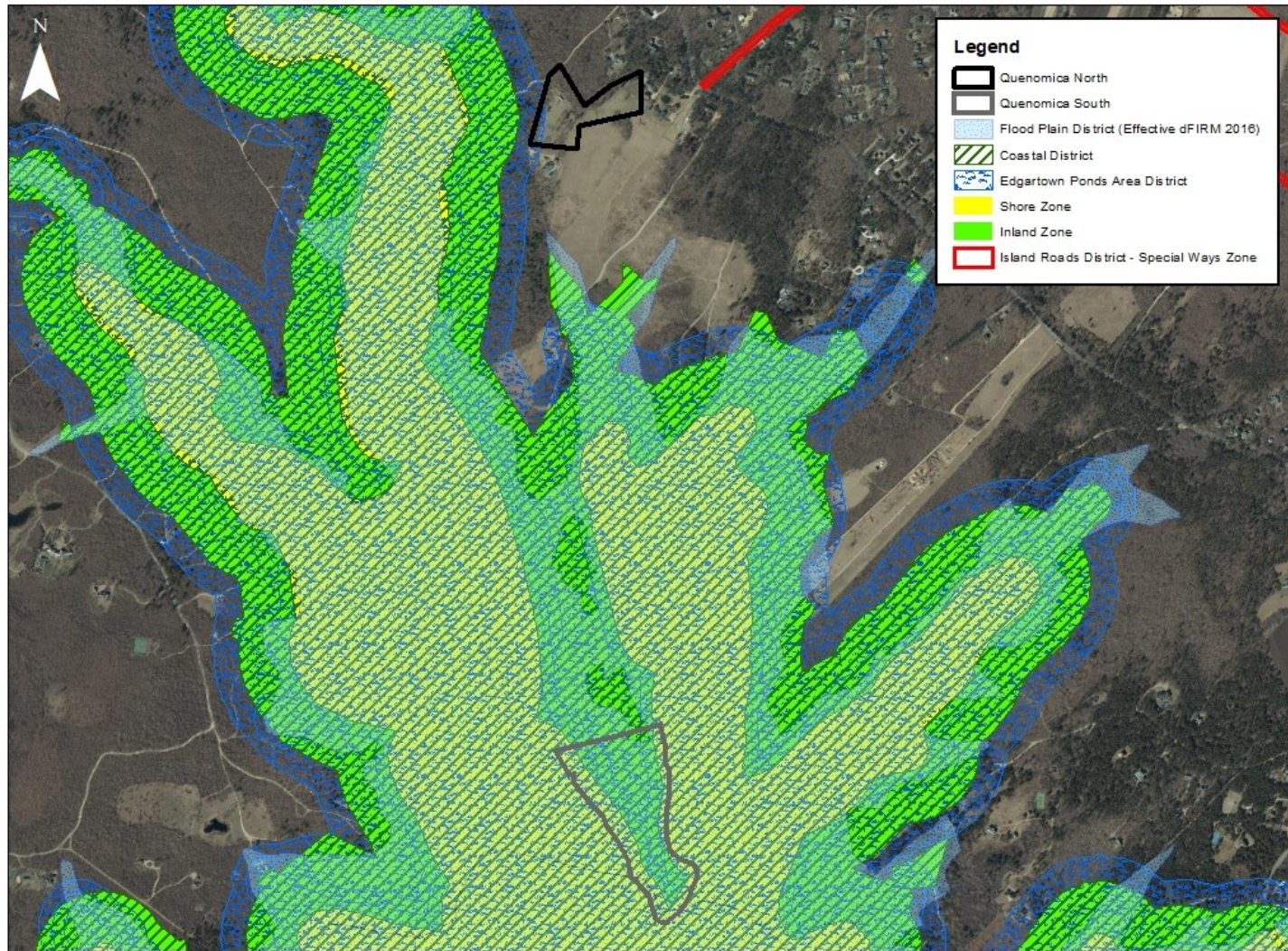
Districts of Critical Planning Concern and Overlay Districts

The Martha's Vineyard Commission has the power to define and designate districts of critical planning concern (DCPC). Quenonica Preserve falls within two districts within the town of Edgartown: Coastal District (inland and shore zone) and Edgartown Ponds Area District (Map 6, page 17). The DCPCs and Overlay Districts are governed by Edgartown Zoning Bylaws found in Article V and are described as follows:

Coastal District: Within the Coastal District (Article V 5.1) a special permit is required from the Edgartown planning board review committee for any structure within 200 ft of a resource area, for vehicular access greater than 10 ft in width, and for any installation of aboveground utilities. In addition, groundwater wells and sanitary disposal systems require a permit and must be located 200 feet from saltwater bodies. The hunting blind, viewing platforms and stairs to the kayak landing will all require permission from the Edgartown planning board.

Edgartown Ponds Area District: Within the Edgartown Ponds Area District (Article V 5.6) a special permit is required from the Edgartown planning board review committee for any trails or landings intended only for private use; temporary floating docks; and public utilities within 100 feet of the mean low water line of the pond. Excavation and dredging, except for the improvement of fishing, shellfishing, or habitat, is prohibited within 300 feet of the pond. The plan does not propose any activities in the Edgartown Ponds Area District that would require approval from the Edgartown planning board.

Map 6: Districts of Critical Planning Concerns within Edgartown, MA.



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. Sources: 2019 ortho phtograph, U S G S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_CriticalPlanning_map_2023.jpg Date: February 6, 2023.

0 500 1,000 2,000 Feet

2. Abutters

A list of those owning land abutting or within 200 ft of Quenomica Preserve was generated based on the Edgartown 2021 Assessors Map as it appears in the AxisGIS program (Map 24: Map of abutters to Quenomica Preserve within 200ft of property boundary., Appendix H, page 129). Abutters are included on the Abutters List in Table 5: List of Abutters, Appendix H.

3. Existing Use and Infrastructure

Quenomica Preserve is bounded by private open grassland, woodlands, and various private properties (Map 24, page 129). This property is an aggregation of active-use pasture with a conservation restriction, coastal woodland, and shoreline on Edgartown Great Pond. The following uses and infrastructure occurring on the property are listed below and depicted on Map 7, page 19.

- A. **Structures:** There are 2 structures within Quenomica Preserve: one run-in shed at Quenomica North and one cottage at Quenomica South. The cottage will remain in use for the foreseeable future as land bank staff housing and the run-in shed will remain in use by the land bank for livestock purposes.
- B. **Roads:** Quenomica Preserve has approximately 900 ft of farm road along the northwestern edge of the pastures in Quenomica North. Kanomika Road connects Quenomica North to Quenomica South and will be used by the public to access the southern portion of the Preserve. Quenomica South has approximately 550 feet of driveway that connects Kanomika Road to the cottage.
- C. **Trails:** A 15-ft existing trail leads from the cottage to the pond shore at Quenomica South.
- D. **Fencing:** There are 2 fenced-in pastures at Quenomica North that compose approximately 3.9 acres of the property; the land bank proposes to use the cultural grassland for livestock purposes or lease 2.7 acres for agricultural use.

Map 7: Existing use map of Quenomica Preserve. See Section 1.D.3 for descriptions of these features.



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. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Existing_use_map_2023.jpg Date: February 3, 2023.

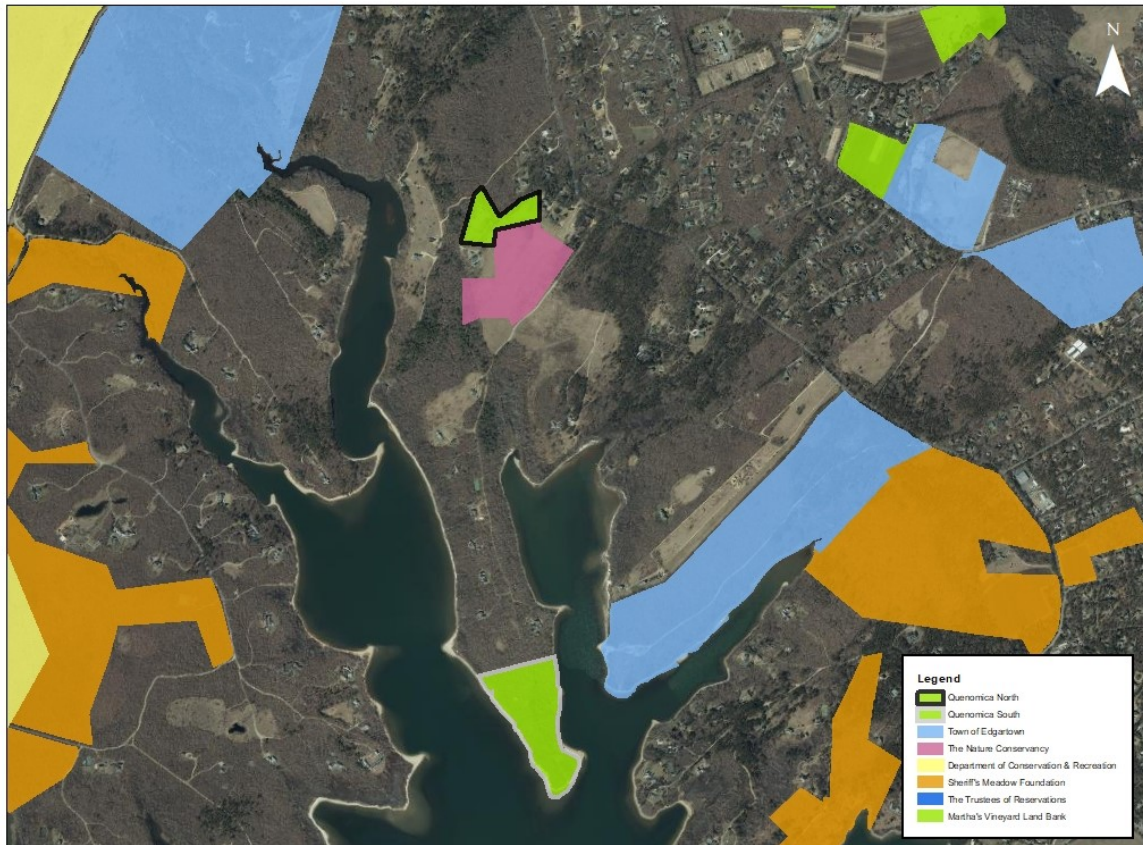
II. Inventory Analysis

A. Constraints & Issues

1. Ecological Context

Quenomica North abuts an 18.7-acre conservation property owned by The Nature Conservancy (Map 8). Quenomica South is surrounded by two coves of Edgartown Great Pond, Mashacket Cove and Wintucket Cove, and protects approximately 3,500 feet of shoreline along the pond. The Preserve offers habitat for five listed moth species, as well as a variety of avian and wildlife species.

Map 8: Private and public conservation land surrounding Quenomica Preserve, Edgartown, MA



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. Sources: 2019 ortho photograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_ConservationLand_map_2023.jpg Date: February 3, 2023.

0 650 1,300 2,600 Feet

2. Natural and Cultural Resource Concerns

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

Commonwealth-listed rare species

Five commonwealth-listed lepidoptera species have been determined to occur on the Preserve; continued protection of the woodland supports these species, as well as continued monitoring, and both are included in this management plan.

Sea Level Rise

Sea level rise is a concern for any low-lying coastal property. Quenomica South is within the 2-10-foot LiDAR sea level rise projection in the base floodplain (FEMA Flood Zones, Map 14, Map 14). Rising sea levels put delicate habitat, like salt marshes, at risk for flooding. Providing open interior habitat for salt marshes to retreat could allow salt marsh plant species to migrate inland in response to higher water levels.

Invasive species

Invasive species are a concern on any property. Exotic and/or invasive species outcompete and displace native species, altering the composition of natural vegetation communities (Somers 1996). Often without natural enemies, these seedlings compete for nutrients, water, and light with neighboring plants, or even directly kill native 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. A list of invasive species impacting the property can be found in Table 1, page 96.

Coastal ponds

Coastal ponds are important components of the health and beauty of Martha's Vineyard and are crucial habitats for fish and shellfish. These systems are sensitive to nutrient fluctuations and alterations in tidal exchange processes with the sea. This resource and other wetland habitats that fall under the wetland protection act (e.g., dune, coastline) on the Preserve are guarded by special regulations to mitigate and prevent negative impacts of human use on the health of these systems.

Indigenous People's Artifacts

Many areas of the island contain significant archaeological findings, especially seasonal villages located near freshwater that abuts the coast. Evidence of indigenous people's use of the land is often left behind in the form of tools and shell middens or trash piles. Management strategies such as pounding posts instead of digging; building up universal access trails by adding material; and covering exposed soil on trails with wood chips are proposed to mitigate the exposure and disturbance of archaeological findings that are presumed to exist on the Preserve.

3. Sociological Context

Quenomica Preserve is positioned in the town of Edgartown off Meetinghouse Way. The property is within 2.5 miles of Edgartown center and is surrounded by both private residences and conserved land. The area is admired for its cultural significance and scenic, recreational, and commercial value provided by Edgartown Great Pond.

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. Anyone may also express concerns at any public meeting of the Martha's Vineyard land bank commission and Edgartown town advisory board or may simply contact land bank staff. The land bank's Edgartown town advisory board and the Martha's Vineyard land bank commission review all comments and can change the draft plan if desired. Some general concerns already incorporated into this management plan include:

- Trespassing on private property.
- Hunting near private residences.

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 Quenomica Preserve meets all of the land bank's nine criteria for property acquisition: agricultural lands; forest land conservation; land to protect existing and future well fields; wetland conservation; ocean and pond frontage and wetland environs; protection of scenic vistas; wildlife habitat conservation; easements for trails and for publicly owned lands; and sites for passive recreation.

Preliminary management plans were adopted by the land bank commission and its Edgartown advisory board (see Appendix B, page 43).

3. Opportunities

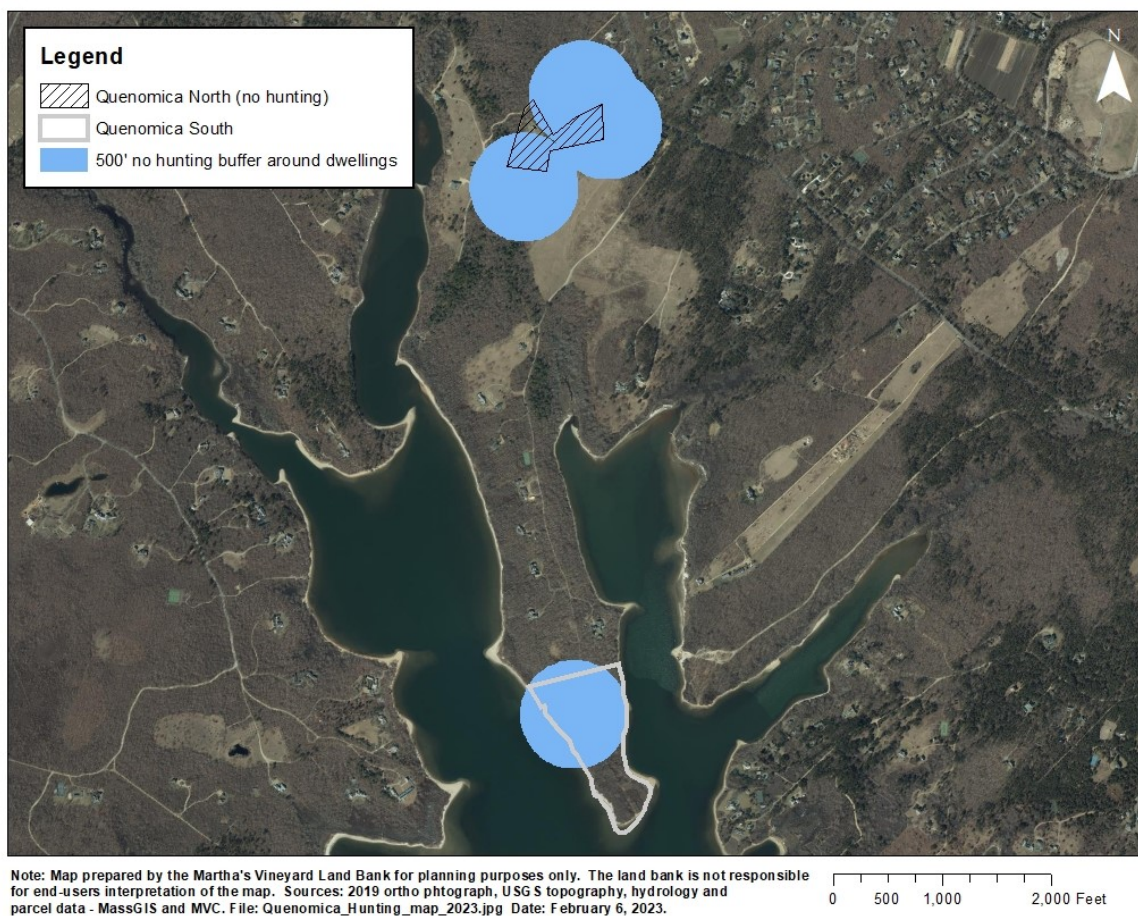
The 29.4 acres of Quenomica Preserve provide several opportunities for the public to interact within these scenic landscapes. They are as follows:

- A. **Access:** A 4-6 vehicle trailhead located off-premises at 40-44 Meetinghouse Way will serve as the primary trailhead for access to the Preserve. An off-premises trail will connect the primary trailhead to Kanomika Road and via that road to Quenomica South. A smaller, 2-vehicle, trailhead is proposed at Quenomica South to accommodate one universal access vehicle and one vehicle for permitted hunters.
- B. **Trails:** An out-and-back 1,500 linear foot universal access trail is proposed from the Quenomica South trailhead to a viewing platform on the southern tip of the point. A spur trail is proposed to access the duck blind and adjustable stairs are proposed to access the kayak landing. A future loop trail may be possible once the proposed sandplain grassland restoration work is completed.
- C. **Views:** The Preserve offers roadside and interior pastoral views from Quenomica North and sweeping views of Edgartown Great Pond from the pond shore at Quenomica South. Several benches and two viewing platforms are proposed for Quenomica South.
- D. **Passive recreation:** The Preserve is well-suited for passive recreational use such as hiking and birdwatching.
- E. **Farming:** There are 3.6 acres of pasture on the Preserve that may provide food for livestock. Some of the land was once used for vegetable crops and the potential for this use in the future remains. An agricultural lease is possible for 2.7 acres of the Preserve.
- F. **Hunting and Fishing:** The proximity of the Preserve to residents and roads precludes deer hunting in all but a 5.7-acre area on the point of Quenomica South. The plan proposes to limit the point to archery hunting only for deer (Map 9, page 24).

Quenomica South's closeness to Edgartown Great Pond also offers an excellent opportunity for duck hunting from the shoreline. A permanent duck blind is proposed for the west side of Quenomica South. The exact location of the duck blind will be determined based on recommendations of the land bank hunting subcommittee.

Edgartown Great Pond has a long history of fishing. Access to the pond for fishing is proposed via the kayak landing.

Map 9: Huntability area with a firearm at Quenomica Preserve and zone of no discharge of a firearm 500' from occupied dwellings. See Section B.3.F for descriptions of these features.



4. Universal Access (UA)

The minimal slope and readily-accessible sweeping views of the pond through the open landscape in Quenomica South provide an ideal opportunity for creating universal accessibility on the property.

The Preserve's ROS (Recreation Opportunities Spectrum) classification is "Semi-Primitive Non-motorized". Further details are included in Appendix I.

III. Land Management Planning

This final section of the management plan states goals for Quenomica Preserve and outlines MVLB strategies for achieving them. The plan addresses five areas of planning concern: nature conservation; recreation and aesthetics; natural products; community interaction; and land administration. These goals and strategies are designed to fit within the social and ecological constraints defined previously and, apart from matters under the control of the NHESP, apply to members of the general public.

A. Nature Conservation Goals

Provide long-term protection for plants, wildlife, and natural processes occurring at Quenomica Preserve.

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

Strategies:

- A. Monitor the property for rare plants and wildlife during regular property checks; report new observations to the proper commonwealth authority.
- B. Develop and implement a strategy to protect any additional rare species observed on the property.
- C. Reroute or close trails if recreational use interferes with a rare species.
- D. Protect rare shorebird feeding habitat along the shoreline by limiting recreational use in the area above mean high tide.
- E. Protect breeding and hibernating rare turtle habitat following NHESP mowing Advisory Guidelines in Rare Turtle Habitat (NHESP 2009).
 - a. Avoid mowing fields during peak breeding periods (May 15-September 15).
 - b. Avoid flail mower heads with guide bars that ride along the ground.
 - c. Limit maximum mower height to no less than 12 inches and mow from the center out in a circular pattern if mowing during the breeding season.
 - d. Leave a 5' un-mowed buffer edge around fields until September 15th.
 - e. Avoid using heavy equipment in woodlands during the non-breeding season (Sept 16-May 14).
- F. Protect breeding rare grassland songbirds such as the grasshopper sparrow if observed through breeding bird surveys on the Preserve.
 - a. Mow fields outside of grasshopper sparrow nesting season.
 - b. Adjust leasehold to reflect management mitigation for rare grassland songbirds if observed breeding.
- G. Promote healthy woodlands including open shrubland understory that support rare moth species.
 - a. Protect woodlands from fire damage by creating buffers of managed vegetation.
 - b. Retain old- or late-successional trees in the open woodland area of the point.
 - c. Utilize selective cutting to increase the complexity of the woodlands vertical structure.
 - d. Retain pockets of scrub oak at the point and promote pitch pine growth on the west side of the point.
- H. Restore to sandplain grassland 4.0 acres of open woodland on the east side of Quenomica South
 - a. Mow the understory to create a mosaic of grassland and shrubland

- species with scattered open-growth oaks.
- b. Preserve pockets of high bush blueberry and scrub oak.
- c. Thin the woodland of trees below 10 dbh and remove saplings.
- d. Maintain the open nature of the restoration area through annual mowing, spot tree removal and seasonal rotational grazing.

Objective 2: Reduce and control erosion on the Preserve.

Strategies:

- A. Utilize soil-retention techniques, such as steps and large stones at the base of boardwalks, as necessary.
- B. Site trails on appropriate grades as to minimize erosion.
- C. Reroute trails as necessary.
- D. Prohibit use of motorized vehicles such as dirt bikes, electric bikes, and all-terrain vehicles on the trail system.
- E. Cover trails with appropriate materials if needed to manage unforeseen erosion issues and prevent further surface soil erosion.
- F. Utilize light-penetrable decking on all boardwalks and platforms.
- G. Install adjustable stairs to access the pond shore from the trail system.
- H. Prohibit temporary boat (including kayak) storage on the shoreline and provide a tie-off rack instead.
- I. Prohibit recreational use of the shoreline with the exception of the permanent duck blind platform, viewing platform at the point, and kayak landing platform.
- J. Explore alternative erosion control measures as such methods are discovered.

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

Strategies:

- A. Retain select snags in woodlands where these trees do not pose unacceptable safety or fire hazard.
- B. Maintain bordering vegetated wetland shrubland along the shoreline of the point.
- C. Monitor changes in vegetation cover during regular property checks and by updating ecological inventory in 2033.
- D. Limit direct access of the shoreline to kayak landing, duck hunting blind and viewing platform.
 - a. Site trails with views of the water and install benches.
 - b. Install educational signs regarding river otter habitat.
 - c. Prohibit dogs on the Preserve.
 - d. Prohibit temporary boat storage and boat tie-offs with the exception of the kayak landing.

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

Strategies:

- A. Use appropriate methods such as hand-pulling, repeated in-season mowing and grazing, weed-wrench removal, and girdling as time and

funding allow.

- B. Monitor and manage vegetation along and under fence rows through frequent mowing and trimming.
- C. File with the Edgartown Conservation Commission for planned treatments of exotic and invasive species that occur within wetland resource and buffer zones.
- D. File with NHESP for planned treatments that occur in priority habitats.
- E. Monitor for re-growth and continue to manage invasive/exotic species.
- F. Explore other control methods and implement if physical control methods fail.
- G. Dispose of invasive species following approved protocols.
- H. Clean maintenance equipment between properties to avoid the spread of invasive species.

Objective 5: Reduce forest-fire danger on the Preserve.

Strategies:

- A. Prohibit open fires on the property, including firepits.
- B. Follow the recommendation of the Martha's Vineyard Commission Community Wildfire Protection Plan, providing recommendations do not preclude attainment of natural conservation objectives.
- C. Remove woodchips and felled trees from the Preserve as necessary.

Objective 6: Protect natural processes on the Preserve.

Strategies:

- A. Encourage native plants that support native pollinators.
 - a. Convert lawn areas, where appropriate, into native grassland and forb habitat.
 - b. Use island-grown native plants and/or seed for any restoration or screening projects.
 - c. Implement mowing and grazing regime around flowering times of dominant vegetation where possible.
- B. Wetland resource areas.
 - a. Protect wetland resources areas and buffer zone of wetland resource areas by limiting access and restoring encroaching woodland to a sandplain grassland.
 - b. Utilize light-penetrating decking on all raised boardwalks and platforms.

Objective 7: Create and manage open habitats.

Strategies:

- A. Lease approximately 2.7 acres of agricultural fields.
- B. Adhere to the Ashakomaksett Farm Association Covenants and Restrictions (DCRD doc#48685) and the conservation restriction (DCRD 63:105) as they pertain to the leasehold.
- C. Manage any agricultural fields outside of the leasehold through annual mowing and grazing. Utilize these techniques if leasehold itself is unoccupied or unutilized.
- D. Restore 3.5 acres of sandplain grassland habitat at the point and maintain

through annual mowing and grazing.

Objective 8: Plan for climate change adaptation

Strategies:

- A. Minimize soil disturbance property-wide.
- B. Promote carbon sequestration in management practices.
- C. Restore sandplain grassland to allow for the natural migration of bordering vegetative wetland in response to sea-level rise.
- D. Site the trail at Quenomica South on the highest elevation possible while maintaining good views of the pond from the trail.
- E. Utilize adjustable stairs and a tie-off system for kayaks to accommodate fluctuating water levels and impacts of sea-level rise.

B. Recreation and Aesthetics

Allow limited, low-impact recreational use of the area and create and/or 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, birdwatching, non-motorized biking, and other passive uses (see project map).
 - a. Open Preserve between dawn and dusk except for stargazing, hunting and fishing.
 - b. Allow horseback riding on the trail system; limit horses to Quenomica North if necessary.
- B. Install a bike rack at trailheads at both 40-44 Meetinghouse Way and Quenomica South to accommodate visitors arriving via bicycle.
- C. Maintain a “carry in-carry out” litter policy.
- D. Create kayak landing with tie-up rack across from Wilson’s Landing and connect to trail system.
- E. Prohibit all overnight boat storage, including outhaul anchors; allow short-term boat storage during the day via the designated tie-off rack.
- F. Monitor impact of passive recreational use on the property annually and manage accordingly.
- G. Use passive methods for assessing use such as trail counters and wildlife cameras.
- H. Protect the significant archaeological nature of the property.
 - a. Utilize surface coverings on trails to minimize exposure of artifacts.
 - b. Prohibit digging or disturbance of the surface, removal of any artifacts from the property, and metal detecting.

Objective 2: Manage existing roads and trails.

Strategies:

- A. Maintain approximately 900 linear feet of the existing farm road at Quenomica North and 550 linear feet of driveway at Quenomica South.

Objective 3: Designate Meetinghouse Way trailhead as the main trailhead for the Preserve.

Strategies:

- A. Instruct visitors in the land bank map and website to use the Meetinghouse Way trailhead as the primary access to the Preserve.
- B. Install a land bank logo marker on Meetinghouse Way to indicate the trailhead.

Objective 4: Create 2-vehicle trailhead east of the driveway at Quenonica South.

Strategies:

- A. Create trailhead off the existing driveway at Quenonica South.
- B. Create and designate one space for universal access.
 - a. Utilize an appropriate soil hardener and compaction tool.
- C. Designate one space for permitted hunters.

Objective 5: Create new trails as shown on the Project Maps.

Strategies:

- A. Create approximately 1,500 linear feet of universal access at Quenonica South from the trailhead to the point and an additional 250 linear feet of spur trail to access the duck blind and kayak landing area.
 - a. Make trail corridors eight feet wide with a maintained tread of 6 feet.
 - b. Site trails so that they are as unobtrusive as possible to nearby homes and sensitive wildlife habitat.
 - c. Minimize the cutting of trees in the creation of trails.
 - d. Allow staff discretion to close or relocate trails or add new trails, such as spur trails for off-property trail connections.
 - e. Use surface materials as needed to ensure proper tread.
 - f. Install raised boardwalk as use dictates, using light-penetrating grating where feasible.
 - g. Expand proposed trail system after the sandplain grassland restoration is complete to include a loop, if possible.
- B. Deter trespassing onto private abutting property.
 - a. Use native plant screening in collaboration with abutters where feasible.
 - b. Install symbolic fencing such as split-rail sections to close or prevent unauthorized off-trail use.
 - c. Install signage as needed.
- C. Mark trails with directional signs.
- D. Close unauthorized trails and install fencing where necessary to define public use areas.
- E. Check and maintain trails monthly.
- F. Maintain existing trail system in good condition.

Objective 6: Highlight and maintain existing views; expand as fitting.

Strategies:

- A. Install rustic benches where appropriate.
- B. Maintain existing open space through mowing and grazing.
- C. Install two viewing platforms utilizing light-penetrating decking, one being the duck blind.

Objective 7: Entertain possibilities for other trail links.

Strategies:

- A. Create new trails as necessary to connect the property to future conservation land and trail easements.
- B. Relocate trails if needed to connect to existing future trails and ways on abutting properties.

Objective 8: Manage dogs and horses on Preserve.

Strategies:

- A. Prohibit dogs on the Preserve year-round due to agricultural uses and conflicts with breeding wildlife such as otters and shorebirds.
- B. Post rules and educational signage regarding dogs and wildlife in appropriate locations.
- C. Permit horses on the trail system, excluding the universal access trail on the Quenomica South, providing erosion and trespassing concerns do not develop; encourage horse riders to bag or remove manure from trails.

Objective 9: Prohibit camping

Strategies:

- A. Prohibit camping on the Preserve unless special permission is granted for scouting and like groups, and if in compliance with appropriate town bylaws.
- B. Monitor the Preserve for squatters and remove unauthorized campers promptly.

C. Natural Products

Objective 1: Allow limited archery hunting (one hunter) and waterfowl hunting at Quenomica South.

Strategies:

- A. Notify the public of the hunting policy and season dates on the Preserve through the land bank website.
- B. Properly sign the Preserve hunting and property boundaries.
- C. Utilize a lottery system for both archery and duck hunting.
- D. Create a permanent duck blind platform with removable sides utilizing light-penetrating decking.
 - a. Consult with the land bank hunting committee as to the exact location of the duck blind.
 - b. Permit duck hunting in the blind for up to 3 individuals.
 - c. Prohibit access to the shoreline for hunting blinds with the exception of the designated blind area.
 - d. Close spur-trail to the duck blind for non-hunters during the

commonwealth waterfowl hunting season.

