

Wilfrid's Pond Preserve

Tisbury,
Massachusetts

Management Plan



September 12, 2019

1996 management plan

Approved by the Tisbury Town Advisory Board (February 13, 1996)

Approved by the Martha's Vineyard Land Bank Commission (February 26, 1996)

Approved by the Secretary of the Executive Office of Environmental Affairs (April 15, 1996)

2007 revised management plan

Approved by the Tisbury Town Advisory Board (December 10, 2007)

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Amended by the Tisbury TAB and MVLBC (September 12, 2019) see page 18.

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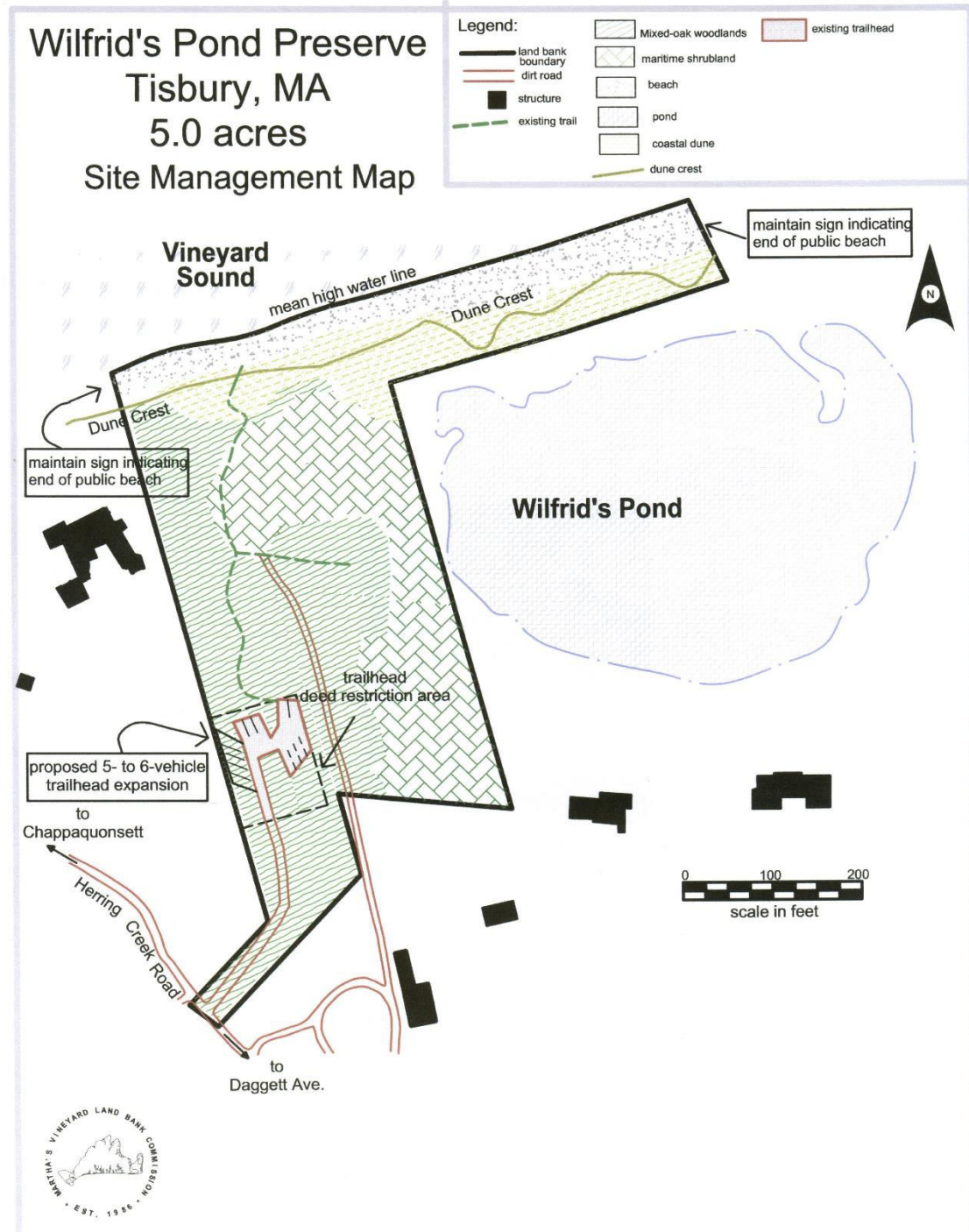
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Map 1: Site Management Map



Executive Summary

Wilfrid's Pond Preserve is a remote north shore beach property located in the town of Tisbury, Massachusetts off Herring Creek Road. It has been open to the public since 1996. In 2003 and 2004 the preserve expanded from 300 feet of shoreline to 700 feet and the acreage increased from 3.2 to 5 acres.

The preserve is adjacent to Wilfrid's Pond (a.k.a., Ashton's Pond), a three-acre coastal pond. The coastal beach is sandy, remote, and serene. Views from the shore include Woods Hole, the Elizabeth Islands, and the Martha's Vineyard steamship route. During the off-season various winter migrating waterfowl species may be observed from the coastal beach bobbing in the waves. During the summer season the beach supports listed and non-listed shorebirds. Inland on the property is a mixed oak stand with abundant black chokeberry shrubs, occasional post oaks and the occasional wood lilies.

Six Massachusetts-listed bird species are known to occur on the property including four shorebirds observed on the beach, one waterfowl species observed in the ocean and a summer migrant observed in the mixed-oak woodlands. One watch-listed plant species is known to occur on the property as well –post oak.

This management plan proposes to continue with the existing management plan from 1996 which allows moderate public use including approximately 550 feet of trails for hiking, non-motorized bicycling, bird-watching and other similar passive recreational uses. The existing 9-vehicle trailhead is proposed in this updated plan to be expanded to accommodate up to 6 additional vehicles, west of the driveway.

All planning goals, objectives and strategies are outlined in detail in the final section of this management plan. To be implemented, this plan must be presented at a public hearing and approved by the land bank's Tisbury town advisory board, the Martha's Vineyard land bank commission and the Secretary of the Executive Office of Energy and Environmental Affairs.

About the Authors

Julie Schaeffer 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. Property foreman Matthew Dix has worked on land bank properties since 1990. He attended the School of Natural Resources at the University of Vermont and has extensive knowledge of the region's natural history and local geography. Jeffrey Komarinetz began as a conservation land assistant in March 2000, Jean-Marc Dupon began as a conservation land assistant in July 2007 and James Dropick began as a conservation land assistant in February 2006. Maureen McManus-Hill has been the administrative assistant since July of 2006; she has a B.A. in economics from Lafayette College. John Potter and Wendy Culbert wrote the 1996 management plan for Wilfrid's Pond Preserve. Portions of that plan are reproduced in this updated version. John Potter was the land superintendent from 1992 to 1998 and Wendy (Malpass) Culbert was the land bank ecologist from 1993 to 1999.

Map 2: Site Management Map

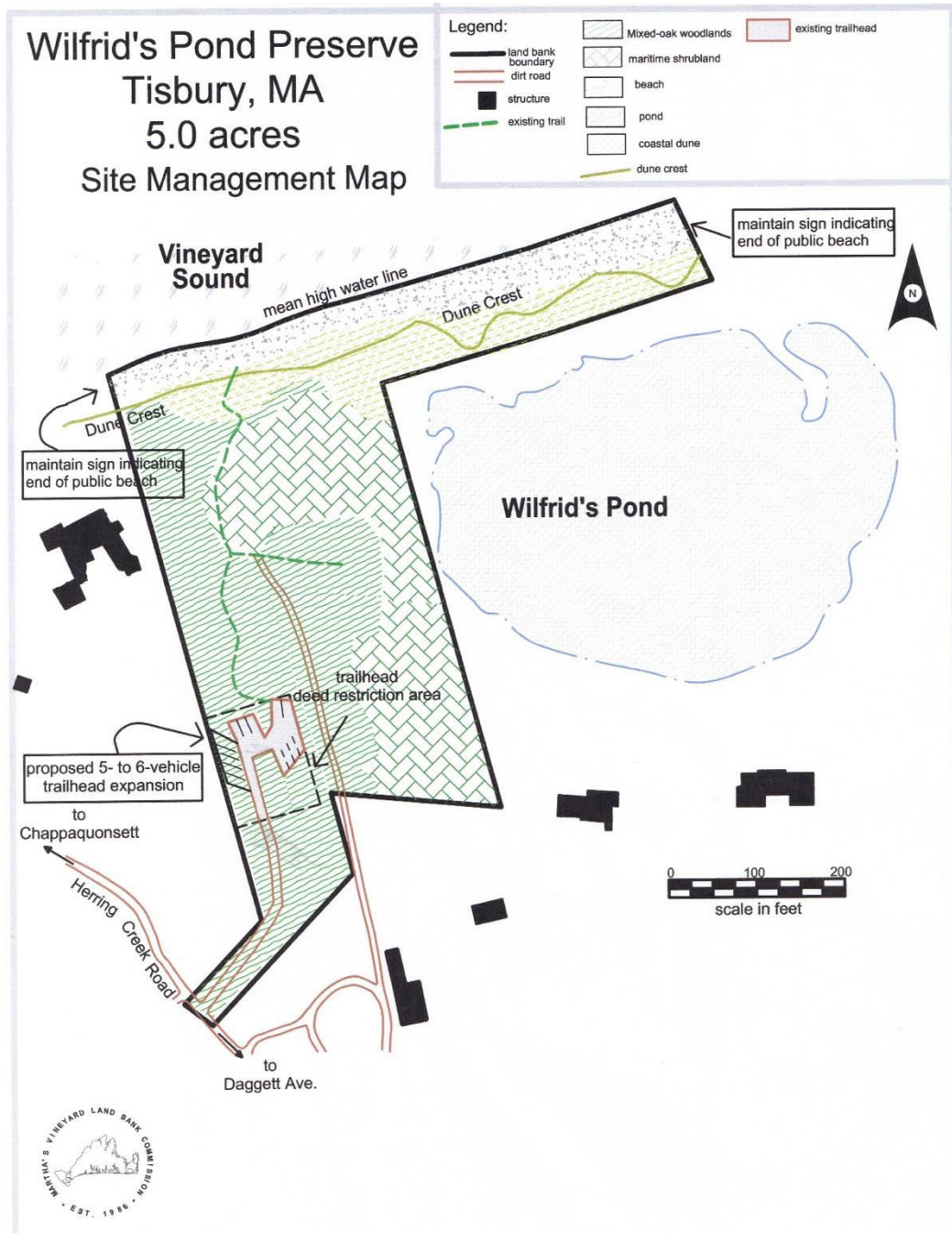


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I. Natural Resource Inventory

A. Physical Characteristics

1. Locus

Wilfrid's Pond Preserve is a 5.0-acre property located in north-central Tisbury, Massachusetts at 41.27'34" north latitude, 70.37'32" west longitude (USGS, 1972). The property has frontage on Herring Creek Road and the Vineyard Sound and is shown as Tisbury tax parcel nos. 31B-5.2, 31B-5.3, 31B-6.2 and 31B-7.5. A **Locus Map** consisting of a section of the Vineyard Haven United States Geological Survey map that has geographic data updated to 1972 (USGS 1972) and an **Aerial Photograph** of the preserve follow as Appendix A.

2. Survey Maps

The property is shown in four parts. Vineyard Land Surveying prepared a survey of the original 1996 Wilfrid's Pond Preserve for G. Kelvin White and the Martha's Vineyard land bank dated May 30, 1995. Three additional parcels were purchased since the opening of the preserve to the public: (1) Vineyard Land Surveying prepared another survey for G. Kelvin White and the Martha's Vineyard land bank dated April 5, 2004; (2) Vineyard Land Surveying also prepared a survey for Francis West, Jr. and Isabel West dated February 19, 1997; and (3) Dean R. Swift prepared a survey for Robert E and Marion J. White dated November 19, 1971. The Site Management Map was created based on these surveys. Larger copies of all the surveys are on file at the land bank office and are available for inspection by appointment. Deeds, preliminary management plan goals and reduced copies of surveys are included in Appendix B.

3. Soils and Geology

The **General Soils Map** (Appendix C) depicts general classes of soils across Martha's Vineyard. A star indicates the location of Wilfrid's Pond Preserve. The preserve is part of the Martha's Vineyard moraine. This moraine is a sand-gravel mix of deposits left by the Wisconsinian ice sheet approximately 25,000 years ago consisting of glacial outwash that was deposited by glacial meltwater sediments. At Wilfrid's Pond Preserve, the moraine meets a more recent beach deposit of Holocene sediments (SCS 1986). These sediments make up the dune area at the northern end of the property.

There are three specific soil types mapped at Wilfrid's Pond Preserve by the Soil Conservation Service as shown on the **Soils Map**. They are discussed in Appendix C following the Soil Map of the preserve. This inventory relies on the *Soil Survey of Dukes County* (SCS 1986).

4. Topography

The topography of Wilfrid's Pond Preserve is relatively flat, ranging from sea level at the northern boundary to ten feet above sea level on the coastal dune to three feet below sea level in a depression behind the dune. The greatest dune slope is 33°. Topography is displayed on the USGS topographic map in Appendix A.

5. Hydrology

The land at Wilfrid's Pond Preserve drains towards three water bodies: Lake Tashmoo, Wilfrid's Pond and Vineyard Sound. Lake Tashmoo is a coastal salt pond and Wilfrid's Pond is a coastal plain pond. Lake Tashmoo is tidal, spring-fed, covers 263 acres and is open to the ocean at a maintained opening in the barrier beach. Wilfrid's Pond is a 2.9-acre pond that is part of a string of small ponds running along the beach at an area called Mink Meadows. It is fed by subsurface groundwater flow and does not exceed six feet in depth (USGS, 1972). Vineyard Sound washes the beach. The six-foot bathymetric contour is 225 feet off-shore. Approximately three-quarters of a mile from the beach on a line to Woods Hole is an area called Middle Ground. This shoal parallels the shore and is a five- to eighteen-foot deep area surrounded by fifty-foot deep waters.

6. Ecological Processes

The primary ecological process – succession – occurring on the preserve is driven by weather and in one case human influence. Strong winds alter the woodland and shrubland communities by blowing down trees and large shrubs thus creating openings in the overstory for successional species to occupy. Another area of the preserve south of the dune was mowed prior to the land bank ownership. This area has slowly filled in with small shrubs that will eventually give way to larger shrubs such as beach plum and small trees such as black cherry and stunted oaks. Wind and wave action also have a constant impact on the beach. Winter storms take and deposit sand from the beach which can lead to beach erosion. However, on this preserve the wave and wind actions have not had noticeable impacts on the beach and dune system in terms of progressive erosion.

B. Biological Characteristics

1. Vegetation

The vegetation of Wilfrid's Pond Preserve is categorized into three principal cover types (see **Ecological Communities Map** in Appendix C). The mixed oak woodland extends over 1.99 acres and is the largest habitat type on the preserve. The remaining acres of the preserve consist of maritime shrubland (1.39 acres) and dune (0.82 acres) communities as well as 0.82 acres of sandy beach.

A total of 113 plant species is known to occur on Wilfrid's Pond Preserve and they account for approximately 11% of all known plants occurring on Martha's Vineyard (Swanson and Knapp 1997). The floristic composition of the preserve has changed little since 1995. A duplicate vegetation survey of the 1995 survey was conducted in 2005. Importance values for plants observed in the three vegetation communities were compared. Importance values are the combination of relative percent cover, relative density and relative percent frequency. The Wilcoxon Signed Ranks test was used to compare the two years. Results indicate there are no significant differences in importance values of plants surveyed in the woodland, shrubland and dune communities between 1995 and 2005 (woodland: $Z=0.626$,

$p=0.531$; shrubland: $Z=0.782$, $p=0.434$; dune: $Z=-0.245$; $p=0.807$). Species diversity also was similar in 2005 as it was in 1995. Only ten additional species were observed in 2005 that were not observed in 1995 and only eight species were observed in the original survey from 1995-1997 but were not observed ten years later (Appendix D, Table 1).

One Massachusetts watch-list plant is still known to occur on the preserve; a few post oaks grow amongst the white and black oaks in the mixed-oak woodland on the preserve.

Additional data regarding methods used for sampling, a brief description of each habitat as well as a table of the flora of Wilfrid's Pond Preserve are included in Appendix D.

2. Wildlife Habitat

Quality of wildlife habitat on Wilfrid's Pond Preserve depends on the characteristics of the vegetation communities. Direct observation of wildlife occurrences and signs throughout the year were the basis for understanding the habitat value at the preserve. A complete list of wildlife species known to occur on the property is included as Appendix E.

(a) *Invertebrates*

Nine invertebrate species are known to occur on the property. Of these the majority are butterfly and biting insect species. Bees also are known to frequent the preserve especially when the beach plum and black cherry are in bloom during the spring/early summer and the seaside goldenrod is in bloom in late summer/early fall. The nearby marsh/pond habitat attracts the biting insects such as midges and mosquitoes. Deer flies and ticks are common throughout the preserve even on the beach. More detail on invertebrates that occur on the preserve is included in Appendix E.

Evidence of marine invertebrates is ubiquitous on the beach and foredune. These include the remains of shells of the Atlantic slipper shell (*Crepidula fornicata*), bay scallop (*Aequipecten irradians*), and quahog (*Mercenaria mercenaria*); and carapaces of the horseshoe crab (*Limulus polyphemus*) and common spider crab (*Libinia emarginata*). The newly deposited wrackline contains abundant invertebrate life, including many thousands of amphipods (Crustacea, Order. Decapoda) and isopods (Crustacea, O. Isopoda). These species can be observed in the eelgrass and algal detritus that constitutes the wrack, and can be sampled simply by removing and preserving clumps of wrack.

(b) *Amphibians and reptiles*

No amphibian species are known to occur on Wilfrid's Pond Preserve. However, a milk snake was observed sunning on the trails in the woodland by land bank staff during June of 1996.

(c) *Birds*

A total of 86 avian species is known to occur on Wilfrid's Pond Preserve counting six listed-species that are not included in the species inventory list. The presence of occasional migrant and resident birds throughout the winter, fall migration, spring migrations and breeding season was recorded during 6-8 visits per season in 1995 and 4 visits in 2005 to sampling points located in the mixed-oak woodland, dune/maritime shrubland and shore/sound. All birds seen or heard during the five-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. Results of these surveys are included in Appendix F.

(d) *Mammals*

Seven mammal species were observed on Wilfrid's Pond Preserve. Common woodland mammals such as eastern cottontail and grey squirrel were observed in the woodland as were skunk diggings in the sand in the fall; tracks of river otter in the snow during the winter; and tracks of domestic dog and cat throughout the year. White-tailed deer tracks were prevalent on the preserve during the summer in the shrubland and during the spring through fall in the woodland. A complete list of mammal species is included in the wildlife table in Appendix E.

(e) *Rare and Endangered Species*

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) designates that at least a third of the preserve is located within Priority Habitat of Rare Species and also Estimated Habitat of Rare Wildlife. Details about the various species and a copy of the **Endangered Species Map** are located in Appendix G.

