



AVALONIA LAND CONSERVANCY, Inc.

P.O. Box 49,

Old Mystic, CT 06372

Phone 860-884-3500

Send email to avalonialc@yahoo.com

Website: <http://www.avalonialandconservancy.org>.

Pine Swamp Wildlife Corridor

Property Management Plan

19, 21 East Drive; 21, 21R Friar Tuck Drive; 52A, 60R Laurel Leaf Drive; 13A Melanie Lane; 16, 17, 17R Queen Eleanor Drive; 20 Ramblewood Drive; 40, 41, 50R Robin Hood Drive; 114 Vinegar Hill Road; 113, 201 Whalehead Road
Latitude 41°26'13.5" Longitude 72°03'10.8"

Ledyard Town Committee is responsible
for stewardship of this property

Plan Prepared by:
Karen Askins
November 28, 2015

Approved by Stewardship Committee: _____

Date _____

Approved by Board of Directors: _____

Date _____



AVALONIA LAND CONSERVANCY, Inc.
P.O. Box 49,
Old Mystic, CT 06372

OVERVIEW

This plan covers three adjacent properties known as the North Tract (163 acres), the South Tract (104 acres), and the Harry Leiser Tract (56 acres). The North Tract consists of 21 and 21R Friar Tuck Drive; 16, 17 and 17R Queen Eleanor Drive; 41 and 51R Robin Hood Drive; 13A Melanie Lane; and 113 and 201 Whalehead Road. The South Tract consists of 52A and 60R Laurel Leaf Drive; 19 and 20 East Drive; 40 Robin Hood Drive; and 20 Ramblewood Drive. The Harry Leiser Tract is at 114 Vinegar Hill Road. All are in Ledyard, New London County, CT. There is a total of 2.5 miles of trail within the Pine Swamp Wildlife Corridor, accessed via eight different trailheads. See the Avalonia website at <http://www.avalonialandconservancy.org/preserves/pine-swamp-wildlife-corridor/> for access information. Visitors are welcome. See signs for property access restrictions. All parcels are owned by Avalonia Land Conservancy, Inc.

SITE INFORMATION

The property

Appendix I contains copies of the deeds with the legal description of each property.

The Pine Swamp Wildlife Corridor encompasses a variety of habitats, from ponds to swamps to upland forest. There is a major power line right-of-way running across the northern section. The preserve sits over and protects a major aquifer in western Ledyard.

The entire preserve is surrounded by land which is zoned for R-40 housing and essentially the entire surrounding area is comprised of residential neighborhoods. The preserve property itself was probably protected from development pressure because it is either too wet or too rocky. The North Tract consists mainly of a large red maple swamp and contains stone walls, an old house site and what appears to be an old dam in the northwestern part of the property. South of this swamp is an area that was used as a sand and gravel operation that was abandoned over 30 years ago. The operations left a number of

depressions, which have since filled with ground water, as well as spoils from the digging. The vegetation of the power line right-of-way is a dense layer of mostly native shrubs.

The heart of the South Tract is another swamp whose name, Pine Swamp, has been applied to the entire preserve. Originally this area was known as the “Mast Swamp” because it was a ready source of ship masts for the ship-building industry of New London County. The swamp probably supported an extensive stand of Atlantic White Cedar (*Chamaecyparis thyoides*) and when these were all cut the White Pines (*Pinus strobus*), which are more prevalent today, became dominant. An article in the New York Times dated November 6, 1883 states, “...a section of country nearly two miles square, singularly beautiful but made up of morasses and quicksands as treacherous as the Florida Everglades. It is a lovely tract, covered with black ooze mud and water and thickly studded with tall, silvery-green white pines.” On the north edge of the Slosberg-Anderson Woodlands lies an area of very large boulders, part of a glacial terminal moraine.

Acquisition history

The Pine Swamp Wildlife Corridor is comprised of donated parcels as well as parcels that Avalonia purchased. Dow Chemical Corporation donated the first piece of the preserve to Avalonia in 1997, in honor of their centennial. This was the 97+acre red maple swamp that forms the heart of the northern area of the preserve and is known as the Dow Centennial Preserve. In 2003 the descendants of Milton O. Slosberg donated the 79 acre parcel known as the Pine Swamp, and Harry Leiser donated the 56 acres immediately to the east of that. Money was raised to purchase more of the surrounding land from the Slosbergs at the same time. The Town of Ledyard donated four parcels of adjoining property totaling 7.46 acres in 2005. The town donated the final pieces of the preserve, two more parcels totaling 7.87 acres, in 2014.