Objective 2: Allow gathering of natural products.

Strategies:

- A. Prohibit collecting of rare plants and wildlife on the Preserve.
- B. Encourage the gathering of permitted materials to occur within the immediate environs of the trail system, to avoid social trails and trampling of vegetation.

Objective 3: Lease 2.7 acres of agricultural fields at Quenomica North.

Strategies:

- A. Conduct public competition to lease agricultural fields.
- B. Mow or graze all open areas regularly, if not otherwise farmed, in order to forestall their conversion to shrubland or woodland.
- C. Allow temporary livestock shelters.
- D. Abide by the Ashakomaksett and Nature Conservancy deeded restrictions, where applicable.

Objective 4: Provide access to Edgartown Great Pond for fishing where applicable.

Strategies

- A. Provide fishing access to Quenomica South via the trailhead at 40-44 Meetinghouse Way and by bicycle.
- B. Direct fishing access to the pond via the kayak landing area.

Objective 5: Provide the Martha's Vineyard Shellfish Group (MVSG) access to Edgartown Great Pond from the Preserve to manage its oyster larvae operation remote site in the pond.

Strategies:

- A. Permit the MVSG to use the existing path near the caretaker's cottage to access its remote oyster larvae operation.

D. Land Administration

Oversee the Preserve on a regular basis; develop and maintain good relationships with residential neighbors, members of the community, visitors, and the town of Edgartown.

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

Strategies:

- A. Mark the property boundary on the land bank website and TrailsMV app.
- B. Install "end of public property" signs where appropriate.
- C. Install logo markers on property.
- D. Install gates or fencing as needed.
- E. Post map of property and trails on kiosks and websites as they are updated.

Objective 2: Maintain good relations with abutters and neighbors.

Strategies:

- A. Continue working relations with neighbors, the town of Edgartown, and its conservation commission.
- B. Monitor public use on the properties and address trespassing violations promptly.

Objective 3: Keep Preserve well-maintained.

Strategies:

- A. Clean up any litter which may occur.
- B. Promptly respond to problems reported by visitors or neighbors.
- C. Employ adequate staff to effectively implement land management goals.

Objective 4: Keep well-maintained boundaries.

Strategies:

- A. Locate, GPS, and mark corners of property.
- B. Install split-rail fence along southern boundary of Preserve.
- C. Walk boundaries annually.
- D. Post boundary flags where appropriate.
- E. 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: House on-premises caretaker/rangers.

Strategies:

- A. Maintain cottage for full-time year-round caretaker.
- B. Create vegetative buffer of native plant species to screen buildings from trail system, as necessary.
- C. Decommission cottage if deemed necessary.
- D. Maintain gate on access driveway of Quenomica South to be located south the trailhead.

Objective 7: Comply with all applicable regulations and agreements.

Strategies:

- A. Comply with Massachusetts endangered species act.
- B. File with the Edgartown conservation commission for activities proposed within resource areas and buffer zones of wetlands and districts of special planning concern zones.
- C. Comply with wetlands protection act and Edgartown wetland by-laws.
- D. Request recommendations from the Massachusetts historical commission regarding the proposed activities in the plan.
- E. Follow deed restrictions attached to the parcels at Quenomica North.
- F. Contribute, the land bank's share, to the Kanomika Road Association and the Old Farms Trail association, should one be chartered.

Literature Cited

- Avery, T. and H. Burkhart. 2002. *Forest Measurements*. McGraw-Hill, Boston, MA. 456 pp.
- Banks, C. E. 1911 (1966). *The History of Martha's Vineyard Dukes County Massachusetts*. Volume II. The Dukes County Historical Society, Edgartown, MA.
- Bennett, A.F., Haslem, A., Cheal, D.C., Clarke, M.F., Jones, R.N., Koehn, J.D., Lake, P.S., Lumsden, L.F., Lunt, I.D., Mackey, B.G. and Nally, R.M., 2009. Ecological processes: a key element in strategies for nature conservation. *Ecological Management & Restoration*, 10(3), pp.192-199.
- Douglass, W. (1747). *A summary, historical and political, of the first planting, progressive improvements, and present state of the British settlements in North-America: With some transient accounts of the bordering French and Spanish settlements*. Rogers and Fowle in Queen-street.
- Dukes County Registry of Deeds (DCRD), Books 1, 2, 3, 4, 36, 41, 44, 48, 51, 63, 67, 92, 99, 113, 117, 119, 163, 170, 173, 177, 179, 185, 227 (n.d.). Edgartown, MA; Dukes County Registry of Deeds.
- Dukes County Registry of Deeds (DCRD, Edgartown Proprietors Book: 22–28 (n.d.). Edgartown, MA.
- Dukes County Registry of Deeds (DCRD), Easement, Book 63: 105 (2004).
- Dukes County Registry of Deeds (DCRD), Municipal Lien Certificate, Book 71: 307 (2012).
- Dukes County Registry of Deeds (DCRD), Book 01628: 199 (2022).
- Dukes County Registry of Deeds (DCRD), Covenant, 48585 (2001).
- EPA. 2020. *Ecological Processes: What are the trends in the ecological processes that sustain the nation's ecological systems*. <https://www.epa.gov/report-environment/ecological-processes>
- Fagherazzi, S., Mariotti, G., Leonardi, N., Canestrelli, A., Nardin, W., & Kearney, W. S. 2020. Salt Marsh Dynamics in a period of accelerated sea level rise. *Journal of Geophysical Research: Earth Surface*, 125(8). <https://doi.org/10.1029/2019jf005200>
- Fedele, R. E. R. (2022, April 26). *Deacon Philip Taber*. Geni. Retrieved March 2023, from <https://www.geni.com/people/Deacon-Philip-Taber/6000000002665559965>
- Fletcher, P.C., Roffinoli, R.J. Soil Conservation Service (SCS). 1986. *Soil Survey of*

Dukes County, Massachusetts. United States Department of Agriculture

Gibb, T. 2018. Nutrients from septic systems can impact well and surface water. <https://www.canr.msu.edu/news/nutrients-from-septic-systems-can-impact-well-and-surface-water>

Glavin, W. F. (1984). (rep.). *MHC Reconnaissance Survey Town Report EDGARTOWN* (pp. 1–15). Edgartown, MA: Massachusetts Historical Commission.

Haines, B. (2018, September 25). *More to the story: A bit of duck hunting history*. Hutchinson Leader. Retrieved March 2023, from https://www.crowrivermedia.com/hutchinsonleader/news/entertainment/more-to-the-story-a-bit-of-duck-hunting-history/article_b9eb5971-7e5f-58b9-b883-b73d64b54880.html

Howes, B., Samimy, R., Schelezinger, D., Ramsey, J., & Eichner, E. 2007. (rep.). *Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Threshold for the Edgartown Great Pond System, Edgartown, MA* (Ser. Massachusetts Estuaries Project, pp. 1–9). Dartmouth, MA: University of Massachusetts.

Humphrey, T. (2023, January 6). *Coyote is spotted in Aquinnah*. The Vineyard Gazette - Community. Retrieved February 21, 2023, from <https://vineyardgazette.com/news/2023/01/06/coyote-spotted-aquinnah>.

Johnson, L. 2011. River Otter diet Analysis. Biodiversity Works internal publication.

Johnson, L. 2023. Personal communication.

Kulp, S.A. & B.H. Strauss. 2019. New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding. *Nature Communications* 4844: <https://doi.org/10.1038/s41467-019-12808-z>

Mackenzie, C. L., & Andrews, T. J. (1997). Origin of Fresh and Brackish-Water Ponds and Fish on the Vineyard. *The Dukes County Intelligencer*, 39(2), 59–75.

Massachusetts Historical Commission (MHC). (2001, June 20). EDG.504. Boston; Massachusetts Cultural Resource Information System.

Massachusetts Historical Society (MHS). (2011). *MV History Notes and Excerpts IV*. Petersham; Harvard Forest.

Mass.gov. 2023. <https://www.mass.gov/service-details/learn-about-river-otters>.

MassWildlife. (2017). *Living With Wildlife - Eastern Coyotes in Massachusetts*. MassWildlife.

- MVC. 2020. *Edgartown Great Pond 2020 M.V.C. Sampling Summary*. Oak Bluffs, MA; Martha's Vineyard Commission. Retrieved 2023, from chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/https://www.mvcommission.org/sites/default/files/docs/egp-2020-final_55349411.pdf.
- MVC. 2023. *Edgartown Great Pond*. Martha's Vineyard Commission. Retrieved February 17, 2023, from https://www.mvcommission.org/edgartown-great-pond
- New England Genealogical Society. 1906. *Vital Records of Edgartown Massachusetts in 1850*. Stanhope press, Boston MA
- NOAA. 2023a. What is eutrophication? National Ocean Service website, https://oceanservice.noaa.gov/facts/eutrophication.html
- NOAA. 2023b. *What is a salt marsh?* National Ocean Service. Retrieved February 17, 2023, from https://oceanservice.noaa.gov/facts/saltmarsh.html
- NOAA Fisheries. 2023. River Herring. https://www.fisheries.noaa.gov/species/river-herring#:~:text=Over%20the%20years%2C%20river%20herring,%2C%20pollution%2C%20and%20other%20factors.
- Oldale, R. N. (1992). *Cape Cod and the Islands: The Geologic Story*. Parnassus Imprints.
- Oliver, T. H., Heard, M. S., Isaac, N. J. B., Roy, D. B., Procter, D., Eigenbrod, F., Freckleton, R., Hector, A., Orme, C. D., Petchey, O. L., Proença, V., Raffaelli, D., Suttle, K. B., Mace, G. M., Martín-López, B., Woodcock, B. A., & Bullock, J. M. (2015). Biodiversity and resilience of ecosystem functions. *Trends in Ecology & Evolution*, 30(11), 673–684. https://doi.org/10.1016/j.tree.2015.08.009
- Pasakarnis, T. 2022. Wastewater. Cape Cod Commission. https://www.capecodcommission.org/our-work/wastewater/
- Pierce, R. A., & Segel, J. D. (2016). *Wampanoag families of Martha's Vineyard : the Wampanoag genealogical history of Martha's Vineyard, Massachusetts : volume I* (Vol. I). Genealogical Publishing Company.
- Proulx, D. (2023, February). *Coyote Talk with Dan Proulx*. West Tisbury; Massachusetts.
- Raesly, E.J., 2001. Progress and status of river otter reintroduction projects in the United States. *Wildlife Society Bulletin*, pp.856-862.
- Russell, J. (2023, February 10). Conversation with Mike MacKenty. personal.

Silverman, D. J. (2005). *Faith and boundaries: Colonists, Christianity, and community among the Wampanoag Indians of Martha's vineyard, 1600-1871*. Cambridge University Press.

Smith, R. S., Johnston, E. L., & Clark, G. F. (2014). The role of habitat complexity in community development is mediated by resource availability. *PLoS ONE*, 9(7). <https://doi.org/10.1371/journal.pone.0102920>

Swain, P. C. 2020. Classification of the Natural Communities of Massachusetts. Massachusetts Division of Fisheries and Wildlife, Westborough, MA.

Town of Edgartown, Town Record I: 6, 33, 109, 127, 128, 131, (n.d.). Edgartown, MA.

Walling, H. F. (1858). Map of the Counties of Barnstable, Dukes, & Nantucket, Massachusetts. *Martha's Vineyard Museum*. map.

draft

Appendix A: Locus, Topography and Site Management Maps

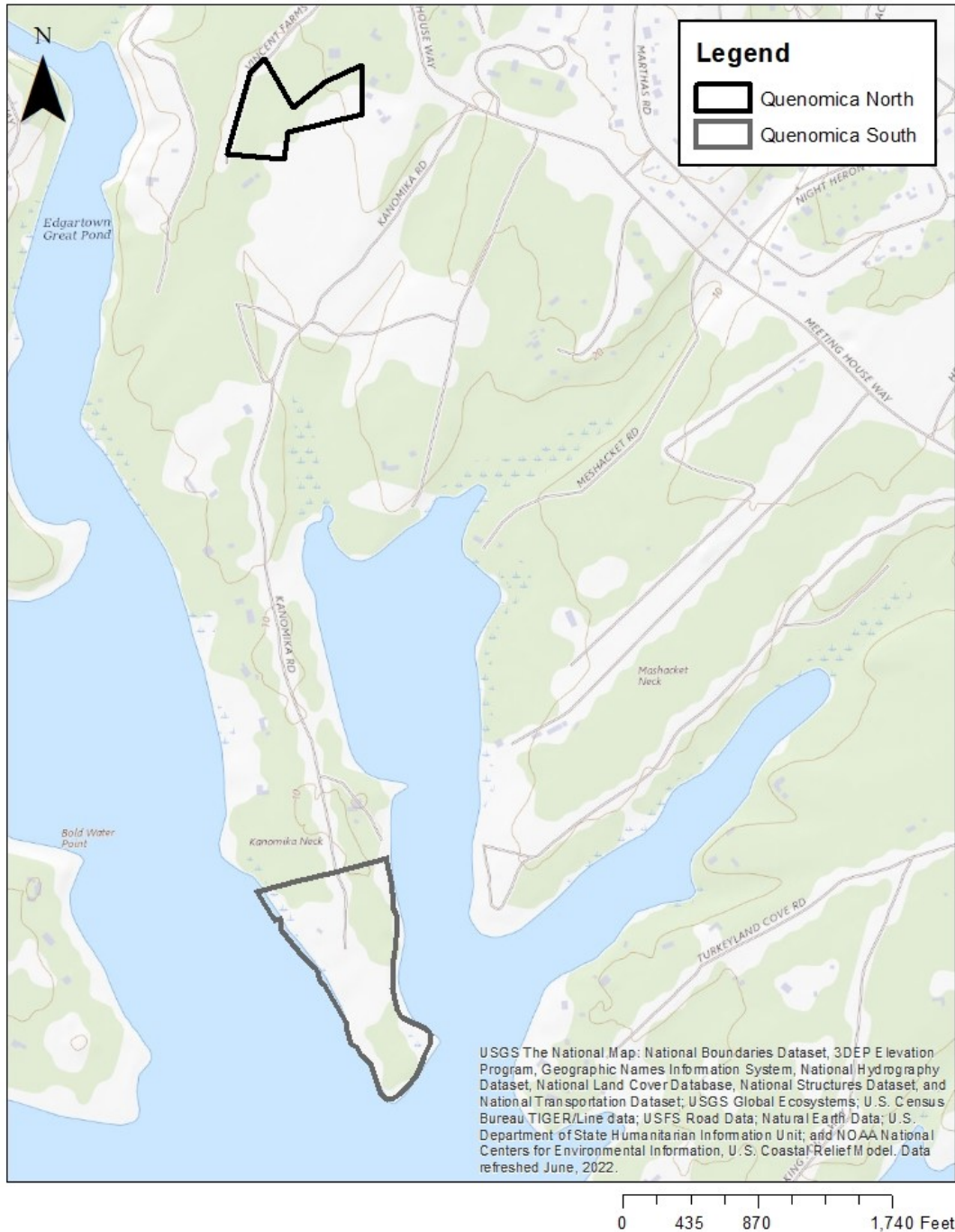
Map 10: Aerial image of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_2021Aerial_map_2023.jpg Date: February 3, 2023.

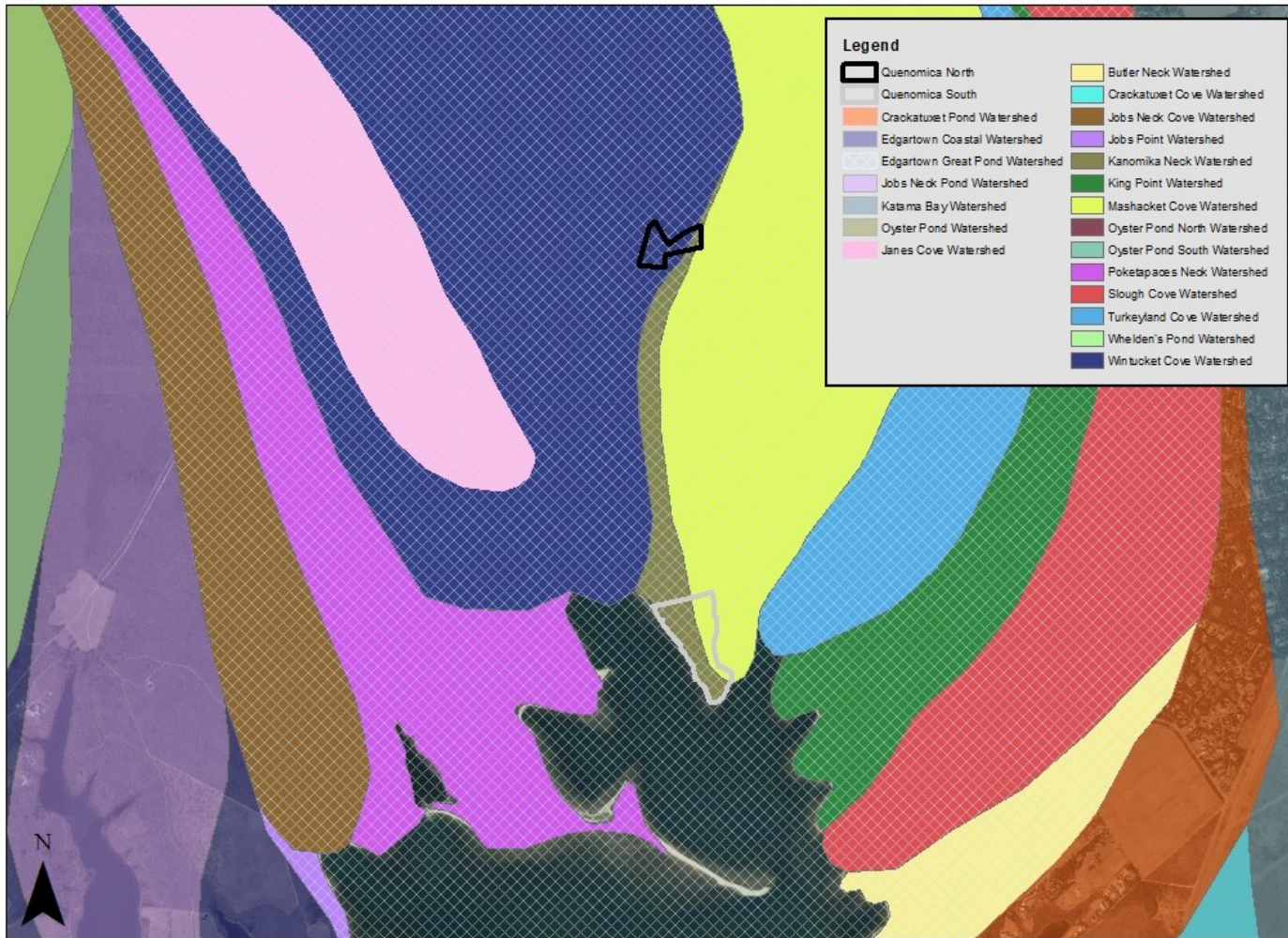
0 500 1,000 2,000 Feet

Map 11: Topographic Map of Quenomica Preserve, Edgartown, MA.

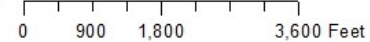


Note: Map prepared by the Martha's Vineyard Land Bank for planning purposes only. The land bank is not responsible for end-users interpretation of the map. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Topography_map_2023.jpg Date: February 6, 2023.

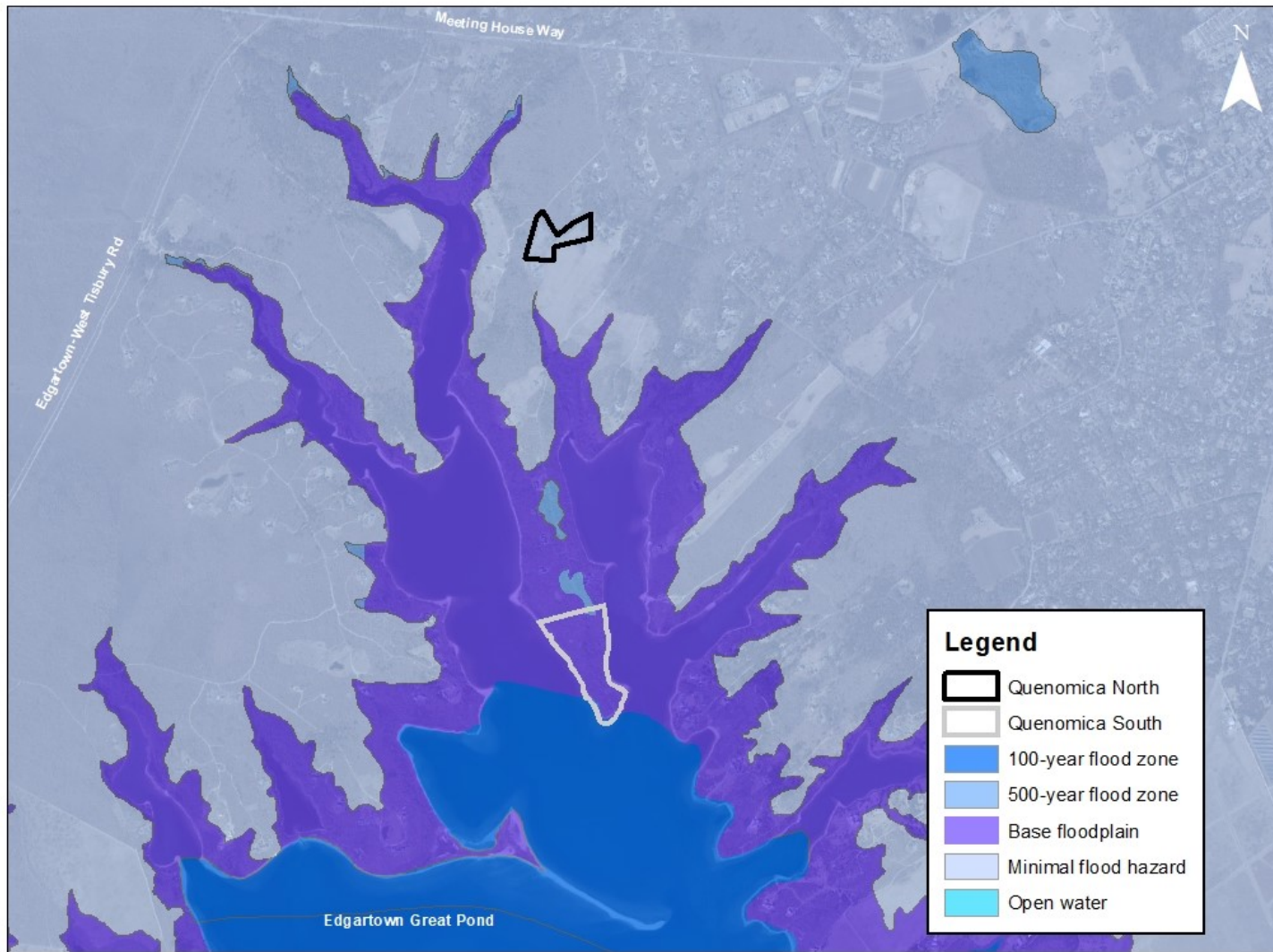
Map 12: Hydrologic map of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho photograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Hydrology_map_2023.jpg Date: February 6, 2023.



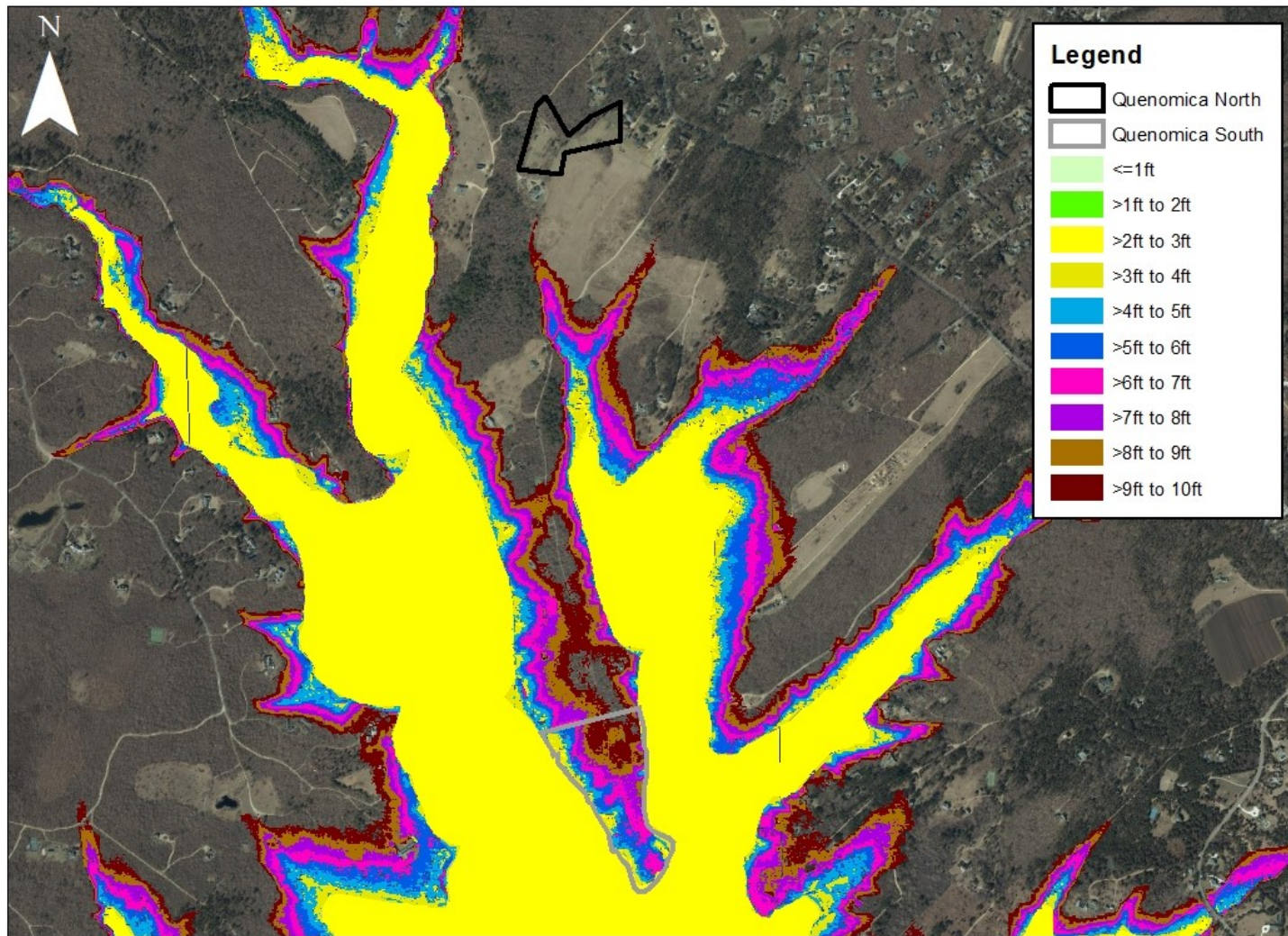
Map 13: Flood zones (FEMA 2016) of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, U S G S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_FEMAflood_map_2023.jpg Date: February 3, 2023.

0 875 1,750 3,500 Feet

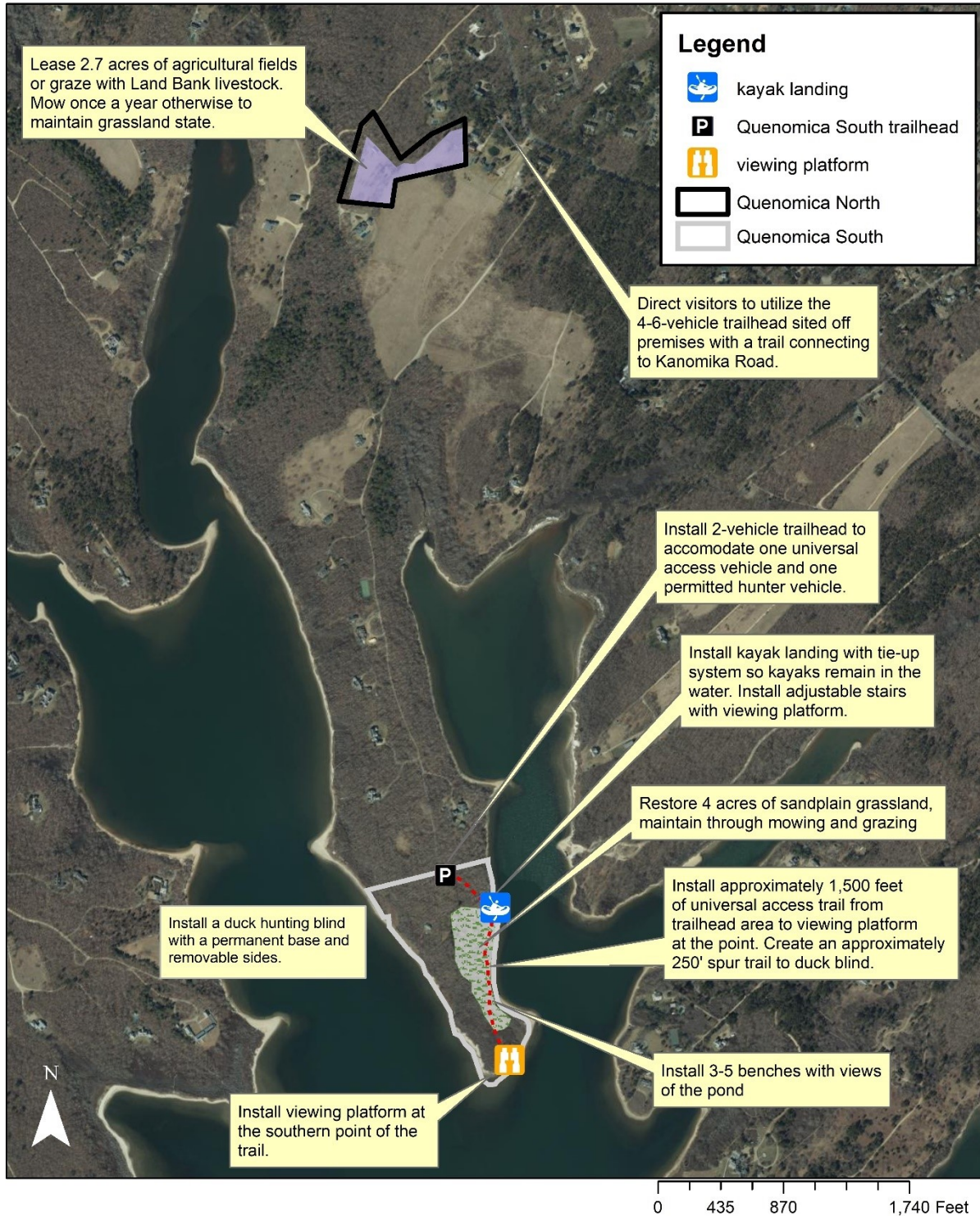
Map 14: Sea level rise scenarios and the resulting impact zones of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_2021Aerial_map_2023.jpg Date: February 3, 2023.