C. Cultural Characteristics

1. Land History

The land bank purchased the first parcel of Wilfrid's Pond Preserve from G. Kelvin White in the spring of 1995 (Deeds, 656/219). The White family had owned this land since the mid-1930s when Wilfrid and Ruth White of Newton bought the house and 13.5 acres of land (Deeds, 189/265). Following Wilfrid White's death, Mrs. White deeded the property to Sydna White who, after twenty years of ownership, transferred it to G. Kelvin White (Deeds, 255/576 and 432/326). An additional acre

was purchased from Mr. White in July 2004 with view restrictions retained by him in the deed (Deeds, 1009/725).

The White's 13.5 acres were subdivided off a larger 45.4-acre parcel owned by Grace Jones Ashton of Fort Collins, Colorado in 1935 (Deeds, 189/265). Mrs. Ashton was something of a horticulturalist and may be responsible for the rhododendrons growing in the woods to the northwest of the farmhouse (White 1995). The Ashton family purchased this land in 1901 from two Smith brothers, Gilbert L. and Alexander (Deeds, 103/180). Gilbert and Alexander had grown up living in the old farmhouse here. In fact, Alexander Smith may have continued taking care of the house and land until at least 1904 (White 1995).

The Smith family lived out at this end of Tashmoo for many years in the nineteenth century. Captain John Smith, a Tisbury mariner, first bought the land in 1832 when Lake Tashmoo was called Chappaquonsett Pond and Herring Creek Road was called "the meadow path" (Deeds, 24/314). Smith retired from a sea-going career early in life. He was 26 years old in 1823 when he married Luretta Manchester, and 35 when he bought this "certain Lot of Land in Holmes's Hole Neck" (Deeds, 24/314). It is possible that the farmhouse was built as early as the mid-1820s with the Smiths leasing the land from Abraham Chase (White, 1995). By 1850, John Smith was dead and his widow, four children and sister-in-law were farming the land (Pease 1850).

Luretta Smith owned \$1,650 worth of real estate in 1850 including 80 acres of improved land and 50 acres of unimproved land. Her 23-year-old son, John, was a medical student and her daughter Lucy was 11. Sons Gilbert and Alexander, 18 and 17 years old, were at the island school, but presumably ran the farm. They had one horse, a milking cow, three other cattle and one sheep (Pease 1850).

The southern end of what is now Wilfrid's Pond Preserve was probably a treeless farm field or paddock at this time. The land was open to the north and east out to the meadows surrounding the ponds up to Mink Meadows. Cranberries may have been cultivated around Wilfrid's Pond (White, 1995). It is likely that some forest stands still remained to the south and east of the property - a pine tree was mentioned in the 1832 deed (Deeds, 24/314). Another curious reference in this deed was to the "woods of the great gate" somewhere northwest of the farmhouse. These may have been a grove and hedgerow that isolated the neck of land out to what is now the opening at Tashmoo. The oldest trees currently standing on the property are from an 1855 age class. It is possible that the great gate woods were a woodlot for the farm that was clear-felled in the early 1850s.

Gilbert Smith left the farm in 1851 to go to New Bedford where he signed on the ship *Cornelius Howard* for the first of many Arctic whaling voyages (NBST, 1928). He worked his way up to master mariner, and captained a bark called *Northern Light* that after a six-year cruise returned to New Bedford in 1871 with 7,000 barrels of oil that sold for \$250,000. Following that trip, he retired to Vineyard Haven for

the last fifty years of his life. Smith was selectman, overseer, and assessor for fourteen years and county commissioner for twenty years. He financed mortgages around town for many years, and bought and sold numerous parcels of land, including his family farm that went to Grace Ashton in 1901. Luretta Smith was living on the farm until at least 1858 (Walling 1858).

2. Planning Concerns

The land bank must address four primary concerns when planning for the management of Wilfrid's Pond Preserve.

(a) Tisbury Coastal District Town bylaws

The proposed expansion of the trailhead is subject to and comports with the Tisbury Coastal District town bylaw Section 9.01.

(b) Martha's Vineyard Commission Development of Regional Impact

The previous trailhead that accommodates 9 vehicles was subject to Development of Regional Impact (DRI), review under section 3.105 of the DRI checklist. Therefore, the proposed trailhead expansion to accommodate additional 5-6 vehicles will likewise be a DRI.

(c) Deed restriction

The 1996 deed from G. Kelvin White granting the land bank the initial 3.4 acres of Wilfrid's Pond Preserve includes a restriction regarding the trailhead. The deed restriction states that any trailhead on the preserve "shall accommodate not more than 9 vehicles, and shall be confined in area to the location depicted as Area "B" on the plan" (Deed 656/219). This restriction was altered in the 2004 deed from G. Kelvin White granting the land bank an additional 1 acre of land (Deed 1009/726); the revised restriction allows for a trailhead to accommodate not more than 15 vehicles with the additional 6 vehicles spaces to be located west of the driveway. The 2004 deed also grants to G. Kelvin White a view easement over the 1-acre addition for the purpose of preserving views of Vineyard Sound from the remaining portion of G. Kelvin White's land.

In addition to the trailhead restrictions the 1996 deed grants to Mr. White the right to pass and repass by foot over the old dirt road and to pass and repass over the property to chop gather and remove firewood for Mr. White's personal use providing it is in accordance with sound woodland management techniques and in conformity with the land management plan.

(d) Wetlands Protection Act

The proposed trailhead expansion is within the land subject to coastal flowage and thus will require permission from the Tisbury Conservation Commission.

3. Abutters

A list of those owning land abutting or within 200 feet of the Wilfrid's Pond Preserve appears as Appendix H.

4. Existing Use and Infrastructure

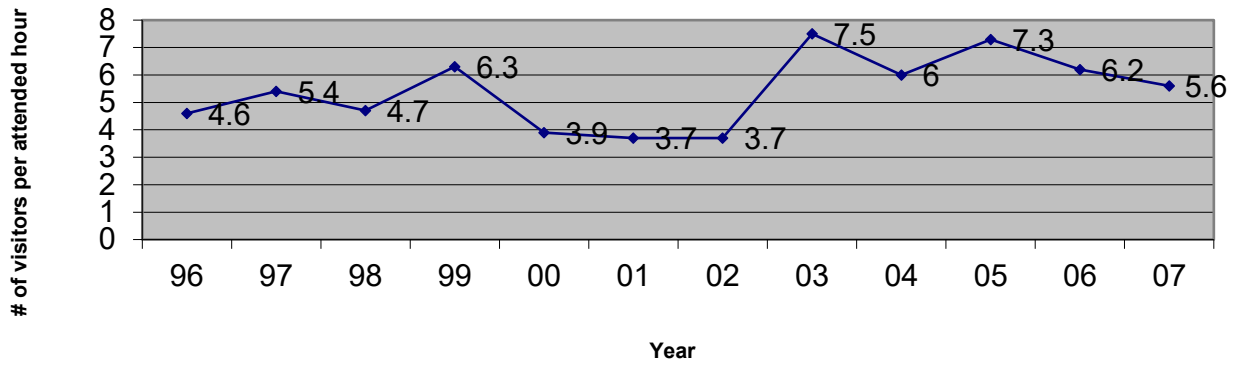
The following are existing uses; an **Existing Use Map** follows the text with corresponding numbers to the uses listed below.

- (1) Herring Creek Road – This ten-foot wide dirt road runs from the west end of Daggett Avenue to the Tashmoo opening. The preserve is 4,329 feet down the road from Daggett Avenue. The town of Tisbury maintains the road on an as-needed basis.
- (2) Driveway – A 300-foot dirt driveway to the preserve's trailhead was created in 1996 and is maintained by the land bank.
- (3) Trailhead – A nine-vehicle trailhead created in 1996 is the only vehicle access to the preserve by the public.
- (4) Trail – A passive-recreational trail from the trailhead to beach was created in 1996. It consists of a 400-feet of trail to the beach with a 150 foot spur trail that ends with a bench and views of Wilfrid's Pond.
- (5) Dirt Road/Path – This private road runs from the Smith-Ashton-White house out towards the old parking area near the beach. It is only maintained as far as the land bank spur trail. The old road from the spur trail nearly to the beach and the old beach parking has grown in with vegetation and is no longer maintained.
- (6) Beach access – The beach is accessed over the dune via ground-level boardwalk and a small set of stairs.

Since 1996, the land bank has been tracking how many visitors per hour attend Wilfrid's Pond Preserve. The following chart shows the "visitor use data" collected by property attendants at Wilfrid's Pond, during prime beach-going times. Each yearly figure represents the average number of visitors that arrived on the preserve per hour between the hours of 10:00 am and 5:00 pm. The second chart shows the number of days the trailhead experienced full capacity and required being closed for a portion of the day. Both the visitors per attended hour and number of days the trailhead reached capacity have experienced increases since the property opened in 1996. Additional data is included in Appendix I.

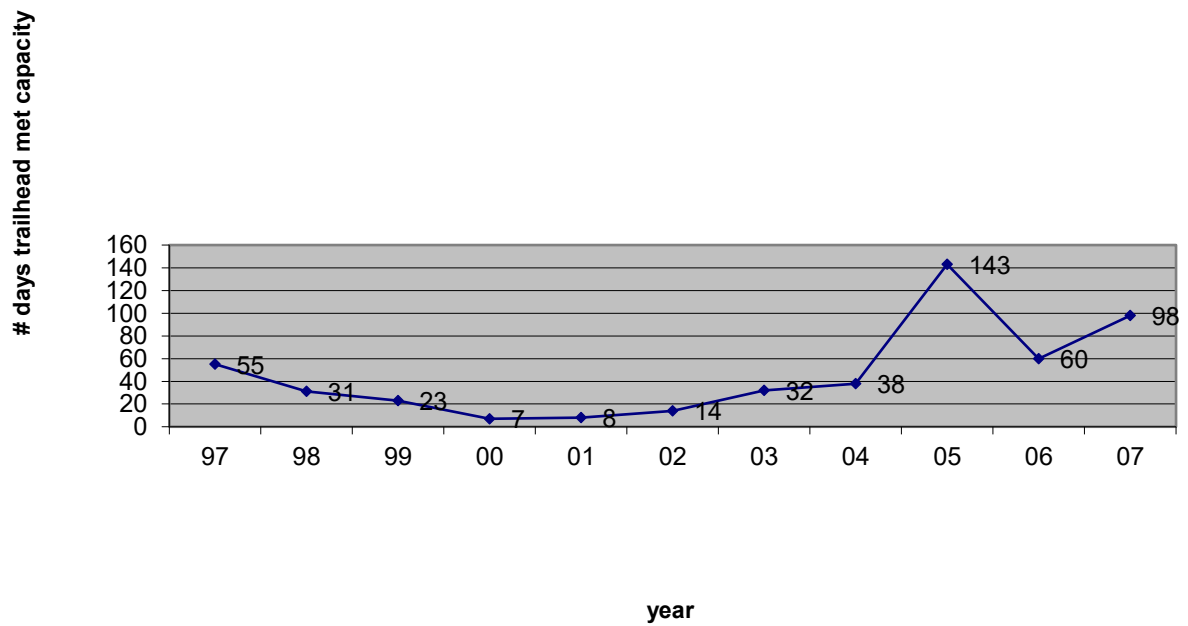
Graph 1. Visitors Per Attended Hour at Wilfrid's Pond Preserve Tisbury, MA (1996-2007)

Graph 1. Visitors per attended hour at Wilfrid's Pond Preserve, Tisbury, MA from 1996-2007

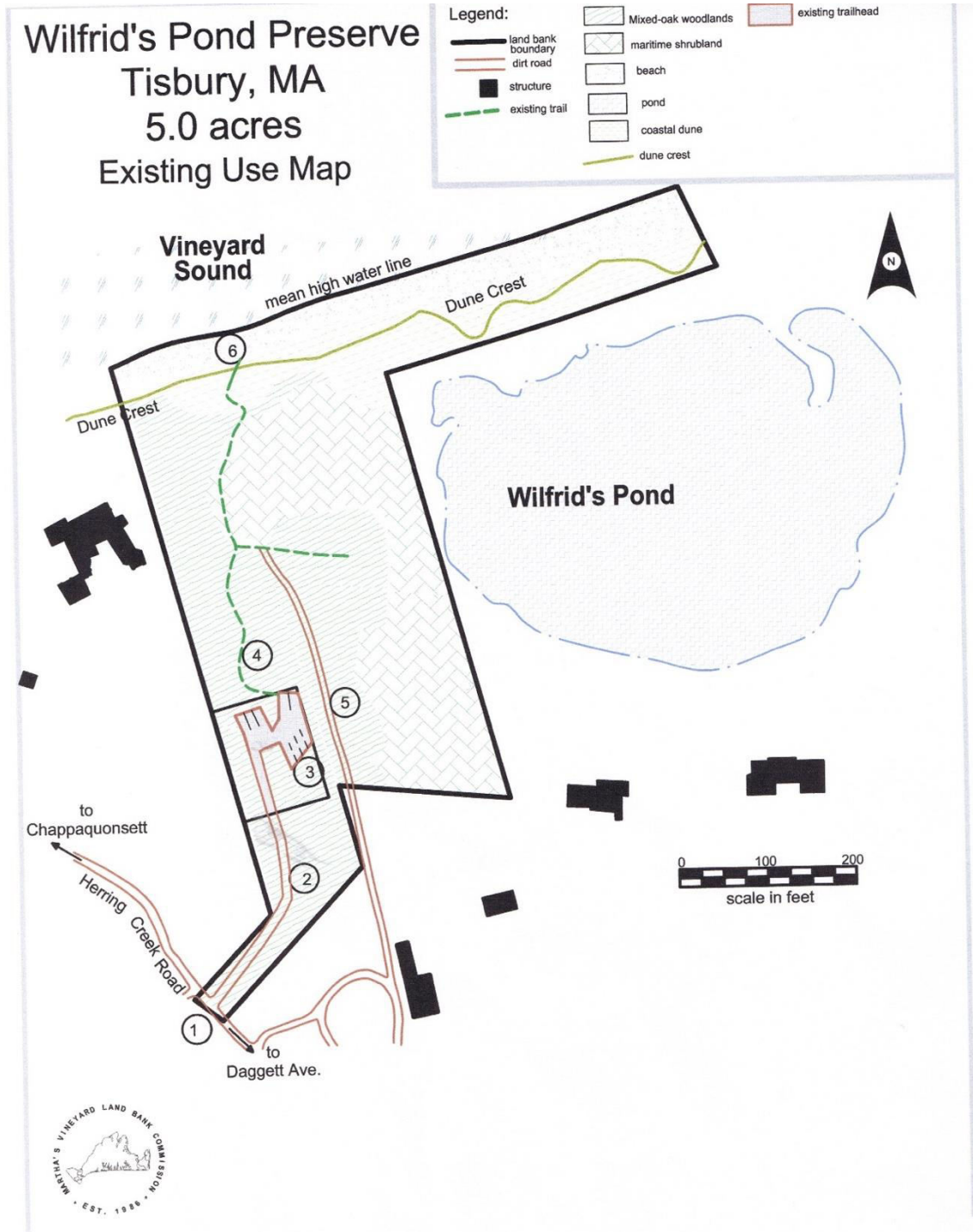


**Graph 2. Trailhead Capacity Closures at Wilfrid's Pond Preserve
Tisbury, MA (1997-2007)**

**Graph 2. Trailhead capacity closures at Wilfrid's Pond Preserve, Tisbury, MA
per season from 1997-2007**



Map 3: Existing Use Map



II. Inventory Analysis

In this section, problems and opportunities that may arise in the management of Wilfrid's Pond Preserve are analyzed.

A. Constraints & Issues

1. Ecological Context

Wilfrid's Pond Preserve is a property of regional conservation significance, because of its coastal shoreline, close proximity to a coastal plain pond and its locally unique back-dune habitat. The coastal pond is small, but it provides habitat for some migrating birds. The coastal beach provides for several Massachusetts-protected rare shorebirds. The dune and coastal beach are designated by NHESP as a priority and estimated habitat of rare species.

2. Natural Resource Concerns

There are four main areas of natural resource concern at Wilfrid's Pond Preserve; each briefly addressed below and then addressed in more detail in the land management section of the plan.

(a) *Dunes*

The dunes on the property are important for storm attenuation. Impacts such as repeated human traffic can cause accelerated changes to dune topography and vegetation. These changes can reduce the ability of the dunes to protect inland areas from high stormwater surges. They can also diminish the quality of the habitat for a variety of plants, birds, and invertebrates that currently use the expanse. The presence of people on the dune ridge may also impact wildlife in the adjacent pond by disturbing sensitive bird species such as osprey, black ducks and wigeons.

(b) *Rare species*

The coastal beach and woodland provide non-breeding as well as nesting habitat for a variety of rare species that occur in designated priority and estimated habitat on the reservation. The shorebirds present on the property are threatened by a variety of human-related activities. These include pedestrian walking too close to nests, kite-flying, fireworks ignition, trash and pet predation.

(c) *Invasive species*

Oriental bittersweet and multiflora rose occur in the dune and shrubland vegetation communities.

(d) *Ground birds*

Several of the birds that occur at the preserve are ground-gleaners and some are ground nesters. For example the eastern towhee are ground nesters and many of the warblers and sparrows are ground gleaners. These birds are especially threatened by animals such as raccoons, skunks and domestic dogs and cats. Trash left behind by humans can attract raccoons and skunks to the area.

3. Sociological Context

Wilfrid's Pond Preserve is located in a medium-density, residential neighborhood (zoning district R-50, minimum lot size 50,000 square feet). In the area of land delineated by Herring Creek Road to the west, Ashton's Way and Connie's Way to the south, Rachel's Way and Mink Meadows Road and Goff Road to the east, and Vineyard Sound to the north, there is a density of approximately 2.76 acres per house (58 total acres). In these 58 acres, there are 4.0 acres of conservation land open to the public and another 1.7 acres of conservation land without public access, for a total of 5.7 acres (9.8% of the area).

Wilfrid's Pond Beach is a desirable conservation destination. The public is drawn to the sandy north-shore beach, the beauty of Wilfrid's Pond, views across Vineyard Sound and the quality of the fishing. Other nearby publicly accessible conservation areas with water access include the town beach the Tashmoo inlet and Hillman's Point Preserve.

4. Neighborhood Concerns

The land bank considers the concerns of the neighbors as part of the planning process. All abutting property owners 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 to the land bank commission, the town advisory board and the land bank staff.

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 use of natural resources with protection of the same.

2. Goals at Purchase

Six of the eight types of property eligible for purchase under the land bank law occur here: forest lands; wetlands; ocean frontage, beaches, dunes and adjoining backlands; scenic vista; nature or wildlife preserve; and land for passive recreation. A management plan for a portion of the preserve was adopted in 1996 and is on file at the land bank office.

3. Opportunities

- (a) *Access* The public may access the preserve from Herring Creek Road via the existing driveway and trailhead. An increase in trailhead capacity will help decrease the number of days in the season that visitors are turned away.
- (b) *Birding* The most desirable season for bird-watchers may be winter with the mergansers, bufflehead, and teal on the pond; and goldeneye and scoters off-shore. It is a good place for shorebirds at other times with semipalmated plovers, dowitchers, and yellowlegs.
- (c) *Boating* Wilfrid's Pond Preserve might be used as a public landing, but there are serious limitations to such a use. The steep dunes and deed restrictions prevent vehicles from getting very close to the shore. It may be possible for windsurfers or kayakers to portage their boats over the dunes. Drawbacks include the rocks off-shore, long portage, interference with swimmers and potential damage to dune vegetation from dragging or resting boats.
- (d) *Firewood* The quality of the trees restricts potential harvest of firewood, and the small size of the property discourages any regular activity. Small amounts of firewood could be harvested on a long-term rotation with little effect to wildlife habitat quality. G Kelvin White has a deed restriction that grants to him the right to pass and repass over the properties original 3.4 acres to chop, gather and remove firewood (Appendix B).
- (e) *Hunting* Although adequate game species have been observed on or near the property (white-tailed deer,

cottontail rabbit and waterfowl) a deed restriction on hunting precludes consideration of this activity for the property.