0 550 1,100 2,200 Feet

Map 15: Proposed project planning map of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_ProjectPlanning_map_2023.jpg Date: March 14, 2023.

Appendix B. Surveys, Deeds and Preliminary Management Plan Goals

Preliminary Management Plan Goals for Quenomica South follow.

December 17, 2021



Martha's Vineyard Land Bank Commission

Quenomica Point Preserve *preliminary management plan*

<i>acreage</i>	20.8 acres
<i>tax parcel nos.</i>	43-5
<i>nature conservation goals</i>	<ol style="list-style-type: none">(1) conduct biological survey of property to serve as base for formulation of management objectives(2) identify rare and endangered species, if any, and create plan to protect and encourage their populations; manage any exotic and/or invasive species(3) examine suitability of property for grassland and/or savanna restoration
<i>natural products goals</i>	<ol style="list-style-type: none">(1) allow fishing(2) seek recommendation of hunting subcommittee as to fitting hunting policy, with predisposition to allow deer and waterfowl hunting
<i>recreational goals</i>	<ol style="list-style-type: none">(1) site loop trail that capitalizes on property's various scenic features; install benches at viewpoints and elsewhere(2) allow swimming and boating and like riparian uses(3) install kayak landing in appropriate location; prohibit overnight storage of any craft

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

printed on recycled paper

2

- (4) create on-premises trailhead accommodating ± 7 vehicles, subject to regular review as to appropriateness and staffed as needed; seek to establish an off-premises trailhead near the public road to provide alternative to using the access road
- administrative goals*
- (1) oversee and police land on regular basis in order to maintain property as an attractive conservation area
 - (2) house a year-round caretaker in the existing house, winterizing it as necessary, in order to provide consistent oversight
 - (3) supply to abutters contact information for land management team and confer regularly as to effectiveness of management plan and staffing

approved by vote of the Edgartown town advisory board: December 17, 2021

approved by vote of the land bank commission: December 13, 2021

Deeds

The complete deeds to Quenonica South are attached below. These deeds can also be found in the Dukes County office of Recorded and Registered Lands (<https://www.masslandrecords.com/Dukes/>).

Bk: 01615 Pg: 598

MARTHA'S VINEYARD LAND BANK FEE		
PAID	\$0.00	
EXEMPT	A	<i>M. McManus</i>
64566	02/25/2022	
NO.	DATE	CERTIFICATION

Quitclaim Deed

I, **John O'Keefe**, of Dover, Massachusetts, a married man,

in consideration of **Eight Million Dollars (\$8,000,000.00)**

grant to **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, with any buildings and improvements thereon situated in Edgartown, Dukes County, Commonwealth of Massachusetts, comprising about 16 acres, known as the Quenonica Club Property, bounded on the east, south and west by Edgartown Great Pond and on the north by the land owned now or formerly by Jeremiah G. MacKenty and Katharine M. Bigelow.

For Title, see deed dated December 21, 1977, recorded in the Dukes County Registry of Deeds, in Book 353, Page 231.

Subject to and together with all easements, restrictions, and rights of way, if any, insofar as the same may be in force and applicable.

The premises are not used as a principal residence and is therefore not homestead property pursuant to M.G.L. c.188.

Property Address: Quenonica Point
Edgartown, MA 02539

Witness my hand and seal this 24th day of February, 2022.

Executed in the presence of

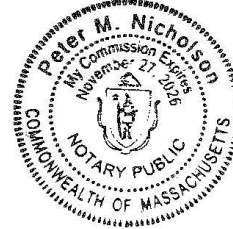
[Signature]
Witness *[Signature]* **John O'Keefe**

Dukes County, ss. Commonwealth of Massachusetts

On this 24th day of February, 2022, before me, the undersigned Notary Public, personally appeared **John O'Keefe**, proved to me through satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose name is signed above, and acknowledged to me that he signed it voluntarily for its stated purpose; and acknowledged the foregoing instrument to be his free act and deed before me.

[Signature]
Notary Public

My Commission Expires: 11/27/26



ATTEST: Paulo C. DeOliveira, Register

Preliminary Management Plan Goals for Quenomica North follow.

March 7, 2022



Martha's Vineyard Land Bank Commission

Quenomica Preserve [expansion]
preliminary management plan

<i>acreage</i>	13.6 acres
<i>tax parcel nos.</i>	27-8.14, 27-8.15, 27-8.18 and 27-8.19
<i>nature conservation goals</i>	<ol style="list-style-type: none">(1) conduct biological survey of property to serve as base for formulation of management objectives(2) identify rare and endangered species, if any, and create plan to protect and encourage their populations; manage any exotic and/or invasive species(3) consider erecting greenhouse, for the propagation of native species to be planted on various land bank properties across the island
<i>natural products goals</i>	<ol style="list-style-type: none">(1) decline to permit hunting, given nearby development and preserve's configuration(2) lease fields for grazing in accordance with land bank policy, unless needed by the land bank for its own livestock
<i>recreational goals</i>	<ol style="list-style-type: none">(1) create, if feasible, trail that integrates into nearby trail system
<i>scenic goals</i>	<ol style="list-style-type: none">(1) manage existing open areas as grasslands(2) remove any structures or facilities deemed superfluous

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

printed on recycled paper

2

administrative goals

- (1) oversee and police land on regular basis in order to maintain property as an attractive conservation area
- (2) site land bank offices and work-shop where suitable in existing buildings
- (3) consider erecting hoophouse(s) or like structure(s) for overwintering or kidding land bank livestock; consider housing livestock manager in existing farmhand cottage
- (4) house land bank employees — year-round and/or seasonal — in the various existing housing units
- (5) install trailhead to serve long-distance hikers, viz., those heading south to Quenomica Point or north to Morning Glory Farm

approved by vote of the Edgartown town advisory board: March 3, 2022

approved by vote of the land bank commission: March 7, 2022

Deeds

The complete deeds to Quenomica North are attached below. These deeds can also be found in the Dukes County office of Recorded and Registered Lands (<https://www.masslandrecords.com/Dukes/>).

MARTHA'S VINEYARD LAND BANK FEE
 PAID \$ _____
 EXEMPTS A
 6411 NO. 3/21/22 DATE MH CERTIFICATION



Quitclaim Deed

Property Address: 25 Old Farms Trail, Edgartown, MA 02539

We, **Ellen A. Harley, Trustee of The Amended and Restated Ellen A. Harley Revocable Trust**, u/d/t dated January 17, 2014, for which trust a Certificate of Trustee Pursuant to M.G.L. c. 184 § 35 is filed with the Dukes County Registry of Land Court (the "Registry") as Document No.79038, and **Edwin W. Harley, Trustee of The Amended and Restated Edwin W. Harley Revocable Trust** u/d/t dated January 17, 2014, for which trust a Certificate of Trustee Pursuant to M.G.L. c. 184 § 35 is filed in the Registry as Document No.79039, (collectively, the "Grantors") in consideration of Seven Hundred Thousand and 00/100 Dollars (\$700,000.00) paid, grant to **Martha's Vineyard Land Bank Commission**, a corporate body politic, with a mailing address of P.O. Box 2057, Edgartown, MA 02539, with quitclaim covenants,

The land with the improvements, if any, thereon located in the Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts, bounded and described as follows:

- | | | |
|---------------|----|---|
| NORTHEASTERLY | by | Lot 31 on hereinafter mentioned plan, three hundred eighty-eight and 81/100 (388.81) feet; |
| SOUTHEASTERLY | by | Lots 31 & 33 on said plan, two courses together measuring two hundred eighty-three and 82/00 (283.82) feet; |
| SOUTHWESTERLY | by | Lot 32 on said plan, three hundred seventy-three and 81/100 (373.81) feet. |
| NORTHWESTERLY | by | the middle line of a Way (40.00' Wide) as shown on said plan, five hundred forty-nine and 27/100 (549.27) feet. |

Being **Lot 38** on Land Court Plan No. 19226-K, Sheet 1, filed with Certificate No. 11049, Book 59, Page 113 at the Registry.

The premises are conveyed together with the right to use for all purposes for which public streets and ways are used in the Town of Edgartown, including utilities, the above-referenced forty foot wide subdivision road, as shown as "Way - (40.00 Wide)" and situated on the westerly and northwesterly portion of the subdivision shown on the Plan.

The premises are further conveyed subject to the Ashakomaksett Farm Association Declaration of Protective Covenants and Restrictions dated June 28, 2001, filed with the Registry as Document No. 48685.

Excluded from this conveyance are all appurtenant rights in and to (i) the real property known as Lot 35 shown on Land Court Plan 19226-K (sheet 2 of 2) filed with the Registry and (ii) the real property known as Lot 15 shown on Land Court Plan 19226-E filed with the Registry to access to Edgartown Great Pond, and park vehicles in connection therewith, which appurtenant rights are hereby released and terminated.

Except as otherwise provided above, the premises are further conveyed subject to and with the benefit of all rights, rights of way, easements, appurtenances, reservations, and restrictions of record, insofar as the same are in force and applicable.

Grantors hereby certify, under the pains and penalties of perjury, that the premises conveyed herein is vacant land, and is therefore not homestead property pursuant to M G L ch. 188.

For Grantors' title see deed dated May 9, 2014, filed with the Dukes County Registry of the Land Court as Document No. 79037 as shown on Certificate No. 13700.

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

Executed as a sealed instrument this 24 day of March, 2022.

The Amended and Restated Ellen A. Harley Revocable Trust

Ellen A. Harley
Ellen A. Harley, Trustee

The Amended and Restated Edwin W. Harley Revocable Trust

Edwin W. Harley
Edwin W. Harley, Trustee

State/Commonwealth of South Carolina
County of Charleston ss

On this 24th day of March, 2022 before me, the undersigned notary public, personally appeared Ellen A. Harley, ~~proved to me~~ through satisfactory evidence of identification, which was personal knowledge / driver's license / passport / other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose, and swore or affirmed to me that the contents of the document with respect to homestead rights are truthful and accurate to the best of her knowledge and belief as Trustee of The Amended and Restated Ellen A. Harley Revocable Trust.

C B Hankins
Notary Public
State of South Carolina
My Commission Expires
October 12, 2025

C B Hankins
Notary Public
My commission expires:

State/Commonwealth of South Carolina
County of Charleston ss

On this 24th day of March, 2022 before me, the undersigned notary public, personally appeared Edwin W. Harley, Grantor, proved to me through satisfactory evidence of identification, which was personal knowledge / driver's license / passport / other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose, and swore or affirmed to me that the contents of the document with respect to homestead rights are truthful and accurate to the best of his knowledge and belief as Trustee of The Amended and Restated Edwin W. Harley Revocable Trust.

C B Hankins
Notary Public
State of South Carolina
My Commission Expires
October 12, 2025

C B Hankins
Notary Public
My commission expires:

MARTHA'S VINEYARD LAND BANK FEE
 PAID \$ _____
 EXEMPTS A
64710 3/21/22 MH
 NO. DATE CERTIFICATION


 2022 00092048
 Bk: 83 Pg: 291 Cert: 15296
 Doc: DEED 03/31/2022 01:17 PM

Quitclaim Deed

I, **Ellen A. Harley**, of Charleston, SC (the "Grantor") in consideration of Four Million Two Hundred Thousand and 00/100 Dollars (\$4,200,000.00) paid, grant **Martha's Vineyard Land Bank Commission**, a corporate body politic, with a mailing address of P.O. Box 2057, Edgartown, MA 02539, with quitclaim covenants,

The land with the improvements, if any, thereon located in the Town of Edgartown, County of Dukes County, Commonwealth of Massachusetts, bounded and described as follows:

A parcel of unimproved land situated on the southeasterly side of a certain forty (40') foot wide subdivision road that intersects with Meetinghouse Road in Edgartown, County of Dukes County, Commonwealth of Massachusetts, and being more particularly shown as **Lot 31** on a plan entitled "Plan of Land in Edgartown, Mass. Being a Subdivision of Lot 23 L.C.P.19226 - I Scale: 1" = 120" July 18, 2000" drawn by Schofield, Barbini & Hoehn, Inc., as approved by the Land Court, filed in the Land Registration Office as Plan 19226-K, a copy of a portion of which is filed in the Dukes County Registry District of the Land Court (the "Registry") with Certificate of Title No. 3853 (the "Plan"), to which plan reference is hereby made for a more particular description thereof.

The premises are conveyed together with the right to use for all purposes for which public streets and ways are used in the Town of Edgartown, including utilities, the above-referenced forty foot wide subdivision road, shown as "Way- (40.00 Wide)" and situated on the northwesterly portion of the subdivision depicted on the Plan.

The premises are conveyed subject to a Deed of Conservation Restrictions to The Nature Conservancy dated December 15, 2004, filed with the Registry as Document No. 77374.

The premises are further conveyed subject to the Ashakomaksett Farm Association Declaration of Protective Covenants and Restrictions dated June 28, 2001, filed with the Registry as Document No. 48685.

Excluded from this conveyance are all appurtenant rights in and to (i) the real property known as Lot 35 shown on Land Court Plan 19226-K (sheet 2 of 2) filed with the Registry and (ii) the real property known as Lot 15 shown on Land Court Plan 19226-E filed with the Registry to access to Edgartown Great Pond, and park vehicles in connection therewith, which appurtenant rights are hereby released and terminated.

Except as otherwise provided above, the premises are further conveyed subject to and with the benefit of all rights, rights of way, easements, appurtenances, reservations, and restrictions of record, insofar as the same are in force and applicable.

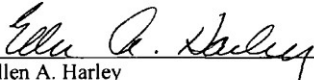
Property Address: 19 Old Farms Trail, Edgartown, MA 02539

Grantor hereby certifies, under the pains and penalties of perjury, that the premises conveyed herein is vacant land, and is therefore not homestead property pursuant to M G L ch. 188.

For Grantor's title see deed dated December 10, 2004, filed with the Registry as Document No. 62080 as shown on Certificate No. 11739.

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

Executed as a sealed instrument this 24 day of MARCH, 2022.


Ellen A. Harley

State/Commonwealth of South Carolina
County of Charleston ss

On this 24th day of March, 2022 before me, the undersigned notary public, personally appeared Ellen A. Harley, who proved to me through satisfactory evidence of identification, which was personal knowledge / driver's license / passport / other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose, and swore or affirmed to me that the contents of the document with respect to homestead rights are truthful and accurate to the best of her knowledge and belief.

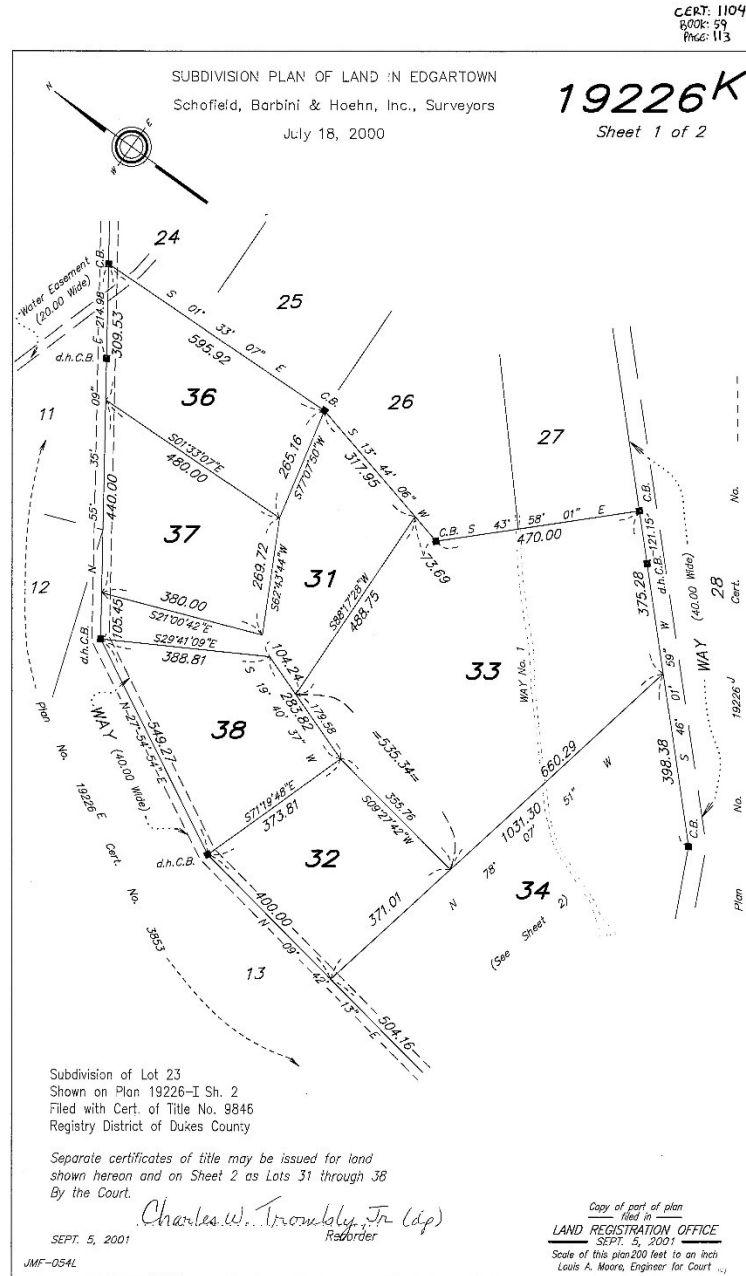
C B Hankins
Notary Public
State of South Carolina
My Commission Expires
October 12, 2025

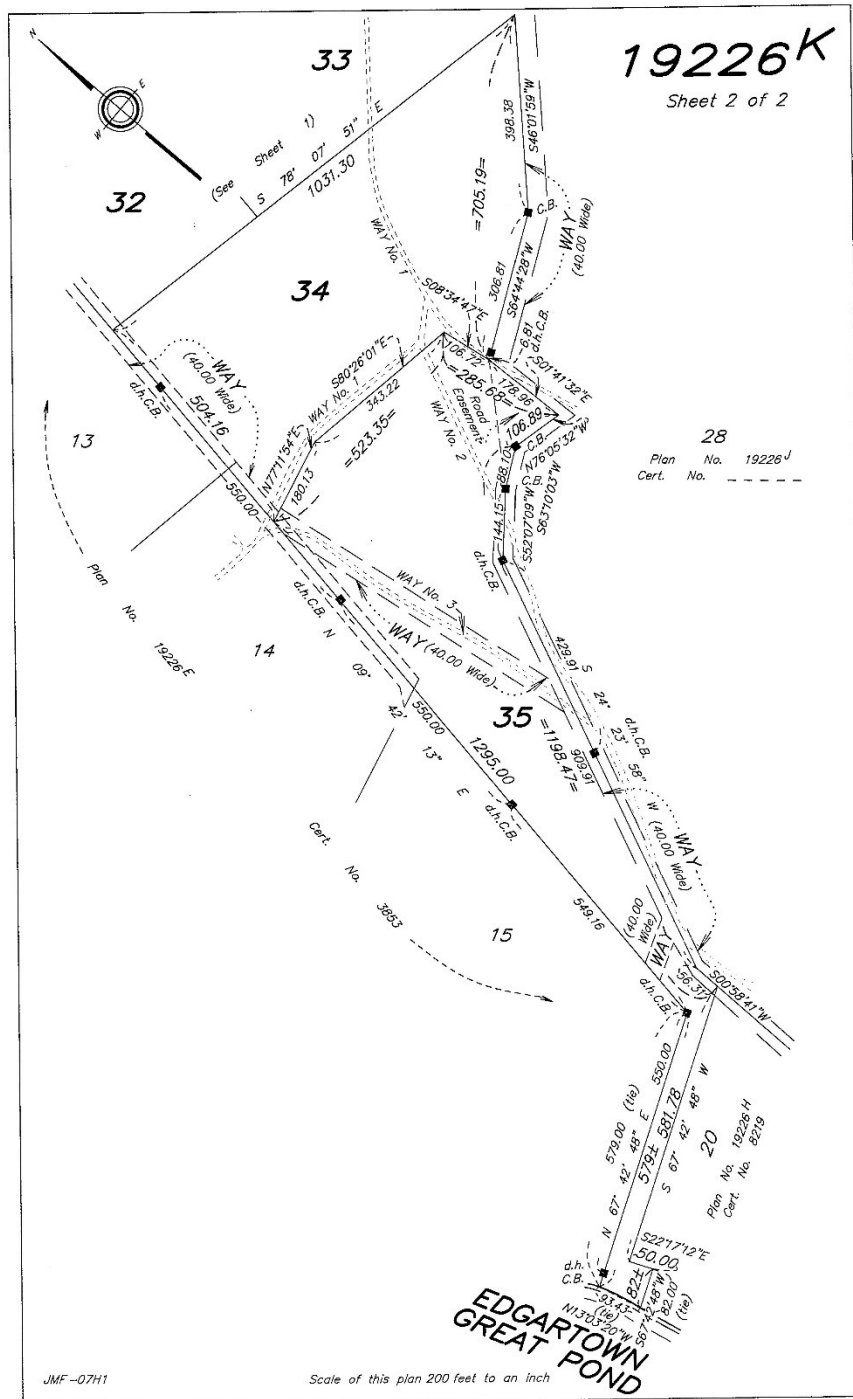


Notary Public
My commission expires:

Survey

Survey's of Quenonoma North are attached as follows and can also be found in the Dukes County office of Recorded and Registered Lands (<https://www.masslandrecords.com/Dukes/>).





Covenants and Restrictions

Covenants and Restrictions pertaining to Quenomica Preserve are attached as follows and can also be found in the Dukess County office of Recorded and Registered Lands (<https://www.masslandrecords.com/Dukes/>).

217 01

REGISTERED LAND
DOCUMENT NO. 48685

**ASHAKOMAKSETT FARM ASSOCIATION
DECLARATION OF
PROTECTIVE COVENANTS AND RESTRICTIONS**

ON THIS ~~5th~~ ^{June} day of ~~April~~, 2001, the undersigned, JEREMIAH G. MACKENTY, as the OWNER or DECLARANT of the land, consisting of eight lots with improvements thereon, situated in the Town of Edgartown, County of Dukess County, Commonwealth of Massachusetts (the "Property") and being more particularly shown on a plan entitled "Plan of Land in Edgartown, Mass. Being a Subdivision of Lot 23 L.C.P. 19226-I Scale: 1" = 120' July 18, 2000 Schofield, Barbini & Hoehn, Inc. Civil Engineers & Land Surveyors P. O. Box 339, 97 State Rd., Vineyard Haven, MA 02568" which is to be filed with the Land Court (the "Plan")

AND

ESTABLISHES the **ASHAKOMAKSETT FARM ASSOCIATION**, a voluntary homeowners' association (hereinafter the "Association"), to be governed by the By-Laws, set forth below for the general purposes of providing for the Property and its residents a private and safe residential neighborhood, including the "Right of Way - 40FT. Wide" along the northwesterly side of the Property and the way known as "Kanomika Road", on the southeasterly side of the Property, each as shown on the Plan (the "Ways")

AND FURTHER

DECLARE, PROVIDE and COVENANT on behalf of himself, his, heirs, successors and assigns, that the Property shown on the Plan and each and every lot thereon (the "Lots" or "Lot") shall be subject to all the provisions of this Declaration, all of said provisions, covenants and restrictions to run with the land, to benefit all the land shown on the Plan and to be managed through the Association by the owners of Lots shown on the Plan.

LAND COURT, BOSTON. The land herein described will be shown on our approved plan to follow as

JUL 10 2001

Plan 19226-K Lot 5-31-38
(EXAMINED AS TO DESCRIPTION ONLY)
Louis A. Moore, Engineer

LM

247 02

SECTION 1
ASSOCIATION BY-LAWS

Section 1.1 - Organization in General

- A. Membership. Each fee owner of a Lot shown on the Plan (hereinafter a "Lot Owner") shall automatically become a member of the Association, and the membership of a Lot Owner shall terminate when he or she ceases to be a Lot Owner, with such membership automatically transferred to his or her successor in interest. All present and future Lot Owners, mortgagees, lessees and occupants of Lots and their employees, and any other persons who may use in any manner any part of the premises shown on the Plan, are subject to this Declaration. Membership shall be appurtenant to and not separated from any Lot.
- B. Association Management. The Association shall be managed by the Lot Owners acting through a Board of Managers.
- C. Fiscal Year. The fiscal year of the Association shall begin on January 1 of each year.

Section 1.2 - Board of Managers

- A. Board of Managers. The Association shall be managed by the Lot Owners acting through a Board of Managers consisting of a General Manager, a Treasurer and a Secretary. Any three positions may be occupied by one and the same person but a Lot Owner must occupy at least one position. In the absence of the General Manager or in instances where the General Manager is unable to act, the Treasurer shall act in his or her place. In the absence of the Treasurer or in instances where the Treasurer is unable to act, the Secretary shall act in his or her place.
- B. Powers and Duties. The Board of Managers shall act for and on behalf of the Association in all matters, other than matters required by law or these By-Laws to be decided by the Lot Owners. The Board shall have the powers and duties necessary for the administration of the affairs of the Association, and may do all things related thereto except those specifically restricted by law or by these By-Laws. Such powers and duties of the Board shall include, but not be limited to, the following:

247 03

- i. Operation, care, upkeep, repair and maintenance of the Ways and any common utilities serving the Lot Owners, to the extent not performed by any public utility or any governmental body; and oversight of those obligations, including maintenance of the field, imposed upon the Lot Owners by the Town of Edgartown and the Martha's Vineyard Commission as part of the approval of the Plan.
 - ii. Collection of assessments from the Lot Owners and to seek reimbursement from any other person or association having a joint obligation to or right in the Ways or the said common utilities.
 - iii. Employment and dismissal of personnel and firms generally appropriate to the operation and affairs of the Association.
 - iv. Prepare a proposed annual budget, for all anticipated costs and expenses to be incurred in the ensuing fiscal year.
 - v. Open bank accounts on behalf of the Association and designating the signatories required therefor.
 - vi. Bringing or compromising claims or conducting litigation as to any course of action involving the Association or involving the subdivision, or arising out of the enforcement of this Declaration.
 - vii. Maintenance of such liability and other insurance relating to the operations of the Association, the Ways and other matters as the Board of Managers shall deem appropriate.
 - viii. To certify matters of fact relating to the Association or this Declaration.
- C. Term, Election, Resignation and Removal. Each member of the Board of Managers shall be elected by majority of votes by the Lot Owners at the annual meeting of Lot Owners, and those so elected and qualified shall together constitute the Board of Managers. Each person so elected shall serve until their successor has been elected and qualified. If any member of the Board of Managers resigns, the remaining Managers shall appoint a successor to serve until the next annual meeting. At any regular or special meeting of Lot Owners, any one or more members of the Board of Managers may be removed by an affirmative vote of a majority of the Lot Owners, and a successor or successors shall thereafter be elected. The first General Manager, Treasurer and Secretary shall be Jeremiah G. MacKenty.
- D. Board Meetings, Quorum and Voting. With reasonable notice, meetings of the Board may be held at such time and place as shall be determined from time to time by the majority of the members of the Board. At all meetings of the Board, a majority of the members of the Board shall constitute a quorum for the transaction of business. The votes of a majority of the members of the Board present and voting at such meeting shall constitute the decision of the Board.

247 04

- E. Consent in Lieu of Meeting. Any action to be taken by the Board of Managers may be taken without a meeting if, after notice to all its members, the requisite assent to the action as evidenced by a writing is filed with the records of the Association. Such assent shall be treated for all purposes as a vote at a meeting.
- F. Compensation of Board Managers. No member of the Board of Managers shall receive any compensation from the Association for acting as such.
- G. Liability of Board of Managers: Indemnification; Self Dealing. The members of the Board of Managers shall not be liable to the Lot Owners for any mistaken judgment, negligence, or otherwise, except for their own individual willful misconduct or bad faith. The members of the Board of Managers shall have no personal liability with respect to any contract made by them on behalf of the Association or any act taken by them in connection with the performance of their duties hereunder. The Lot Owners shall indemnify and hold harmless each of the members of the Board of Managers against all liability arising out of contracts made or the acts or omissions by the Board of Managers on behalf of the Association, unless involving willful misconduct or bad faith. The Board of Managers or any member thereof may contract with the Association without liability for self-dealing. The Board of Managers may contract with any Manager or Lot Owner, or any affiliate of any such person, provided such Manager or Lot Owner shall act in good faith and on reasonable arms length commercial terms and the disinterested Managers approve the contract in advance. The liability of the Lot Owners arising out of any act or neglect of the Board of Managers, or of any Manager or Managers, shall be a common expense. Every agreement made by the Board of Managers or by a Manager on behalf of the Association shall provide that the members of the Board of Managers or a Manager, as the case may be, are acting only as agent for the Lot Owners and shall have no personal liability thereunder.
- H. Limitation of Liability Extended to Others Acting for the Association. Any person appointed by the Board of Managers or any of its Managers to perform any function on behalf of the Association, shall have the same protections as enumerated in Section 1.2 G, above as if said appointee or appointees were themselves members of the Board of Managers.

Section 1.3 - Lot Owners

- A. Meetings. Annual meetings of all Lot Owners shall be held in Edgartown, Massachusetts at 9:00 AM on the first Sunday in August of each year or at such other place or time as the Board of Managers may direct by reasonable

247 05

notice to all Lot Owners. At such meeting, any pending Board of Manager elections, adoption of the proposed budget, as it may be amended at the annual meeting, and all other business of the Association shall be conducted or transacted as may properly come before them. The General Manager may call a special meeting of the Lot Owners when directed by the Board of Managers, or upon the presentation to any member of the Board of a petition giving the reason therefor signed by at least three Lot Owners. The Secretary shall give notice of each annual meeting and any special meeting to each Lot Owner by mail, telephone or by any other means requested by a Lot Owner but only if the Secretary is easily able to accommodate such other request. Said notice shall be given not less than five but not more than thirty days prior to such meeting and shall include the purposes of said meeting. Notice tendered in good faith as herein provided shall be considered notice served. Notwithstanding the preceding provisions, any or all of the Lot Owners may participate in such meetings by or conduct the meeting through the use of any available means of communication by which all participating may simultaneously see or hear the words of each other during the meeting and examine all relevant documents presented. Lot Owners participating in a meeting by this means are deemed to be present in person at such meeting as if personally present.

- B. Membership voting. One vote shall be allocated to each Lot. Each Lot Owner, or some other entity or person who need not be a Lot Owner designated by such Lot Owner in writing to act as proxy on his or her behalf, shall be entitled to cast the vote appurtenant to such Lot at all meetings of Lot Owners. The vote of a Lot owned by more than one person or entity may not be split and shall be counted, if a proxy is executed or the vote is cast, as if such vote is unanimous by all owners of record for such Lot. However, notwithstanding the preceding sentence, in the case of Lots owned by natural persons, either individually or as co-tenants, the vote of such Lot may be cast, or the proxy therefor executed, by any single Owner of said Lot and, in such case, the Association shall be entitled to assume that such vote or proxy represents the unanimous vote of all the Owners of such Lot. Except as otherwise provided in these By-Laws, the presence of any person or by proxy of Lot Owners representing a majority of Lots as shown on the Plan shall constitute a quorum at all meetings of Lot Owners. A two-thirds (2/3rds) vote of Lot Owners at a meeting at which a quorum is present shall be binding upon all Lot Owners for all purposes except where these By-Laws require a different percentage vote.
- C. Consent in Lieu of Meeting. Any action to be taken by the Lot Owners may be taken without a meeting, if, after notice to all the Lot Owners, the required assent to the action as prescribed in this Declaration is evidenced by a writing

247 06

filed with the records of the Association. Such assent shall be treated for all purposes as a vote at a meeting.

SECTION 2
DESIGN & USE RESTRICTIONS

Section 2.1- General

- A. No structures or improvements shall be erected, modified, placed, allowed to stand or made to any Lot unless, in each instance, the same comply with the terms and provisions of these Design & Use Restrictions. A certificate executed by the Board of Managers shall conclusively establish compliance with the terms and provisions of this Section 2. Nothing herein shall impose upon any Lot or owner thereof any requirement of architectural review or pre-approval for use of a particular Lot.

Section 2.2- Construction Limitations

- A. All structures and improvements shall be erected, modified, placed, allowed to stand or made to any Lot in compliance with all by-laws, codes and statutes of the Commonwealth of Massachusetts and the Town of Edgartown.
- B. Development of lots and structures and improvements thereon within the Ashakomaksett Farm Association shall conform to the following:
- i. All buildings and structures placed or erected on any Lot and all managed turf, lawns, landscaping and cutting of existing natural vegetation (except for driveways and utilities) shall occur within a development area, as defined below (the "Developed Area"). For Lots without building envelopes, the Developed Area shall be limited to three-fourths (3/4) of an acre, exclusive of driveways and utilities. Lots with building envelopes, the Developed Area shall be within the building envelopes as shown on the Sketch Plan attached hereto as Exhibit "A" (the "Sketch Plan"). For Lots with one building envelope, the Developed Area shall be limited to three fourths (3/4) of an acre, exclusive of driveways and utilities. For Lots with two building envelopes, the Developed Area, exclusive of driveways and utilities, shall be limited to three-quarters (3/4) of an acre for one building envelope and one-half (1/2) acre for the second building envelope

247 07

- ii. The managed turf areas on each Lot shall be limited, in the aggregate, to twenty-five hundred (2,500) square feet, and that organic fertilizers and pesticides only shall be used on the managed turf areas; however, unfertilized native grassland shall not be considered as managed turf and may be planted within the Developed Area to extend the vistas. The term organic fertilizers shall be as defined in the decision of the Martha's Vineyard Commission dated December 14, 2000 and registered with the Dukes County Registry District Office of the Land Court as Document No. 47286, as it may be amended from time to time.
- iii. Each individual lot shall be served by an individual on-site, advanced treatment de-nitrification septic system as approved by the Board of Health.
- iv. Lots 28, 29, 30 and 31 shall not have greater than five (5) bedrooms per lot. Lot 35 shall not in the aggregate have greater than eight (8) bedrooms. Lots 32, 33 and 34 shall not have greater than thirteen (13) bedrooms which bedrooms shall be allocated by the owner(s) of said Lots 32, 33 and 34. As used herein, "bedroom" shall be the same as defined by Title V of the State Environmental Code (310 CMR 13.000, et seq.). From time to time, the owners of two or more lots may, among themselves, redistribute the bedrooms allocated pursuant to the foregoing, provided that notice of same, signed by all affected Lot Owners is filed with the Dukes County Registry District Office of the Land Court.
- v. The nitrogen loading limit for the entire Property shall be one hundred twelve (112) kilograms (246 pounds) of nitrogen per year as calculated from all sources, including septic systems, lawns, landscaping and farming activities. No Lot Owner shall do or cause anything which will have the effect of increasing the nitrogen loading limit as to such Lot beyond the allocable nitrogen loading limit for such Lot. The allocable nitrogen loading limit for each lot shall be equal to the sum of the following, where "x" is the number of bedrooms allowed under subparagraph iv, above, to each lot: $112\text{kg}(x/41)$.

Section 2.3 - Maintenance of the Field

- i. The existing field (the "Field") shown on the Sketch Plan shall be maintained by the respective owners of the Lots upon which it is located as it has been historically used and maintained, or for other purposes consistent with agriculture and open space, all such use being within the nitrogen loading limits established herein; provided, however, that nothing herein shall limit the following improvements in and to the field:

247 08

underground septic systems, wells, fencing for the purposes of containing farm animals, expansion of the field and maintenance of the existing irrigation well.

- ii. The agricultural crops within the Field shall be limited to legumes, hay or pasture, which may be fertilized with nitrogen once every five (5) years or otherwise as per the Decision of the Martha's Vineyard Commission dated December 14, 2000 and filed with the Dukes County Registry District of the Land Court as Document No. 47286.

Section 2.4 - Miscellaneous Prohibitions

- A. No garage shall be used for the storage of heavy commercial vehicles or construction equipment except for tractors or other such farm equipment.
- B. No commercial activities of any nature shall be conducted upon any lot, except, however, use of space as a home office within the living area of a dwelling provided same generates no foot traffic and is in conformity with all governmental regulations.
- C. No trailer, mobile home, camper, temporary building or structure of any kind shall be used as a residence, either temporarily or permanently.
- D. No trailer, mobile home, commercial vehicles, excluding pick-up trucks and passenger cars, construction equipment, permanent tent or similar structure or equipment shall be kept, placed or maintained upon any Lot in such a manner as to be visible from neighboring property. Provided, however, that the provisions of this paragraph shall not apply to the temporary construction of shelters or facilities maintained during and used exclusively in connection with the construction of any improvement on a Lot.
- E. No rubbish, debris, heavy brush of any kind shall be permitted to accumulate upon any Lot which will or may render the same or any portion thereof unsanitary, unsightly, offensive or detrimental to any Lot except for such reasonable temporary storage.
- F. No advertising signs, notices, plaques or other signs shall be displayed on any Lot except for signs regarding no trespassing, no hunting, directional, and signs identifying the owner of a Lot.
- G. No Lot Owner or occupant shall make such disturbing noise on his Lot or do or permit anything to be done thereon which will interfere with the comfort

247 09

of other Lot Owners or their occupants, provided, however, that as part of maintenance of the field and enhancement of the conservation resources of the Property, prescribed burning shall be specifically permitted.

SECTION 3
FUNDS AND ASSESSMENTS

Section 3.1- Operating Fund

The Board of Managers shall establish an operating fund for the Association into which shall be deposited all monies paid to the Association and from which disbursements shall be made in performing the functions of the Association under this Declaration.

Section 3.2- Regular Assessments

At least thirty (30) days prior to the annual meeting, the Board shall prepare and mail to each member a proposed budget for the Association reflecting the estimate of the expenses to be incurred by the Association during the upcoming fiscal year (January 1 through December 31) in performing its functions under this Declaration. At the annual meeting, the Lot Owners shall adopt, or modify and adopt the budget proposed by the Board of Managers. The budget shall provide for an allocation of costs for maintenance of the two Ways and the various common utility lines between those Lots having access to a particular Way or utility line. The budget so adopted shall be divided by the total number of Lots, whether or not improved, and the resulting amount shall be assessed to each Lot Owner as of the first day of such fiscal year or at some other date as determined by the Board.

Section 3.3- Special Assessments

If, at any time during any fiscal year, the regular assessment proves inadequate for any reason, the Board, by unanimous vote, may levy a special assessment as of such date as it may determine in the amount of such actual or estimated inadequacy, which amount shall be assessed to the Lot Owners.

Section 3.4- Payment of Assessments

All assessments shall be due and payable within thirty (30) days after the date of assessment unless some later date is designated by the Board. All owners of Lots shall be liable for all assessments levied upon them pursuant to this Declaration without any right of set-off or counterclaim.

Section 3.5- Reimbursement Assessment

The Board shall levy a reimbursement assessment against any Lot Owner where, as a result of that Lot Owner's failure to comply with the provisions of this Declaration or due to that Lot Owner's neglect or misuse of the Ways, monies are expended by the Association to cure the non-compliance or make such repairs. Such assessment shall be limited to the amount so expended but may include reasonable attorney's fees. Such assessment shall be due and payable to the Association when assessed by the Board.

Section 3.6- Enforcement of Assessments

Assessments levied hereunder together with interest thereon and all reasonable costs of collection thereof, including reasonable attorney's fees, shall be a charge on the Lot and shall constitute a continuing lien upon said Lot against which such assessment is made from the time the payment thereof became due, and shall also be the joint and several obligation of the Lot Owner.

Any assessment not paid within thirty (30) days after the due date shall bear interest from the due date at the rate of 1.5 percent per month (or any maximum lesser rate allowed by law).

The Association may bring an action at law against the owner personally obligated to pay the same, or foreclose the lien against the subject Lot. The Association may enforce each such lien by selling any Lot subject thereto in the manner provided by law for the foreclosure of mortgages containing a statutory power of sale, provided that notice of the commencement of such proceedings is duly filed for recording in the Dukes County Registry of Deeds within two years of the date on which payment becomes due and so long as said assessment or any portion thereof remains unpaid.

The lien for the assessments provided for herein shall be subordinate to the lien of any first mortgage. Sale or transfer of any Lot pursuant to mortgage foreclosure or any proceeding in lieu thereof, shall extinguish the lien on the Lot, but not the obligation of the Owner assessed, for such assessments as to payments which became due prior to such sale or transfer. No sale or transfer shall relieve such Lots or the owners thereof from liability for any assessments thereafter becoming due or from the lien thereof.

Section 3.7- Certificate

At the request of any Lot Owner or mortgagee of a Lot Owner, the Board of Managers or any one of its members, shall certify in writing and in recordable

247 11

form, as to whether all assessments made hereunder against such Lot Owner's lot or the mortgagee thereof, are paid, or, if unpaid, the amount outstanding. Any such certification may be relied upon as conclusively establishing the matters certified therein and shall be binding upon the Association.

SECTION 4
MISCELLANEOUS PROVISIONS

Section 4.1- Amendment

Except as otherwise herein expressly provided, this Declaration may be amended at any time by a vote or written consent thereto, to adopt the proposed amendment by a three-fourths (3/4) majority of the Lot Owners. Amendment of this Declaration shall not be effective until there has been filed and recorded with the Dukes County Registry District Office of the Land Court a certificate signed by the Secretary setting forth the amendment and the facts relating to its adoption by the Board and the Lot Owners. However, no such amendment shall be adopted which impacts some but not all Lots without the written consent of the owners of the Lot Owners so impacted.

Section 4.2- Duration of Restrictions

These Protective Covenants and Restrictions shall continue and remain in full force and effect in all events until thirty (30) years from this date, and may thereafter be extended and continued in full force and effect for further periods of twenty (20) years each, in the manner provided in Massachusetts General Laws Chapter 184, Section 28, as it may be amended from time to time.

Section 4.3- Enforcement

The terms and provisions of this Declaration are for the benefit of all the land described herein and shall run with the land. Except as otherwise provided herein, any Lot Owner or the Association, acting by and through its Board of Managers, shall have the right to enforce any or all of the provisions of this Declaration.

Section 4.4 - Choice of Law; Unenforceability

This Declaration shall be subject to the laws of the Commonwealth of Massachusetts and must be exclusively enforced in an action brought in the trial court of the said Commonwealth. No requirement in this Declaration shall be deemed to be waived by reason of any failure to enforce same. If any provision

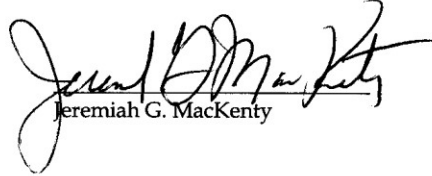
247 12

of this Declaration is found to be unenforceable, this shall not impair or affect in any manner the validity, enforceability or effect of the balance of these instruments.

Executed as a sealed instrument as of the date first above written.



Stephen Mark Wickers



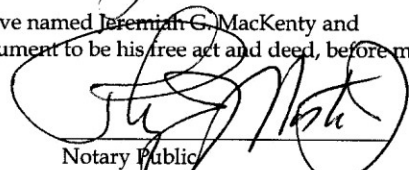
Jeremiah G. MacKenty

COMMONWEALTH OF MASSACHUSETTS

Dukes Count, ss.

June 28, 2001

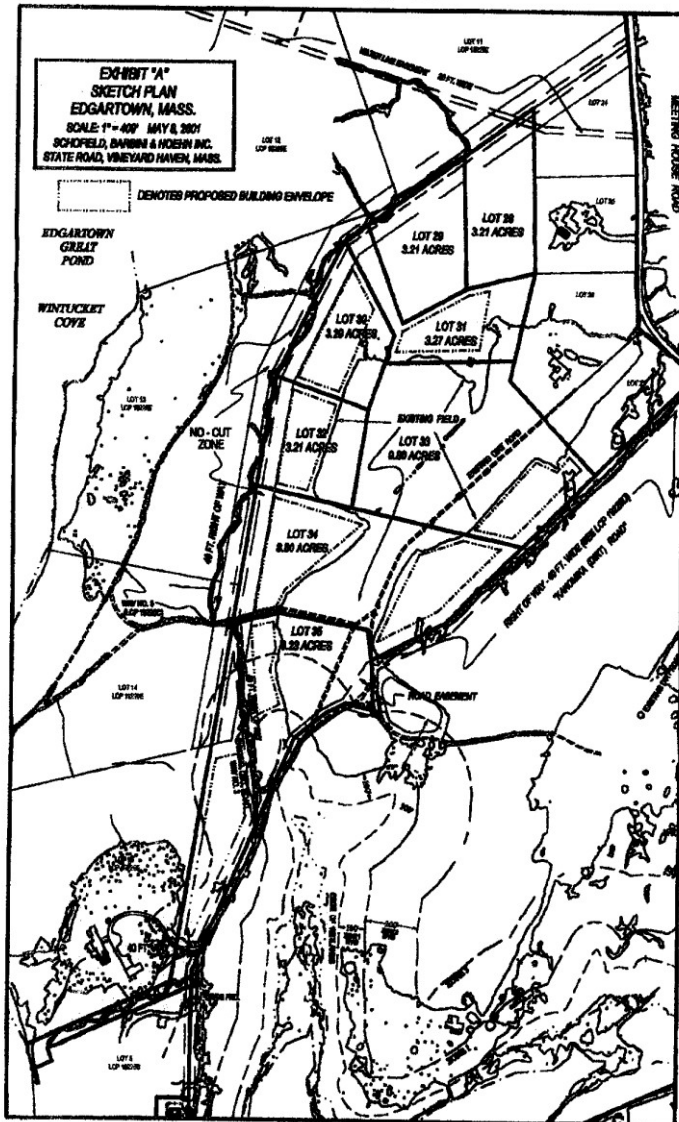
Then personally appeared the above named Jeremiah G. MacKenty and acknowledged the foregoing instrument to be his free act and deed, before me,



Notary Public

My Commission Expires:

April 26, 2007



Dukes Registry District

RECEIVED FOR REGISTRATION
September 17, 2001 11:50 A.M.
NOTED ON CERTIFICATE NO 3853
REGISTRATION BK 20 PG 380


2004 00062081
Bk: 00063 Pg: 105 Cert: 11739
Doc: RESTR 12/15/2004 04:13 PM

DEED OF CONSERVATION RESTRICTIONS

EDGARTOWN, MASSACHUSETTS

THIS DEED OF CONSERVATION RESTRICTIONS is made on the ¹⁶15 day of December, 2004 by Ellen A. Harley, having an address at 23 Wentworth Street, Charleston, SC 29401, on behalf of her heirs, successors and/or assigns ("Grantor") in favor of the THE NATURE CONSERVANCY, a non-profit charitable corporation incorporated under the laws of the District of Columbia and qualified to do business and in good standing in the Commonwealth of Massachusetts, with a Massachusetts address at 205 Portland Street, Suite 400, Boston, MA 02114-1708 and a principal address at 4245 North Fairfax Drive, Arlington, Virginia 22203 ("Grantee" or "The Nature Conservancy").

I. BACKGROUND FACTS

WHEREAS, Grantor is the sole owner in fee simple of approximately 3.27 acres of real property located on 19 Old Farms Trail, off Meeting House Way in the Town of Edgartown, Dukes County, Massachusetts, known as Lot 31 on a plan (the "Plan") prepared by Schofield, Barbini and Hoehn, Inc, dated July 18, 2000, as approved by the Land Court, and filed in the Dukes County Registry District Office of the Land Court as Plan No. 19226-K (the "Property"); and

WHEREAS, Grantor wishes to convey Conservation Restrictions over the Property so that the Property shall remain predominantly in or be restored to its natural and scenic state in perpetuity; and

WHEREAS, Grantor and Grantee desire to preserve the natural, scenic and open space values of the Property; to protect the watershed and water quality of Edgartown Great Pond; to protect globally rare sandplain grasslands, shrublands, heathlands, and other natural communities; to promote the protection of native habitats; to increase the populations of native animals, birds, insects and other species; to prevent habitat fragmentation and to promote restoration of native grasslands, shrublands and heathlands (all of the foregoing, collectively, the "Conservation Values"); and

WHEREAS, Grantor and Grantee intend to enhance the Conservation Values of the Property by minimizing the scale and number of structures thereon; managing and restoring the native natural communities on portions of the Property; prohibiting the introduction of and providing for the removal of certain invasive plant species; prohibiting the use of synthetic fertilizer and the application of biocides, herbicides or pesticides without the Grantee's prior approval and encouraging the use of native plants in landscaping and restoration; and

WHEREAS, Grantor desires to convey the following conservation restrictions in perpetuity (the "Conservation Restriction"), and Grantee has determined it to be desirable and beneficial to enforce this Conservation Restriction in order to protect the Property's Conservation Values while permitting uses of the Property that do not impair its Conservation Values and are not inconsistent with the purpose of this Conservation Restriction;

NOW, THEREFORE, in consideration of the above and the mutual covenants, terms,

conditions and restrictions contained herein, and pursuant to the laws of the Commonwealth of Massachusetts, in particular Sections 31-33 of Chapter 184 of the General Laws, Grantor hereby voluntarily grants and conveys to Grantee and its successors and permitted assigns, with Quitclaim Covenants, the Conservation Restriction in perpetuity over the Property of the nature and character and to the extent set forth below.

II. PURPOSE

Grantor and Grantee recognize the Conservation Values of the Property and share the common goal of protecting these Conservation Values. Therefore, except as provided for herein, the Property is not to be improved with structures or other improvements, will be retained in a primarily natural and open condition, and threatened or endangered plants and animals that may exist will be protected.

III. DEFINITIONS

The following words when used in this instrument, unless the context shall prohibit, shall have the following meanings:

- A. **BASELINE REPORT:** The report prepared by Grantee and kept on file at the offices of Grantee, with a copy to the Grantor, which report sets forth the condition of the Property as of the Effective Date of this Conservation Restriction and is intended to serve as an objective information baseline for monitoring compliance with and implementation of the terms of this Conservation Restriction, as more particularly described in Article VII.R hereof.
- B. **CONSERVATION VALUES:** As defined in Article I.
- C. **IMPROVEMENT:** Any structure or improvement of any kind, including, without limitation, interim or temporary improvements.
- D. **INVASIVE PLANT SPECIES:** Those species set forth on **Exhibit A** attached hereto, as the same may be amended from time to time by Grantee in the good faith exercise of its professional judgment.
- E. **PLAN:** The plan prepared by Schofield, Barbini and Hoehn, Inc, dated July 18, 2000, as approved by the Land Court, and filed in the Dukes County Registry District Office of the Land Court as Plan No. 19226-K.

IV. RIGHTS OF GRANTEE

- A. **Enforcement.** Grantor hereby grants the following rights to Grantee:
 - (1) Grantor grants the right to Grantee to prevent Grantor, or any persons (whether or not claiming by, through, or under Grantor), from conducting any activity on or use of the Property that is inconsistent with the Purpose of this Conservation Restriction and is not otherwise a permitted act, use or activity under Article VI, and to require that Grantor, or any other

persons, restore such areas or features of the Property that may be damaged by their inconsistent activity or use, as more particularly set forth herein;

- (2) Grantor grants the right to Grantee to enter upon the Property at reasonable times, in a reasonable manner and after prior reasonable written notice to the Grantor, in order to monitor Grantor's compliance with and otherwise enforce the terms of this Conservation Restriction, at least once annually. Grantee in the exercise of its entry rights under this subparagraph shall not unreasonably interfere with Grantor's quiet enjoyment of the Property. In consideration of these and all other rights of entry included in this grant, Grantee hereby releases and agrees to hold harmless, indemnify, and defend Grantor from and against any and all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, demands, orders or judgments, including reasonable attorneys' fees, arising from or in any way connected with damage or injury resulting from any such entry onto the Property;
- (3) Grantor grants the right to Grantee to obtain injunctive and other equitable relief against any claimed violations, including without limitation relief requiring removal of offending structures, plants, or animals and any other activity required to bring about restoration of the Property to the condition that existed prior to any such claimed violation (it being agreed that there would be no adequate remedy at law);
- (4) Grantor grants the right to Grantee to enforce this Conservation Restriction in the case of breaches by Grantor or any other persons (whether or not claiming by, through, or under Grantor) by appropriate legal and equitable proceedings, after providing Grantor with reasonable written notice and a reasonable opportunity to cure.

B. Cost of Enforcement. Grantor shall be liable for all costs incurred in enforcing the provisions of this instrument including, but not limited to, reasonable attorneys' fees and any costs of restoration, if Grantee prevails in its effort to enforce, unless such costs are incurred as a result of claims made or restoration required from persons not claiming by, through or under the Grantor. Should Grantee fail in its effort to enforce then Grantee shall be liable for all costs incurred by Grantor in defending against said effort to enforce, including, but not limited to costs and reasonable attorneys' fees.

C. Forbearance Not a Waiver. Enforcement of the terms of this instrument shall be within the discretion of Grantee. Any forbearance by Grantee to exercise its rights under this Conservation Restriction in the event of any violation of any term of this instrument shall not be deemed or construed to be a waiver of any subsequent violation of the same or any other term of this instrument or of any of the rights created by this instrument. No delay or omission by Grantee in the exercise of any right or remedy upon any violation shall impair such right or remedy or be construed as a waiver.

D. Acts Beyond Grantor's Control. Nothing contained in this instrument shall be construed to entitle Grantee to enforce its provisions to bring any action against Grantor or any persons (whether or not claiming by, through, or under Grantor) for any injury to or change in the Property resulting from causes beyond Grantor's or any persons' control, including, without limitation, fire, flood, storm and earth movement, or for any prudent action taken or withheld by Grantor or any persons under emergency conditions to prevent, abate, or mitigate significant injury to the Property or persons resulting from such causes.

V. PROHIBITED ACTS, USES AND IMPROVEMENTS

A. The following, acts, uses and Improvements are expressly forbidden on, over or under the Property, except as otherwise provided herein. There shall be:

- (1) No constructing or placing any building, guest house, storage building, landing strip, mobile home, swimming pool, tennis court or similar recreation area or impervious surface, asphalt or concrete pavement, outside antennae, aerial, satellite dish, television camera or other device for the transmission or reception of electromagnetic or other signals, fencing (other than any existing fence or stone walls), boardwalk or platform, hard-surfaced footpath, utility pole, conduit, telephone line, power or other utility line, tent or camp equipment, shack, container or trailer for temporary or permanent use, external fuel tank or fuel storage device, statuary or ornamental structure, lawn furniture, sign, billboard or other advertising display or any other temporary or permanent structure or facility of any kind upon, above or below the Property.
- (2) No commercial, commercial recreational, or industrial uses of the Property of any kind, whether or not limited to the Property or open to the general public.
- (3) No substances or materials, or refuse, trash, vegetation cuttings, soil, gravel, sand or other bulk material, vehicle bodies or parts, rubbish, debris, junk, or unsightly or offensive material shall be placed, stored, or dumped at any time on, in or under the Property. No storage of boats, docks, or other portable equipment on the Property.
- (4) No plowing, rototilling, excavation, dredging, mining or removing of loam, peat, gravel, sand, rock, hydrocarbons, soil or other mineral resource or natural deposit from the Property. No removal or relocation of any existing stone walls on the Property.
- (5) No introduction of non-native species of animals or plants on the Property and no cutting or destruction of trees, shrubs or other vegetation on the Property.
- (6) No polluting, altering, depleting, diverting, channeling, damming, draining, extracting or manipulating the hydrologic regime of any surface

and/or ground water, or activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation or preservation or restoration of wildlife habitat.

- (7) No placing, filling, spraying, storing, or dumping on or applying to the Property of any synthetic fertilizers or biocides (including but not limited to, fungicides, insecticides and herbicides, as defined under applicable federal or state law), whether natural or synthetic, or any toxic or hazardous substance or other substances or materials, or any “bug zappers,” except the Grantee may use biocides, pesticides or herbicides with the permission of Grantor to control or remove Invasive Plant Species, pests, or disease outbreaks, such use to be by the narrowest spectrum, least persistent material appropriate for the target species and subject to all applicable laws and regulations.
- (8) No keeping of animals other than domesticated pets, and farm animals may only be kept in accordance with Section VI.A.(7).
- (9) No hunting, taking, trapping or killing of birds, animals, or invertebrates on, over, under, or in the Property except with respect to hunting or trapping on the Property by Grantee for species management or scientific research purposes, with the prior written permission of the Grantor.
- (10) No artificial lighting, except limited exterior lighting within the Building Envelope, defined below in section VI. A. (1), provided it is reasonably employed for safety or lighting of passage ways and is shaded so as not to project skyward.
- (11) No further subdivision or partitioning of the Property, or use of any portion of the Property to gain subdivision approval for adjacent property owned by Grantor or others on or following the Effective Date of this grant provided however the Property may be combined, in whole or in part, with other adjacent property the effect of which does not increase the total number of lots.

VI. PERMITTED ACTS, USES AND ACTIVITIES

The prohibitions of Article V notwithstanding, Grantor and Grantee reserve the following rights, uses and activities on and over the Property, subject to such conditions or limitations as may be imposed by law, ordinance, or governmental regulation.

A. Grantor’s Permitted Acts, Uses and Activities.

- (1) A 10,000 square foot Building Envelope in the location shown on the Sketch Plan attached hereto as Exhibit “B” is hereby established (the “Building Envelope”). The location of the Building Envelope may be modified with the prior written approval of the Grantor and the Grantee provided that no structure or other permanent improvement is located outside

of the Building Envelope following such modification. In the event of such modification, a new sketch plan showing the relocated Building Envelope shall be filed with the Dukes County Registry District of the Land Court together with a certificate signed by Grantor and Grantee. Within the Building Envelope, Grantor may construct, maintain, replace or alter one single-family house (subordinate to a house on abutting property that may now or in the future be owned by the Grantor), with a footprint at grade of not more than 1,300 square feet, and an exterior height of not more than 25 ½ feet above mean natural grade to any roof ridge line, with total livable floor space not to exceed 2,600 square feet, exclusive of basements. Part or all of such structure may also be devoted to equipment storage, workshop space, and/or stalls for not more than eight horses. The structure's exterior shall be weathered natural materials, and/or painted in dark tones of natural colors, except that windows and doors, including their casings, may be painted to match then existing abutting structures owned by the Grantor. The structure shall be reasonably screened by trees from view from abutting properties not owned by Grantor. Gardens, lawns, patios and decks shall not exceed, in the aggregate, 2,500 square feet of area. A de-nitrifying septic system is required. The septic system and/or well may be located outside of the building envelope if necessary. Grantor shall, thirty days prior to beginning any construction, give notice to Grantee, in the manner provided for herein, of any planned construction on the Property.

- (2) Landscaping only with plants native to Martha's Vineyard, as listed in "The Flora of Martha's Vineyard", published by the Martha's Vineyard Sandplain Restoration Project, and planting of legumes, hay and pasturage. Other plants may be approved by the Grantee in writing, provided that the Grantee reasonably determines such plants are not invasive or otherwise detrimental to the Conservation Values, which approval shall not be unreasonably withheld.
- (3) The installation and maintenance of a septic system, water supply well, and water lines, electric, telephone and television lines, and other necessary utilities, all of which shall be located underground, and all of which shall be permitted only to the extent necessary to support the permitted structure. Installation, maintenance, and use of a ten foot wide, unpaved dirt or gravel driveway to the structure described above is permitted.

Installation and maintenance of sight pervious fencing, to be constructed of natural materials and unpainted or painted in dark shades of natural colors, shall be permitted for the safe containment of animals. Grantor shall, thirty days prior to beginning construction of any such utilities or improvements, give notice to Grantee, in the manner provided for herein. Nothing in this subparagraph (3) shall limit or prohibit exercise by others of all rights and easements previously existing in and to the Premises.

- (4) Excavation or removal from the Property or deposition on the Property of soil, gravel or other mineral resource or natural deposit, but only as may be incidental to any uses permitted in this Article VI., or any other permissible uses of the Property.
- (5) Selective mowing and cutting of trees, shrubs, grasses, and other vegetation for the following purposes: (a.) fire protection or safety; (b.) removal of dead, diseased, and downed trees; (c.) maintaining woodlands; (d.) maintaining and expanding pasture or grazing areas; (e.) restoration of native natural communities; (f.) maintaining existing view channels; (g.) providing domestic firewood for use on the Property or on abutting property now or in the future owned by the Grantor; and (h.) removal of invasive plant species. Cutting of trees and mowing shall be consistent with maintenance and restoration of native natural communities.
- (6) Outdoor non-commercial and non-motorized recreational activities, including, without limitation, walking, birding, nature study, picnicking, bicycling, cross country skiing, horseback riding, hunting, and other non-commercial recreational activities that are consistent with maintenance and restoration of native natural communities, and do not adversely impact the Conservation Values of the Property. No right of public access to any portion of the property arises directly from this Conservation Restriction.
- (7) Keeping and grazing of up to eight traditional farm animals, including horses, consistent with sound animal husbandry practices; Grantor shall obtain Grantee's written consent before grazing more than eight farm animals, which consent shall not be unreasonably withheld, provided that the then available grazing area is adequate to support such additional farm animals.
- (8) Any use or activity not specifically prohibited in this instrument is permitted on the Property provided such use or activity is consistent with the purpose of this Conservation Restriction, consistent with maintenance and restoration of native natural communities, and does not adversely impact the Conservation Values of the Property.

B. Grantee's Permitted Acts, Uses and Activities.

- (1) Ecological field research and related activities, including monitoring, inventories, and collection of species and natural communities, with prior written notice to Grantor.
- (2) Protection, restoration, and management of biodiversity, including, with prior written notice to Grantor, protection of rare species and natural communities, removal of exotic species, trapping, vegetation management, planting or seeding of native species, occasional mowing, and other management activities in accordance with Grantee's management policies and practices. Any prescribed

burning shall require Grantor's prior written permission, which may be granted or withheld in Grantor's sole discretion.