(f) Fishing

Saltwater fishing in Vineyard Sound is a popular activity along this shoreline. Striped bass and bluefish are regularly caught in the Preserve area. Bonito and false albacore are possible, especially later in the season. The locale is particularly good for light tackle and for fly-fishing, due to the lack of heavy surf. Impact to rare shorebirds can be minimized by establishing protection zones around nests, starting in Mid-April.

(g) Swimming

There is a 700-foot stretch of beach on the property. The surface is often sandy, though cobbles and shells are pervasive. The surf is calm and suitable for children. Deed restrictions limit the amount of parking to 15 spaces. A deed restriction requires that a limit be put on the maximum number of people that may use the premises at any one time.

(h) Viewsheds

There are two prime views on the property. One is on top of the highest part of the dune. This point gives a commanding view of Wilfrid's Pond, the beach to the east and the Vineyard Sound. The second good view of Wilfrid's Pond is from the interior of the oak stand on the eastern side of the property. This view is limited and somewhat obstructed by shrub vegetation.

4. Universal Access (UA)

Wilfrid's Pond Preserve already hosts a less-developed accessible trail to a bench with pond views. The Reservation's ROS ("Recreation Opportunities Spectrum") classification is "less-developed". ROS is a model designed and used by the U.S.D.A. Forest Service to categorize conservation areas for universal access planning. Due to the expansion of the trailhead an additional vehicle space will be designated for UA use (one UA for every five non-UA spaces). Details regarding UA on Wilfrid's Pond Preserve are contained in Appendix J.

III. Land Management Planning

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

A. Nature Conservation

Provide long-term protection for plants, animals and natural processes occurring at Wilfrid's Pond Preserve.

Objective 1 Protect and encourage rare and endangered species on Wilfrid's Pond Preserve.

Strategies

- a. Monitor for rare plants and animals on the property during regular property checks.
- b. Monitor for rare shorebirds from April to the end of the breeding season (late June or through August) for occurrence of any state-listed rare or endangered species.
- c. Develop and implement a strategy to protect any additional rare species observed on the property.
- d. Prohibit dogs and cats from the property during the period from April 15 to June 15, and again through August 31 if monitoring establishes the presence of a nesting, protected species.
- e. Explore options for controlling stray pets, striped skunks and other predators of ground-nesting birds, as needed.
- f. Protect pond wildlife from undue human disturbance.
- g. Conduct major trail maintenance during the winter season when the listed turtle is least active; walk ahead of trail equipment during regular season trail maintenance, so as to scout for turtles.

Objective 2 Limit human impact on dune vegetation.

Strategies

- a. Prohibit public uses in the dune vegetation.
- b. Instruct the public to access the beach only via the designated beach access boardwalk.

- c. Regularly monitor dune vegetation for visual evidence of impact.
- d. Prevent pathways from being made in dune vegetation by posting signs informing people about the problem and by installing fencing, if necessary.

Objective 3 Control the spread of invasive plants.
Strategies

- a. Monitor property for such invasive plants as oriental bittersweet, porcelain-berry and multiflora rose.
- b. Implement control methods if invasive plants threaten nature conservation objectives and providing clearing is consistent with aesthetic management objectives.

Objective 4 Protect pond wildlife from undue human disturbance.
Strategies

- a. Inform land bank visitors, via the sign station, about the potential consequence of their activities to wildlife.
- b. Maintain an upper limit of 60 people allowed on the property at any one time and limit the amount of parking on the property to 15 spaces.
- c. Prohibit people from climbing onto the dunes and do not allow unsanctioned paths to develop that lead to the tops of dunes.
- d. Prohibit unsanctioned paths that lead from the preserve to the pond shore.

Objective 5 Reduce and control erosion of trails.
Strategies

- a. Install water bars where necessary
- b. Reroute or temporarily close trails where necessary.
- c. Continue to use wood chips or a superior product on trails to reduce erosion and harden trails for UA purposes.

Objective 6 Maintain diversity of existing plant communities to provide a range of habitat requirements to wildlife species.
Strategies

- a. Encourage shrubland vegetation to encroach in areas where blow-downs occur.
- b. Monitor changes in vegetation cover during regular property checks and by updating ecological inventory by 2017.
- c. Manage and monitor invasive species where possible to ensure habitats are not significantly altered.

B. Recreation and Aesthetics

Allow limited, low-impact recreational use of the area for bird-watching, boating, hiking, picnicking, and swimming provided that these uses do not preclude attainment of nature conservation objectives; and maintain attractive views and landscapes.

Objective 1 Maintain existing access driveway and trailhead; expand trailhead to accommodate an additional 5-6 vehicles west of the driveway.

Strategies

- a. Maintain existing eight-and-a half foot wide, dirt access driveway, existing trailhead, existing sign station and land bank logo posts.
- b. Expand existing trailhead by 5-6 spaces to accommodate no more than 15 vehicles.
- c. Adhere to trailhead deed restrictions.
- d. Direct visitors, in the land bank map, to access the property trailhead from Herring Creek Road.
- e. Request approval for trailhead expansion from MVC as DRI and the Tisbury Conservation Commission as land subject to coastal storm flowage.
- f. Designate two of the 15 vehicle spaces for UA use.
- g. Maintain bicycle rack at trailhead.

Objective 2 Maintain existing trail system and expand as necessary.

Strategies

- a. Maintain existing trail network with corridors five feet wide and eight feet tall when possible.
- b. Maintain less developed UA trail from the trailhead to the bench with pond views using wood chips.
- c. Allow land bank staff the discretion to close, relocate and add new trails, such as spur trails to connect to future trail easement or conservation lands.
- d. Prohibit use of motorized vehicles by visitors, such as but not limited to dirt bikes and all-terrain vehicles, on the property.
- e. Check and maintain trails on a regular basis.
- f. Maintain boardwalk over dune and construct new boardwalk or stairs as necessary to maintain a stable tread.

Objective 3 Prohibit dogs from the beach on the preserve during summer season for birds (approximately April-August); and otherwise require visitors to abide by Tisbury dog bylaws.

Strategies

- a. Allow leashed dogs from October through March and prohibit dogs on the beach from April through the end of the breeding season (July or through August depending on the presence of hatched fledglings).
- b. Allow leashed dogs from August through September before 10 am and after 5 pm in the event nesting shorebirds or hatched fledglings are not present on the preserve.
- c. Encourage visitors to clean up after their pets.
- d. Post the dog policy on the sign station.
- e. Indicate the dog policy in the map under the description for the property when possible.

Objective 4 Allow limited boating and picnicking on the property.

Strategies

- a. Allow public to portage light boats from the trailhead to the beach.
- b. Monitor access to the beach by boat; cooperate with the Tisbury Harbormaster to prevent conflicts with swimmers.
- c. Prohibit all overnight boat storage, including outhaul anchors (amendment 2019).
- d. Prohibit boat landings on vegetated shorelines; allow short-term boat storage during the day on unvegetated beach shorelines (amendment).
- e. Monitor boat use of the property, and limit all boat launching to the western end of the beach.
- f. Prohibit any commercial use of the property.
- g. Allow picnicking on the preserve but do not advertise this activity on the land bank map or trailhead signs.
- h. Maintain a "carry-in-carry out" policy for litter, but police the area regularly to keep beach and surrounding land free of trash.

Objective 5 Limit public use of the preserve as per deed restrictions.

Strategies

- a. Open property every day of the year from one-half hour before sunrise to one-half hour after sunset.
- b. Prohibit nighttime use except for fishing.
- c. Limit use to no more than 60 visitors at one time.

Objective 6 Maintain pond viewing area in its present location on the eastern side of property.

Strategies

- a. Maintain wooden bench at the end of the UA spur trail.
- b. Maintain view channels between the bench and the pond in such a way as not to unduly expose the pond wildlife to viewing public.

C. Natural Products**Allow saltwater fishing and silvicultural management where such use is consistent with the attainment of nature conservation and recreation goals.**

Objective 1 Keep trailhead open to fishing vehicles during both days and Nights so long as the use stays within the overall limit of 15 vehicles/ 60 people.

Strategies

- a. Inspect the property periodically by land bank staff at day and at night during the period of greatest fishing activity (i.e., end of May through early July and again September through early November) to verify compliance with the limits on number.
- b. Encourage people fishing to remove all debris from the preserve (i.e., fishing line, fish carcasses, bait buckets).

Objective 2 Allow salvage cutting of firewood in the oak woodland within the framework of a long-term forest management plan.

Strategies

- a. Entertain proposals from tree farmers, who have completed long-term forest management plan, to salvage cut firewood in the event of storm damage.
- b. Provide for the former landowner's wood needs as detailed in the deed (Appendix B).

Objective 3 Prohibit hunting and camping on the preserve.

Strategies

- a. Indicate the property is a no-hunting property on the land bank map.
- b. Post the area as a no-hunting zone during commonwealth hunting seasons.
- c. Patrol the property on a regular basis during hunting seasons if the need arises.
- d. Prohibit camping on the property unless special permission is granted by the land bank commission for a particular reason such as a request by the Boy Scouts of America or a local school.
- e. Remove unpermitted campers from the preserve promptly.
- f. Prohibit beach and camp fires on the preserve.

D. Community Interaction

Provide helpful and interesting information about the property to visitors and allow educational use of the property.

Objective 1 Help people find the property and avoid trespassing.

Strategies

- a. Include property on land bank map as a less-developed, accessible property and provide directions.
- b. Clearly mark property boundaries.
- c. Limit trespassing by marking boundaries as trails reach them.
- d. Install gates or fencing as needed.
- e. Post on the sign station maps of property and trails as well as an aerial overview of connecting land and trails as they are created.

Objective 2 Maintain good relations with abutters and neighbors, including any involvement with maintaining Herring Creek Road.

Strategies

- a. Maintain and establish contact and working relationship with neighbors.
- b. Maintain contact and working relationship with Tisbury conservation commission.

Objective 3 Present useful and interesting information about Wilfrid's Pond Preserve to the public.

Strategies

- a. Provide the Tisbury public library and conservation commission with copies of this management plan if so desired.
- b. Make copy of this plan available at the land bank office.
- c. Post information about habitat and species at the central trailheads.

E. Land Administration

Oversee and police Wilfrid's Pond Preserve on a regular basis and develop good neighborhood relations.

Objective 1 Keep property well-maintained.

Strategies

- a. Inspect property at least monthly.
- b. Clean up any litter and junk which may occur.
- c. Promptly respond to problems.
- d. Employ adequate staff to effectively implement land management goals.
- e. Post a property attendant on the preserve from mid-June through August, as necessary.

Objective 2 Adhere to deed restrictions.

Strategies

- a. Comply with all deed restrictions.
- b. Comply with recreation easements of record for beach use as stated in Alexandra West Deed (993/583) Appendix B.

Objective 3 Keep well-maintained boundaries.

Strategies

- a. Locate corners and walk boundaries annually.
- b. Walk boundaries annually.
- c. Correct encroachments as they occur.
- d. Post boundary flags where appropriate.

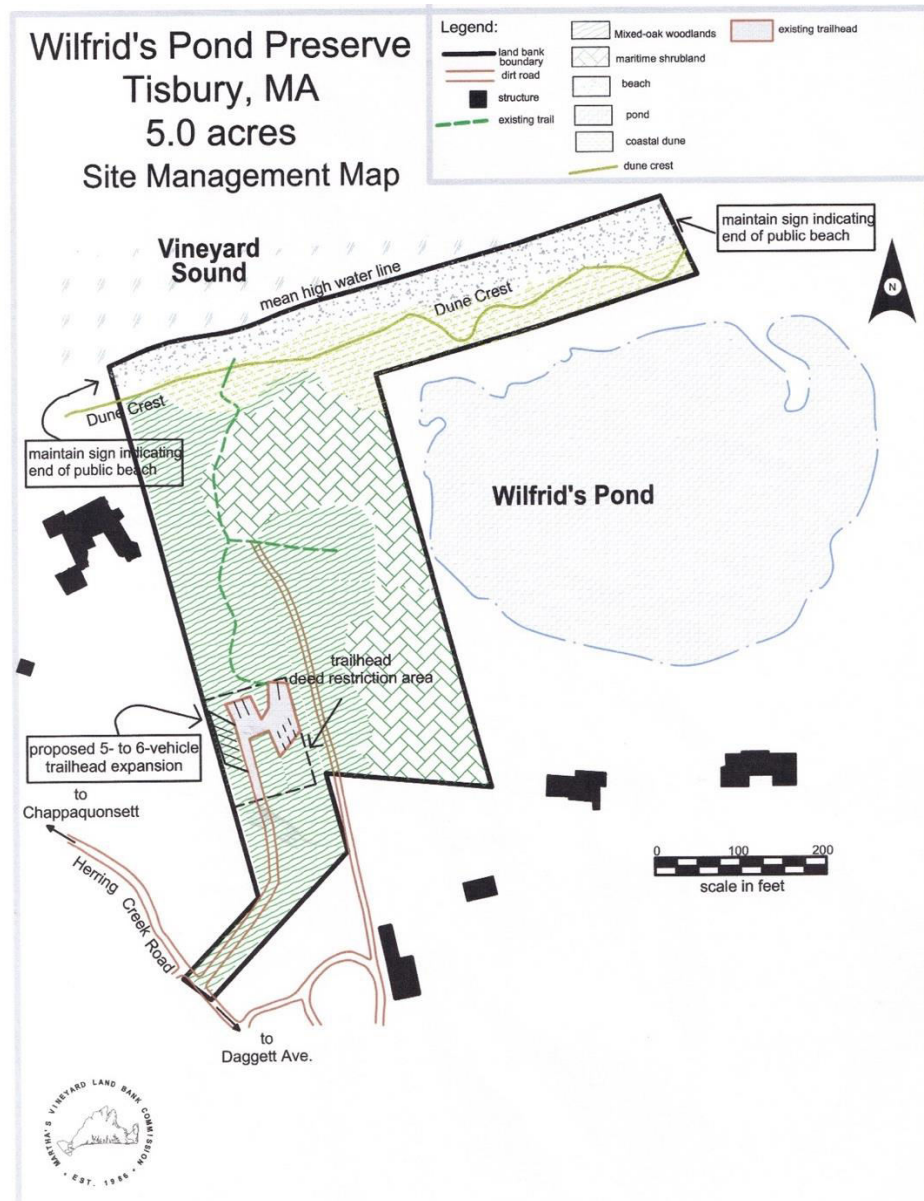
Objective 4 Keep good records of all land management activities and natural events.

Strategies

- a. Complete a land bank event record for all significant events, natural or otherwise.
- b. Continue to update plant and animal inventories.
- c. Maintain photographic record of landscape appearance.

IV. Site Management Map

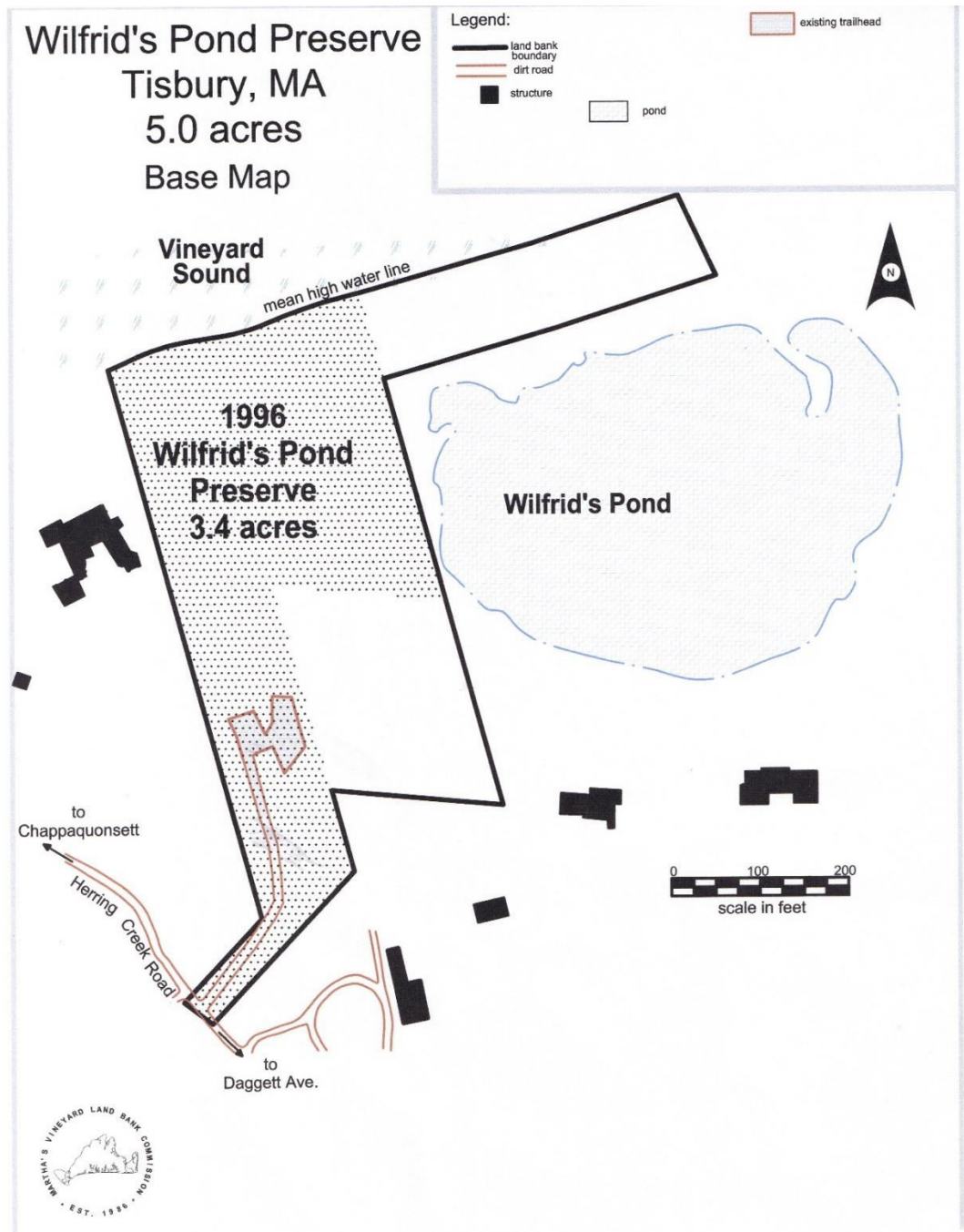
Map 4: Site Management Map



V. Literature Cited

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Appendix A: Base, Topographic, and Aerial Maps
Map 5: Base Map



Map 6: USGS Topographic Map

Wilfrid's Pond Preserve, Tisbury, MA
USGS topographic map (MASSGIS)
Parcel data (Cartographic Associates)



Figure 1: Aerial Photograph of Wilfrid's Pond Preserve

Wilfrid's Pond Preserve, Tisbury, MA
Aerial photograph (MASSGIS, 2003 colorortho)
Parcel data (Cartographic Associates)



Appendix B: Deeds and Surveys

BR656PG219

pg. 1

G. KELVIN WHITE

of Herring Creek Road, Vineyard Haven, MA 02568
Dukes County, Massachusetts,

in consideration of THREE HUNDRED FIFTY THOUSAND AND NO/100 (\$350,000.00) DOLLARS

grant to MARTHA'S VINEYARD LAND BANK COMMISSION, a corporate body politic,
with offices at 167 Main Street, Edgartown, MA 02539

§

with quitclaim covenants

~~to be described as follows:~~

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

Being Lot No. 1 as shown on a certain plan of land entitled "Plan of Land in
Tisbury, Mass. Prepared for G. Kelvin White and the Martha's Vineyard Land
Bank Commission May 30, 1995 Scale 1"=40'" prepared by Vineyard Land
Surveying, Inc. P.O. Box 421, West Tisbury, MA 02575, and filed in the Dukes
County Registry of Deeds as Tisbury Case File No. 432, to which plan
reference is hereby made for a more particular description (the "Plan"). Said
Lot No. 1 consists of 1.4 acres, more or less, according to said plan.

The premises are conveyed subject to and together with the benefit of all
easements, restrictions, reservations, and rights of way of record, including,
but not limited to, the following:

1. The grantee, by acceptance of this deed, covenants with the grantor that any parking area created on the granted premises shall accommodate not more than nine (9) vehicles, and shall be confined in area to the location depicted as Area "B" on the Plan. Parking outside of Area "B" shall be prohibited.
2. The grantee further covenants that the following activities will be strictly prohibited:
 - a. Hunting;
 - b. Beach fires;
 - c. Sleeping on the beach after dusk and before daybreak;
 - d. Motor vehicle access except in the area between Herring Creek Road and Area "B" (with the exception of maintenance vehicles); and
 - e. Organized commercial activities.
3. The Management Plan to be created by the Grantee shall limit use of the premises to uses consistent with conservation and passive recreation purposes and the respectful and peaceable exercise thereof, and shall:
 - a. Limit the maximum number of people using the premises for such purposes at any one time; and
 - b. Limit the uses, if any, of the premises after dusk and before daybreak to uses in keeping with those made of other properties owned and managed by the grantee, and to uses of a character and nature befitting a residential neighborhood.
4. An appurtenant, perpetual easement for view is hereby reserved by the grantor, over and across that portion of the grantee's property more particularly shown as Area "C1" and Area "C2" on the Plan, for the purpose of preserving the view of Vineyard Sound from the adjoining property of the grantor, by permitting the grantor the right to manage the vegetation and by prohibiting grantee from the

BK656PM220

28.

Construction of buildings in Area "C1" and Area "C2". Pursuant to this easement, no structure shall be erected, maintained or allowed to stand in Area "C1" and Area "C2" except (i) a simple bench in Area "C1" for use in viewing Ashton's Pond; and (ii) a sign station and boardwalk, constructed to Tisbury Conservation Commission specifications, in Area "C2". In addition, grantor and his successors and assigns shall have a reasonable right of access to Area "C1" and Area "C2" in order to manage the vegetation, in accordance with the following requirements:

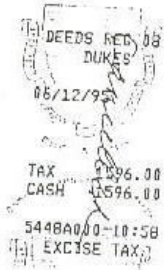
- a. Reasonable prior written notice shall be given grantee of the proposed date on which any vegetation management is to occur and of the proposed work to be performed.
 - b. All vegetation management shall be designed to create a natural appearing flow of canopy, and shall employ proper forestry, horticultural and landscaping management practices:
 - c. All cuttings, prunings and trimmings of vegetation as a by-product of any vegetation management pursuant to this Easement shall be removed from the premises in a reasonable period of time.
5. Grantee shall construct an access road connecting Herring Creek Road and Area "B" which is located as close to the Northwesterly boundary of Lot No. 1 as is reasonably possible, given the constraints of topography and economics.
6. The grantor hereby reserves, on behalf of himself, his immediate family members, and guests, a perpetual easement, appurtenant to grantor's adjoining property to:
- a. Pass and repass by foot over the "grassy road", "grassy path" and "sandy path" shown on the Plan in Area "C1" to make use of the premises in harmony with the land management plan developed by grantee for the premises, and to use the beach for all purposes for which beaches are commonly used on the Island of Martha's Vineyard; and
 - b. Pass and repass by foot over the premises to chop, gather and remove firewood for grantor's personal use, in accordance with sound woodland management techniques and in harmony with the land management plan to be developed for the premises.

The above-referenced restrictions numbered one through three shall continue and remain in full force and effect for thirty (30) years from the date of recording of this Easement and may be extended and continued in full force and effect in the manner provided in M.G.L. Chapter 184, Section 28, as it may be amended from time to time, or as provided in similar successor provisions, for further periods of twenty (20) years, each, or for such other maximum further periods as may be allowed by any amendments of said law or by any successor provisions.

For title, see deed of Sydna V. White to G. Kelvin White dated July 24, 1985 and recorded in the Dukes County Registry of Deeds in Book 432, Page 126.

BK 656PC221

PS-



Executed as a sealed instrument this 12th day of June 1995

[Signature]
[Signature]
 G. Kelvin White

The Commonwealth of Massachusetts

Dukes County ss. June 12 1995

Then personally appeared the above named G. Kelvin White

and acknowledged the foregoing instrument to be his free act and deed,

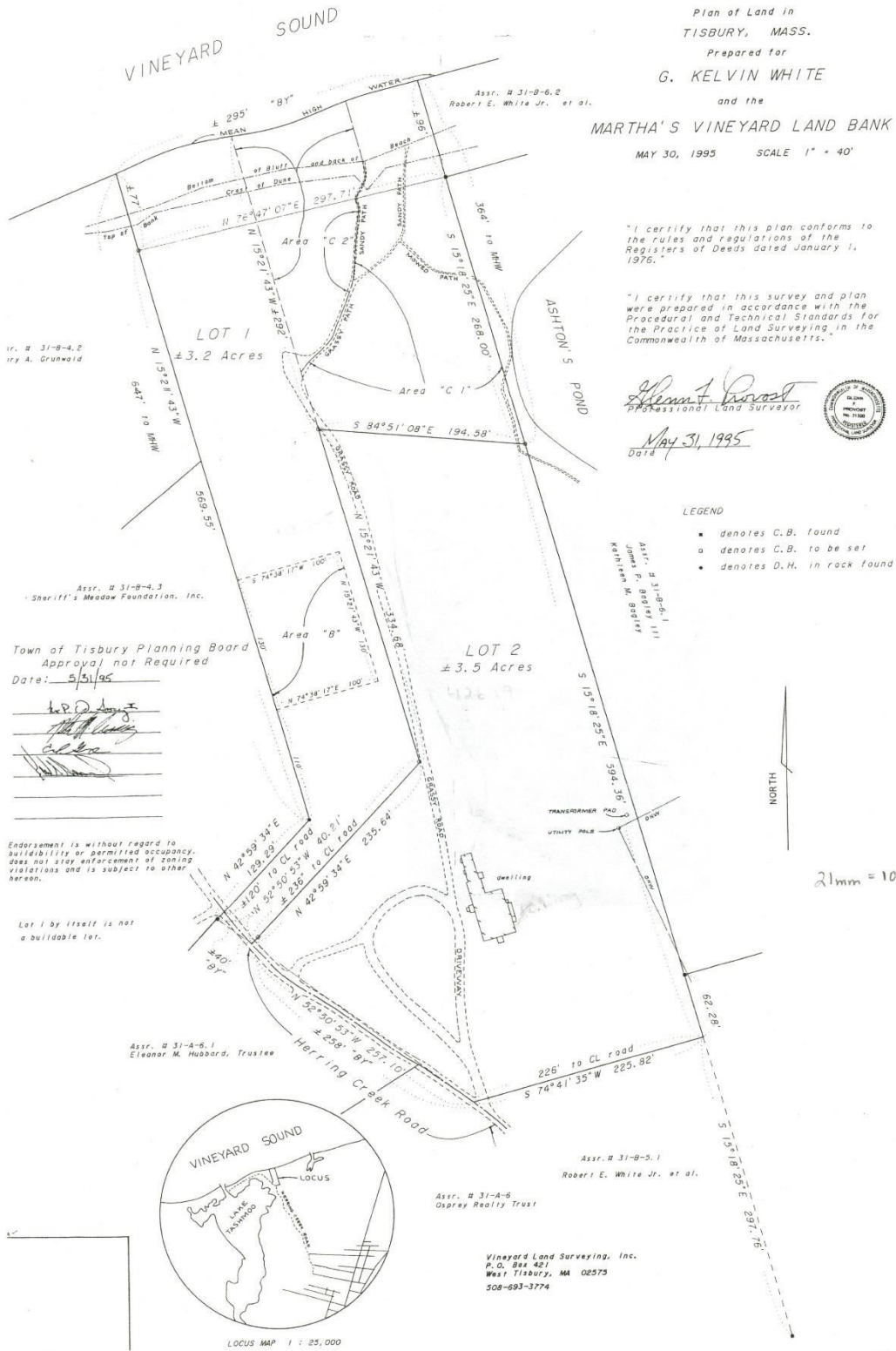
Before me, [Signature]
 Notary Public — Justice of the Peace
 My commission expires 19

MY COMMISSION EXPIRES SEPT. 27, 1993

Edgartown, Mass. June 12 1995
 at 10 o'clock and 57 minutes A M
 received and entered with Dukes County Deeds
 book 656 page 219

Attest: [Signature]
 Register

MARTHA'S VINEYARD LAND BANK FEE
 PAID: \$ _____
 EXEMPT: \$ 0
17003 6/12/95 [Signature]
 NO. DATE CERTIFICATION



Plan of Land in
TISBURY, MASS.
Prepared for
G. KELVIN WHITE
and the
MARTHA'S VINEYARD LAND BANK
MAY 30, 1995 SCALE 1" = 40'

"I certify that this plan conforms to the rules and regulations of the Registers of Deeds dated January 1, 1976."

"I certify that this survey and plan were prepared in accordance with the Procedural and Technical Standards for the Practice of Land Surveying in the Commonwealth of Massachusetts."

Glenn F. Perovost
Professional Land Surveyor
MAY 31, 1995
Date



- LEGEND
- denotes C.B. found
 - denotes C.B. to be set
 - denotes D.H. in rock found

Assr. # 31-B-4.2
Ivy A. Grunwald

Assr. # 31-B-4.3
Sheriff's Meadow Foundation, Inc.

Town of Tisbury Planning Board
Approval not Required
Date: 5/31/95

[Handwritten signatures]

Endorsement is without regard to buildability or permitted occupancy, does not stay enforcement of zoning violations and is subject to other herein.

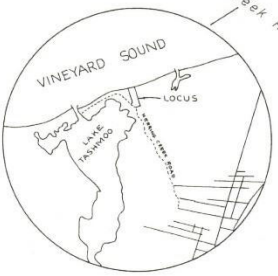
Lot 1 by itself is not a buildable lot.

Assr. # 31-A-6.1
Eleanor M. Hubbard, Trustee

Assr. # 31-B-5.1
Robert E. White Jr. et al.

Assr. # 31-A-6
Osprey Realty Trust

Vineyard Land Surveying, Inc.
P.O. Box 421
West Tisbury, MA 02573
508-693-3774



LOCUS MAP 1 : 25,000

MARTHA'S VINEYARD LAND BANK REC
 PAID \$ _____
 EXEMPT \$ A
36 331 7/23/04 2004
 NO

BOOK 1009 PAGE 0725

QUITCLAIM DEED

I, G. KELVIN WHITE

of Herring Creek Road, Vineyard Haven, MA 02568

in consideration of TWO HUNDRED THOUSAND AND NO/100 (\$200,000.00) DOLLARS

grant to the MARTHA'S VINEYARD LAND BANK COMMISSION, a corporate body politic, with offices at 167 Main Street, Edgartown, MA 02539

with quitclaim covenants

The land with all improvements thereon located off Herring Creek Road in Tisbury, Dukes County, Commonwealth of Massachusetts, being more particularly bounded and described as follows:

Being Lot 2A shown on a certain plan of land entitled "Plan of Land in Tisbury, Mass. Prepared for G. KELVIN WHITE and the MARTHA'S VINEYARD LAND BANK, April 5, 2004 Scale 1" = 40' Vineyard Land Surveying, Inc.", filed in the Dukes County Registry of Deeds as Tisbury Case File No. 607, to which plan reference is hereby made for a more particular description. Said Lot 2A consists of one acre of land, according to said plan ("Plan I").

Being a portion of Lot 2 shown on a certain plan of land entitled "Plan of Land in Tisbury, Mass. Prepared for G. Kelvin White and the Martha's Vineyard Land Bank Commission May 30, 1995 Scale 1" = 40'" prepared by Vineyard Land Surveying, Inc. P.O. Box 421, West Tisbury, MA 02575 and filed in the Dukes County Registry of Deeds as Tisbury Case File No. 482 ("Plan II").

The Premises are conveyed subject to and together with the benefit of all easements, restrictions, reservations, and rights of way of record.

The following rights and easements over the premises conveyed are hereby reserved by Grantor, as appurtenant to the remainder of Lot 2 on Plan II:

1.) A perpetual easement for view, over and across the premises conveyed, for the purpose of preserving the view of Vineyard Sound from Lot 2 on Plan II. Grantee shall regularly mow the premises (except for notable and aesthetic specimen plants). In the event that Grantee does not mow to Grantor's satisfaction, then Grantor, his successors and assigns, after due notice to Grantee, shall have a reasonable right of access in order to conduct satisfactory mowing. Grantor shall defend, indemnify and hold harmless Grantee from and against all liabilities, losses, claims, injuries or damages (including, without limitation, reasonable attorney's fees and costs) which may be incurred by, or asserted against, the Grantee by reason of, or arising out of, Grantor and Grantor's agents, employees and representatives entering Lot 2A to conduct such mowing.

2.) A perpetual easement, appurtenant to Lot 2 on Plan II, to pass and repass by foot over the "Grassy Road Easement", also identified as "Approximate Location of Grassy Path (not field located)" shown on the Plan for purposes of obtaining access to the beach. This easement shall be for the benefit of one (1) single family residence only, and shall be used only for the benefit of the remainder of Lot 2.

Reference is hereby made to a certain deed of Lot 1 on Plan II, delivered to grantee by grantor on June 12, 1995 and recorded in the Dukes County Registry of Deeds in Book 656, Page 219 (the "Original Deed"). Said deed contained the following restriction:

"1. The grantee, by acceptance of this deed, covenants with the grantor that any parking area created on the granted premises shall accommodate not more than nine (9)

Property Address: 455 Herring Creek Road, Tisbury, MA

BOOK 1009 PAGE 0726

vehicles, and shall be confined in area to the location depicted as Area "B" on the Plan. Parking outside of Area "B" shall be prohibited."

Such restriction is hereby amended to read as follows:

"1. The grantee, by acceptance of this deed, covenants with the grantor that any parking areas created on the granted premises shall accommodate not more than fifteen (15) vehicles. Nine (9) spaces currently exist on the premises; the additional six (6) spaces shall be sited on the westerly side of the existing driveway located on Lot 1."

All of the rights and restrictions set forth in said Original Deed, shall be deemed to apply to the premises conveyed hereby. All of said restrictions shall remain in full force and effect, with the exception of 1., which is amended above.

For title, see deed of Sydna V. White to G. Kelvin White dated July 24, 1985 and recorded in the Dukes county Registry of Deeds in Book 432, page 326.

Executed as a sealed instrument on this 24th day of July, 2004.

G. Kelvin White
G. Kelvin White

COMMONWEALTH OF MASSACHUSETTS

County of Dukes County, ss

July 23, 2004

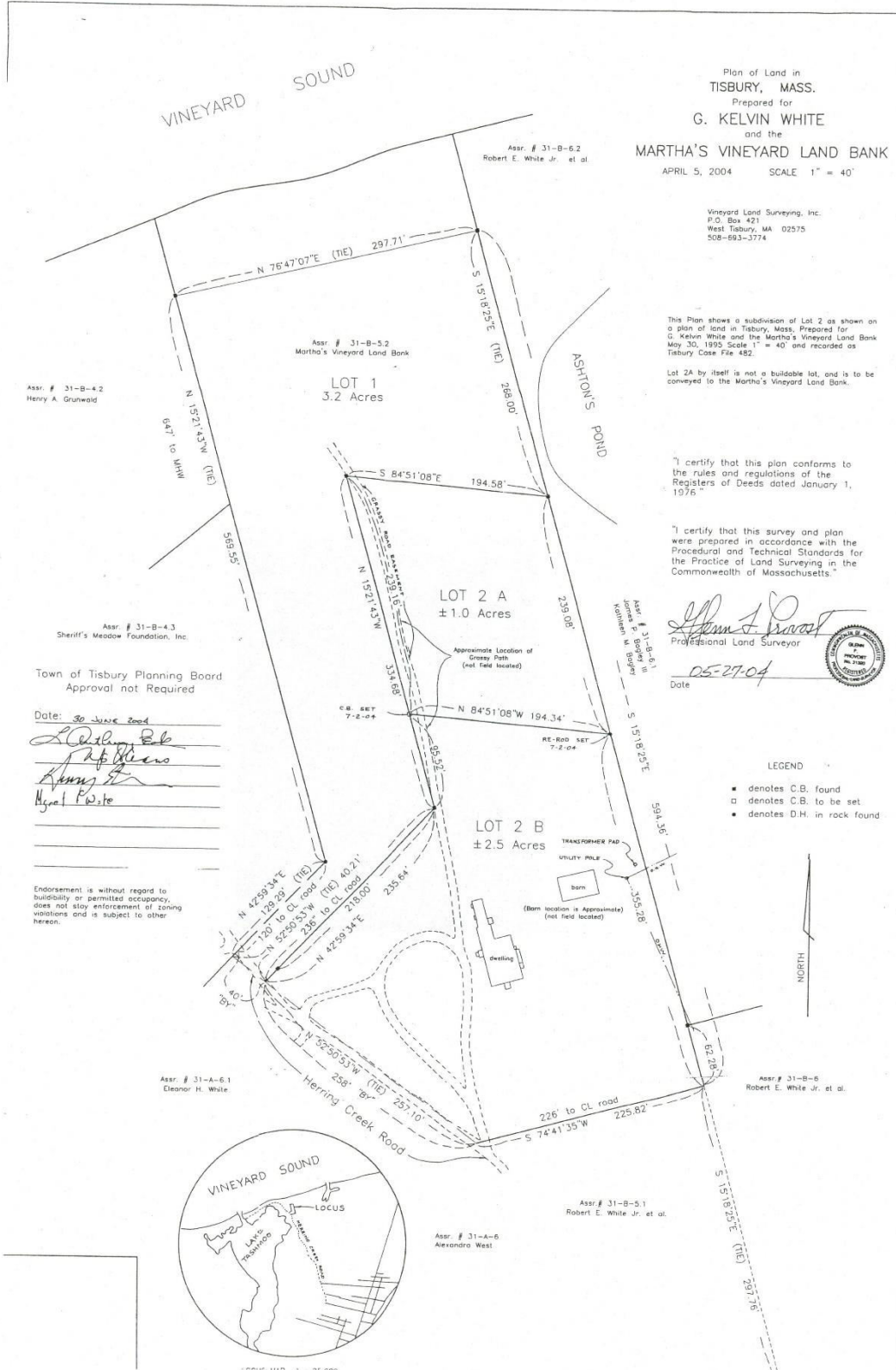
On this day of July, 2004, before me, the undersigned notary public, personally appeared G. Kelvin White, proved to me through satisfactory evidence of identification, which was a Massachusetts driver's license, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

[Signature]
Notary Public
My commission expires: 9/2/2005



Edgartown, Mass. July 23, 2004
at 11 o'clock and 49 minutes AM
received and entered with Dukes County Deeds
book 1009 page 725

Attest: *Danni B. Brewer* Register



Plan of Land in
TISBURY, MASS.
 Prepared for
G. KELVIN WHITE
 and the
MARTHA'S VINEYARD LAND BANK
 APRIL 5, 2004 SCALE 1" = 40'

Vineyard Land Surveying, Inc.
 P.O. Box 421
 West Tisbury, MA 02575
 508-693-3774

This Plan shows a subdivision of Lot 2 as shown on a plan of land in Tisbury, Mass. Prepared for G. Kelvin White and the Martha's Vineyard Land Bank May 30, 1995, Scale 1" = 40' and recorded as Tisbury Case File 482.