- (3) With the prior written permission of Grantor, which permission shall not be unreasonably withheld, selective mowing or cutting of trees, shrubs or other vegetation on the Property, when such mowing or cutting is required to (i) manage rare species habitat, (ii) manage or restore native grassland and other natural communities, or (iii) remove invasive plant species.
- (4) There is hereby granted to the Grantee the right twice annually, at reasonable times and in a reasonable manner, and following prior notice to Grantor, to enter the property and conduct guided and organized noncommercial natural history walking tours for the purpose of public and private education. Such entry shall be conducted in a manner so as to avoid disturbing Grantor's privacy and quiet enjoyment of the Property and other abutting property now or in the future owned by the Grantor. Grantee agrees to indemnify and hold harmless Grantor against any and all liability resulting from said interpretive walking tours in the absence of willful, wanton or reckless conduct by said Grantor.

C. Discretionary Consent.

Grantee's consent for activities otherwise prohibited in Sections V. or VI. above, may be given under the following conditions and circumstances. If, owing to unforeseen or changed circumstances, any activities prohibited or possibly so prohibited are deemed desirable by Grantor and Grantee, Grantee may, in its sole discretion, give permission for such activities, subject to the limitations herein. Such requests for permission shall be in writing. Grantee may give its permission only if it determines, in its sole discretion, that such activities (1) do not violate the purpose of this Conservation Restriction and (2) either enhance or do not impair the conservation values of the Property. Notwithstanding the foregoing, the Grantee and Grantor have no right or power to agree to any activities that would result in the termination of this Conservation Restriction or that would cause it to fail to qualify as a valid easement under the requirements of Section 170(h) of the Internal Revenue Code governing "Qualified Conservation Contributions," including any regulations issued pursuant thereto, or under the requirements of Massachusetts General Laws Chapter 184, Sections 31-33. Under no circumstances shall any additional residential, commercial or industrial structures or any commercial, commercial recreational, or industrial activities not otherwise permitted herein be allowed on the Property.

VII. GENERAL PROVISIONS:

A. Pre-existing Rights of the Public and General Public Access.

Approval of this Restriction pursuant to M.G.L. Chapter 184, Section 32 by any municipal officials and by the Secretary of Environmental Affairs is not to be construed as representing the existence or non-existence of any pre-existing rights

of the public, if any, in and to the Property, and any such pre-existing rights of the public, if any, are not affected by the granting of this Conservation Restriction. The restrictions hereby imposed do not grant to the general public, nor to any other person, any right of access to any portion of the Property other than as expressly herein provided.

B. Amendment.

If circumstances arise under which an amendment to, or modification of, this instrument would be appropriate with respect to all or any portion of the Property, Grantor and Grantee (with the approval of the Secretary of Environmental Affairs and the Edgartown Selectmen where required by law), may jointly amend this instrument, provided that no amendment shall be allowed that will affect the qualification of this instrument under any applicable laws, including Massachusetts General Laws Chapter 184, Sections 31 through 33, and any amendment shall be consistent with the purpose of this instrument, shall not affect perpetual duration and shall not adversely impact the Conservation Values of the Property. Any such amendment shall be filed with the Dukes County Registry District of the Land Court and shall not be effective prior to such filing. Nothing in this paragraph shall require Grantor or Grantee to agree to any amendment or to consult or negotiate regarding any amendment. Notwithstanding the foregoing, Grantor and Grantee shall have no right or power to agree to any amendment or modification that would result in the termination of this Conservation Restriction or that would allow any residences, commercial, commercial recreational, or farming or industrial structures or activities not provided for above.

C. Effective Date.

This Restriction shall be effective when the Grantor and the Grantee have executed it, the administrative approvals required by Section 32 of Chapter 184 of the General Laws have been obtained, and it has been filed with the Dukes County Registry District of the Land Court.

D. Recording.

Grantee shall file this instrument with the Dukes County Registry District of the Land Court and may refile notices of said instrument at any time as may be required to preserve its rights in this instrument.

E. Controlling Law.

The interpretation and performance of this instrument shall be governed by the laws of the Commonwealth of Massachusetts.

F. Liberal Construction.

Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the purpose of this instrument and the

protection of the Conservation Values of the Property. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

G. Severability.

If any provision of this instrument or the application thereof to any person or circumstances is found to be invalid, the remainder of the provisions of this instrument shall be not affected thereby.

H. Entire Agreement.

This instrument sets forth the entire agreement of the parties with respect to the matters covered hereby and supersedes all prior discussions, negotiations, understandings or agreements relating to such matters, all of each are merged herein and therein. No alteration or variation of this instrument shall be valid or binding unless contained in an amendment that complies with paragraph B of this Article VII.

I. Binding Restrictions.

The covenants, restrictions, and easements of this instrument shall run with the Property and shall be binding upon and inure to the benefit of Grantor and Grantee, and their respective successors and assigns, and shall continue as a servitude running in perpetuity with the Property, provided that no owner of the Property shall be responsible except for violations occurring during the period in which such owner is an owner of the Property.

J. Subsequent Transfers.

Grantor agrees to incorporate by reference the terms of this Conservation Restriction in any deed or other legal instrument by which she divests herself of any interest in all or a portion of the Property, including, without limitation, a leasehold interest. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Conservation Restriction or limit its enforceability in any way.

K. Extinguishment.

1. Grantor and Grantee agree that the terms of this Restriction shall survive any merger of the fee and Restriction interest in the Premises. Should Grantee (or any assignee of the Grantee's interests in this Restriction) come to own all or a portion of the fee interest in the property, a.) Grantee (or such assignee), as successor in title to the Grantor, shall observe and be bound by the terms of this Restriction; and b.) this Restriction shall not be extinguished, in whole or in part, through the doctrine of merger in view of the public interest in its enforcement. Any instrument of assignment of the Restriction or the rights conveyed herein shall

refer to the provisions of this paragraph, and shall contain language necessary to continue the Restriction in force.

2. Grantee's Receipt of Property Right. The Grantor and the Grantee agree that the donation of this Restriction gives rise for purposes of this paragraph to a real property right, immediately vested in the Grantee, with a fair market value that is at least equal to the proportionate value that this Restriction determined at the time of the gift bears to the value of the unrestricted Premises at that time.

3. Value of Grantee's Property Right. Such proportionate value of the Grantee's property right shall remain constant.

4. Right of Grantee to Recover Proportional Value at Disposition. If any occurrence ever gives rise to extinguishment or other release of the Restriction under applicable law, then the Grantee, on a subsequent sale, exchange or involuntary conversion of the Premises, shall be entitled to a portion of the proceeds equal to such proportionate value, subject, however, to any applicable law which expressly provides for a different disposition of proceeds.

5. Grantor/Grantee Cooperation Regarding Public Action. Whenever all or any part of the Premises or any interest therein is taken by public authority under power of eminent domain or other act of public authority, then the Grantor and the Grantee shall cooperate in recovering the full value of all direct and consequential damages resulting from such action.

6. Allocation of Expenses upon Disposition. All related expenses incurred by the Grantor and the Grantee shall first be paid out of any recovered proceeds, and the remaining proceeds shall be distributed between the Grantor and Grantee in shares equal to such proportionate value.

7. Continuing Trust of Grantee's Share of Proceeds of Restriction Disposition. The Grantee shall use its share of the proceeds in a manner consistent with the purposes of this grant or for the protection of a "relatively natural habitat of fish, wildlife, or plants or similar ecosystem," as that phrase is used in and defined under P.L. 96-541, 26 USC 170(h)(4)(A)(ii), as amended, and in regulations promulgated thereunder.

L. Conservation Assignee.

Grantee may not assign and transfer the rights, powers and privileges hereunder, in compliance with the provisions of Article 97 of the Amendments to the Massachusetts Constitution, if applicable, other than to a charitable corporation or trust (i) whose purposes include conservation of land or water areas (ii) who, at the time of assignment qualifies under Section 170(h) of the Internal Revenue Code of 1986, as amended, and applicable regulations thereunder and under Massachusetts General Laws Chapter 184, Section 32 as an eligible holder of this Conservation Restriction and (iii) to which the Grantee assigns in writing its rights, privileges, and powers hereunder. Upon any such assignment and transfer

and the recordation of a written instrument evidencing such assignment and transfer, such assignee shall succeed to all of such rights, powers and privileges to the same extent and with the same force as if such assignee had been originally named herein. This instrument does not purport to be a transfer of a fee interest.

M. Notices.

Any notice, demand, request, consent, approval or communication that any party desires or is required to give to another party shall be in writing and sent either (i) by United States Postal Service, certified mail, return receipt requested, (ii) by any nationally known overnight delivery service for next day delivery or (iii) delivered in person, addressed as follows or to such other address as any party from time to time shall designate by written notice to the others:

To Grantor:

Ellen A. Harley
P. O. Box 22827
Charleston, SC 29413

To Grantee:

The Nature Conservancy
Massachusetts Field Office
205 Portland Street, Suite 400
Boston, MA 02114-1708
Attn: State Director

with a copy to:

The Nature Conservancy
Eastern Resource Office
11 Avenue de Lafayette
Boston, MA 02111
Attn: Legal Counsel

N. Captions.

The captions herein are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope of this instrument nor the intent of any provisions hereof.

O. Waiver.

No provision contained in this instrument shall be deemed to have been abrogated or waived by reason of any failure to enforce same, irrespective of the number of violations or breaches which may occur.

P. Hazardous Material.

The Grantor shall hold harmless, indemnify and defend Grantee from and against all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, demands or judgments, including, without limitation, reasonable attorneys' fees, arising from or in any way connected with the prior, current, or future presence or release of any hazardous material or substance of any kind on the Property. This paragraph shall not apply in the case of any hazardous material or substance in any manner placed on the Property by Grantee or Grantee's representatives or agents.

Q. Indemnification.

Grantor, her successors and assigns agrees to release, hold harmless, defend and indemnify Grantee from any and all liabilities including, but not limited to, injury, losses, damages, judgments, costs, expenses and fees which Grantee may suffer or incur as a result of or arising out of the activities of Grantor or her successors and assigns on the Property. Grantee agrees to release, hold harmless, defend and indemnify Grantor from any and all liabilities including, but not limited to, injury, losses, damages, judgments, costs, expenses and fees which Grantor may suffer or incur as a result of or arising out of the activities of Grantee (other than activities by Grantee in connection with its monitoring and enforcement of the provisions of this Conservation Restriction pursuant to the provisions of Article IV of this Conservation Restriction).

R. Easement Documentation ("Baseline") Report.

The Grantor agrees to sign and acknowledge a Property Condition Certification and an easement documentation report prepared by Grantee establishing the baseline condition of the Property at the time of this grant, as provided in Treas. Reg. 1.170A-14(g)(5).

The Conservation Values of the Property are documented in a report prepared by Grantee and kept on file at the offices of Grantee, with a copy to the Grantor, which report shall be deemed incorporated herein by this reference (the "Easement Documentation Report," or "Baseline Report"). The Baseline Report shall serve as an objective information baseline for monitoring compliance with the terms of this Conservation Restriction. The Grantor will review the Baseline Report and submit signed certificates of approval of its contents to Grantee, which approval shall not be unreasonably withheld. In the event Grantor disagrees with any aspect of the Baseline Report as presented, Grantor will provide a reasonably detailed explanation of the reasons for such disagreement to Grantee. Should the Baseline Report be updated by Grantee, Grantor will review and approve such changes in the same manner as set forth in this paragraph with respect to the initial Baseline Report. Copies of any such changes or supplements to the Baseline Report shall be provided to Grantor.

S. Counterparts.

This DEED OF CONSERVATION RESTRICTIONS may be executed in several counterparts and by each signatory on a separate counterpart, each of which when so executed and delivered shall be an original, but all of which together shall constitute one document.

IN WITNESS WHEREOF, Grantor has executed this instrument under seal as of the date first written above.

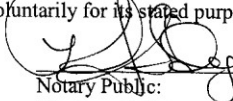
GRANTOR:



Ellen A. Harley

~~COMMONWEALTH OF MASSACHUSETTS~~ STATE OF SOUTH CAROLINA
~~DUKES COUNTY~~

On this 10th day of November, 2004, before me, the undersigned notary public, personally appeared Ellen A. Harley, and proved to me through satisfactory evidence of ~~identification, which was~~ personal knowledge/driver's license/passport/other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose.



Notary Public:
My commission expires: March 5, 2013

ACCEPTANCE OF DEED OF CONSERVATION RESTRICTIONS

The Deed of Conservation Restrictions is accepted this 23 day of November, 2004

GRANTEE:

THE NATURE CONSERVANCY

By: [Signature]

Name: Tom Chase

Its: Eastern Massachusetts Program Director

COMMONWEALTH OF MASSACHUSETTS
WUKE S COUNTY

On this 23 day of November, 2004, before me, the undersigned notary public, personally appeared Tom Chase as Tom Chase of The Nature Conservancy, and proved to me through satisfactory evidence of identification, which was personal knowledge driver's license/passport/other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she/he signed it voluntarily for its stated purpose.

Eastern
Massachusetts
Program
Director

[Signature]
Notary Public:
My commission expires: 2/23/07

APPROVAL BY SELECTMEN

We, the undersigned, being a majority of the Selectmen of the Town of Edgartown, Massachusetts, hereby certify that at a meeting duly held on NOVEMBER 16, 2004, the Selectmen voted to approve the foregoing Deed of Conservation Restrictions pursuant to M.G.L. Ch. 184, § 32.

SELECTMEN:

Margaret Serpa
Michael J. Donoma

COMMONWEALTH OF MASSACHUSETTS
Dukes COUNTY

On this 16th day of NOVEMBER, 2004, before me, the undersigned notary public, personally appeared MARGARET E. SERPA & MICHAEL J. DONOMA, and proved to me through satisfactory evidence of identification, which was personal knowledge driver's license/passport/other: _____ (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she/he signed it voluntarily for its stated purpose.

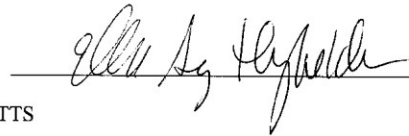
Peter O. Catterucci
Notary Public:
My commission expires: AUGUST 15, 2008

APPROVAL BY THE SECRETARY OF THE
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

The undersigned Secretary of the Executive Office of Environmental Affairs of the Commonwealth of Massachusetts hereby certifies that foregoing Deed of Conservation Restrictions, to The Nature Conservancy, by Edwin and Ellen Harley, with respect to land located in Edgartown, Massachusetts, described herein as the "Property," has been approved in the public interest pursuant to Massachusetts General Laws Chapter 184, Section 32.

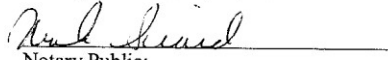
Date: Oct. 7/2004

Secretary of the Executive Office of
Environmental Affairs of the
Commonwealth of Massachusetts



COMMONWEALTH OF MASSACHUSETTS
Suffolk COUNTY

On this 7th day of December, 2004, before me, the undersigned notary public, personally appeared Ellen Roy Harley and proved to me through satisfactory evidence of identification, which was ~~personal knowledge/driver's license/passport~~ other: of identity (circle one), to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she/he signed it voluntarily for its stated purpose.



Notary Public:
My commission expires:

NICOLE SICARD
Notary Public
My Commission Expires December 31, 2004

EXHIBIT A
TO
DEED OF CONSERVATION RESTRICTIONS

INVASIVE PLANT SPECIES

WIDESPREAD AND INVASIVE

<i>Ailanthus altissima</i> (Mill.) Swingle	Tree-of-heaven
<i>Alltaria petiolata</i> (Bieb.) Cavara & Grande	Garlic Mustard
<i>Berberis thunbergii</i> DC.	Japanese Barberry
<i>Celastrus orbiculatus</i> Thunb.	Asiatic Bittersweet
<i>Centaurea biebersteinii</i> DC.	Spotted Knapweed
<i>Euphorbia cyparissias</i> L.	Cypress Spurge
<i>Frangula alnus</i> Mill.	European Buckthorn
<i>Hesperis matronalis</i> L.	Dame's Rocket
<i>Lonicera xbella</i> Zabel	Bella Honysuckle
<i>Lonicera Morrowii</i> A. Gray	Morrow's Honeysuckle
<i>Lythrum salicaria</i> L.	Purple Loosestrife
<i>Nasturtium officinale</i> R. Br.	Watercress
<i>Phragmites australis</i> (Cav.) Trin.	Common Reed
<i>Polygonum cuspidatum</i> Sieb. & Zucc.	Japanese Knotweed
<i>Rhamnus cathartica</i> L.	Buckthorn
<i>Robinia pseudoacacia</i> L.	Black Locust
<i>Rosa multiflora</i> Thumb.	Multiflora Rose
<i>Tussalogo farfara</i> L.	Coltsfoot
<i>Vincetoricum nigrum</i> (L.) Moench.	Black Swallow-wort

RESTRICTED AND INVASIVE

<i>Aegopodium podagraria</i> L.	Goutweed
<i>Ampelopsis brevipedunculato</i> (Maxim.) Trautv.	Porcelain Berry
<i>Butomus umbellatus</i> L.	Flowering-rush
<i>Cabomba caroliniana</i> A. Gray	Fanwort
<i>Cardamine impatiens</i> L.	
<i>Elaeagnus umbellata</i> Thumb.	Autumn Olive
<i>Euonymus alatus</i> (Thumb.) Sieb.	Winged Euonymus
<i>Glyceria maxima</i> (Hartman) Holmburg	Tall Mannagrass
<i>Iris pseudacorus</i> L.	Yellow Iris
<i>Lepidium latifolium</i> L.	Tall Pepperwort
<i>Lonicera japonica</i> Thumb.	Japanese Honeysuckle
<i>Lystmachia nummularia</i> L.	Moneywort
<i>Lystmachia vulgaris</i> L.	Garden Loosestrife
<i>Microstegium vimineum</i> (Trin.) A. Camus	Japanese Stilt Grass
<i>Myriophyllum heterophyllum</i> Michx.	Variable Water-milfoil
<i>Myriophyllum spicatum</i> L.	European Water-milfoil

Potamogeton crispus L.
 Rubus phoenicolasias Maxim.
 Trapa natans L.
 Vincetoxicum rossicum (Kleoc.) Barb.

Crispy-leaved Pondweed
 Wineberry
 Water Chestnut
 Swallow-wort
 Bamboo
 Horseradish
 Mint

POTENTIALLY INVASIVE

Acer ginnala L.
 Acer platanoides L.
 Acer pseudoplatanus L.
 Acorus calamus L.
 Aira caryophylla L.
 Allium vineale L.
 Alnus glutinosa (L.) Gaertner
 Amorpha fruticosa L.
 Athroxon hispidus (Thumb.) Makino
 Berberis vulgaris L.
 Bronus tectorum L.
 Callitriche stagnalis Scop.
 Carex kobomugi Ohwi
 Catalpa bignonioides Walter
 Catalpa speciosa Warder
 Cirshan avrense (L.) Scop.
 Cirsium palustre (L.) Scop.
 Cycloloma atriplicifolium (Spreng.) Coult.
 Cyrisus scoparius (L.) Link
 Datura stramonium L.
 Deschampsia caespitosa (L.) Beauv.
 var. parviflora (Thuil.) Richter
 Egeria densa Planchon
 Elaeagnus angustifolia L.
 Elsholtzia ciliata (Thumb.) Hylander
 Epilobium hirsutum L.
 Euphorbia esula L.
 Froelichia gracilis (Hook.) Moq.
 Geranium nepalense Sweet
 Glechoma hederacca L.
 Humulus japonicus Sieb. & Zucc.
 Hydrilla verticiliata (L.f.) Royle
 Hydrocharis morsus-ranae L.
 Impatiens glandulifera Royle
 Kochia scoparia (L.) Schrader
 Ligustrum obtusifolium Sieb. & Zucc.
 Ligustrum ovalifollum Hassk.

Amur Maple
 Norway Maple
 Sycamore Maple
 Sweet Flag
 Silver Hairgrass
 Wild Garlic
 European Black Alder
 False Indigo

 Barberry
 Dropping Brome-grass

 Southern Catalpa
 Northern Catalpa
 Canada Thistle
 Marsh Thistle
 Winged Pigweed
 Scotch Broom
 Jimsom-weed

 Tufted Hairgrass
 Brazilian Water-weed
 Russian Olive
 Elsholtzia
 Hairy Willow-herb
 Leafy Spurge
 Cottonwood
 Nepalese Crane's-bill
 Gill-over-the-ground
 Japanese Hops
 Hydrilla
 European Frog's bit

 Summer Cypress
 Border Privet
 California Privet

<i>Ligustrum vulgare</i> L.	European Privet
<i>Lonicera maackii</i> (Rupr.) Maxim.	Amur Honeysuckle
<i>Lonicera tatarica</i> L.	Tatarrarian Honeysuckle
<i>Lonicera xylosium</i> L.	European Fly-honeysuckle
<i>Lychnis flos-cululi</i> L.	Ragged Robin
<i>Marsilea quadrifolia</i> L.	Water Shamrock
<i>Miscanthus sinensis</i> Anders.	Eulalia
<i>Myosotis scorpioides</i> L.	Forget-me-not
<i>Myriophyllum acq. ... ium</i> (Vell.) Verdc.	Parrotfeather
<i>Najas minor</i> Allions	Eutrophic Water-nymph
<i>Nelumbo lutea</i> (Willd.) Pers.	American Water Lotus
<i>Nymphoides peltata</i> (Gmel.) Kuntze	Yellow Floating Heart
<i>Ornithogalum umbellatum</i> L.	Star of Bethlehem
<i>Paulownia tomentosa</i> (Thumb.) Steudel	Empress-tree
<i>Phalaris arundinacea</i> L.	Reed Canary-grass
<i>Poa compressa</i> L.	Canada Blue-grass
<i>Polygonum cespitosum</i> Blume	
<i>Polygonum perfoliatum</i> L.	Mile-a-Minute Vine
<i>Populus alba</i> L.	White Poplar
<i>Pueraria lobata</i> (Willd.) Owhi	Kudzu-vine
<i>Ranunculus ficaria</i> L.	Lesser Celandine
<i>Rumex acetosella</i> L.	Sheep Sorrel
<i>Senecio jacobea</i> L.	Stinking Willie, Tansy Ragwort
<i>Silphium perfoliatum</i> L.	Cup-plant
<i>Solanum dulcamara</i> L.	Climbing Nightshade
<i>Valeriana officinalis</i> L.	Garden-heliotrope
<i>Veronica beccabunga</i> L.	Brooklime

ADDITIONAL POTENTIALLY INVASIVE TAXA

<i>Azolla caroliniana</i> Willd.	Eastern Mosquito Fern
<i>Eichhornia crassipes</i> (Mart.) Solms-Laub.	Water Hyacinth
<i>Pistia stratiates</i> L.	Water Lettuce

SUGGESTED FOR INCLUSION PENDING SUPPORTING DOCUMENTATION:

<i>Eragrostis curvula</i> (Sohrader) Nees	Weeping Love-grass
<i>Lespedeza cuneata</i> (Dumont) G. Don	
<i>Phellodendron japonicum</i> Maxim	Cork-tree
<i>rosa rugosa</i> Thumb.	Japanese Rose
<i>Taxus cuspidata</i> Sieb. & Zucc.	Japanese Yews

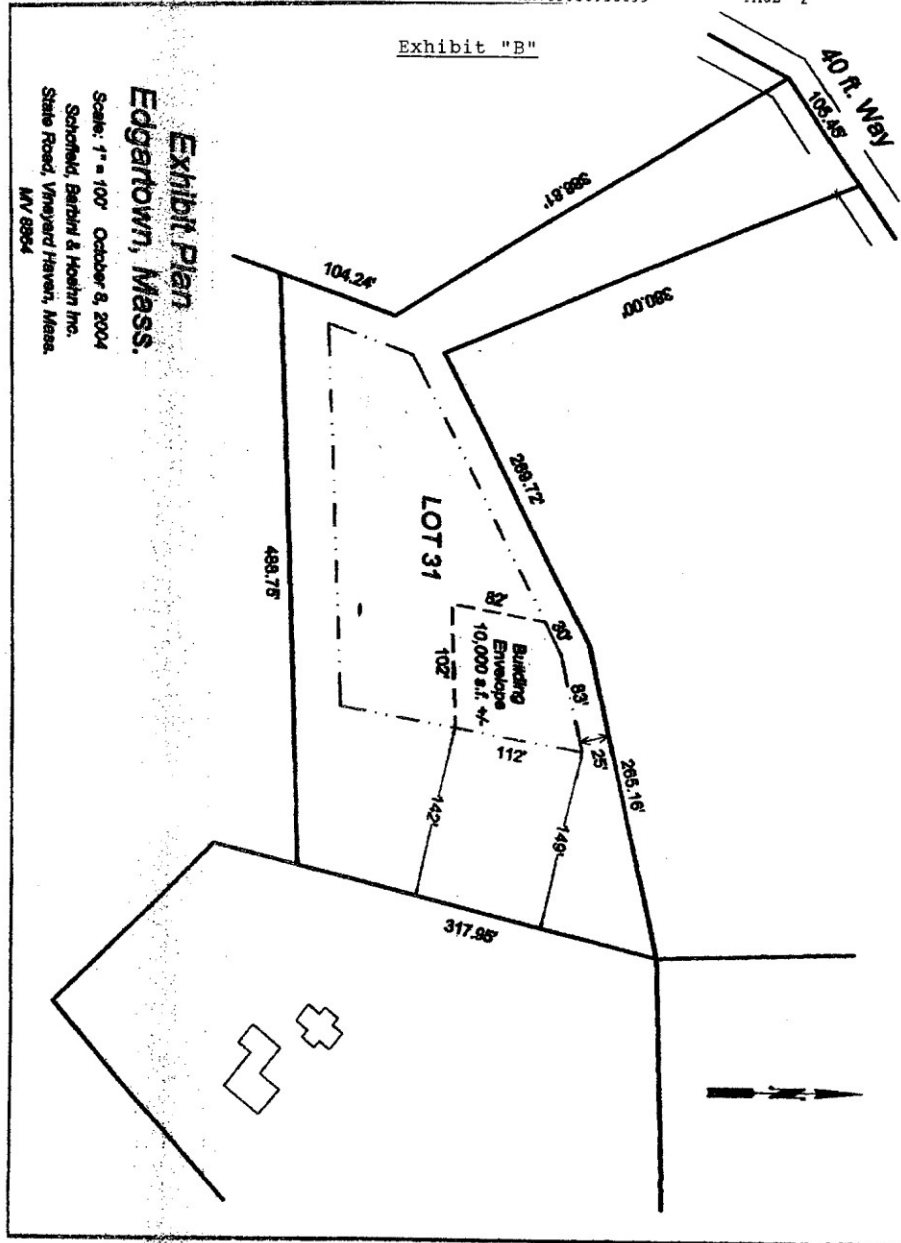


Exhibit Plan
Edgartown, Mass.
Scale: 1" = 100' October 8, 2004
Schofield, Barbuti & Hoehn Inc.
State Road, Vineyard Haven, Mass.
MV 0954

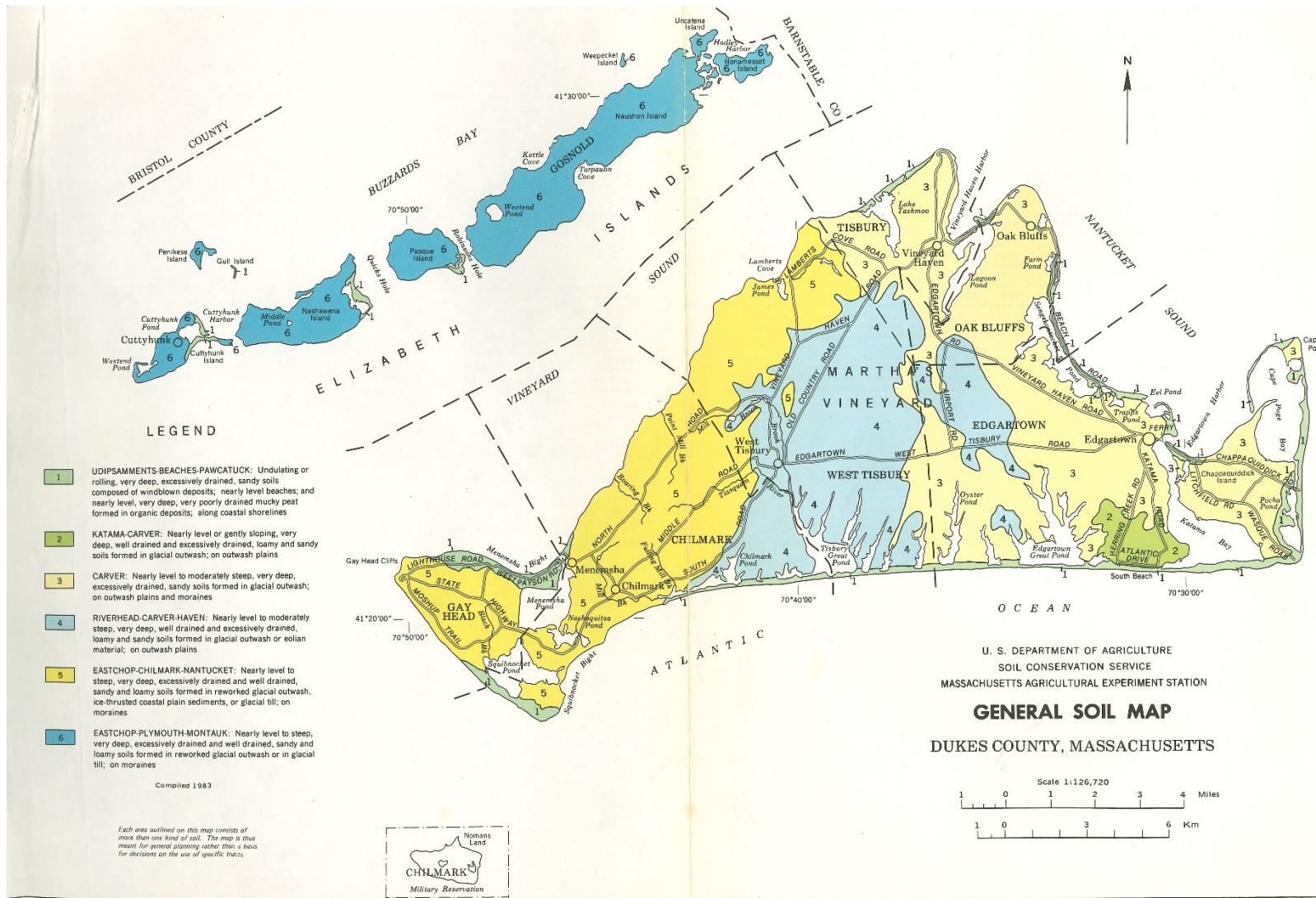
Exhibit "B"

Attest:

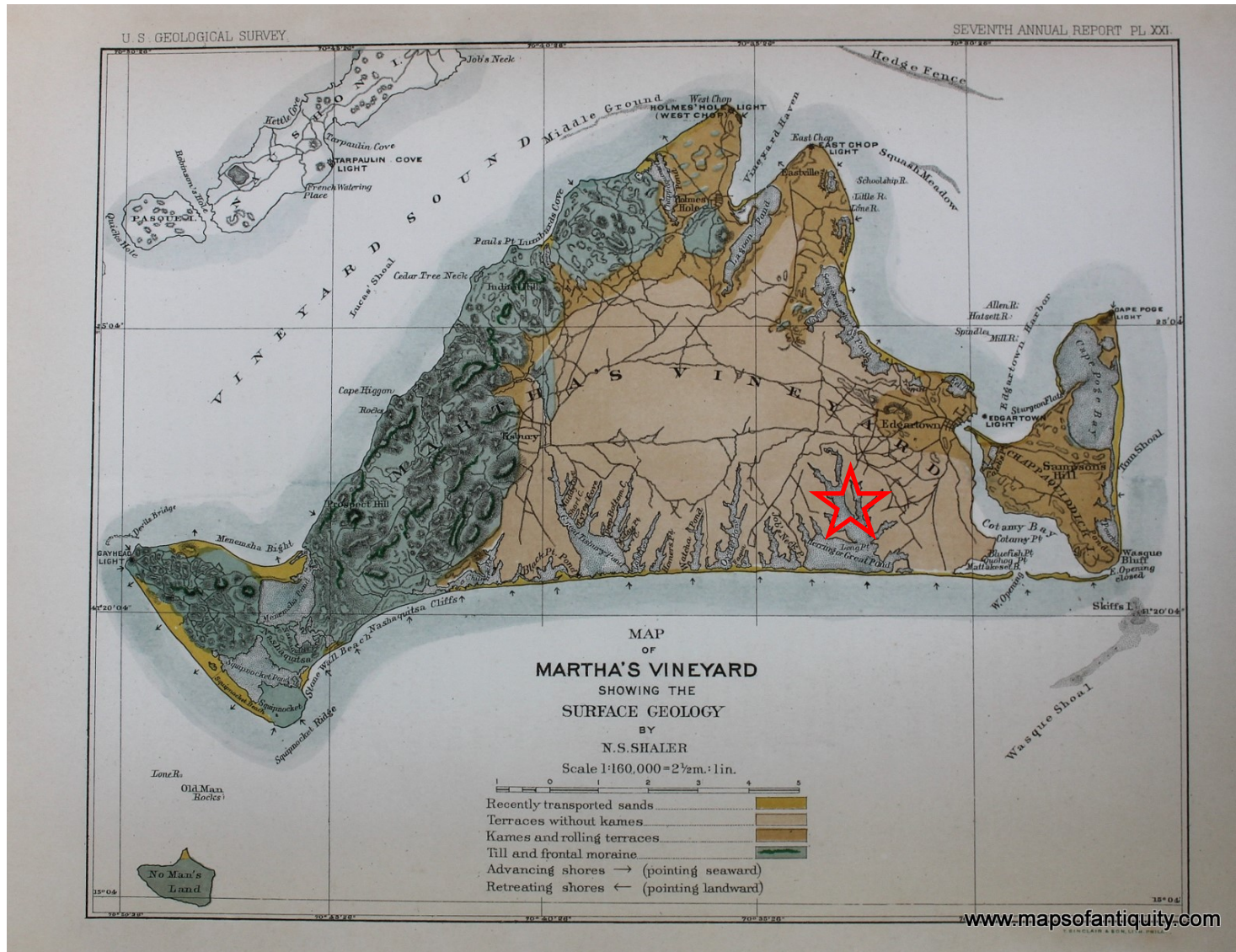
Deanne E. Powers Register

Appendix C. Soils Maps and Descriptions

Map 16: General Soil Map of Martha's Vineyard



Map 17: Surface geology of Martha's Vineyard; star indicates location of Quenomica Preserve.