Lot 2A by itself is not a buildable lot, and is to be conveyed to the Martha's Vineyard Land Bank.

I certify that this plan conforms to the rules and regulations of the Registers of Deeds dated January 1, 1976.

I certify that this survey and plan were prepared in accordance with the Procedural and Technical Standards for the Practice of Land Surveying in the Commonwealth of Massachusetts.

James P. Goveas
 Professional Land Surveyor
 Date: 05-27-04

LEGEND
 ■ denotes C.B. found
 □ denotes C.B. to be set
 ● denotes D.H. in rock found

Assr. # 31-B-4.2
 Henry A. Grunwald

Assr. # 31-B-4.3
 Sheriff's Meadow Foundation, Inc.

Town of Tisbury Planning Board
 Approval not Required

Date: 30 June 2004
William B. [Signature]
[Signature]
[Signature]
 Nigel P. [Signature]

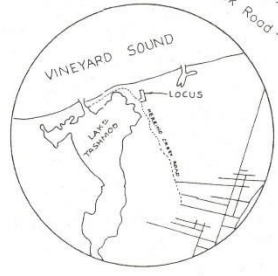
Endorsement is without regard to buildability or permitted occupancy, does not stop enforcement of zoning violations and is subject to other herein.

Assr. # 31-A-6.1
 Eleanor H. White

Assr. # 31-B-8
 Robert E. White Jr. et al.

Assr. # 31-B-5.1
 Robert E. White Jr. et al.

Assr. # 31-A-6
 Alexandra West



MARTHA'S VINEYARD LAND BANK FEE
 PAID \$ _____
 EXEMPT \$ 0
 NO. 2164 DATE 12/16/03 CERTIFICATION 16770

#9470512

QUITCLAIM DEED

We, ROBERT E. WHITE, JR. and EDGAR J. WHITE, both individually and as EXECUTORS w/w/o BRUCE B. WHITE (Middlesex Probate Docket No. 02P-2470-EP), both c/o Edgar J. White, 346 SE Weston Road, Shelton, WA 98584 (the "Grantors"),

in consideration of the sum of ONE HUNDRED NINETY THOUSAND and no/100 (\$190,000.00) DOLLARS, the receipt of which is hereby acknowledged,

GRANT to MARTHA'S VINEYARD LAND BANK COMMISSION, a corporate body politic, with a principal place of business at Upper Main Street, P.O. Box 2057, Edgartown, Massachusetts 02539 (the "Grantee"),

with QUITCLAIM COVENANTS,

A certain parcel of land located on Vineyard Sound in Tisbury, County of Dukes County, Commonwealth of Massachusetts, bounded and described as follows:

NORTHEASTERLY by land now or formerly of Isabel W. West, One Hundred (100') Feet, more or less;

SOUTHEASTERLY by land now or formerly of N. Langhorne Scruggs, Two Hundred and no/100 (200.00') Feet;

SOUTHWESTERLY by land now or formerly of Synda V. White, One Hundred (100') Feet, more or less; and

NORTHWESTERLY by the waters of Vineyard Sound,

Being the lot which is bounded northwesterly by the waters of Vineyard Sound and shown as "Robert E. White et ux." on a plan entitled "Plan of Land in Tisbury, Mass. Surveyed for Robert E. & Marion J. White November 19, 1971 Scale: 1" = 150' Dean R. Swift Reg'd Land Surveyor Vineyard Haven, Mass." which plan is recorded with Dukes County Registry of Deeds in Book 294, Page 259 (the "Plan" and the "Premises").

The Premises are conveyed subject to and with the benefit of the following restrictions:

1. The Premises shall become a part of the "Wilfrid's Pond Preserve" (being the premises described in a deed of G. Kelvin White to Martha's Vineyard Land Bank Commission dated June 12, 1995 recorded with said Registry in Book 656, Page 219), and shall be used, managed, and governed by the Grantee according to the terms and conditions of the Management Plan for the Wilfrid's Pond Preserve as the same may be adopted and amended from time to time by the Grantee.
2. No right of access to the Premises is hereby granted and the Grantee hereby agrees to make no claim for any easement by necessity or implication as appurtenant to the Premises by or through the property lying southeasterly of the Premises, which property is shown on the Plan as (a) "3.82 +/- Acres" (being the premises described in a deed of Robert E. White and Marion J. White to N. Langhorne Scruggs dated December 17, 1971 recorded with said Registry in Book 294, Page 257) and (b) "Robert E. White et ux." (being the parcel lying southeasterly of said parcel shown as "3.82 +/- Acres" and northwesterly of land now or formerly of Doris B. Digelow).

Ashton's New Tisbury, MA 02568

0477513

These restrictions shall be for the benefit of the remaining land of the Grantors as described in (a) a deed dated December 22, 1980 recorded with said Registry in Book 380, Page 302 and a deed dated January 2, 1981 recorded with said Registry in Book 380, Page 624; (b) a deed dated November 29, 1991 recorded with said Registry in Book 570, Page 162 and a deed dated December 19, 1992 recorded with said Registry in Book 596, Page 575 and a deed dated January 22, 1993 recorded with said Registry in Book 599, Page 454; and (c) a deed dated November 29, 1991 recorded with said Registry in Book 570, Page 160 and a deed dated December 19, 1992 recorded with said Registry in Book 596, Page 577 and a deed dated January 22, 1993 recorded with said Registry in Book 599, Page 456.

The two above referenced restrictions shall continue and remain in full force and effect for thirty (30) years from the date of recording this Deed and may be extended and continued in full force and effect in the manner provided in M.G.L. Chapter 184, Section 28, as it may be amended from time to time, or as provided in similar successor provisions, for further periods of twenty (20) years, each, or for such other maximum further periods as may be allowed by any amendments of said law or by any successor provisions.

Being a portion of the premises conveyed in a deed of Robert E. White and Marion J. White to Robert E. White, Jr., Edgar J. White, and Bruce B. White dated January 2, 1981 recorded with said Registry in Book 380, Page 623. See also, Estate of Bruce B. White (Middlesex Probate Docket No. 02P-2470-EP).

WITNESS our hands and seals this 15 day of May, 2003.

Robert E. White Jr.
Robert E. White, Jr., individually and
Executor as aforesaid

Edgar J. White, individually and
Executor as aforesaid

COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss.

May 15, 2003

Then personally appeared the above named Robert E. White, Jr., individually and Executor as aforesaid, and acknowledged the foregoing instrument to be his free act and deed, before me

Robert T. [Signature]
Notary Public
My commission expires: *12/1/2004*

[Seal]

0470514

These restrictions shall be for the benefit of the remaining land of the Grantors as described in (a) a deed dated December 22, 1980 recorded with said Registry in Book 380, Page 302 and a deed dated January 2, 1981 recorded with said Registry in Book 380, Page 624; (b) a deed dated November 29, 1991 recorded with said Registry in Book 570, Page 162 and a deed dated December 19, 1992 recorded with said Registry in Book 596, Page 575 and a deed dated January 22, 1993 recorded with said Registry in Book 599, Page 454; and (c) a deed dated November 29, 1991 recorded with said Registry in Book 570, Page 160 and a deed dated December 19, 1992 recorded with said Registry in Book 596, Page 577 and a deed dated January 22, 1993 recorded with said Registry in Book 599, Page 456.

The two above referenced restrictions shall continue and remain in full force and effect for thirty (30) years from the date of recording this Deed and may be extended and continued in full force and effect in the manner provided in M.G.L. Chapter 184, Section 28, as it may be amended from time to time, or as provided in similar successor provisions, for further periods of twenty (20) years, each, or for such other maximum further periods as may be allowed by any amendments of said law or by any successor provisions.

Being a portion of the premises conveyed in a deed of Robert E. White and Marion J. White to Robert E. White, Jr., Edgar J. White, and Bruce B. White dated January 2, 1981 recorded with said Registry in Book 380, Page 623. See also, Estate of Bruce B. White (Middlesex Probate Docket No. 02P 2470 EP).

WITNESS our hands and seals this day of May, 2003.

Robert E. White, Jr., individually and
Executor as aforesaid

Edgar J. White
Edgar J. White, individually and
Executor as aforesaid

COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss.

May , 2003

Then personally appeared the above named Robert E. White, Jr., individually and Executor as aforesaid, and acknowledged the foregoing instrument to be his free act and deed, before me

Notary Public
My commission expires:

[Seal]

Edgar J. White

R94776515

Washington
STATE OF OREGON

Mason, ss.

May 16, 2003

Then personally appeared the above named Edgar J. White, individually and Executor as aforesaid, and acknowledged the foregoing instrument to be his free act and deed, before me

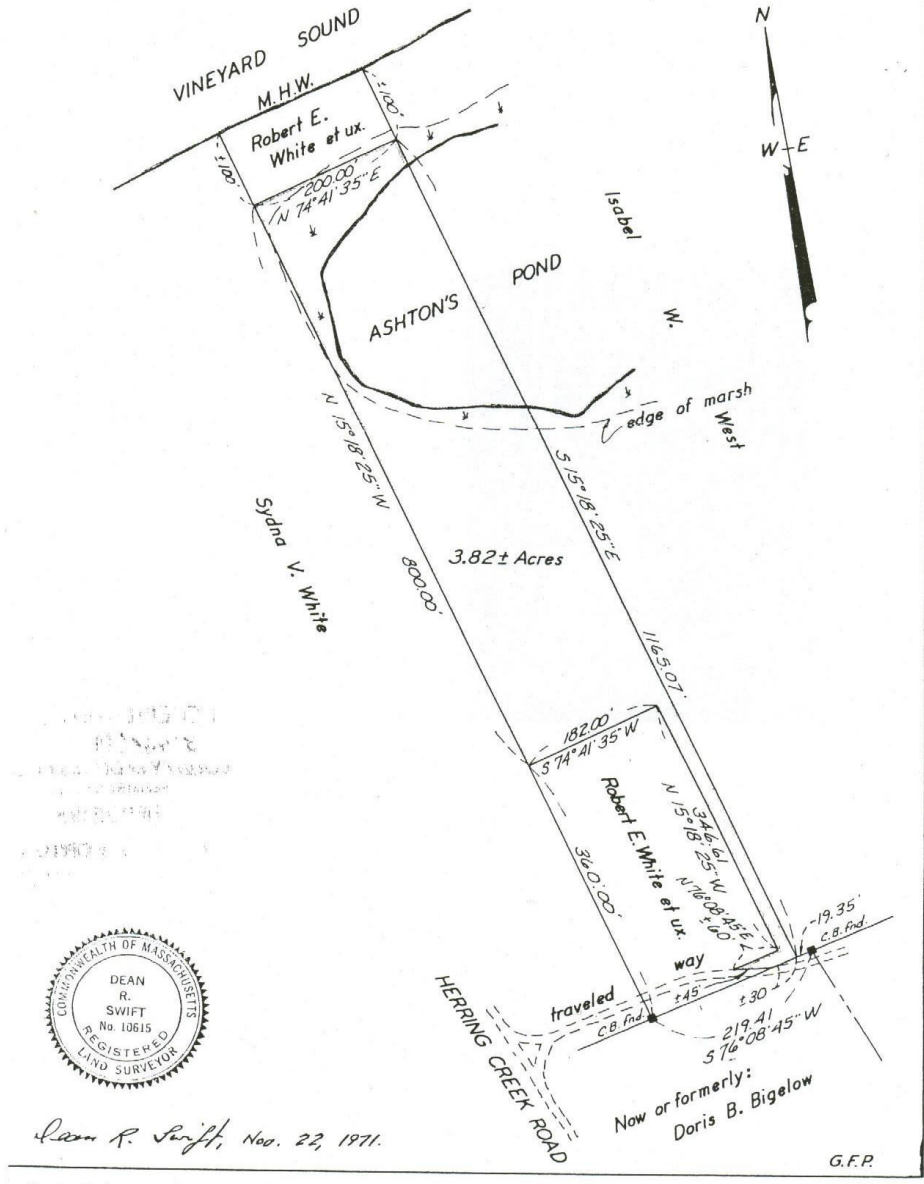


Marie Collier
Notary Public
My commission expires: 3-18-06

Edgmont, Mass. May 20, 2003
at 12 o'clock and 08 minutes PM
received and entered with Dukes County Deeds
Book 947 page 512

Attest: *Deane P. Rivers*, Register

PLAN OF LAND IN TISBURY, MASS.
 Surveyed for
ROBERT E. & MARION J. WHITE
 November 19, 1971 Scale: 1" = 150'
 Dean R. Swift Reg'd. Land Surveyor
 Vineyard Haven, Mass.



BOOK 993 PAGE 0583

QUITCLAIM DEED

ALEXANDRA WEST, of P. O. Box 1414, Vineyard Haven, MA 02568 (the "Grantor"),

in consideration of the sum of TWO HUNDRED EIGHTY THOUSAND and no/100 (\$280,000.00) DOLLARS, the receipt of which is hereby acknowledged,

Rachel's Way, Tisbury, W.

GRANT to the MARTHA'S VINEYARD LAND BANK COMMISSION, a corporate body politic, with a principal place of business at Upper Main Street, P.O. Box 2057, Edgartown, Massachusetts 02539 (the "Grantee"),

with QUITCLAIM COVENANTS,

A certain parcel of land located on Vineyard Sound in Tisbury, County of Dukes County, Commonwealth of Massachusetts, bounded and described as follows:

Being Lot 1 as shown on a plan of land entitled: "Plan of Land in Tisbury, Mass. Prepared for Francis West, Jr. & Isabel West February 19, 1997 Scale 1" = 50' Being a Subdivision of Assessors Parcel 31-B-7.4 Vineyard Land Surveying, Inc. P.O. Box 421 West Tisbury, MA 02575," which plan is recorded with Dukes County Registry of Deeds as Tisbury Case File No. 505 and to which plan reference is hereby made for a more particular description thereof (the "Premises" and the "Plan"); said Lot 1 containing 18,240 sq. ft., more or less, according to the Plan.

The Premises are conveyed subject to and with the benefit of the following restrictions:

1. The Premises shall become a part of the "Wilfrid's Pond Preserve" (being the premises described in a deed of G. Kelvin White to Martha's Vineyard Land Bank Commission dated June 12, 1995 recorded with said Registry in Book 656, Page 219 and in a deed of Robert E. White, Jr. et al to Martha's Vineyard Land Bank Commission dated May 15, 2003 recorded with said Registry in Book 947, Page 512), and shall be used, managed, and governed by the Grantee according to the terms and conditions of the Management Plan for the Wilfrid's Pond Preserve as the same may be adopted and amended from time to time by the Grantee.
2. No right of access to the Premises is hereby granted and the Grantee hereby agrees to make no claim for any easement by necessity or implication as appurtenant to the Premises by or through the property lying easterly and southeasterly of the Premises, which property is shown in part on the Plan as "Lot 2 135,370 sq. ft." and in part as "Lots 1, - 3." and the lot shown as "Norman L. & Judith J. Guy" and the lot shown as "Tracy Dickson III" all as shown on a plan of land recorded with said registry as Tisbury Case File No. 143.

These restrictions shall be for the benefit of the remaining land of the Grantor as described in a deed from Francis West, Jr. and Isabel West to Alexandra West and Christopher West dated June 7, 1999 recorded with said Registry in Book 767, Page 695.

The two above-referenced restrictions shall continue and remain in full force and effect for thirty (30) years from the date of recording this Deed and may be extended and continued in full force and effect in the manner provided in M.G.L. Chapter 184, Section 28, as it may be amended from time to time, or as provided in similar successor provisions, for further periods of twenty (20) years, each, or for such other maximum further periods as may be allowed by any amendments of said law or by any successor provisions.

BOOK 993 PAGE 0584

The premises are conveyed subject to and with the benefit of (i) recreational easements of record for beach use of the Premises and adjoining property granted by Francis West, Jr. and/or Isabel West to certain owners of upland generally located southerly of the Premises, and (ii) an easement from Alexandra West to Alexandra West and Christopher West of even date recorded herewith.

Being the premises conveyed in (i) a deed of Francis West, Jr. and Isabel West to Alexandra West dated September 2, 1998 recorded with said Registry in Book 740, Page 467, and (ii) a confirmatory deed of Francis West, Jr. and Isabel West to Alexandra West dated June 21, 1999 recorded with said Registry in Book 771, Page 365.

WITNESS my hand and seal this 20th day of March, 2004.

Alexandra West
Alexandra West

STATE OF OREGON

Multnomah, ss.

March 20th, 2004

Then personally appeared the above named Alexandra West and acknowledged the foregoing instrument to be her free act and deed, before me



[Seal]

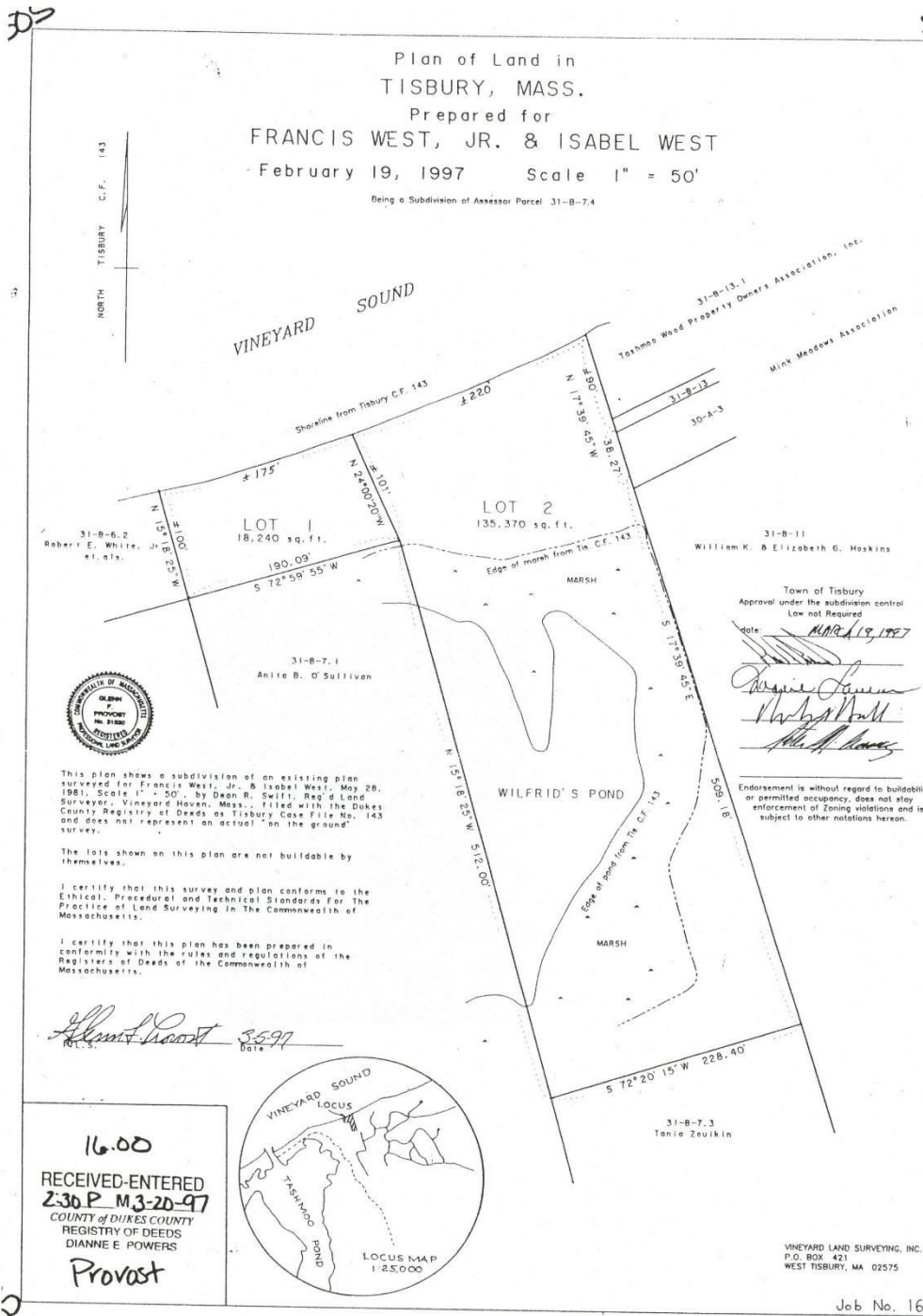
Irina Bazhinoval
Notary Public
My commission expires: sept 8, 2007

MARtha'S VINEYARD LAND BANK FEE

PAID \$ _____
 EXEMPT \$ A
37787 3/29/04 Crnkauz
NO. DATE CERTIFICATION

Edgartown, Mass: March 29, 2004
at 12 o'clock and 31 minutes P M
received and entered with Dukes County Deeds
book 993 page 583

Attest: *Jessie E. Powers* Register



This plan shows a subdivision of an existing plan surveyed for Francis West, Jr. & Isabel West, May 28, 1981, Scale 1" = 50', by Dean R. Swift, Registered Land Surveyor, Vineyard Haven, Mass., filed with the Dukes County Registry of Deeds as Tisbury Case File No. 143 survey.

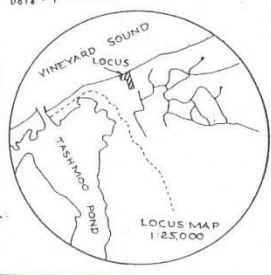
The lots shown on this plan are not buildable by themselves.

I certify that this survey and plan conforms to the Ethical, Procedural and Technical Standards For The Practice of Land Surveying in The Commonwealth of Massachusetts.

I certify that this plan has been prepared in conformity with the rules and regulations of the Registers of Deeds of the Commonwealth of Massachusetts.

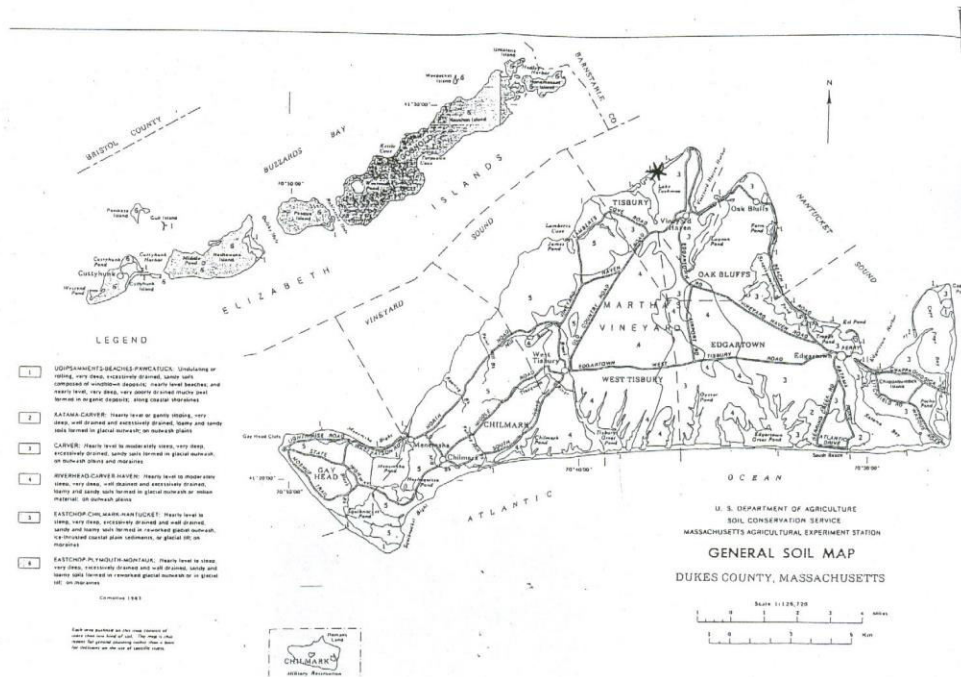
Alvin Provost
Date: 3-5-97

16.00
RECEIVED-ENTERED
2:30 P.M. 3-20-97
COUNTY OF DUKES COUNTY
REGISTRY OF DEEDS
DIANNE E. POWERS
Provost



Appendix C: Physical Characteristics Maps

Map 7: General Soils Map of Martha's Vineyard (SCS 1986)



Map 8: Soils Map (The Nature Conservancy, SCS 1986)

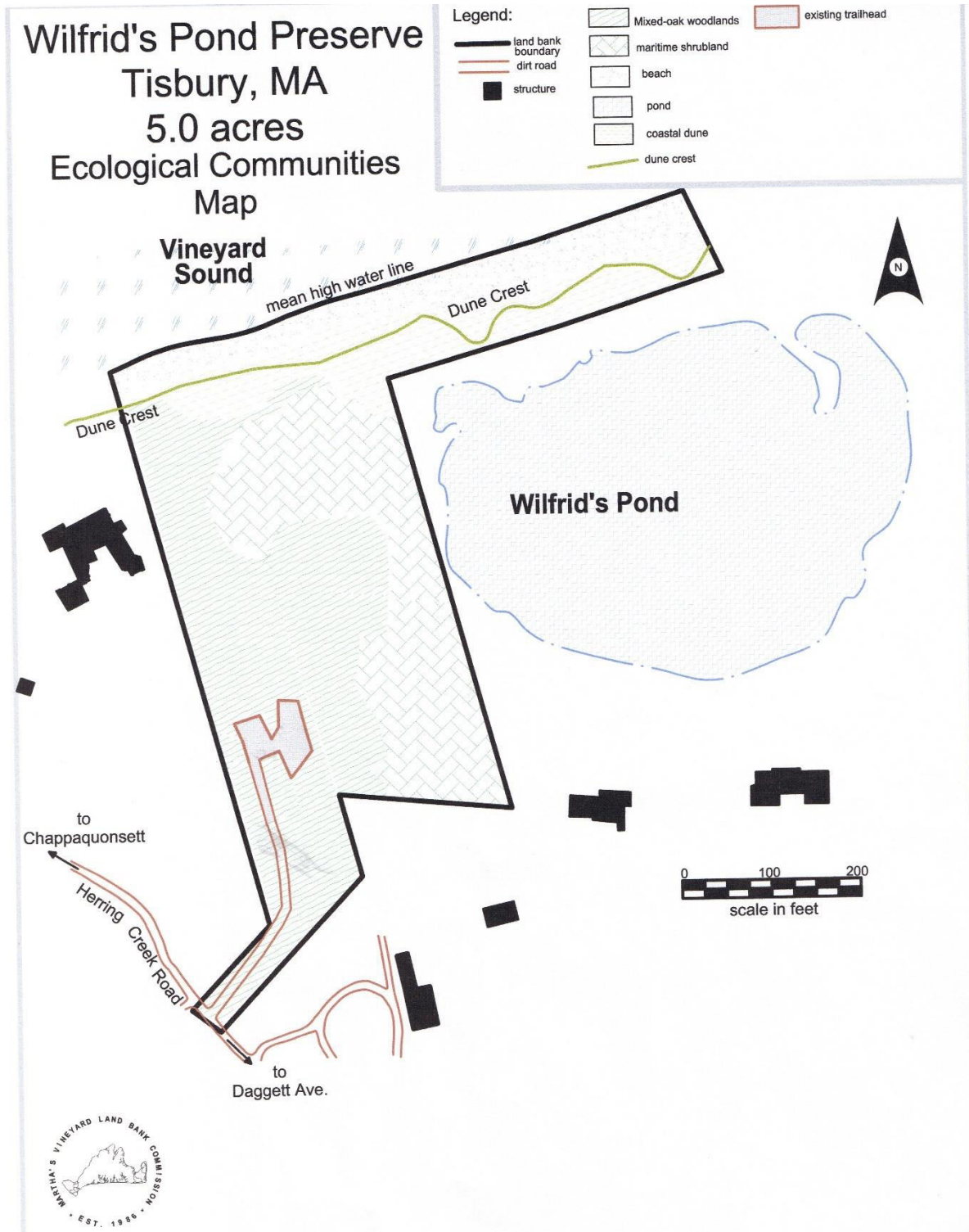
Wilfrid's Pond Preserve, Tisbury, MA
Soils map (The Nature Conservancy, SCS 1986)
Orthophotograph (MASSGIS, 2003 aerial)
Parcel data (Cartographic Associates)



The following four soil types compose Wilfrid's Pond Preserve. Each soil's characteristics and suitability are discussed in the following paragraphs.

- (a) Udipsamments,(UaC) Udipsamment soil is an entisol found on excessively drained dunes formed by wave-wash and wind-blown accumulations of sand. Available water capacity is low and proximity to salt water is high limiting the vegetation to xeric, halophytic grasses and shrubs. The adjacent beach is deep sand that has no vegetation resulting from continual wave action that occurs either on a daily or seasonal basis depending on elevation. The slope and vegetation of this soil type is easily disturbed by wind, water and human traffic.
- (b) Carver Series (CeB) The Carver soil is a more developed entisol that is very deep, gently sloping and excessively drained. It is closely associated with morainal deposits but formed in glacial outwash. Permeability is very rapid and available water capacity is quite low; thus this soil is poorly suited to cultivated crops and woodland productivity. Moderate limitations for recreation development for trails due to sandiness exist that can be overcome with special maintenance.
- (c) Klej Series (KeA) Klej is loamy, coarse sand that is a mottled entisol. It is deep, nearly level and moderately well drained. It can be found in depressions and in low areas adjacent to bodies of open water. It is more suited to woodland productivity than the Carver soil. There are moderate limitations for recreational use due to wetness, but these can be overcome by special design, maintenance and limited use.
- (d) Pawcatuck/Matunuck(PaA) This soil unit consists of very deep, level, poorly drained soils in tidal areas. These soils are found adjacent to shore areas and brackish ponds. The permeability of the Pawcatuck soils is moderate to rapid in the organic material and very rapid in the substratum. Most areas of this soil are in salt-tolerant grasses. The daily tidal flooding limits the area for most uses other than as wetland wildlife habitat.

Map 9: Ecological Communities Map



Appendix D: Vegetation Description and Table

During 2005 woodland, shrubland and dune vegetation surveys were conducted. The point sampling method as described by Avery and Burkhart (1994) was used to inventory the trees of the woodlands. A total of 5 points were inventoried in the mixed-oak woodland. Three-meter squared 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 shrubland and dune communities were inventoried following methods described by Dunwiddie (1986). Species diversity and density were recorded within ten 2- and 4-m² circular plots located at random locations along five transects running east-west in the shrubland. Species diversity and density were recorded within nineteen 1- and 2-m² circular plots located at random locations along five transects running east-west in the dune. 1995 data from overlapping plots were compared to 2005 data using the Wilcoxon Signed Ranks test. Rare species were inventoried on the preserve during ongoing plant inventories conducted by land bank staff July, September, October and November of 1995, April, May and June of 1996, May and June of 1997, August 2003, and July through August 2005. Flora at Wilfrid's Pond Preserve is listed in Table 1 with proper nomenclature according to Gleason and Cronquist (1991). A description or qualitative summary of each cover type follows:

Habitat Descriptions

Mixed-Oak Woodland: Woodland trees are, on average, 36.5 feet tall, 9.2 inches in diameter at breast height and 80-140 years old. The estimated basal area per acre is 106 square feet. There are an estimated 16.8 trees per acre in the dbh class of 10 inches and greater. The mixed oak woodland exhibits the second greatest diversity of the vegetation communities and is habitat to 32% of the total species known to occur on the property.

Black and white oak dominate the woodland overstory. A rich subcanopy of 15-30 foot tall oak saplings, oblongleaf shadbush, mockernut hickory, black cherry and sassafras occur in the shade of the oak overstory. A diverse 5-15 foot tall shrub and vine layer occurs in the woodland understory. The most abundant are poison ivy, southern arrowwood, bracken fern, common greenbrier and Virginia creeper. The open-canopied nature of this woodland results in an ericaceous shrub layer that is less than 5 feet tall and dense in areas. This low shrub layer is dominated by black huckleberry, dangleberry and low bush blueberry. The herbaceous and graminoid groundcover is sparse with the occurrence of species such as bristly dewberry, yarrow, New York aster, Pennsylvania sedge, whorled loosestrife and star flower. An increase in frequency of occurrence of bracken fern, lowbush blueberry and Virginia creeper and a decrease in sassafras and shadbush saplings have occurred in the past 10 years.

Maritime Shrubland: The maritime shrubland is dominated by bayberry and rose species and covers 28% of the preserve. It occurs on Carver and Klej loamy coarse sands. It is dominated by 5 to 10-foot tall shrubs and tangles of vines. The area closer to the dune complex is dominated by lower growing herbs, graminoid species as well as stunted shrubs and trees. It is the most diverse vegetation community on the preserve. Bayberry, pasture rose and poison ivy are the dominant species in the shrubland. Other common shrubs and vines are Virginia rose, Virginia creeper, shining sumac, black cherry, black huckleberry, beach plum and southern arrowwood. Invasive plants such as oriental

bittersweet and multiflora rose also occur in the shrubland. The common herbs and graminoids that dominate the groundcover are prickly and bristly dewberry, field sorrel, poverty grass, lance-leaf goldenrod and sweet goldenrod. The composition of the shrubland has changed little in ten years. An increase in field sorrel, shining sumac, poverty grass, black huckleberry, black oak saplings and southern arrowwood and a decrease of lance-leaf goldenrod, Virginia creeper and sheep fescue was observed in the past decade.

Dune: The dune vegetation community is dominated by American beach grass and seaside goldenrod and covers 16% of the preserve. It occurs on Carver loamy coarse sand and Udipsamment soils. The active ten-foot tall sand dune is densely vegetated by American beach grass with poison ivy interspersed throughout and pockets of dusty miller, seaside goldenrod and evening primrose. Poison ivy is the only species that has exhibited an increase in frequency on the dune in the last decade. Portions of the back dune are sparsely vegetated by lance-leaved goldenrod, sweet everlasting, beach heather, beach plum, beach rose, seaside goldenrod, sand jointweed and field sorrel. A small number of beach plants and opportunistic weeds grow in the foredune; such as seaside goldenrod, American beach grass, sea rocket, seaside spurge, saltmarsh sand-spurry, saltmeadow cordgrass, beach clotbur, seabeach sandwort, orach species, seabeach knotweed, pilewort, wild lettuce and oriental bittersweet.

Table 1. Flora of Wilfrid's Pond Preserve, Tisbury, MA 1995 - 2005

				Vegetation Community					
				Mixed-oak woodland		Maritime shrubland		Dune	
	Scientific name	Common name	Survey	95	05	95	05	95	05
	Clubmoss Species								
1	<i>Lycopodium complanatum</i>	northern ground cedar	3	x					
	Fern Species								
2	<i>Pteridium aquilinum</i>	bracken fern	1, 2, 6,7	C	A	x	x		
	Graminoid Species								
3	<i>Agrostis gigantea</i>	redtop	1,7			x	x		
4	<i>Ammophila breviligulata</i>	american beach grass	1, 2,7	x		U	x	A	A
5	<i>Andropogon virginicus</i>	broom sedge	7				x		
6	<i>Atriplex patula</i>	orach sp	7					x	
7	<i>Carex hormathodes</i>	marsh straw edge	1,7	x			U	x	x
8	<i>Carex pensylvanica</i>	pennsylvania sedge	1, 2, 6,7	x	x	C	U		
9	<i>Carex species</i>	sedge species	1, 2, 6,7			x		x	
10	<i>Danthonia spicata</i>	poverty grass	7			U	C		
11	<i>Deschampsia flexuosa</i>	common hair grass	1, 6	x					
12	<i>Distichlis spicata</i>	spike grass	2, 6,7			U	x		
13	<i>Festuca ovina</i>	sheep fescue	1, 2, 6,7	x	x	C	U		
14	<i>Holcus lanatus</i>	velvetgrass	1, 6,7			x	x	x	x
15	<i>Juncus effusus</i>	soft rush	4,7			x		x	x