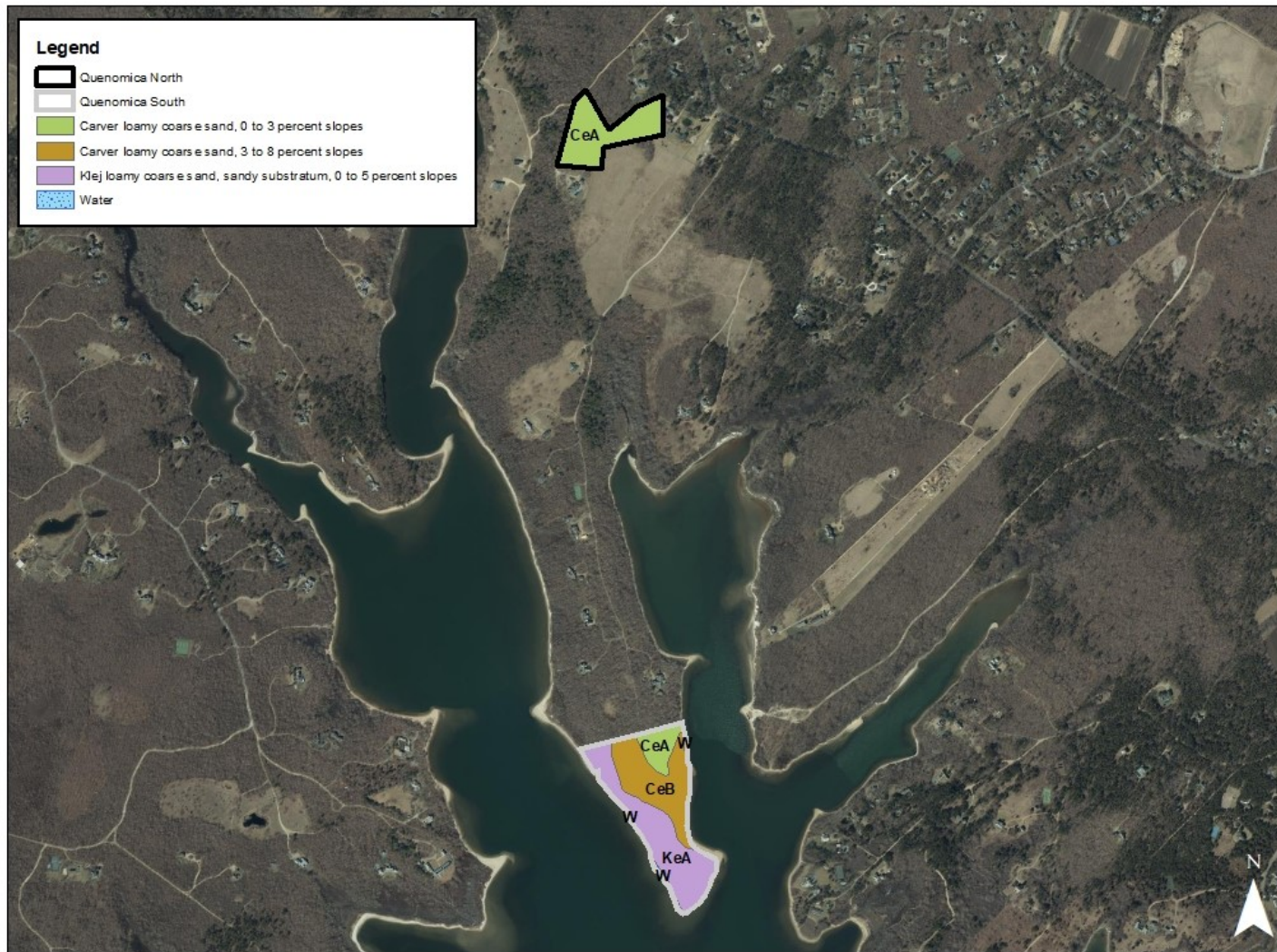
Map 18: Surface geology of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, U S G S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Surficial_geology_map_2023.jpg Date: February 3, 2023.

0 1,300 2,600 5,200 Feet

Map 19: Soil types of Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, U S G S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Soils_map_2023.jpg Date: February 3, 2023.

Soil Type Descriptions

The soils found in Quenomica Preserve include Carver loamy coarse sand and Klej loamy coarse sand. The following summaries of each soil type are derived from Fletcher & Roffinoli (1986) Dukes County Soil Surveys.

Carver loamy coarse sand (CeA, CeB)

CeA - This soil type is generally flat (0-3% slopes), deep, and very well-drained. It is typically found in the central and eastern parts of Martha's Vineyard in outwash plains and is drought-prone with low water-holding capacity. Although its droughtiness is a limitation for growing cultivated crops, this soil type can successfully be used for crops or pastures with the addition of manure and crop residue. Areas with this soil tend to be in low-productivity woodlands due to its propensity for drought. This soil is well suited for low-density housing.

CeB - This soil can be found on the northern, eastern, and central parts of Martha's Vineyard and is deep, gently sloping (3-8% slopes), and well-drained—indicating a low water capacity. Woodlands often cover this soil type with low productivity due to droughtiness. While not especially good for crops, amendments can be done to this soil to increase yield. This soil is suitable for low density housing.

Klej loamy coarse sand, sandy substratum (KeA)

KeA – This soil is found in low lying, generally flat areas (0-5% slopes) alongside bodies of water. It is deep and fairly well-drained with a very low water-holding capacity. Woodlands and cropland are typically productive on this soil, however low water availability can be a limiting factor. The permeability and high seasonal water table can be problematic for building on these soils. Ground water pollution is possible if septic tank absorption fields are not managed correctly.

Appendix D: Vegetation

Survey Methods

During the summer of 2022, formal vegetation surveys were conducted in grassland, pondshore, salt marsh, and woodland habitats of Quenomica Preserve. Random point locations were generated using ArcGIS Map 10.8 for the woodland and grassland surveys. Pondshore and salt marsh habitats were inventoried across various site visits for presence of species throughout the growing season.

In the woodlands, 5 points were inventoried using a point sampling method as described by Avery and Burkhart (2002). This method captures tree species composition, canopy density, and diameter at breast height (DBH) of trees within the plot. In addition to canopy measurements, 3m² circular plots were

used to inventory the understory at each woodland point. Density and percent cover of understory vegetation was recorded for all plots.

The grassland was inventoried following methods described by Dunwiddie (1986) which capture species diversity and stem density within plots. A total of 20 plots were randomly generated and surveyed within 1 m² circular plots.

Species diversity

A total of 134 plant species was observed within Quenomica Preserve. A full list of flora can be found in Table 1 with proper nomenclature according to GoBotany.NativePlantTrust.org (2022).

Table 1: Flora of Quenomica Preserve.

	Scientific Name	Common Name	Morph	Habitat*
1	<i>Agrostis species</i>	Agrostis sp.	graminoid	cg
2	<i>Agrostis gigantea</i>	Redtop bentgrass	graminoid	cg
3	<i>Ammophila breviligulata</i>	American beach grass	graminoid	cp
4	<i>Anaphalis margaritacea</i>	Pearly everlasting	herb	cp
5	<i>Aralia nudicalis</i>	Wild sarsparilla	shrub	cw
6	<i>Artemisia vulgaris</i>	Common mugwort	herb	cg
7	<i>Asclepias syriaca</i>	Common milkweed	herb	cg
8	<i>Atriplex prostrata</i>	Triangle orache	herb	cp
9	<i>Atriplex cristata</i>	Seabeach orache	herb	cp
10	<i>Baccharis halimifolia</i>	Groundseltree	shrub	cp
11	<i>Cakile edentula</i>	American searocket	herb	cp
12	<i>Calamagrostis canadensis</i>	Canada reedgrass	graminoid	cp
13	<i>Calystegia sepium</i>	Hedge bindweed	shrub	cp
14	<i>Carex comosa</i>	Bearded sedge	graminoid	cp
15	<i>Carex crawfordii</i>	Crawford's sedge	graminoid	cp
16	<i>Carex lurida</i>	Sallow sedge	graminoid	cp
17	<i>Carex silicea</i>	Sea-beach sedge	graminoid	cp
18	<i>Carex pensylvanica</i>	Pennsylvania sedge	graminoid	cp
19	<i>Chenopodium album</i>	White goosefoot	herb	cg
20	<i>Chenopodium glaucum</i>	Oak-leaved goosefoot	herb	cp
21	<i>Chickweed species</i>	Chickweed sp.	herb	cg
22	<i>Cichorium intybus</i>	Common chicory	herb	cg
23	<i>Cinna arundinacea</i>	Sweet wood-reed	graminoid	cg
24	<i>Cirsium vulgare</i>	Bull thistle	herb	cg
25	<i>Clethra alnifolia</i>	Sweet pepperbush	shrub	cw/cp
26	<i>Corylus americana</i>	American hazelnut	shrub	cw
27	<i>Cuscuta gronovii</i>	Common dodder	herb	cp
28	<i>Cyperus filicinus</i>	Fern flatsedge	graminoid	cp
29	<i>Cyperus diandrus</i>	Umbrella flatsedge	graminoid	cp
30	<i>Cyperus strigosus</i>	Straw-colored flatsedge	graminoid	cp

31	<i>Dactylis glomerata</i>	Orchard grass	graminoid	cg
32	<i>Daucus carota</i>	Queen Anne's lace	herb	cg
33	<i>Decodon verticillatus</i>	Swamp-loosestrife	herb	cp
34	<i>Dichanthelium clandestinum</i>	Deer-tongue	graminoid	cg
35	<i>Digitaria sanguinalis</i>	Hairy crabgrass	graminoid	cg
36	<i>Distichlis spicata</i>	Saltgrass	graminoid	cp
37	<i>Echinochloa walteri</i>	Coastal barnyard grass	graminoid	cp
38	<i>Eleusine indica</i>	Goosegrass	graminoid	cg
39	<i>Elymus repens</i>	Creeping wild-rye	graminoid	cg
40	<i>Erechtites hieraciifolius</i>	American burnweed	herb	cp
41	<i>Erigeron canadensis</i>	Horseweed	herb	cg
42	<i>Eupatorium hyssopifolium</i>	Hyssop-leaved thoroughwort	herb	cg
43	<i>Euthamia caroliniana</i>	Coastal Goldenrod	herb	cp
44	<i>Euthamia graminifolia</i>	Grass leaved goldenrod	herb	cp
45	<i>Festuca species</i>	Fescue sp.	graminoid	cg
46	<i>Festuca rubra</i>	Red fescue	graminoid	cg
47	<i>Galium palustre</i>	Marsh bedstraw	herb	cp
48	<i>Gaylussacia baccata</i>	Black huckleberry	shrub	cp
49	<i>Hibiscus moscheutos</i>	Swamp rose mallow	herb	cp
50	<i>Hypericum mutilum</i>	Dwarf St. John's-wort	herb	cp
51	<i>Hypericum perforatum</i>	Common St. John's-wort	herb	cg
52	<i>Iris species</i>	Iris sp.	herb	cp
53	<i>Juncus acuminatus</i>	Sharp-fruited rush	graminoid	cp
54	<i>Juncus canadensis</i>	Canada rush	graminoid	cp
55	<i>Juncus effusus</i>	Common soft rush	graminoid	cp
56	<i>Juncus pylaei</i>	Pylaei's soft rush	graminoid	cp
57	<i>Juncus sp.</i>	Rush sp.	graminoid	cp
58	<i>Juniperus virginiana</i>	Eastern red cedar	tree	cw
59	<i>Lepidium virginicum</i>	Poor-man's pepperweed	herb	cp
60	<i>Leucanthemum vulgare</i>	Ox-eye daisy	herb	cg
61	<i>Lotus corniculatus</i>	Garden bird's-foot-trefoil	herb	cg
62	<i>Lycopus americanus</i>	American water-horehound	herb	cp
63	<i>Lycopus virginicus</i>	Virginia water-horehound	herb	cp
64	<i>Lyonia ligustrina</i>	Maleberry	shrub	cp
65	<i>Lysimachia borealis</i>	Starflower	herb	cw
66	<i>Lythrum salicaria</i>	Purple loosestrife	herb	cp
67	<i>Melampyrum lineare</i>	American cow-wheat	herb	cw
68	<i>Mollugo verticillata</i>	Green carpetweed	herb	cg
69	<i>Morella caroliniensis</i>	Bayberry	shrub	cw/cp
70	<i>Myrica gale</i>	Sweet gale	shrub	cp
71	<i>Nyssa sylvatica</i>	Black gum	tree	cw
72	<i>Oenothera biennis</i>	Common evening-primrose	herb	cp
73	<i>Osmundastrum cinnamomeum</i>	Cinnamon fern	fern	cp

74	<i>Oxalis dillenii</i>	Slender yellow wood sorrel	herb	cg
75	<i>Panicum virgatum</i>	Switchgrass	graminoid	cp
76	<i>Parthenocissus quinquefolia</i>	Virginia Creeper	vine	cw/cp
77	<i>Persicaria hydropiper</i>	Mild waterpepper	herb	cp
78	<i>Persicaria maculosa</i>	Lady's-thumb smartweed	herb	cg
79	<i>Persicaria pensylvanica</i>	Pennsylvania smartweed	herb	cp
80	<i>Persicaria punctata</i>	Dotted smartweed	herb	cp
81	<i>Phleum pratense</i>	Common Timothy	graminoid	cg
82	<i>Phytolacca americana</i>	American pokeweed	herb	cg
83	<i>Pieris japonica</i>	Japanese fetterbush	shrub	cw
84	<i>Pinus rigida</i>	Pitch pine	tree	cw
85	<i>Pinus strobus</i>	Eastern white pine	tree	cg
86	<i>Plantago lanceolata</i>	Narrowleaf plantain	herb	cg
87	<i>Plantago major</i>	Common plantain	herb	cg
88	<i>Pluchea odorata</i>	Marsh fleabane	herb	cp
89	<i>Poa annua</i>	Annual blue grass	graminoid	cg
90	<i>Polygonum aviculare</i>	Dooryard knotweed	herb	cg
91	<i>Prunus serotina</i>	Black cherry	tree	cg
92	<i>Ptilimnium capillaceum</i>	Atlantic mock bishop-weed	herb	cp
93	<i>Pycnanthemum muticum</i>	Broad-leaved mountain mint	herb	cw
94	<i>Quercus alba</i>	White oak	tree	cw/cp/cg
95	<i>Quercus ilicifolia</i>	Scrub Oak	shrub	cw
96	<i>Quercus velutina</i>	Black oak	tree	cw/cp
97	<i>Rhododendron viscosum</i>	Swamp azalea	shrub	cp
98	<i>Rhododendron calendulaceum</i>	Flame azalea	shrub	cw
99	<i>Rosa carolina</i>	Pasture rose	shrub	cp
100	<i>Rosa virginiana</i>	Virginia rose	shrub	cp
101	<i>Rosa nitida</i>	Shining rose	shrub	cp
102	<i>Rubus hispidus</i>	Bristly Dewberry	vine	cw
103	<i>Rumex crispus</i>	Curly dock	herb	cp
104	<i>Saponaria officinalis</i>	Common soapwort	herb	cg
105	<i>Sassafras albidum</i>	Sassafras	tree	cw/cp
106	<i>Schoenoplectus pungens</i>	3-square bulrush	graminoid	cp
107	<i>Schoenoplectus tabernaemontani</i>	Soft-stemmed club-bulrush	graminoid	cp
108	<i>Scirpus cyperinus</i>	Woolgrass	graminoid	cp
109	<i>Scutellaria galericulata</i>	Hooded skullcap	herb	cp
110	<i>Setaria pumila</i>	Yellow foxtail	graminoid	cg
111	<i>Setaria faberi</i>	Chinese foxtail	graminoid	cg
112	<i>Smilax rotundifolia</i>	Green briar	vine	cw/cp
113	<i>Solanum ptycanthum</i>	Eastern black nightshade	herb	cp
114	<i>Solidago sempervirens</i>	Seaside goldenrod	herb	cp
115	<i>Sonchus asper</i>	Spiny-leaved sow-thistle	herb	cg
116	<i>Spartina pectinata</i>	Prairie cordgrass	graminoid	cp

117	<i>Spartina alterniflora</i>	Smooth cordgrass	graminoid	cp
118	<i>Spartina patens</i>	Saltmeadow cordgrass	graminoid	cp
119	<i>Symphyotrichum subulatum</i>	Annual saltmarsh aster	herb	cp
120	<i>Teucrium canadense</i>	American Germander	herb	cp
121	<i>Thelypteris simulata</i>	Massachusetts fern	fern	cp
122	<i>Thelypteris palustris</i>	Marsh fern	fern	cp
123	<i>Toxicodendrons radicans</i>	Poison Ivy	vine	cw/cp/ cg
124	<i>Triadenum virginicum</i>	Virginia marsh-St. John's-wort	herb	cp
125	<i>Trifolium pratense</i>	Red clover	herb	cg
126	<i>Typha latifolia</i>	Common cattail	graminoid	cp
127	<i>Vaccinium angustifolia</i>	Lowbush blueberry	shrub	cw/cp
128	<i>Vaccinium Corymbosum</i>	Highbush blueberry	shrub	cw/cp
129	<i>Vaccinium pallidum</i>	Hillside Blueberry	shrub	cw
130	<i>Verbascum thapsus</i>	Common mullein	herb	cp
131	<i>Verbena hastata</i>	Blue vervain	herb	cp
132	<i>Viburnum dentatum</i>	Arrowwood	shrub	cw/cp
133	<i>Vitis aestivalis</i>	Summer grape	vine	cp
134	<i>Vitis labrusca</i>	Fox Grape	vine	cw/cp/cg

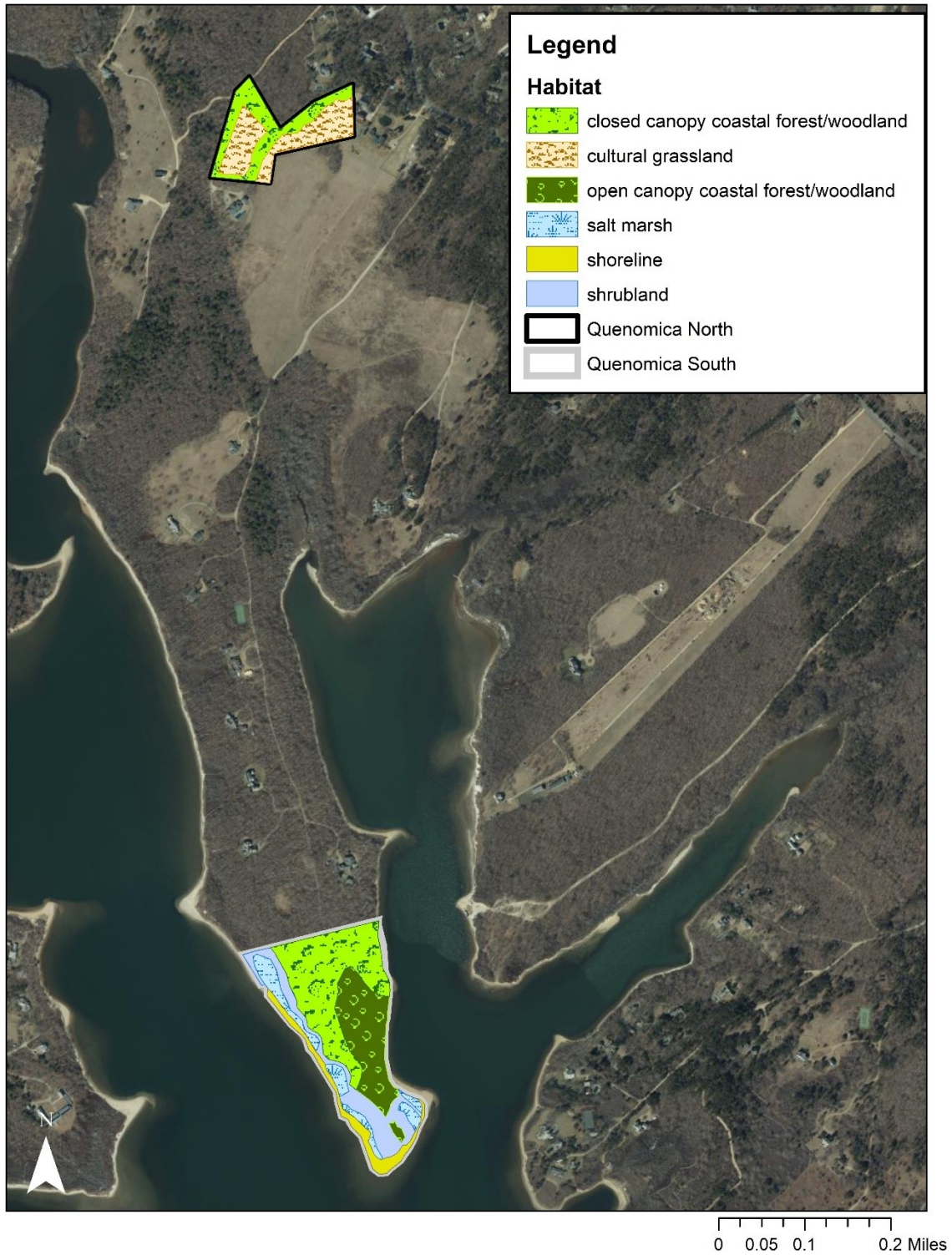
*Habitat types:

- cw = coastal woodland
- cg = cultural grassland
- cp = coastal pondshore

Natural Community Descriptions

There are three different natural communities within Quenomica Preserve. Classification of habitat types was made for the property using the Classification of the Natural Communities of Massachusetts by Swain (2020), in parallel with standardized vegetation surveying methods. A map of the designated habitats can be seen in Map 20 (Appendix D, page 100).

Map 20: Ecological communities of Quenonica Preserve.



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. Sources: 2019 ortho photograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenonica_EcoCommunities_map_2023.jpg Date: February 6, 2023.

A. Coastal woodland (14.2 acres):

The coastal woodland is the dominant ecological community at Quenomica Preserve, totaling 14.2 acres. The coastal woodland is split between a closed canopy woodland and an open canopy woodland based on past centuries' landscape management practices. The closed canopy woodland accounts for 10 acres and the open canopy woodland located solely at Quenomica South accounts for 4.2 acres. The open canopy woodland is located in roughly the same location as the grassland depicted in the 1938 aerial photographs of Quenomica South (Map 23). In sample areas the woodland overstory is dominated by black oak (40%), followed closely by sassafras (30%) and white oak (27%). Trees in the woodland can reach a height of up to 60 feet, though the average is closer to 50 feet. The average diameter at breast height (dbh) in the stand is 10.5 inches, with a few tree diameters measuring at over 20 inches. The basal area is 60 square feet per acre.

The understory of the coastal woodland is densely populated, with a percent ground cover of 86%, with nearly all understory vegetation measuring under 3 feet tall. Much of the understory maintains an open, savanna-like appearance. The open canopy woodland comprises primarily saplings and old open growth trees with pockets of established scrub oak and high-bush blueberry. Sassafras seedlings occur frequently amidst the dominant low-bush blueberry and black huckleberry cover. Crawling vines such as Virginia creeper, poison ivy, and greenbrier are present, accompanied by mixed oak seedlings, high-bush blueberry, and arrowwood viburnum.

B. Coastal salt pondshore and vegetated wetland environs (6.4 acres):

There are nearly 3500 feet of shoreline along Edgartown Great Pond, parts of which are very steep and consist of the coastal woodland community. In areas that are more gradually sloped, small stretches of sandy beach (1.4 acres) mixed with salt marsh habitat (2 acres) boast typical coastal pond shore vegetation, including species such as smooth cordgrass, prairie cordgrass, swamp-loostrife, Pylaei's soft rush, annual saltmarsh American-aster, and soft-stemmed club-bulrush. These species are adapted to the tidal fluctuations experienced along the shoreline of this salt pond. Behind the saltmarsh and at the point is a dense layer of shrubland dominated by high-bush blueberry, arrowwood, swamp azalea, grape, poison ivy and bayberry. The understory is devoid of vegetation due to the fluctuating water levels of the pond that flood the shrubland and scour the ground.

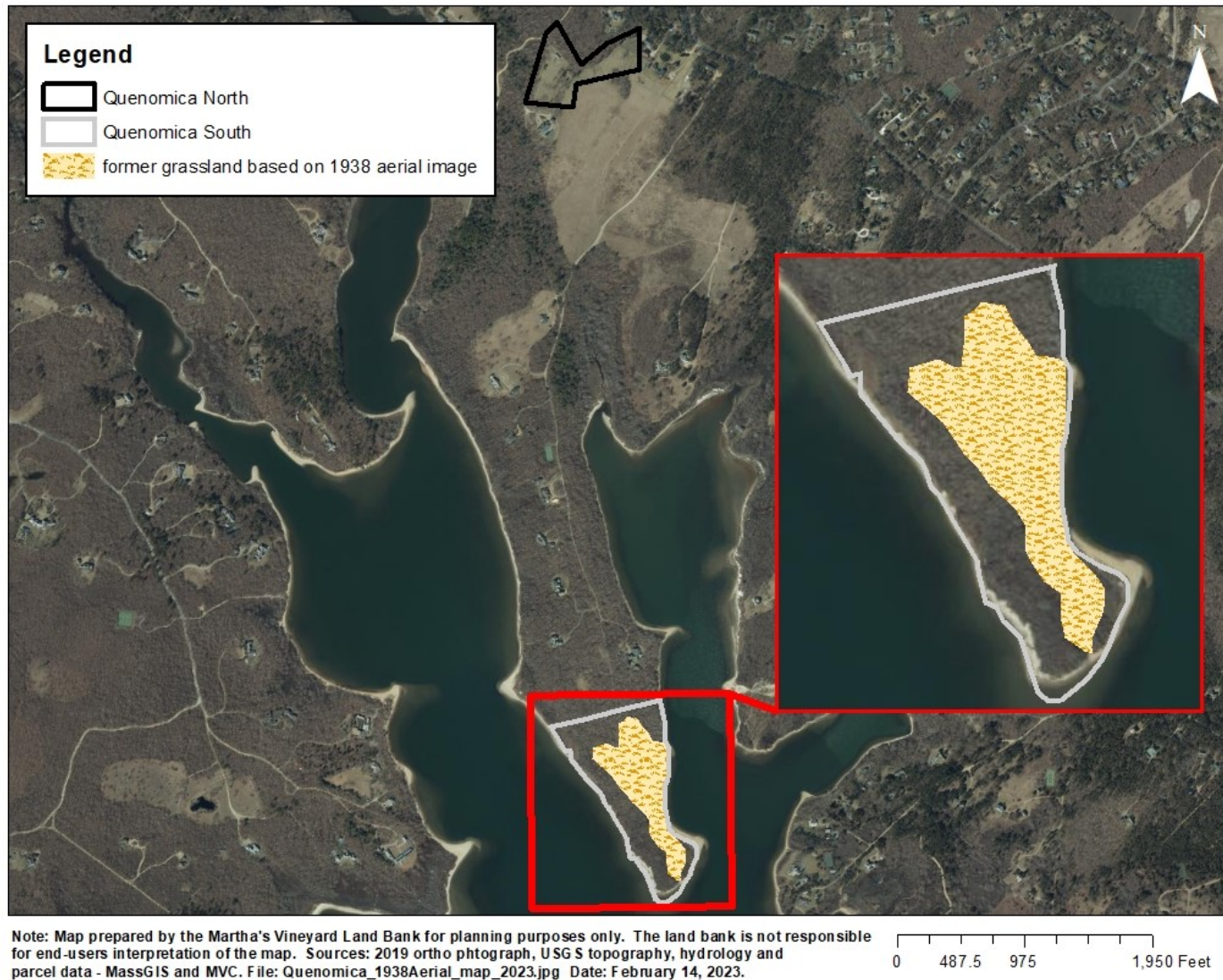
C. Cultural grassland (3.6 acres):

The cultural grassland comprises 3.6 acres of former pasture in Quenomica North. Trees such as white oak, black cherry, and eastern white pine occur sparsely and near the edges of these open spaces, with the dominant ground cover being herbaceous plants and sedges. Common milkweed, ox-eye daisy, orchard grass, and Queen Anne's lace are a few of many species identified in

these fields. Common invasive species such as bull thistle and dooryard knotweed were also found around the edges of the fields.

draft

Map 21: Former grassland area based on 1938 aerial image at Quenomica Preserve, Edgartown, MA.