16	<i>Juncus greenei</i>	greene's rush	1, 6,7	x	x	x	U	x		
17	<i>juncus tenuis</i>	path rush	7				U	x		
18	<i>panicum scoparium</i>	panicum sp.	7				U			
19	<i>Panicum species</i>	panic grass species	1,7					x	x	
20	<i>Panicum virgatum</i>	switchgrass	1, 6,7			x	U	x	x	
21	<i>Phragmites australis</i>	common reed	6,7					x	x	
22	<i>Schizachyrium scoparium</i>	little bluestem	2, 6,7			U	x			
24	<i>Scirpus americanus</i>	chairmaker's rush	6,7				x			
25	<i>Spartina patens</i>	salt meadow cordgrass	2, 6,7					U	x	
	Herbaceous Species									
26	<i>Achillea millefolium</i>	yarrow	1, 6,7	x	x	x	U	x		
27	<i>Allium cf. vineale</i>	field garlic	5,7			x	x			
28	<i>Aralia nudicaulis</i>	wild sarsaparilla	1,7			x		x		
29	<i>Artemisia stelleriana</i>	dusty miller	1, 6,7					x	x	
30	<i>Aster novi-belgii</i>	new york aster	3, 6,7		U	U	U			
31	<i>Aster species</i>	aster species	1, 2	x		x				
32	<i>Atriplex arenaria</i>	seabeach orach	1, 3,7					x	x	
33	<i>Atriplex patula</i>	orach	2					x		
34	<i>Cakile edentula</i>	sea rocket	1, 2, 6,7	x				C	x	
35	<i>Cardamine parviflora var. arenicola</i>	small-flowered bitter cress	4,7					x		
36	<i>Chrysanthemum leucanthemum</i>	oxeye daisy	1,7			x	x			
37	<i>Conyza canadensis</i>	horseweed	7				U			
38	<i>Erechtites hieracifolia</i>	pilewort	1, 2, 3,7	x		x	x	x	x	
39	<i>Euphorbia polygonifolia</i>	seaside spurge	2, 3,7					U	x	
40	<i>Euthamia graminifolia</i>	lance-leaved goldenrod	1, 2, 6,7	x	x	A	C	x	x	
41	<i>Fragaria vesca</i>	wood strawberry	1, 6	x						
42	<i>Gaultheria procumbens</i>	wintergreen	1, 6	x						
43	<i>Gnaphalium obtusifolium</i>	sweet everlasting	3, 6,7				U	x		
44	<i>Hieracium species</i>	hawkweed species	1, 6			x				
45	<i>Honckenya peploides</i>	seabeach sandwort	1,7					x		
46	<i>Hudsonia tomentosa</i>	beach heather	1,7					x	x	
47	<i>Hypericum perforatum</i>	common St. John's-wort	7				x			
48	<i>Hypochoeris radicata</i>	cat's ear	4,7			x	x			
49	<i>Lactuca canadensis</i>	wild lettuce	2, 3,7			U		x		
50	<i>Lactuca serriola</i>	prickley lettuce	7				x			
51	<i>Lechea maritima</i>	beach pinweed	1, 2,7			C	x	x	x	
52	<i>Lilium philadelphicum</i>	wood lily	1	x						
53	<i>Lysimachia quadrifolia</i>	whorled loosestrife	1, 2, 6,7	x	U	U	U	x		
54	<i>Melampyrum lineare</i>	cowwheat	7				U			

55	<i>Oenothera biennis</i>	common evening primrose	1,7					x		
56	<i>Phytolacca americana</i>	pokeweed	1,7					x	x	
57	<i>Polygonella articulata</i>	sand jointweed	2,7			x	x	x	x	
58	<i>Polygonum glaucum</i>	seabeach knotweed	1, 3,7					x	x	
59	<i>Rumex acetosella</i>	field sorrel	1, 2,7			U	A	x	x	
60	<i>Sisyrinchium species</i>	blue-eyed grass species	1,7			x	x			
61	<i>Solidago odora</i>	sweet goldenrod	1, 2, 3, 6,7	x	x	C	C	x		
62	<i>Solidago rugosa</i>	rough-stemmed goldenrod	1,7	x	x	x	x	x	x	
63	<i>Solidago sempervirens</i>	seaside goldenrod	1, 2, 3, 6,7			x		A	A	
64	<i>Solidago species</i>	goldenrod species	1			x				
65	<i>Spergularia marina</i>	saltmarsh sand-spurrey	1, 2, 3, 6,7					U	x	
66	<i>Teucrium canadense</i>	american germander	1, 2,7	x		x	x			
67	<i>Trientalis borealis</i>	starflower	1,7	x	U		U	x		
68	<i>Veronica arvensis</i>	corn speedwell	5,7			x	x			
69	<i>Xanthium strumarium</i>	beach clotbur	1, 2, 3					U		
	Shrub Species									
70	<i>Amelanchier canadensis</i>	oblongleaf shadbush	1, 2, 6,7	x	x	x				
71	<i>Amelanchier laevis</i>	smooth shadbush	4	A	U					
72	<i>Aronia melanocarpa</i>	black chokeberry	1, 2, 6,7	U		U	x			
73	<i>Baccharis halimifolia</i>	groundsel tree	5,7			x				
74	<i>Berberis thunbergii</i>	japanese barberry	1,7			x				
75	<i>Gaylussacia baccata</i>	black huckleberry	1, 2, 6, 7	x	x		C			
76	<i>Gaylussacia frondosa</i>	dangleberry	1, 2, 6	A	A					
77	<i>Ilex verticillata</i>	winterberry	3, 6	x						
78	<i>Juniperus virginiana</i>	eastern red cedar	1, 6,7			x	U			
79	<i>Myrica pensylvanica</i>	bayberry	1, 2, 6,7	U	U	A	A	x	C	
80	<i>Prunus maritima</i>	beach plum	1, 2, 6,7	x		x	U	x	A	
81	<i>Rhododendron catawbiense</i>	rose-bay rhododendron	1, 6,7	x						
82	<i>Rhus copallinum</i>	shining sumac	1, 2, 6,7	U		U	C			
83	<i>Ribes species</i>	gooseberry species	1,7			x				
84	<i>Rosa carolina</i>	pasture rose	1, 2, 6,7			U	A	x	C	
85	<i>Rosa multiflora</i>	multiflora rose	1,7			x				
86	<i>Rosa rugosa</i>	beach rose	1, 2, 6,7	x	U	C		x		
87	<i>Rosa virginiana</i>	virginia rose	1, 2, 6,7	x		C	C			
88	<i>Sambucus canadensis</i>	common elder	1, 5,7			x				
89	<i>Vaccinium angustifolium</i>	narrow-leaved blueberry	1, 2, 6	x		U				
90	<i>Vaccinium corymbosum</i>	highbush blueberry	1, 2, 6,7	U		x	x			
91	<i>Vaccinium pallidum</i>	low bush blueberry	1, 2, 6,7	x	A		x			

92	<i>Viburnum dentatum</i>	southern arrowwood	1, 2, 6,7	A	A	U	C		
	Tree Species								
93	<i>Carya tomentosa</i>	mockernut hickory	1, 6,7	x	x				
94	<i>Ilex opaca</i>	american holly	1, 6,7	x	U	x			
95	<i>Pinus rigida</i>	pitch pine	1, 6,7	x	x				
93	<i>Populus tremuloides</i>	quaking aspen	1, 2, 6,7	x	x	x			
97	<i>Prunus serotina</i>	black cherry	1, 2, 6,7	A	A	C	C		
98	<i>Quercus alba</i>	white oak	1, 2, 6,7	U	U	C	C		
99	<i>Quercus stellata</i>	post oak	1, 2, 6,7	x	x	x			
100	<i>Quercus velutina</i>	black oak	1, 2, 6,7	x	U	U	C		
101	<i>Sassafras albidum</i>	sassafras	1, 2, 6,7	A	C	U	U		
	Vine Species								
102	<i>Ampelopsis brevipedunculata</i>	porcelain-berry	1, 2	x					
103	<i>Celastrus orbiculatus</i>	oriental bittersweet	1, 2, 6,7	x	U	x	U	U	
104	<i>Cuscuta gronovii</i>	common dodder	1,7			x			
105	<i>Parthenocissus quinquefolia</i>	Virginia creeper	1, 2, 6,7	U	C	A	C	C	U
106	<i>Polygonum convolvulus</i>	black bindweed	2,7			x			
107	<i>Rubus allegheniensis</i>	common blackberry	7		U				
108	<i>Rubus flagellaris</i>	prickly dewberry	1,2,6,7	x	x	C	C		
109	<i>Rubus hispida</i>	bristly dewberry	1, 2,7	x	U	C	C		
110	<i>Smilax glauca</i>	glaucous greenbrier	1, 2,7	x				x	
111	<i>Smilax rotundifolia</i>	common greenbrier	1, 2, 6,7	U	U				
112	<i>Vitis labrusca</i>	fox grape	1, 2, 6,7	x	x	x			
113	<i>Toxicodendron radicans</i>	poison ivy	1, 2, 6,7	A	A	A	A	C	A
	<i>Abundant species</i>			6	6	4	4	2	4
	<i>Common species</i>			1	2	10	13	3	2
	<i>Uncommon species</i>			7	13	15	18	5	1
	<i>Present species</i>			41	15	38	23	37	21
	<i>Total # of species</i>			55	36	67	58	47	28
	<i>Present of total species</i>			49%	32%	59%	51%	41%	25%

^aA = abundant (percent occurrence greater than 50%), C = common (percent occurrence greater than 20% but less than or equal to 50%), U = uncommon (percent occurrence less than or equal to 20%), x = present on the preserve but not detected in a survey plot; Upper case = woodland survey; lower case = shrubland or grassland survey; t=trail, p=pond, s=streamside (ie. x-t means species is in that habitat along a trail, x (t) means species is along a trail and elsewhere in the habitat).

^b Survey periods: 1, 2, 3 =spring, summer and fall 1995 list of species by Wendy Melpas and Matthew Dix (WM, MD); 4=1996 spring-summer inventory by WM; 5=1997 late spring early summer inventory; 6=2003 summer inventory by Julie Schaeffer (JS); 7=2005 surveys by JS.

Appendix E: Wildlife

Wilfrid's Pond Preserve has habitat features that accommodate many species of wildlife. The shoreline of shifting sand, gravel and deposited wrack provides forage and nesting habitat for seabirds and shorebirds. The tidal flooding provides cover and forage for amphipods and other terrestrial and marine invertebrates in wrack deposits. The grassy dune provides forage and cover and the loose, sandy substrate provides nesting and burrowing sites for insects, reptiles, birds and mammals. The shrub thickets with scattered trees, fruiting shrubs and openings of grassy and herbaceous plant cover. The shrubland/woodland ecotone on the edge of the oak woodland provides perching sites and cover for nesting and foraging wildlife. The oak woodland with mature, hardwood, mast-bearing trees provides forage for wildlife; and cavities provide nesting opportunities for birds and small mammals.

Table 2. Wildlife at Wilfrid's Pond Preserve, Tisbury, MA

Scientific name	Common name	Dune/shrubland^a	Woodland
Kingdom Animalia			
Phylum Arthropoda			
Class Insecta			
Order Hymenoptera (sawflies, ants, wasps, and bees)			
Family Apidae: <i>Megabombus pennsylvanicus</i>	Bumblebee	S	
Order Lepidoptera (butterflies and moths)			
Superfamily Papilionoidea (butterflies)			
Family Lycaenidae: <i>Lycaena phlaeas</i>	American copper	SP, S	
Family Nymphalidae: <i>Phyciodes tharps</i>	pearl crescent	SP	
Family Nymphalidae: <i>Cercyonis pegala</i>	common wood- nymph	S	S
Family Nymphalidae: <i>Nymphalis antiopa</i>	mourning cloak		S
Order Diptera (flies)			
Family Ceratopogonidae: species unknown	biting midge	Sp	
Family Culicidae: species unknown	mosquitoes	S	S
Family Tabanidae: <i>Chrysops sp.</i>	deer flies	S	S
Order Acarina			
Family Araneidae: <i>Argiope aurantia</i>	deer tick	S, SP, F	S, SP, F, W

Phylum Chordata			
Class Mammalia			
Order Lagomorpha			
Family Leporidae: <i>Sylvilagus floridanus</i>	eastern cottontail	F, W	F, W
Order Rodentia			
Family Sciuridae: <i>Sciurus carolinensis</i>	grey squirrel		SP, S, F
Order Carnivora			
Family Mephitidae: <i>Mephitis mephitis</i>	striped skunk	F	F
Family Mustelidae: <i>Lontra canadensis</i>	river otter	W	
Family Canidae: <i>Canis lupus</i>	domestic dog	S, SP, F, W	S, SP, F, W
Family Felidae: <i>Felis silvestris</i>	domestic cat	S, SP, F, W	S, SP, F, W
Order Artiodactyla			
Family Cervidae: <i>Odocoileus virginianus</i>	white-tailed deer	S	SP, S, F
Class Reptilia			
Order Squamata			
Family Colubridae: <i>Lampropeltis triangulum</i>	milk snake		S

^aSeason and frequency of occurrence: SP = spring, S = summer, F = fall, W = winter.

Appendix F: Avian Species List and Seasonal Tables

The following is a list of avian species observed on Wilfrid's Pond Preserve and their corresponding foraging guilds.

Table 3: Avian species list observed on Wilfrid's Pond Preserve, Tisbury, MA

Family Accipitridae (hawks and eagles)		
Common Name	Scientific Name	Foraging Guild
osprey	<i>Pandion haliaetus</i>	piscivore, high dives
red-tailed hawk	<i>Buteo jamaicensis</i>	carnivore-small mammals, high patrol
Family Anatidae (swans, geese, ducks & waterfowl)		
bufflehead	<i>Bucephala albeola</i>	omnivore, bottom forager
black scoter	<i>Melanitta nigra</i>	aquatic invertebrates, surface diver
Canada goose	<i>Branta Canadensis</i>	omnivore, dabbler, ground gleaner
common eider	<i>Somateria mollissima</i>	carnivore, bottom forager
common goldeneye	<i>Bucephala clangula</i>	omnivore, bottom forager
hooded merganser	<i>Lophodytes cucullatus</i>	piscivore, surface diver
red-breasted merganser	<i>Mergus serrator</i>	piscivore, water diver
white-winged scoter	<i>Melanitta fusca</i>	omnivore, bottom forager
Family Bombycillidae (waxwings)		
cedar waxwing	<i>Bombycilla cedrorum</i>	frugivore, upper canopy gleaner
Family Cardinalidae (cardinals)		
northern cardinal	<i>Cardinalis cardinalis</i>	omnivore, ground gleaner
Family Cathartidae (American vultures)		
turkey vulture	<i>Cathartes aura</i>	carrion feeder, high patroller
Family Columbidae (pigeons and doves)		
mourning dove	<i>Zenaida macroura</i>	granivore, ground gleaner
Family Corvidae (jays and crows)		
blue jay	<i>Cyanocitta cristata</i>	omnivore, ground gleaner
American crow	<i>Corvus brachyrhynchos</i>	omnivore, ground gleaner

Family Emberizidae (finches, sparrows, warblers)		
eastern towhee	<i>Pipilo erythrophthalmus</i>	omnivore, ground gleaner
song sparrow	<i>Melospiza melodia</i>	omnivore, ground gleaner
white-throated sparrow	<i>Zonotrichia albicollis</i>	insectivore, ground gleaner
Family Fringillidae (finches)		
American goldfinch	<i>Carduelis tristis</i>	omnivore, ground gleaner
house finch	<i>Carpodacus mexicanus</i>	omnivore, ground gleaner
Family Gaviidae (loons)		
red-throated loon	<i>Gavia stellata</i>	piscivore, surface diver
Family Hirundinidae (swallows)		
barn swallow	<i>Hirundo rustica</i>	insectivore, aerial forager
tree swallow	<i>Tachycineta bicolor</i>	omnivore, aerial forager
Family Icteridae (blackbirds, orioles)		
common grackle	<i>Quiscalus quiscula</i>	omnivore, ground gleaner
red-winged blackbird	<i>Agelaius phoeniceus</i>	omnivore, ground gleaner
brown-headed cowbird	<i>Molothrus ater</i>	omnivore, ground gleaner
northern oriole	<i>Icterus galbula</i>	omnivore, upper canopy gleaner
Family Laridae (gulls, terns)		
great black-backed gull	<i>Larus marinus</i>	carnivore, coastal scavenger
herring gull	<i>Larus argentatus</i>	omnivore, ground gleaner, surface dips
ring-billed gull	<i>Larus delawarensis</i>	s/w: carnivore, scavenger
Family Mimidae (mimic thrushes)		
gray catbird	<i>Dumetella carolinensis</i>	s: omnivore, ground gleaner
northern mockingbird	<i>Mimus polyglottos</i>	omnivore, ground gleaner
Family Muscicapidae (thrushes)		
American robin	<i>Turdus migratorius</i>	omnivore, ground gleaner
Family Paridae (titmice and chickadees)		
black-capped chickadee	<i>Parus atricapillus</i>	s: insectivore, foliage gleaner w: omnivore, foliage gleaner
Family Parulidae (warblers)		
common yellowthroat	<i>Geothlypis trichas</i>	insectivore, foliage gleaner

pine warbler	<i>Dendroica pinus</i>	insectivore, bark gleaner
yellow warbler	<i>Dendroica petechia</i>	insectivore, bark gleaner
yellow-rumped warbler	<i>Dendroica coronata</i>	insectivore, foliage gleaner
prairie warbler	<i>Dendroica discolor</i>	insectivore, lower canopy gleaner
Family Phalacrocoracidae (cormorants)		
double-crested cormorant	<i>Phalacrocorax auritus</i>	piscivore, surface diver
Family Phasianidae (grouse, ptarmigans)		
northern bobwhite	<i>Colinus virginianus</i>	omnivore, ground gleaner
Family Picidae (woodpeckers, flickers)		
northern flicker	<i>Colaptes auratus</i>	insectivore, ground gleaner
Family Regulidae (kinglets)		
golden-crowned kinglet	<i>Regulus satrapa</i>	insectivore, upper canopy gleaner
Family Scolopacidae (sandpipers)		
sanderling	<i>Calidris alba</i>	insectivore, ground prober
Family Sittidae (nuthatches)		
white-breasted nuthatch	<i>Sitta carolinensis</i>	insectivore, bark gleaner
Family Sturnidae (starlings)		
European starling	<i>Sturnus vulgaris</i>	omnivore, ground gleaner
Family Sulidae (gannets and boobies)		
northern gannet	<i>Sula bassanus</i>	piscivore, water plunger
Family Troglodytidae (wrens)		
Carolina wren	<i>Thryothorus ludovicianus</i>	insectivore, foliage gleaner
Family Turdidae (thrush)		
hermit thrush	<i>Catharus guttatus</i>	insectivore, foliage gleaner
Family Tyrannidae (flycatchers)		
great-crested flycatcher	<i>Myiarchus crinitus</i>	omnivore, hawker

The various habitats of Wilfrid's Pond Preserve meet shoreline, dune and woodland avian fauna needs and support a diverse array of birds. The abundance of berry-producing shrubs in the understory of the woodland and in the shrubland; the presence of common greenbrier; the shrub thickets in the shrubland; the open grassy dunes; and the sandy shoreline are features that attract birds to the preserve.

Bird species in the various habitats are seasonally dependent. The winter and fall seasons do not support a diverse number of birds (Tables 4 and 7). The greatest diversity of birds occurs during the spring migration and summer breeding season (Tables 5 and 6). The prevailing winds on Martha's Vineyard are generally from the northeast and are dry and cold from October through April contributing in low avian diversity during this period.

Overall diversity of birds on the preserve differed in 2005 from 1995. Three new species were observed in 2005 that were not observed in 1995 and 26 species, primarily shorebirds, ducks and waterfowl, were observed in the 1995 surveys but not again in the 2005 surveys. Two of the bird species observed in 1995 but not in 2005 – brown-headed cowbird and European starling – are nuisance bird species; the cowbird is a brood parasite and starling is a non-native species. Five more species observed in 1995 and not in 2005 are sea ducks and three are birds of prey. The sea ducks are winter species and are observed on the preserve when public use is minimal and the birds of prey were all observed flying overhead in 1995 and did not happen to fly overhead during the 5-minute point-counts performed in 2005. The change in diversity could be a result of several factors including increased development in the area; natural selection; changes in beach composition from sand to cobble and cobble to sand; and change in upland habitats resulting from succession and environmental factors such as weather. The reduction in frequency of visits during each season from 6 or 8 in 1995 to 4 in 2005 may in fact contribute the greatest to the observed difference in overall diversity.