Appendix E. Wildlife

Wildlife Habitat Descriptions

Quenomica Preserve provides habitat for a variety of bird and mammal species. The coastal woodland provides foraging and nesting habitat for many species of birds and the coastal pond shoreline offer habitat for aquatic invertebrates, amphibians, and reptiles. The invertebrates in turn are food for many species of bats. River otters utilize the pond and its shore for foraging and denning, and coyotes have been observed using the woodland and shoreline for hunting.

Grasslands are important habitats for pollinators and other invertebrate communities. The mixture of grasses and flowering plants along the edges of the fields creates diverse options for shelter, forage, and pollen/nectar sources. The insects as well as the seeds of the plants in turn support birds and small mammals. Furthermore, the open structure is conducive to hunting for raptor species. Edge habitats between grasslands and woodlands support species such as the eastern towhee that prefer this transition zone.

Wildlife Surveys Results

Formal avian point count surveys, lepidoptera black-light trap surveys, and acoustic bat surveys were conducted on the property (Map 22, page 107). Incidental observations of additional wildlife species were made while conducting formal wildlife surveys. Wildlife species observed on the property are listed in Table 2: Wildlife observations in Quenomica Preserve, Edgartown, MA. Table 3 :Summary of macrolepidoptera species recorded from Quenomica Preserve, Edgartown, MA, and Table 4: Bird species observed in Quenomica Preserve during the spring and summer of 2022. U= Uncommon; O=Occasional; C=Common; P=Present. PO=Possible breeding; CO=Confirmed breeding; PR=Probably breeding. A total of 35 species was observed on the Preserve.

Mammals

Seven species of mammals were observed on the Preserve, including racoons; deer; rats; two bat species; river otters; and an eastern coyote (Table 2). The North American river otter is endemic to North America. Habitat loss, hunting and pollution are responsible for a significant loss in occupied range. Otters mate in the spring and deliver pups the following January-May after a delayed implantation period of up to 273 days (Mass.gov 2023, Raesly 2001). Otters are active year-round



Figure 2: River otters on the pond shore.

at various locations throughout Martha’s Vineyard. Male hunting groups and family units have been documented on Quenomica South since 2011 (Johnson 2011, 2023). Although prolific in the majority of Massachusetts and New England, coyotes are uncommon on Martha’s Vineyard. They periodically swim ashore to the island from their closest population on Naushon Island (Humphrey 2023). Occasionally they are found dead washed up on island beaches in attempts to migrate from the Elizabeth Islands.



Figure 4: Eastern coyote walking along the pond shoreline at night.

Despite estimates of approximately six coyotes living on the island, there is currently no evidence of a breeding population. As the number of coyotes increases, a population is expected to become established in the coming years (Proulx 2023). Coyotes are omnivorous and opportunistic in their feeding, eating a variety of food including berries, roadkill, rabbits, small deer, reptiles, and birds (MassWildlife 2017). Pups are born from

April-May with up to nine in a litter. Adults observed on the island are estimated to be between 45-50 pounds, though large coyotes can weigh up to 60 pounds (Proulx 2023). Coyotes are usually elusive and avoid humans, however conflict can arise if livestock, garbage, or small pets are not secured properly (MassWildlife 2017).



Figure 3: White-tailed deer grazing near the pond.

Table 2: Wildlife observations in Quenomica Preserve, Edgartown, MA.

<i>Scientific Name</i>	Common Name
Class Amphibia	
Order Anura	
Family Ranidae	
<i>Lithobates catesbeianus</i>	American bullfrog
Class Insecta	
Order Lepidoptera	
Family Nymphalidae	
<i>Danaus plexippus</i>	Monarch butterfly
Class Arachnida	
Order Araneae	

Family Lycosidae	
<i>Lycosidae species</i>	Wolf spider
Class Mammalia	
Order Artiodactyla	
Family Cervidae	
<i>Odocoileus virginianus</i>	White-tailed deer
Order Carnivora	
Family Canidae	
<i>Canis latrans</i>	Coyote
Family Mustelidae	
<i>Lontra canadensis</i>	North American river otter
Family Procyonidae	
<i>Procyon lotor</i>	Raccoon
Order Rodentia	
Family Muridae	
<i>Rattus norvegicus</i>	Brown rat
Family Chiroptera	
<i>Eptesicus fuscus</i>	Big brown bat
<i>Lasiurus borealis</i>	Eastern red bat

Map 22: Plant and wildlife survey locations at Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho photograph, U S G S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Survey_map_2023.jpg Date: February 6, 2023.

0 485 970 1,940 Feet

Lepidoptera

Although not often seen, moths play a vital role in the environment as pollinators and as a food source for nocturnal birds and bats. In addition, caterpillars are an important source of food for diurnal birds.

Nocturnal moth species were surveyed using a stainless-steel rigid vein 18-24 in “leptrap” with a 32-40 Watt quantum black light. Traps were set using a photoelectric switch from dusk to dawn on 7 nights from June 7th, 2022 to September 14th, 2022. Species were collected, processed, and sent to Mark Mello, an entomologist with the Lloyd Center for the environment, in New Bedford, MA for positive identification. A total of 194 species was observed across all trap sites (Table 3); for the purpose of the management plan, MESA-listed species have been omitted from the table.

194 species of moths were observed on the Preserve during surveying in the summer of 2022, including four species that are MESA-listed as threatened and one species that is MESA-listed as of special concern. Four species (*Hyperstrotia pervertens*, *Nola cereella*, *Baileya dormitans*, *Meropleon diversicolor*) were new detections for land bank properties.

Table 3: Summary of macrolepidoptera species recorded from Quenomica Preserve, Edgartown, MA.

MONA #	ZOOK. #	Species	CW
DREPANIDAE			
Oretinae			
6255		<i>Oreta rosea</i>	1
GEOMETRIDAE			
Ennominae			
6282		<i>Speranza argillacearia</i>	2
6340		<i>Macaria minorata</i>	1
6342		<i>Macaria bisignata</i>	1
6352		<i>Macaria granitata</i>	2
6353		<i>Macaria multilineata</i>	1
6443		<i>Glenoides texanaria</i>	1
6449		<i>Glena cribrataria</i>	3
6598		<i>Protoarmia porcelaria</i>	4
6620		<i>Melanolophia canadaria</i>	1
6621		<i>Melanolophia signataria</i>	1
6654		<i>Hypagyrtis unipunctata</i>	2
6720		<i>Lytrosis unitaria</i>	1
6725		<i>Euchlaena muzaria</i>	2
6739		<i>Euchlaena irraria</i>	3
6754		<i>Pero anctaria</i>	3
6755		<i>Pero morrisonaria</i>	2
6763		<i>Phaeoura quernaria</i>	2
6796		<i>Campaea perlata</i>	5

6823		<i>Metarranthis angularia</i>	3
6826		<i>Metarranthis hypochraria</i>	1
6827		<i>Metarranthis refractaria (indeclinata?)</i>	1
6829.1		<i>Metarranthis sp.nr. lateritiaria</i>	1
6843		<i>Plagodis fervidaria</i>	4
6844		<i>Plagodis alcoolaria</i>	1
6884		<i>Besma endropiaria</i>	3
6885		<i>Besma quercivoraria</i>	3
6888		<i>Lambdina fiscellaria</i>	1
6892		<i>Lambdina pellucidaria</i>	2
6941		<i>Eusarca confusaria</i>	5
6964		<i>Tetracis cachexiata</i>	3
6966		<i>Eutrapela clemataria</i>	1
6982		<i>Prochoerodes lineola</i>	2
7009		<i>Nematocampa resistaria</i>	1
Geometrinae			
7046		<i>Nemoria bistriaria</i>	2
7084		<i>Hethemia pistasciaria</i>	1
Sterrhinae			
7132		<i>Pleuroprucha insulsaria</i>	2
7136		<i>Cyclophora packardi</i>	2
7139		<i>Cyclophora pendulinaria</i>	1
7159		<i>Scopula limboundata</i>	3
Larentiinae			
7196		<i>Eulithis diversilineata</i>	1
7237		<i>Hydriomena transfigurata</i>	1
7416		<i>Costaconvexa centrostrigaria</i>	2
7449		<i>Eupithecia palpata</i>	1
7625		<i>Pasaphila rectangulata</i>	1
		<i>Eupithecia spp.</i>	6
MIMALLONIDAE			
7659		<i>Lacosoma chiridota</i>	1
7662		<i>Cicinnus sp.</i>	1
LASIOCAMPIDAE			
Macromphalinae			
7663		<i>Apatelodes torrefacta</i>	1
Lasiocampinae			
7687		<i>Phyllodesma americana</i>	1
SATURNIIDAE			
Ceratocampinae			
7704		<i>Eacles sp.</i>	1
7716		<i>Anisota stigma</i>	1
7719		<i>Anisota senatoria</i>	4
Hemileucinae			
7746		<i>Automeris io</i>	3
Saturniinae			
7758		<i>Actias luna</i>	1

SPHINGIDAE			
Sphinginae			
7784		<i>Dolba hyloeus</i>	1
7810		<i>Sphinx gordius</i>	3
7810.1		<i>Sphinx poecilla</i>	3
Smerinthinae			
7824		<i>Paonias excaecata</i>	2
7826		<i>Paonias astylus</i>	3
NOTODONTIDAE			
Notodontinae			
7917	930010	<i>Paraeschra</i> ("Hyperaeschra") <i>georgica</i>	3
Phalerinae			
7902	930033	<i>Datana ministra</i>	1
7904	930035	<i>Datana drexelii</i>	8
7906	930037	<i>Datana contracta</i>	4
7915	930046	<i>Nadata gibbosa</i>	10
7920	930049	<i>Peridea angulosa</i>	5
Heterocampinae			
7975	930067	<i>Macruocampa marthesia</i>	5
7983	930075	<i>Heterocampa obliqua</i>	3
7990	930082	<i>Heterocampa umbrata</i>	5
7994	930086	<i>Cecrita guttivitta</i>	3
8005	930098	<i>Schizura ipomoeae</i>	3
8006	930099	<i>Schizura badia</i>	1
8007	930100	<i>Coelodasys unicornis</i>	2
8017	930110	<i>Ianassa lignicolor</i>	1
Nystaleinae			
7957	930133	<i>Dasylophia anguina</i>	1
EREBIDAE			
Arctiinae			
8045.1	930219	<i>Crambidia pallida</i>	3
8118	930297	<i>Virbia opella</i>	6
8121	930299	<i>Virbia aurantiaca</i>	1
8129	930335	<i>Pyrrharctia isabella</i>	2
8134	930309	<i>Spilosoma congrua</i>	8
8146	930323	<i>Hypercompe scribonia</i>	1
8169	930278	<i>Apantesis phalerata</i>	6
8171	930280	<i>Apantesis nais</i>	2
8171.1	930281	<i>Apantesis carlotta</i>	1
8188	930253	<i>Grammia figurata</i>	1
8203	930360	<i>Halysidota tessellaris</i>	2
8211	930370	<i>Lophocampa caryae</i>	1
8228	930401	<i>Cycnia</i> sp.	2
8267	930440	<i>Cisseps fulvicollis</i>	2
Hermiinae			
8322	930469	<i>Idia americalis</i>	2
8323	930471	<i>Idia aemula</i>	2

8326	930474	<i>Idia rotundalis</i>	5
8328	930476	<i>Idia julia</i>	2
8329	930477	<i>Idia diminuendis</i>	6
8340	930489	<i>Zanclognatha literalis</i>	3
8341	930490	<i>Zanclognatha theralis</i>	1
8353	930500	<i>Zanclognatha jacchusalis</i>	2
8355	930502	<i>Chytolita morbidalis</i>	4
8360	930511	<i>Macrochilo orciferalis</i>	2
8364	930514	<i>Phalaenostola larentioides</i>	3
8370	930520	<i>Bleptina caradrinalis</i>	10
8378	930529	<i>Renia salusalis</i>	2
8379	930530	<i>Renia factiosalis</i>	2
8381	930532	<i>Renia discoloralis</i>	1
8384.1	930536	<i>Renia flavipunctalis</i>	2
8386	930538	<i>Renia adspergillus</i>	1
8387	930539	<i>Renia sobrialis</i>	1
Pangraptinae			
8490	930559	<i>Pangrapta decoralis</i>	9
Hypeninae			
8465	930588	<i>Hypena scabra</i>	1
Scolecocampinae			
8522	930643	<i>Gabara subnivosella</i>	3
Phytometrinae			
9037	930729	<i>Hyperstrotia pervertens</i>	1
9038	930730	<i>Hyperstrotia villificans</i>	3
Erebinae			
8801	930792	<i>Catocala ilia</i>	1
8847	930833	<i>Catocala gracilis</i>	1
8873	930855	<i>Catocala similis</i>	1
8876	930857	<i>Catocala micronympha</i>	1
8618	930891	<i>Drasteria graphica</i>	1
8738	930923	<i>Caenurgina crassiuscula</i>	1
8767	930927	<i>Doryodes spadaria</i>	1
8745	930944	<i>Mocis texana</i>	1
8689	931023	<i>Zale lunata</i>	2
8697	931032	<i>Zale minerea</i>	3
8699	931034	<i>Zale obliqua</i>	1
8707	931042	<i>Zale metatoides</i>	1
9818	931060	<i>Amolita fessa</i>	1
9821	931063	<i>Amolita roseola</i>	2
Eulepidotinae			
8574	931077	<i>Anticarsia gemmatalis</i>	1
8587	931089	<i>Panopoda rufimargo</i>	3
EUTELIIDAE			
8957	931106	<i>Paectes oculatrix</i>	2
NOLIDAE			
Nolinae			

8983	931121	<i>Meganola minuscula</i>	1
8983.1	931122	<i>Meganola phylla</i>	3
8983.2	931123	<i>Meganola spodia</i>	2
8989	931129	<i>Nola pustulata</i>	1
8991	931131	<i>Nola cereella</i>	1
8996	931136	<i>Nola clethrae</i>	2
Risobinae			
8970	931149	<i>Baileya ophthalmica</i>	2
8971	931150	<i>Baileya dormitans</i>	1
NOCTUIDAE			
Bagisarinae			
9169	931241	<i>Bagisara rectifascia</i>	1
Eustrotiinae			
9047	931290	<i>Lithacodia muscosula</i>	1
Pantheinae			
9189	931406	<i>Charadra deridens</i>	1
Balsinae			
9664	931419	<i>Balsa labecula</i>	3
Acronictinae			
9211	931432	<i>Acronicta tritona</i>	1
9238	931455	<i>Acronicta lobeliae</i>	2
9246	931460	<i>Acronicta clarescens</i>	1
9243	931463	<i>Acronicta ovata</i>	4
9244	931464	<i>Acronicta immodica</i>	7
9245	931465	<i>Acronicta modica</i>	3
9249	931467	<i>Acronicta increta</i>	2
9247	931469	<i>Acronicta tristis</i>	3
9254	931471	<i>Acronicta afflicta</i>	4
9257	931474	<i>Acronicta impleta</i>	2
9259	931476	<i>Acronicta noctivaga</i>	1
9266	931480	<i>Acronicta lithospila</i>	1
9272	931485	<i>Acronicta oblinita</i>	1
9285	931497	<i>Polygrammate hebraeicum</i>	1
9286	931498	<i>Harrisimemna trisignata</i>	1
Condicinae			
9690	931989	<i>Condica videns</i>	1
Eriopinae			
9633	932194	<i>Callopietria cordata</i>	1
Noctuinae			
9618	932208	<i>Phosphila turbulenta</i>	2
9619	932209	<i>Phosphila miseloides</i>	3
9669	932219	<i>Spodoptera ornithogalli</i>	1
9681.1	932233	<i>Elaphria alapallida</i>	3
9688	932249	<i>Galgula partita</i>	1
9647	932266	<i>Proxenus miranda</i>	1
9650	932269	<i>Athetis tarda</i>	1
9547	932292	<i>Phlogophora periculosa</i>	1

9364	932314	<i>Apamea sordens</i>	1
9353	932316	<i>Apamea inordinata</i>	1
9415.1	932375	<i>Oligia strigilis</i>	2
9404	932378	" <i>Oligia</i> " <i>modica</i>	1
9427	932413	<i>Meropleon diversicolor</i>	1
9435	932419	<i>Photedes sp.</i>	1
9556	932713	<i>Chytonix palliatricula</i>	2
10521	932803	<i>Morrisonia confusa</i>	1
10291	932805	<i>Morrisonia latex</i>	1
10300	932882	<i>Lacanobia grandis</i>	2
10301	932883	<i>Spiramater lutra</i>	4
10431	932928	<i>Dargida diffusa</i>	3
10444	932943	<i>Leucania phragmatidicola</i>	1
10461	932965	<i>Leucania ursula</i>	1
10397	933044	<i>Lacinipolia renigera</i>	4
10532.1	933089	<i>Homorthodes lindseyi</i>	2
10563	933113	<i>Protorthodes oviduca</i>	1
10567	933118	<i>Ulolonche culea</i>	1
10585	933136	<i>Orthodes majuscula</i>	2
10587	933138	<i>Orthodes cynica</i>	1
10288	933146	<i>Orthodes detracta</i>	6
10627	933193	<i>Tricholita signata</i>	1
10870	933232	<i>Dichagyris acclivis</i>	1
10641	933506	<i>Agrotis vetusta</i>	1
11010	933547	<i>Lycophotia phyllophora</i>	5
11012.2	933551	<i>Noctua pronuba</i>	4
10942.1	933589	<i>Xestia dolosa</i>	1
11006	933649	<i>Protolampra brunneicollis</i>	2
11029	933680	<i>Abagrotis alternata</i>	1
Total species:			194

Avian

Land bank staff conducted seasonal 5-minute point count surveys of birds at Quenomica Preserve in the spring of 2022 (n=3) and summer of 2022 (n=4). The presence of occasional migrant and resident birds throughout the spring season and summer breeding season was recorded during a total of seven visits: sites A and B were visited all seven times and point C was visited 5 times. 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. Surveys were conducted in the morning so nocturnal species were not likely to be detected.

Bird species on the Preserve are seasonally-dependent. Some birds occur in more than one survey points and during more than one season. Total species counts do not include multiple sightings of an individual species. Summer breeding season yields the greatest richness of bird species on the Preserve

(Table 4). Most birds that visit the Preserve during the breeding season are tree/shrub nesters though some are cavity-nesters and ground nesting species.

Observations of breeding, nesting, and rearing young– such as adults carrying nesting materials or food, carrying fecal sacs from a nest, or attending hatchlings – were not recorded, therefore it cannot be confirmed if any observed species was breeding on the property. A total of 35 species was observed on the Preserve.

Table 4: Bird species observed in Quenomica Preserve during the spring and summer of 2022. U= Uncommon; O=Occasional; C=Common; P=Present. PO=Possible breeding; CO=Confirmed breeding; PR=Probably breeding.

Species ^b 2022 Spring n=3	Pond Shoreline (A) and Coastal Woodland (B)		
	Point A	Point B	Data Combined
Year-round			
American Crow	O	O	O
American Robin		O	U
American Woodcock		P	U
Black-Capped Chickadee		O	U
Canada Goose	O	O	O
Double-crested Cormorant	O		U
Eastern Towhee	C	C	C
Gray Catbird	O	U	O
Mute Swan	O		U
Ovenbird		O	U
Pine Warbler		O	U
Red-winged Blackbird	O		U
Song Sparrow	C	O	C
Tufted Titmouse		O	U
Yellow Warbler	C	O	C

Species ^b 2022 Spring n=1	Cultural Grassland (C)
	Point C
Year-round	
American crow	X
American Robin	X
Baltimore Oriole	X
Black-capped Chickadee	X
Blue jay	X
Brown-headed Cowbird	X
Chipping Sparrow	X
Common Yellowthroat	X
Downy Woodpecker	X
Northern Cardinal	X
Eastern Towhee	X
Hairy Woodpecker	X
Red-winged Blackbird	X
Song Sparrow	X
Tufted Titmouse	X

Species ^b 2022 Summer n=4	Pond Shoreline (A), Coastal Woodland (B), & Cultural Grassland (C)			
	Point A	Point B	Point C	Data Combined
Year-round				
American Crow	O	C	O	O
American Goldfinch	C	O	C	C
American Robin		O	O	O
Barn Swallow	O		O	U
Black-Capped Chickadee	P	O	O	O
Brown-headed Cowbird			O	U
Blue Jay			O	U
Carolina Wren		O	O	U

Chipping Sparrow			O	U
Double-crested Cormorant	C			O
Greater Black-backed Gull	O			U
Gray Catbird	C	C	O	C
Herring Gull	O	O		U
Mute Swan	O			U
Northern Cardinal		O	O	U
Northern Flicker			O	U
Red-bellied Woodpecker			C	O
Red-winged Blackbird			O	U
Song Sparrow	C	O	C	C
Tufted Titmouse		O	P	U
White-breasted Nuthatch		O	O	O
Breeding				
Common Tern	O			U
Common Yellowthroat	O	O	O	O
Eastern Phoebe			O	U
Eastern Towhee		C	O	O
Osprey	C	O	P	O
Red-eyed Vireo	O	O		O

Appendix F. Endangered Species

Portions of Quenomica Preserve fall within Priority Habitat of Rare species, as established by the Natural Heritage and Endangered Species Program (Map 23). This plan includes management goals that balance the needs of potential rare species on the Preserve. If major management changes occur, repeat surveys will be conducted to understand effects on these species and a plan will be proposed to NHESP to mitigate any harm.

Map 23: NHESP priority habitat and estimated habitat in Quenomica Preserve, Edgartown, MA.



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. Sources: 2019 ortho phtograph, U S G S topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_NHESP_map_2023.jpg Date: February 3, 2023.

0 500 1,000 2,000 Feet

Appendix G. Land Use History in Detail

Quenomica Preserve is located on Quenomica Neck, a narrow finger of land that extends into the northern reaches of Edgartown Great Pond. It is derived from the Wampanoag name, *Quanamaukeag*, for “long fishing place” or, *Quannaumkeag*, for “the long eel fishing place” (Banks II 1966). American eels, in this case, are catadromous, spawning in salt water and traveling to freshwater to live out their lives before returning to breed and die in the ocean. The Preserve is surrounded by various landforms around Edgartown Great Pond that have retained their Wampanoag names that often define how the native people were interacting with the landforms as is the case with Quenomica (Figure 1). The names for various necks and coves of Edgartown Great Pond near the Preserve such as *Winnetukget* (at the good tidal cove), *Crackatuxet* (the swift tidal cove), *Cataama* (crab-fishing place), *Mashakomuket* (the great house) are mentioned in some of the earliest deeds (Banks II 1966). The persistence of these Wampanoag names in early deed

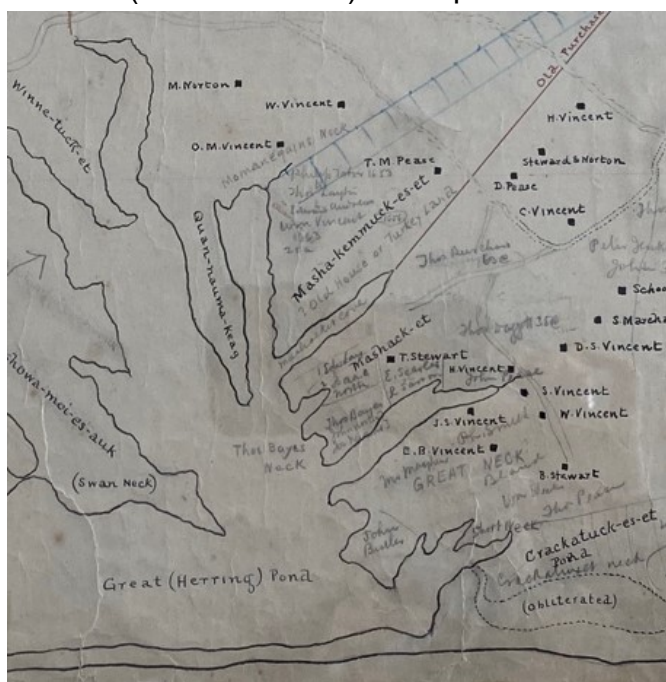


Figure 5. Charles Banks sketch circa 1900 MV museum (MVM) 2012.036.066

recordings between the native people and early settlers for land areas around the Great Pond indicate a significant native village presence around the great pond (Galvin 1984). The area of Quenomica was likely an important landform to the Wampanoag as it flanked the area known as *Momanequin's Neck* on the west; *Mashakamocket* or *Shakamoksett*, the great (sachem) house flanked *Momanequin's Neck* on the east. *Momanequin's Neck* was named for the Christian native, Momenequam, who was born in 1610 and was converted to Christianity by Hiacoomes in 1649. Momenequam was the first preacher of Nashuokamuk, the southwest region of the island (Silverman 2005).

Thomas Mayhew and his son Thomas in 1641-2 from Tewanquatick, sagamore of Nunnepog (fresh pond) (DCRD 3:68). The township reached as far as the eastern chop of Holmes Hole and included Chappaquiddick (Pierce and Segel Part I 2016). The Mayhews came from Watertown along with “five of their townsmen”, John Daggett, Daniel Pierce, Richard Beeres, and John and Francis Smith (Banks II 1966). The first people to take up residence in Edgartown likely did so along the harbor. These first “home lot” land transactions occurred freely and were unrecorded until Mayhew, senior and junior, came to live on the island in 1646. Several divisions of common land followed the settlement of the first “home lots” (Figure 2). Between 1646 and 1652 Chappaquiddick and the “Dividend lots”, 10-40 acres in size, were assigned to various proprietors. These acts were recorded post factum based on verbal descriptions and private records (Banks II 1966). To protect the investment of the proprietary group as a whole, Mayhew banned

Great Harbor, later named Edgartown, was the first purchase made by patentees



Figure 6. First Division of Old Purchase, Marna Waller 1998

proprietor land sales directly with native people in 1652 (Banks II 1966). At this time, approximately 15 families were known to live in Edgartown comprising 20 proprietors (Banks II, 1966). The first recorded division of common land amongst the 20 proprietors occurred in 1653 and encompassed 200 acres of “The Planting Field” located on the north side of Edgartown (Banks II 1966). A sketch by Banks, circa 1900, depicts Philip Tabor, a carpenter and assessor of Watertown as owning land near Quenomica in 1653 (Fedele 2022, Banks II 1966, Figure 3). Philip Tabor was an acquaintance of Thomas Mayhew senior, having unrecorded land purchases prior to 1647 that he sold during the nine years he resided on the Vineyard (Banks II 1966). One of the oldest houses remaining on the Vineyard, the Vincent Farm House, was once located on land owned by Philip Tabor that is in the neighborhood of Quenomica (DCRD 1:325).

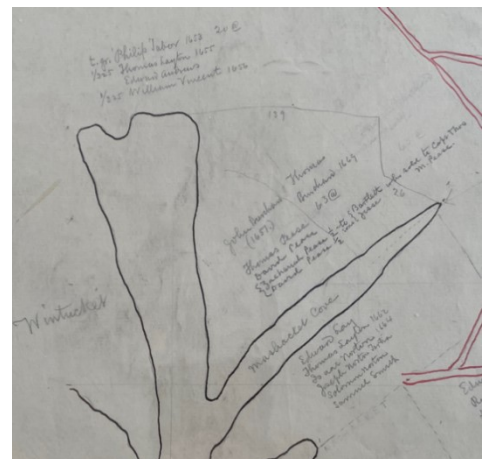


Figure 7. Charles Banks sketch circa 1900 MVM 2012.036.030

Mayhew continued to acquire land from the sachem to accommodate the growing town of Edgartown. Land around Sanchacantucket was purchased in 1653 and designated as “The “New Purchase” followed by the five and twenty proprietors’ division of 8-40 acre lots, primarily in Katama, the following year. The “line lots” situated on the “old purchase”



Figure 8. Ditch and mound example from Williamsburg, VA, <https://www.hmdb.org/m.asp?m=17316>

line were divided in 1659 amongst 19 proprietors (Banks II 1966, Town Records I, 6). Trails were given European names such as Swimming Place Path, Old Mill Path, Plain Road and Planting Field Way (Galvin 1984). Plantation period (1627-1675) deeds reference orchards, fences and ditches in boundary descriptions suggesting an agrarian community (Galvin 1984). The ditch and mound system (Figure 4) with optional wooden fencing

was used instead of stonewalls due to the lack of substantive glacial deposits in the outwash plain of Edgartown (MHS 2011). Records indicate farm animals such as cattle, hogs, horses, sheep, and goats were introduced between 1651 and 1668 (Galvin 1984). Commonage rights for pasture were defined with the arrival of livestock. One right was equivalent to 8 cows in 1653 (Banks II 1966). Commonage rights for firewood were also defined. In 1654, the number of proprietors increased from 20 to 25 with additional proprietors being Richard Aery, Thomas Bayes, Thomas Harlock, Richard Sarson, John Smith and William Vinson (Vincent) (Banks II 1966).

William Vinson (b. 1627) came to the Vineyard from Connecticut possibly with John Pease. He first purchased 4 acres on Starbuck Neck in 1655 followed by 20 acres from Edward Andrew in 1656. Those 20 acres comprise the center of the Vincent Farm to the east of Quenomica. The land included a house formerly owned by Philip Tabor (1653) and Thomas Layton (1655) (Banks III 1966, DCRD 1:325, Figures 5,6). In 1655, William Vinson married Susannah Collier and they had one son Thomas Vinson, a gunsmith and locksmith.



Figure 9. William Vincent house, 1672, https://docs.nwu.edu/baker_vincent_house/

The land in and around the preserve remained in the possession of two early proprietor families, Norton and Vinson, for over two and a half centuries. William Vinson became a proprietor with the five and twenty lot division in 1654 and Nicholas Norton became a proprietor with the “Line Lots” division in 1660 (Banks II 1966).