Analysis of the avian species abundance data with equal samples during similar time periods suggest the diversity of birds on the preserve remains greater in 1995 than 2005 ($t_{df=76}=-3.575$, $p=0.001$). Further analysis revealed that the bird diversity in the woodland and beach/dune habitats did not differ significantly from number of species observed in 1995 compared to 2005 ($t_{df=52.8}=-1.177$, $p=0.245$; $t_{df=39.9}=-0.326$, $p=0.746$, respectively). However, the species diversity in the shrubland was greater in 1995 compared to 2005 ($t_{df=48.8}=-3.358$, $p=0.002$). The shrubland habitat has undergone some changes in the past decade including storm damage and succession from a more open grassy/shrub habitat near the dune to one with small trees and larger shrubs. The remains of an old beach access road and clearing for parking was still visible in the shrubland in 1995 and is now unrecognizable. The shrubland is the smallest habitat on the reservation at 1.38 acres compared to the woodland (1.99 acres) and the beach/dune area (1.62 acres). It is unlikely that recreation use is a contributing factor to the decrease in species richness in the shrubland. The shrubland has experienced the least impact over the past decade from recreational development on the preserve as the habitat is not accessible to the public and the beach access trail runs along the shrubland boundary and does not bisect it.

There are 28 families represented at Wilfrid's Pond Preserve. The Anatidae family of swans, geese, ducks and waterfowl is most represented on the preserve. An analysis of foraging guilds shows that, as expected, many of the birds using the sound are dependent on aquatic environments (e.g., surface diver, bottom feeder, water plunger, coastal scavenger, ground probers and water diver). Many of the upland species that occur on

the preserve are omnivorous ground gleaners while slightly few species are insectivorous foliage, canopy and bark gleaners. The woodland and shrubland on the preserve is abundant with fruiting trees, shrubs and vines such as shadbush, chokeberry, cherry, arrowwood, beach plum, Virginia creeper and greenbrier that are able to sustain the omnivores.

Observations of behaviors associated with nesting or rearing of young, such as adults carrying nesting material or food to a nest, carrying fecal sacs from a nest or attending hatch-year birds, can confirm that a species is breeding on the property, as can locating an active nest. A species is probably breeding if singing territorial males are present on the property on two occasions at least a week apart. A species is possibly breeding if it is detected in suitable breeding habitat during the breeding season. Of the 35 bird species known to occur on the reservation during the summer, seven species – the blue jay, black-capped chickadee, brown-headed cowbird, gray catbird, song sparrow, common grackle and white-breasted nuthatch– are confirmed breeders. A blue jay nest and an adult common grackle attending young were observed. The remaining confirmed breeders were spotted as fledglings. Twelve bird species are considered probable breeders; and eight are considered possible breeders (Table 6). Eight species that are primarily shorebirds and waterfowl are non-breeders on the reservation due to lack of required habitat or limited occurrence during the survey.

Table 4. Abundance of avian species on Wilfrid's Pond Preserve, Tisbury, MA during the winter season in 1995 and 2005.

Species ^b	Habitat ^a					
	Dune/maritime shrubland		Shore/sound		Mixed-oak woodland	
	1995 n=6	2005 n=4	1995 n=6	2005 n=4	1995 n=6	2005 n=4
Year-round						
American crow	O	O	U	C	C	O
American goldfinch	U				U	
American robin						U
Black-capped chickadee	O	C			O	C
Canadian goose					U	P
Carolina wren	U				P	U
cedar waxwing	U					
great black-backed gull						C
herring gull	U		C			
Northern flicker	U				P	
song sparrow	U					
white-breasted nuthatch					P	U
yellow-rumped warbler	O				U	
Winter migrants						
black scoter				O		
bufflehead			U			
common eider			O			
common goldeneye			O	C		
hooded merganser				O		
Northern gannet			P			
red-breasted merganser			C	O		
ring-billed gull	U		O	O		
white-throated sparrow	O					
white-winged scoter			U			

^a C=common birds (detected in more than 50% of the survey visits), O=occasional birds (detected in 26-50% of the survey visits), U=uncommon birds (detected in 25% and fewer of the survey visits) and P=present birds (not detected during a survey period but observed on the property).

^b Seasonal grouping organized according to Peterson Field Guides Eastern Birds (1980) and Felix Neck Bird Checklist (1992).

Table 5. Abundance of avian species on Wilfrid's Pond Preserve, Tisbury, MA during the spring season in 1995 and 2005.

Species ^b	Habitat ^a					
	Dune/maritime shrubland ^c		Shore/sound		Mixed-oak woodland	
	1995 n=6	2005 n=4	1995 n=6	2005 n=4	1995 n=6	2005 n=4
Year-round						
American crow	O		O	U	C	C
American goldfinch	U	U		U	O	C
American robin	O				C	
black-capped chickadee	O	U			O	U
blue jay	O				O	
brown-headed cowbird					O	
Canada goose			U			
Carolina wren	U	U			U	
cedar waxwing						U
common grackle	C				C	
eastern towhee	U	U			U	
European starling	U					
gray catbird		U				
great black-backed gull			O			
herring gull			O	U		
house finch	U				O	
mourning dove	U				O	
Northern cardinal		O			U	C
Northern flicker	U				U	
red tailed hawk	U					
red-winged blackbird	O				O	

song sparrow	O	C			O	U
tree swallow	U				U	
yellow-rumped warbler	O	U			O	
Winter migrants						
common goldeneye			O			
double-crested cormorant			U	C		
red-breasted merganser			O			
white-throated sparrow						U
Summer migrants						
barn swallow	U					
great-crested flycatcher						O
Osprey					O	
prairie warbler		U				U
turkey vulture	U					
yellow warbler		U				

^a C=common birds (detected in more than 50% of the survey visits), O=occasional birds (detected in 26-50% of the survey visits), U=uncommon birds (detected in 25% and fewer of the survey visits) and P=present birds (not detected during a survey period but observed on the property).

^b Seasonal grouping organized according to Peterson Field Guides Eastern Birds (1980) and Felix Neck Bird Checklist (1992).

Table 6. Abundance of avian species on Wilfrid's Pond Preserve, Tisbury, MA during the summer season in 1995 and 2005.

Species ^b	Habitat ^a						Breeding status ^c
	Dune/maritime shrubland		Shore/sound		Mixed-oak woodland		
	1995 n=8	2005 n=4	1995 n=8	2005 n=4	1995 n=8	2005 n=4	
Year-round							
American crow	U	U	U	U	U		PR
American goldfinch	C	C			O	C	PR
American robin	U				C		PR
black-capped chickadee	U	U			C	U	CO _{fl}

blue jay	U				O		CO _{nest}
brown-headed cowbird					O		CO _{fl}
Carolina wren					U	U	PO
common grackle	C				C		CO _{ay}
eastern towhee	U				C		PR
gray catbird	O	U			C		CO _{fl}
great black-backed gull			U	U			NB
herring gull	U				U		NB
house finch	O				O		PR
mourning dove	O				U		PR
northern bobwhite	U				P		PR
northern cardinal	U					O	PO
northern flicker	P						PO
northern mockingbird	U						PO
red-winged blackbird					U		PR
song sparrow	C				C		CO _{fl}
tree swallow	U		U		U		PR
white-breasted nuthatch					O	C	CO _{fl}
Winter migrants							
double-crested cormorant	U		C	U			NB
red-throated loon				U			NB
sanderling				U			NB
Summer migrants							
common yellowthroat	C				C		PR
great-crested flycatcher	U	O			U		PR
northern oriole					U		PO
osprey	U						PO
pine warbler					U		PO
prairie warbler	U				U		PR

^a C=common birds (detected in more than 50% of the survey visits), O=occasional birds (detected in 26-50% of the survey visits), U=uncommon birds (detected in 25% and fewer of the survey visits) and P=present birds (not detected during a survey period but observed on the property).

^b Seasonal grouping organized according to Peterson Field Guides Eastern Birds (1980) and Felix Neck Bird Checklist (1992).

^c Breeding status: NY=nearby habitat, NB=nonbreeding, PO=possible breeding (species detected in suitable breeding habitat), PR=probable breeding (species heard singing on two occasions over one week apart in suitable breeding habitat). CO=confirmed breeding (species carrying food, CF; feeding young, FY; with begging hatch-year fledglings, HY; or a located nest, N). Breeding status: PO possible breeding, PR

Table 7. Abundance of avian species on Wilfrid's Pond Preserve, Tisbury, MA during the fall season in 1995 and 2005.

Species ^b	Habitat ^a					
	Dune/maritime shrubland		Shore/sound		Mixed-oak woodland	
	1995 n=6	2005 n=4	1995 n=6	2005 n=4	1995 n=6	2005 n=4
Year-round						
American crow	O	U	U		C	C
American goldfinch	O					
American robin	U					U
black-capped chickadee	U	O			O	O
blue jay	O				C	O
Carolina wren	P					U
eastern towhee					U	U
gray catbird		O		U	O	C
great black-backed gull			P			
hermit thrush	U					
herring gull			O			
Northern flicker	U					
song sparrow	O	U			U	
white-breasted nuthatch	P				O	U
yellow-rumped warbler	C	U			U	
Winter migrants						
double-crested cormorant			C			
red-breasted merganser			U			

white-throated sparrow	U				P	
Spring/fall migrant						
golden-crowned kinglet					P	
Summer migrants						
common yellow-throat		U				
turkey vulture					P	

^a C=common birds (detected in more than 50% of the survey visits), O=occasional birds (detected in 26-50% of the survey visits), U=uncommon birds (detected in 25% and fewer of the survey visits) and P=present birds (not detected during a survey period but observed on the property).

^b Seasonal grouping organized according to Peterson Field Guides Eastern Birds (1980) and Felix Neck Bird Checklist (1992).

Appendix G: Rare and Endangered Species List and Map

Five Massachusetts-listed bird species and one watch-listed plant species are known to occur on the property. Three of the listed bird species are shorebirds that feed on invertebrates in the wet-sand and wrack line of the preserve as well as dive for fish in the surf. One of the shorebirds is known to nest feet from the eastern property boundary. A listed waterfowl species was observed in the sound off the shore of the preserve amidst other winter-migrating waterfowl. One listed songbird was spotted in the mixed-oak woodland of the preserve during the spring of 2005. The post oak occurs infrequently in the mixed-oak woodland.

A third of the preserve, mainly the coastal shore and dune system, is designated as priority habitat and estimated habitat for rare species (Natural Heritage and Endangered Species Program (NHESP) 2006). Six species are known to occur in or near this particular priority habitat and estimated habitat for rare species (Table 7). Five of these species are coastal beach species of which four were observed on the beach and feeding in offshore waters and Wilfrid's Pond during avian surveys. A listed turtle is the only upland rare species reported by NHESP to have priority and estimated habitat on the preserve. The mixed-oak woodland does provide the required habitat for the listed turtle; however, 10 years of summer staff on the preserve daily from June through August and monthly maintenance checks of the trails did not reveal any evidence of the listed turtle on the preserve. A rare coastal pondshore grass may occur in the pond shore of Wilfrid's Pond. However, this habitat does not occur on the preserve unless the pond has an unusually high-water level.

The NHESP also reported one historic record of a coastal forb as occurring in the vicinity of the preserve. This species prefers saltmarsh habitats of which there are none on the preserve.

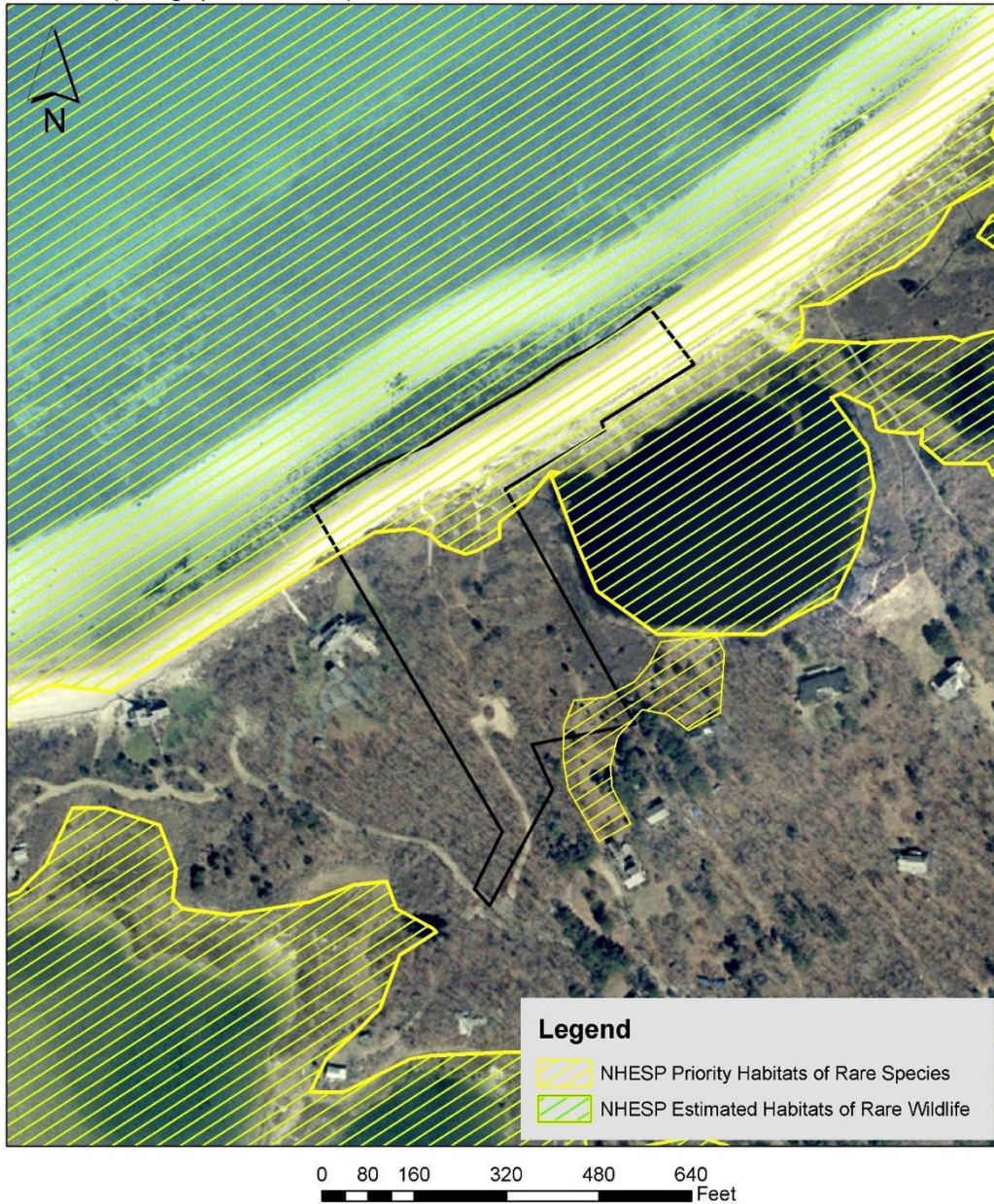
Table 8. Rare species known to occur in priority habitat on or near Wilfrid's Pond Preserve, Tisbury, MA according to the 11th edition of the Massachusetts Natural Heritage Atlas; bold denotes species known to occur on the property through land bank staff observation.

Species Category	Species Type	Status^a	Habitat Requirement	Habitat Status^b
Reptile	Turtle	SC	woodland/ farmland	√
Avian	Shorebird	SC	coastal beach	√
Avian	Shorebird	T	coastal beach	√
Avian	Shorebird	E	coastal beach	√
Avian	Shorebird	SC	coastal beach	√
Graminoid	Poaceae	T	coastal pond shore	X

^a E=endangered, T=threatened, SC=Special concern ^b X = required habitat not present on the property, species not likely to occur on the property; √ = required habitat available on the property, species may occur on the property sources: MA NHESP fact sheets

Map 10: NHESP Priority and Estimated Habitats Map

Wilfrid's Pond Preserve, Tisbury, MA
Natural Heritage and Endangered Species Program Priority and Estimated Habitats Map of Rare Species
NHESP maps (12th edition, 2006 data), Aerial photograph (MASSGIS, 2003 colorortho),
Parcel data (Cartographic Associates)



Appendix H: Abutters List and Map

Table 9. List of properties abutting or within 200 feet of Wilfrid's Pond Preserve, Tisbury, MA

Map	Lot	Owner Name	Address
31B	4.2	Henry Grunwald	720 Park Ave, New York, NY 10021
31B	4.3	Sheriff's Meadow Foundation	
31B	5	Kelvin G. White	455 Herring Creek, Vineyard Haven, MA 02568
31B	6.1	James P. and Kathleen Bagley	142 Hodge Road, Princeton, NJ 08540
31B	7.1	Anita B. O'Sullivan	56 Hillside Road, Greenwich, CT 06830
31B	7.4	Daniel G. Prigmore, Trustee	20 Rowes Wharf #410, Boston, MA 02110

Appendix I: Existing Use

Table 10: A decade of existing use data at Wilfrid's Pond Preserve from 1997 through 2007

year	visitors per season	days attended per season	hours attended per day	hours attended per season	vehicles per season	visitors per attended hour	vehicles per hour	average # visitors per vehicle	walk-on visitors per season	walk-on visitors per day	bikes per season	bikes per day	# times trailhead closed	duration of trailhead closure (hr)	# visitors turned away	# vehicles turned away
97	3261	87	7	601	1132	5	2	2	606	7	194	2	55	26	106	49
98	2729	81	7	579	818	5	1	2	603	7	177	2	31	22	74	31
99	1711	43	6	271	549	6	2	2	270	6	89	2	23	11	55	22
00	1437	55	7	371	447	4	1	2	319	6	83	2	7	6	17	7
01	932	40	6	252	303	4	1	2	223	6	55	1	8	6	16	7
02	1857	74	7	500	648	4	1	2	379	5	81	1	14	12	34	16
03	1602	44	5	214	560	7	3	2	208	5	138	3	32	9	53	24
04	2001	68	5	330	822	6	2	2	202	3	126	2	38	18	91	45
05	4404	91	7	617	1515	7	2	2	590	6	318	3	143	58	329	142
06	2834	74	6	459	1063	6	2	2	456	6	379	5	60	22	96	51
07	3575	93	7	639	1314	6	2	2	523	6	236	3	98	51	225	105
10 year avg.	2395	68	6	439	834	5	2	2	398	6	171	2	46	22	100	45

Analysis of 2007 summer use data indicated that attendance by visitors on weekend days was greater than weekdays. Of the 93 days attended in 2007, the average number of visitors per day – a total of 38 – was exceeded on 25 weekend days and 19 weekdays. The average number of visitors at the preserve at any one time was 16.7 for 2007. The total number of visitors at one time exceeded 30 on 6 different days and the greatest number of visitors at one time was 38 on a Saturday in late July 2007.

Appendix J: Universal Access (UA)

Using criteria in the land bank's *Universal Access Plan*, Wilfrid's Pond Preserve is addressed as follows (Universal Access Committee ("UAC") 1997).

Property Name:	Wilfrid's Pond Preserve
Size:	5 acres
Primary Activities:	hiking, bicycling, cross-country skiing and bird-watching
Primary Elements:	trailhead and sign station
Primary Spaces:	coastal beach and pond views
Obstacles that Limit Accessibility:	topography of dune and sandy substrate
Existing or Potential Alternatives:	Tashmoo opening
Proposed ROS Classification:	less-developed
Proposed Expectation of Accessibility:	moderate

A less developed UA trail covered with wood chips from trailhead to bench with views of the pond exists; no further UA trails are possible due to the slope of the dune and sandy substrate.