Figure 10. William Vincent house, 1672, MVM

The various necks were divided in considerable detail by Mayhew senior, Thomas Burchard and Philip Tabor and recorded in the Edgartown town records (Town of Edgartown I: 109, 128, 127, 131) in 1663. Quenomica Neck was divided into 33 shares comprising 2-acre lots (Figure 7). The first 10 shares went to Nicolas Norton, Tomas Harlock, Thomas Paine, Thomas Daggett, Richard Sarson, William Vinson, Good wife

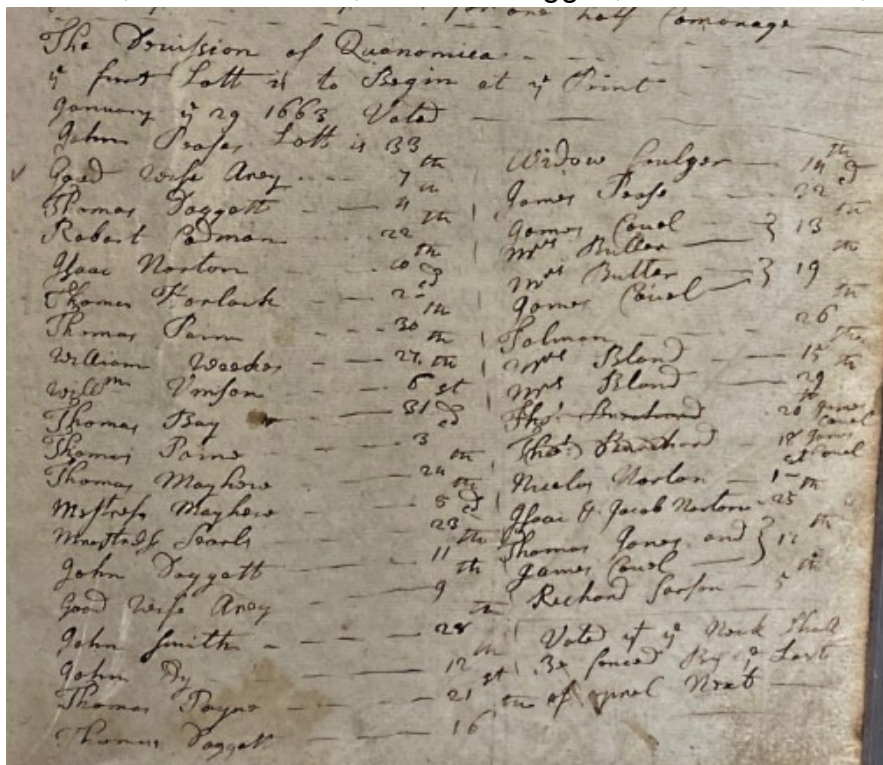


Figure 11. Quenomica division; Excerpt from Town Records I, 109

Aery, Matthew Mayhew, and Isacc Norton and would likely have composed Quenomica South (Town of Edgartown I: 109). The necks provide good fodder for grazing livestock. Their division was congruent with an increase in commonage rights in 1663 from 8 to 12 cattle with 8 sheep or goats equating one cow (Banks II 1966).

The largest area of common land, the “Plain Lots”, was divided in 1676 into 40 lots among 28 proprietors. William Vinson received one lot

(#30) Nicholas Norton 4 lots (# 7, 19, 25, 34) and Isaac Norton 3 lots (# 8, 25, 34) (Banks I 1966 and Edgartown Proprietors Book page 2). Joseph Norton purchased several parcels of land at Quenomica in 1681 (DCRD 3:147).

Restrictions on firewood commonage were necessary by 1683 as land was cleared for agriculture (Banks II 1966). The woodlands of Edgartown were divided in 1684 into 42 shares (Town of Edgartown I: 33). Sarson and Aery both sold parcels at Quenomica to Thomas Harlock (DCRD 2:171, 174). William Vinson died in 1697 and left his estate to his wife, Susannah, purposefully excluding his son Thomas (Banks II, 1966). However, Susannah did not continue to begrudge her son and bequeathed her inheritance to him in 1711-1714 (DCRD 3:86, 89). Thomas Vinson (b 1656) married Sarah Post. They had 5 daughters and 4 sons, Thomas², Reuben, Nathaniel and Joseph. Thomas added to the family farm with additional land purchases at Quenomica from Matthew Mayhew in 1712 (DCRD 2:345). The woodland in the northern reaches of Quenomica Neck between the “Old Quenomica” and the 10 acres on the line were divided in 1718 (Edgartown proprietors book 22-28). Many of the boundary marker descriptions in this division referenced fences, ditches, stake and stone sets, and saplings, suggesting a landscape surrounding the woodland was devoid of established trees and without stones for building walls. Thomas Vinson², husbandman, purchased land at a place known as *Quanomokoy*

wood from Oliver John Aery, blacksmith, in 1726 (DCRD 4:160). Joseph Vinson, farmer, also completed several purchases in Edgartown amassing a considerable acreage around the Mashacket area from 1747-1748.



Figure 14. 1776 Des Barres. Eastern Half of Martha's Vineyard and Nantucket.

Sheep farming on the island was gaining in popularity and profitability during the 18th and 19th centuries. For Edgartown, whaling and fisheries of other kinds constituted the primary occupation of townsmen from early settlement to the last half of the 19th century (Banks II 1966). Despite the profitability of whaling, one third of the township toiled in farming (Galvin 1984). Eighteenth century maps



Figure 9. 1781 Des Barres. Coast of New England from Chatham Harbor to Narraganset Bay

document much of the woodland in Edgartown cleared be it for pasture, firewood or building. The bucolic region of Edgartown was focused heavily in Katama and around the Great Pond (Figure 8). William Douglas gives his account of the West end of Martha's Vineyard in 1751 as "3 miles wide: much of the island is very barren, being heaths and pine land: 3 poor townships, Edgartown, Tisbury, and Chilmark: about 200 fencible white men and 450 Indian" (Douglas 1751). The De Barres maps of 1776 and 1781 depict a cluster of houses at the location of the Vincent Farm east of Quenomica, otherwise the neck is devoid of additional occupation (Figure 8, 9). The Des Barres 1776 map depicts the five and twenty divisions in Katama and one fenced area north of the Vincent homestead. Hecter St.



Figure 13. 1784 Crèvecoeur. Carte De L'Isle de Martha's Vineyard avec ses dependencies

John de Crevecoeur corroborates Douglas' account in Letters from and American Farmer where he wrote, "Edgar



Figure 12. Plan of Edgartown and Tisbury, made by Benjamin Smith, dated June 1, 1795.

(town) is the best sea-port....as its soil is light and sandy, many of its inhabitants follow the example of the people of Nantucket (whaling)...flock of island is 20,000 sheep, 2,000 neat cattle, besides horses and goats” (MacKenzie Jr 1997). The Crevecoeur map of 1784 and the 1795 plan of Edgartown illustrate a moderate amount of woodland in the township to the north of the Great Pond and a large sheep pasture to the east of the pond (Figure 10, 11). This suggests that a large portion of the farming that was occurring in Edgartown during the 18th century was focused in Katama and around the Great Pond.

The homestead on Quenomica North dates to the Federal Period (1775-1830) with its federal style building and Greek revival updates in the mid-19th century (MHC 2001, Figure 12). It was built in 1789 and belonged to a 129-acre homestead occupied by the Norton family. It is also referred to as the Beriah Weeks house (MHC 2001). However, mid-seventeenth century deeds of his will document the Beriah



Figure 15. Norton Homestead, 1789

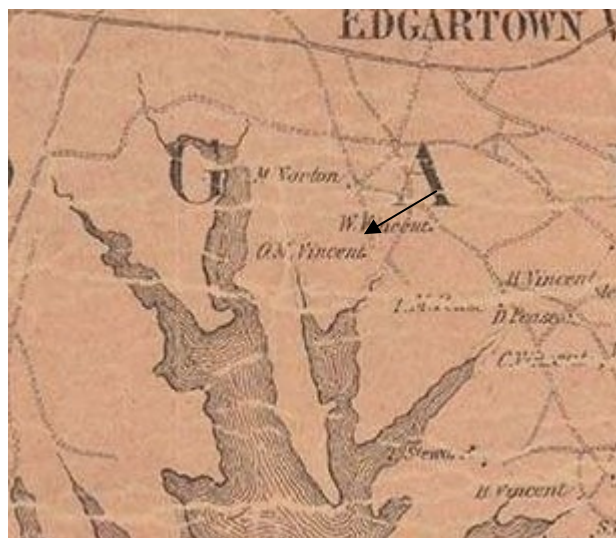


Figure 16. Henry F. Walling 1858 Map of the Counties of Barnstable, Dukes, & Nantucket, Massachusetts

Weeks dwelling house, two barns, orchard, and farm on the “east side of the road or highway that leads from Edgartown to Homes Hole (DCRD 32:13). Beriah Weeks was a resident of Tisbury until he married Sarah Smith in Edgartown in 1802 (New England Historical Genealogical Society 1906). The Norton house is first depicted on the H.F. Walling map of 1858, ten years after Beriah Weeks’ death. The name M. Norton (Matthew Norton) appears next to the house symbol abutting Meetinghouse Way on the map (Figure 13). Matthew Norton’s house is also labeled on Banks’ sketch of Edgartown circa 1900 (Figure 1).

(Banks III 1966). Nicholas had four sons and six daughters. Upon his death at 40 years of age his estate was divided among his children and wife, Elizabeth. Nicholas bequeathed to Benjamin, a farmer, “*all my meadow at Saniacantick as also my meadow at Morthals neck beach from the Crick dug into the Great pond westward as also my dwelling houes and all my land aioyning to my Sayd house after the deces of my wife...as also my lots at quompasha with all my divided land Elsewhere*” as well as a whole commonage (Banks II 1966). Matthew Norton was a 6th generation farmer of the Norton clan born in 1780 and the father of two sons. In 1860, Matthew Norton was assessed for 84 acres plus a dwelling house and barn; his son, Owen Norton, was assessed for 27 acres of meadow, pastureland, woodland and marsh (Massachusetts Historical

Matthew Norton was of the Benjamin Norton clan descended from Nicholas Norton, a proprietor of Edgartown in 1657



Figure 17. Plan of Edgartown made by Henry H. Crapo, dated 1830 (Figure 15). Crop production is indicated on the northern portion of the Preserve.

Between 1865 and 1894, Owen Norton purchased small parcels of woodland from various Vincent family members and Charles Stewart in the area of Wintucket, Kracktucket and Sukey Allen Way (aka Meetinghouse Way) adjacent to his land holdings (MHC 2001, DCRD 44:225, 41:484, 51:102, 63:449, 67:315, 92:48-51, 36:9). By 1881, Owen Norton's homestead farm amounted to 127 acres and included a barn, two cows, a horse and hay (MHC 2001).

Land farming was not the only agribusiness in the great pond environs. In 1881, the commonwealth leased Edgartown great pond to 29 individuals including Oliver Vincent and Owen Norton, owners of the Preserve parcels, for 15 years for the purpose of taking and cultivating fishes (DCRD 67:105).

Commission 2001).

Matthew Norton's farmland expansion is evident in mid-19th century maps of the island. The plan of Edgartown by Henry Crapo gives a detailed account of the woodland to openland ratio in Edgartown (Figure 14). In this map both the north and south portions of the Preserve were open land in 1830. Over the course of 15 years additional clearing took place on the Quenomica Neck and Meetinghouse Way area as depicted in the 1850 Whiting map

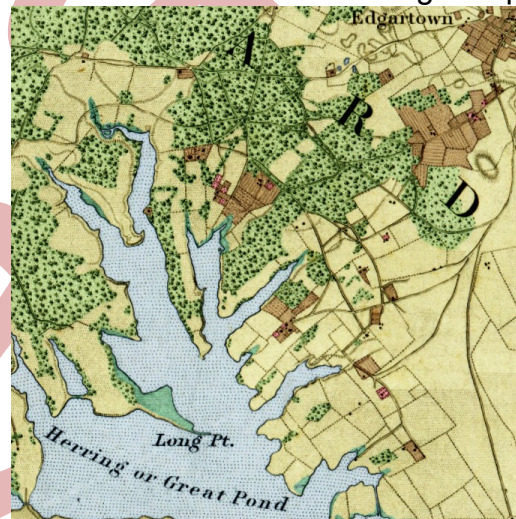
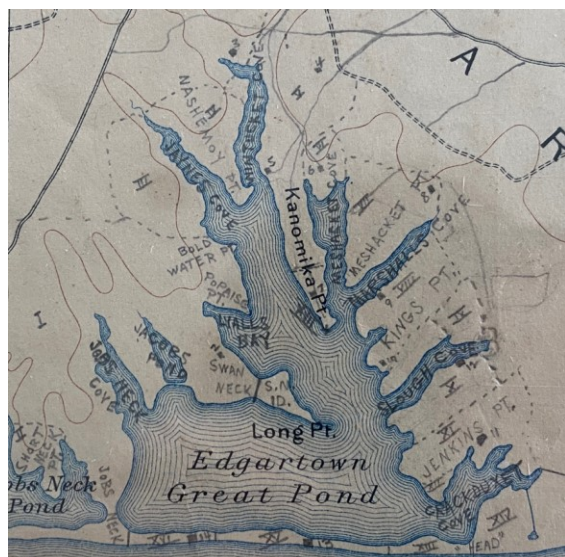


Figure 18. 1850 Whiting Map

Farming is an occupation of perseverance, opportunity, and ingenuity. During the 19th century market hunting for waterfowl grew in popularity in response to the large rafts of ducks that migrated through eastern United States in the winter. Ducks were not only used for human consumption; farmers would feed them to their pigs (Philips 2022). Overhunting



LAND OWNERS & LESSEES		BUILDINGS
I	FLYNN.	1 PohoGwot - FLYNN.
II	NORTON, (WOOD)	2 SANS SOUCI "
III	SMITH,	3 TOWN PUMPING STATION
IV	PERRY,	4 LOOK FARM.
V	LOOK,	5 " CAMP.
VI	KENNISTON,	6 KENNISTON FARM
VII	MADEIRA, (PEASE)	7 KANOMIKA CLUB
VIII	KING, (SULLIVAN)	8 MADEIRA FARM.
IX	WHIMPENNY, (WOOD)	9 ICE HOUSE
X	VINCENT, (WOOD)	10 PEASE CAMP.
XI	CAPAWAC CLUB (LESSES ?)	11 CAPAWAC CLUB
XII	VINCENT, (WOOD)	12 ICE HOUSE
XIII	" HEAD "	13 PROCTOR CAMP
XIV	" "	14 HAYDEN CAMP
XV	PROCTOR,	
XVI	HAYDEN Fg.	
XVII	KANOMIKA CLUB.	
XVIII	WATCHA "	
XIX	LOOK,	
XX	NORTON	

Figure 19. Annotated map of Martha's Vineyard circa 1909

led to the prohibition of commercial hunting for waterfowl, changing the purpose of duck hunting from subsistence to sport (Haines 2018). At the turn of the 19th century an annotated topographic map of the island (circa 1909) shows the locations of four hunting camps and two hunting clubs in Tisbury Great Pond (Walling 1858, Figure 16). Quenonica point was a particularly favorable location to hunt waterfowl due to the long coves on either side that funneled ducks from the potholes in the back of the coves to open water at dusk. For approximately two decades the point was leased to hunters so that they may rise before dawn and engage in the sport of waterfowl hunting. Oliver Vincent, who owned the point in 1896, leased shooting rights to Horace Gridley for 10 years. The lease included access to 15 acres on the point by foot or team, plus the right to erect a shooting box and shoot gamebirds (DCRD 99:166). Upon the expiration of the lease another agreement for shooting rights was made between Vincent and Jason Dexter, John White and Harry Wimpenny (DCRD 113:553).

Quenonica Neck was undergoing much change in the 20th century not only in terms of ownership but landscape structure as well. The annotated map of 1909 describes the northern portion of the Preserve as the Look Farm, no longer the Norton Farm. In 1906, Owen Norton's widow, Sophronia and their daughter Elizabeth sold the Norton Farm to Thomas Mullen who that same year sold the farm to Christopher Look (DCRD 117:74, 96). Sixteen acres of Quenonica Point were divided into sixths and sold to various parties including Thomas Dexter, the duck hunter, and S. Prescott Fay in 1907 (DCRD 119:304).

Twenty years later various one sixth shares of the 16-acre point were sold to Walter and Leland Renear who had the Quenomica Shooting Club with others on the point as depicted on the 1913 Geroge Eldridge map (Figure 18). The remains of their duck blinds are underwater most of the year off Quenomica Point. The Dexter and Look camps are north of Renear's camp on the Eldridge map. Spelling of Quenomica in maps and deeds varied by one or sometimes many letters during the early settlement centuries. The name



Quenomica is spelled with a "K" for the first time on a map in the Atlas of Massachusetts created by Cartographer Oscar Walker in

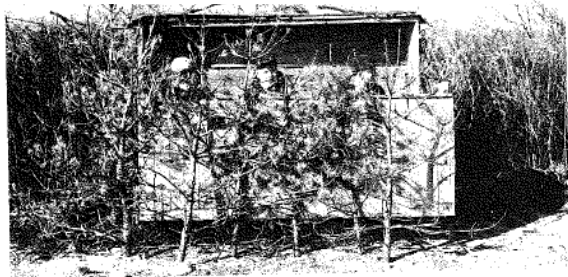


1891 (Figure 17); no reason is given for this divergence from the historical spelling of the name.

Farming by European settlers on the northern portion of the preserve has to this point in history occurred for over two and a half centuries. In 1926 Christopher, Frank and John Look sold the homestead to Alfred and Morris Hall (DCRD 170:144). Over the course of ten years between 1927 and 1937, Robert Bigelow purchased the one sixth shares of the 16-acre lot on the point from various individuals (DCRD 163:372, 173:44, 179:164, 185:312, 177:344, 227:134).

During the 1940's the northern portion of the Preserve along with several hundred acres of surrounding land were purchased by John G. MacKenty. Mr. MacKenty was born in 1900 and was a Radio Corporation of America executive and avid duck hunter. He was married to Katherine Walker, and they had two sons, John and Jeremiah, and one daughter, Katherine, who was married to Robert Bigelow, the owner of the southern portion of the Preserve. John MacKenty senior, published the book "Duck Hunting" in

Figure 22. Fixed blind from John MacKenty's book "Duck Hunting" 1953



1953 where he described the why and how of duck hunting anywhere, drawing from his experiences on Edgartown Great Pond. In his book, MacKenty describes duck hunting as being "conducted in a pleasurable and paradoxical atmosphere of relaxation and anticipatory tension". Additionally, he took issue with the term "duck shooting" as "ninety per cent of the pleasure in this

Figure 21. Eldridge Map of Martha's Vineyard, 1913

sport lies in the process of hunting and perhaps only ten per cent in the actual ‘shooting’’. The Mackentys operated several duck blinds along both sides of Quenomica Neck (personal communication, Mike MacKenty 2022, Figure 19).

The open landscape of Quenomica Preserve created through centuries of farming was maintained by the MacKenty/Bigelow family and was visible into the mid twentieth century (Figure 21). They operated a gentlemen’s farm on the Preserve, raising chickens and peacocks and growing hay (MacKenty 2023). In 1977, Katherine MacKenty Bigelow sold the 16 acres “more or less” with the buildings thereon at Quenomica Point to John O’Keefe who later sold the land to the Land Bank in 2022. The MacKentys also



Figure 20. 1938 Aerial of Martha's Vineyard

sold the northern portion of the Preserve, parcel 38, to Storm and Debra Field in 2012 (DCRD cert 13219, 71:307) who later sold to Ellen Harley in 2014 (DCRD cert 13700, 74:231) and parcel 31 to Ellen Harley in 2004 (DCRD cert 11739, 63:105) (Figure 21). Both lots are part of the Ashakomaksett Farm Association created in 2001 (DCRD document 48685) and are illustrated on a plan created in 2000 and recorded as Plan 19226-K (DCRD cert 3853).

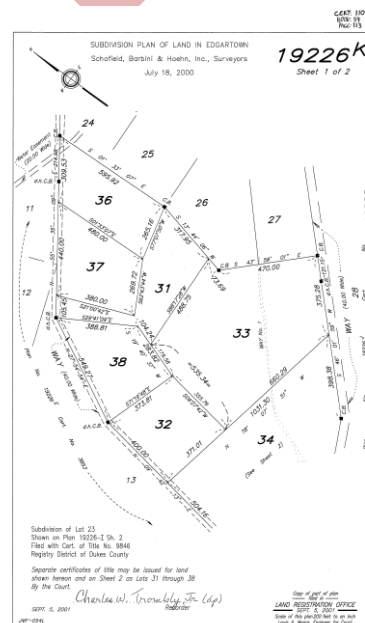


Figure 21. Survey of lots 31 and 38 from Ashakomaksett Farm Subdivision

Between 1928 and 1990, Quenomica Point was succumbing to succession and was no longer grass-dominant. The Preserve remained overgrown throughout much of the 21st century until 2008 when portions of the northern parcels of the Preserve were opened for agriculture by the Harleys. The Harleys continued MacKentys’ gentleman’s farm and kept rescue horses, a donkey, and gardens. In 2022, the land bank purchased the Preserve

from John O’Keeffe (Quenomica South) and Ellen Harley (Quenomica North).

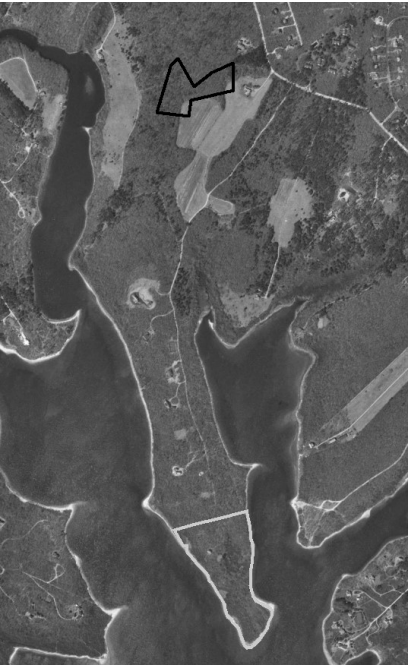


Figure 26, Aerial photograph 1990



Figure 25, Aerial photograph 2001



Figure 23, Aerial photograph 2008

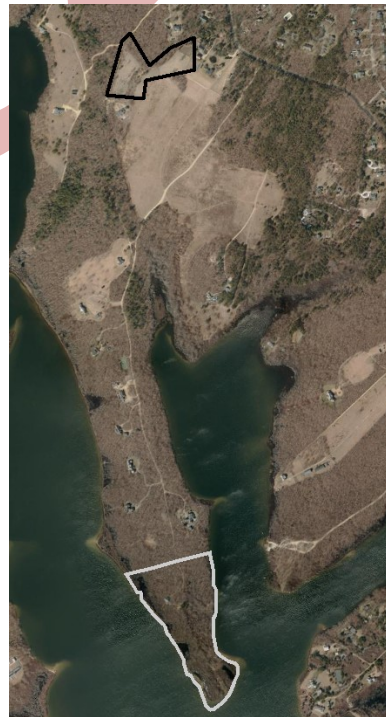
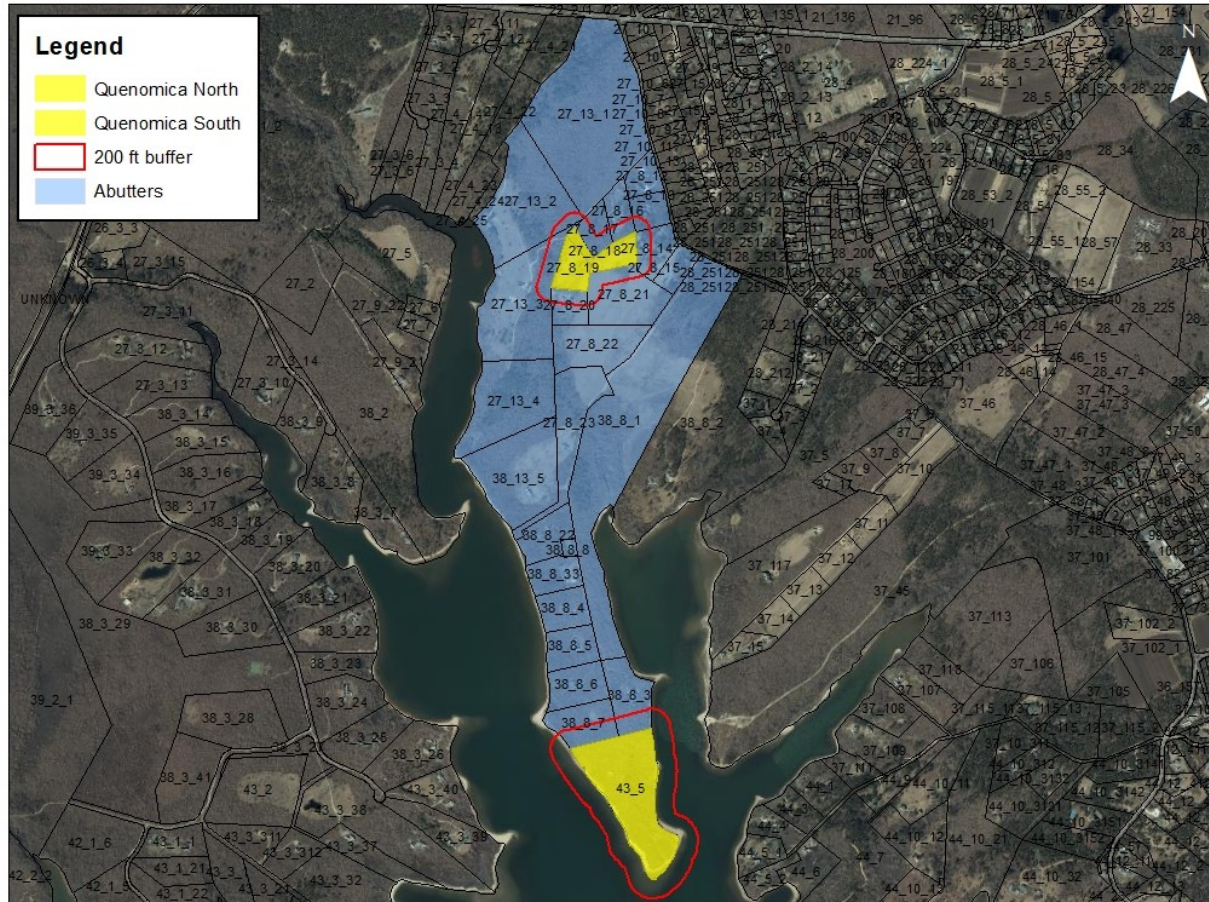


Figure 24, Aerial photograph 2019

Appendix H. Abutters

Map 24: Map of abutters to Quenomica Preserve within 200ft of property boundary.



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. Sources: 2019 ortho photograph, USGS topography, hydrology and parcel data - MassGIS and MVC. File: Quenomica_Abutters_map_2023.jpg Date: March 22, 2023.

0 650 1,300 2,600 Feet

Table 5: List of Abutters that are within 200 ft of the Quenomica Preserve boundary as well as those owning property along Kanomika Road and Old Farms Trail.

Parcel/ GIS/ Cama Number	Property Address	Owner Name	Co-Owner Name	Owner Address	Owner City	Owner State	Owner Zip
27-8.12	26 Meetinghouse Way	Woessner Warren D	Freeman Iris C	110 Bank St SE Apt 2503	Minneapolis	MN	55414
27-8.13	32 Meetinghouse Way	Meyers William F	N/A	9 Stoneybrook Rd	Darien	CT	06820
27-8.14	40 Meetinghouse Way	Martha's Vineyard Land Bank Commission	N/A	PO Box 2057	Edgartown	MA	02539
27-8.15	44 Meetinghouse Way	Martha's Vineyard Land Bank Commission	N/A	PO Box 2057	Edgartown	MA	02539
27-8.16	1 Old Farms Trail	Egerton Robert E Jr	Egerton Angela N	PO Box 2133	Edgartown	MA	02539
27-8.17	11 Old Farms Trail	Mackenty William	Howard Gilman	4 Sandgate Circle	Madison	CT	06443
27-8.20	31 Old Farms Trail	Cronin Douglas J	Cronin Stefanie G	PO Box 2746	Edgartown	MA	02539
27-8.21	20 Kanomika Rd	Nature Conservancy	N/A	99 Bedford St 5th Floor	Boston	MA	02111
27-8.22	30 Kanomika Rd	Nature Conservancy	N/A	99 Bedford St 5th Floor	Boston	MA	02111
27-8.23	40 Kanomika Rd	Quanomica LLC	N/A	40 Sago Palm Rd	Indian River Shores	FL	32963
27-13.1	2 Old Farms Trail	Mackenty John W	Mackenty Edmund R	18 Ranger Rd	Natick	MA	01760
27-13.2	420 West Tisbury Rd	Mackenty John W	Mackenty Edmund R	18 Ranger Rd	Natick	MA	01760
27-13.3	20 Old Farms Trail	Mackenty Michael C	N/A	PO Box 2865	Edgartown	MA	02539
27-13.4	30 Old Farms Trail	Mackenty John W & Michael C	Mackenty Edmund R	C/O Edmund R Mackenty 18 Ranger Rd	Natick	MA	01760
38-13.5	50 Kanomika Rd	Forrester Family LLC	N/A	40 Sago Palm Rd	Vero Beach	FL	32963
38-8.1	60 Meetinghouse Way	Stratton John C III	N/A	50 Pleasant Street	Mendon	MA	01756
38-8.22	61 Kanomika Rd	Jones Gerald S	Jones Linda B	80 Thistle Patch Way	Hingham	MA	02043
38-8.3	70 Kanomika Rd	Muney Karen L	Muney Alan M	11206 River View Dr	Potomac	MD	20854

Quenomica Preserve **Draft** Management Plan

38-8.33	63 Kanomika Rd	McCaslin Richard Brian	McCaslin Kimberly Diane	26 Cypress Rd	Wellesley	MA	02481
38-8.4	65 Kanomika Rd	65 Kanomika Rd LLC	N/A	6410 Shadow Rd	Chevy Chase	MD	20815
38-8.5	67 Kanomika Rd	Rubin Mitchell	Berkower Lisa	PO Box 9000	Edgartown	MA	02539
38-8.6	69 Kanomika Rd	Dobrin Philip Joel	Dobrin Lucy	885 Park Ave Apt 9B	New York	NY	10075
38-8.7	71 Kanomika Rd	O'Keefe Patrick J	O'Keefe Katherine A	5555S Forest Ln	Greenwood Village	CO	80121-2117
38-8.8	Kanomika Rd	Luening JD & Gage LP & Sargent RL	Kanomika Neck Association	290 West End Ave Apt 8D	New York	NY	10023

Draft

Appendix I. Universal Access

The Recreational Opportunities Spectrum (ROS) classification for Quenomica 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 the Preserve as follows.

Property Name:	Quenomica Preserve
Size:	29.4 acres
Primary activities:	Hiking, wildlife viewing
Primary elements:	Pastureland and coastal pond views
Primary spaces:	Woodlands, pastures, pond shore
Obstacles that limit accessibility:	Archaeological sensitive areas
Existing or potential alternatives:	Sweetened Water Preserve
Proposed ROS classification:	Semi-primitive non-motorized
Proposed expectation of accessibility:	none

For all less-developed land bank, 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.

Universal access is feasible for Quenomica Preserve from the trailhead at Quenomica South to the viewing platform at the point. To mitigate impacts to archaeologically sensitive areas the creation of the trail is proposed by adding material including hardener and building up the trail.