Property restrictions

The only restrictions are those on the Harry Leiser Tract. They are summarized as follows:

1. This parcel must be designated the “Harry Leiser Tract”
2. It must be “forever retained in an undeveloped, natural, open space or wooded condition, without any access roads, picnic tables, fire rings, portable toilets...”
3. There must be no motorized vehicles
4. Members of the public may walk only on trails which have been constructed with minimal damage to the existing vegetation
5. No hunting or trapping
6. Trees or shrubs should only be cut for the purpose of preventing the spread of disease

Land use history

Please see Appendix II, p. 11.

Public use resources

The three properties are open to the public for all standard Avalonia passive recreational activities. Bicycle riding and horseback riding are not permitted. The property is posted with use restrictions. Blazed hiking trails are maintained on the northern section and are frequently used. The blue trail can be accessed from Whalehead Road (small parking area) or from Merry Lane (parking in the cul-de-sac). The eastern section of the blue trail follows the power line right-of-way and then turns north and follows the blue dot loop trail around the Dow Centennial preserve. In the southern section there is a single, blazed hiking trail along the western edge of the swamp accessed either from Robin Hood Drive or Hillside Drive (parking in the street at both ends). On the Harry Leiser tract there is a single looped trail accessed from Vinegar Hill Road.



Informational sign on Red Trail explaining the glacial moraine.



Terminal moraine in Slosberg-Anderson Woodlands

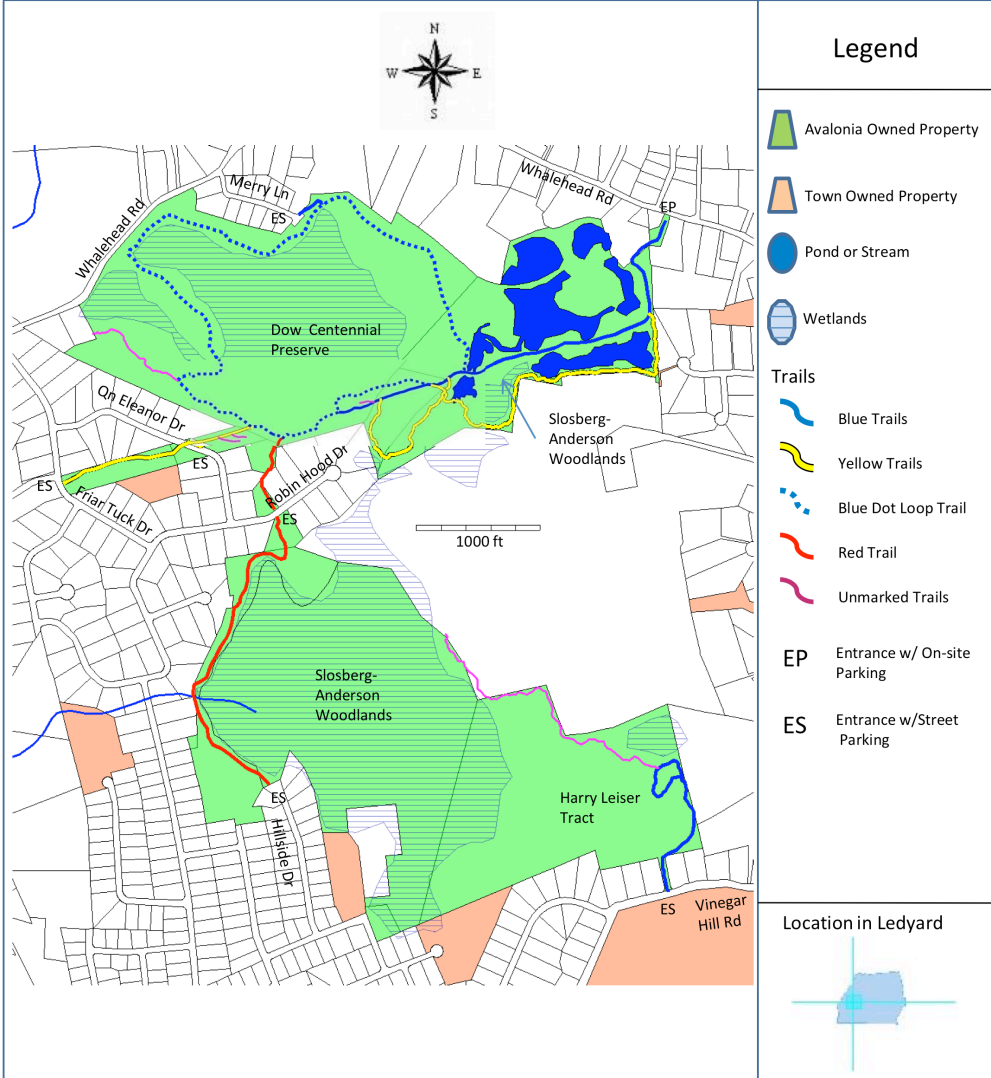


P.O. Box 49
Old Mystic, CT 06372

Pine Swamp Wildlife Corridor

Ledyard, CT

322 - Acres



Natural resources

For a thorough description of the vegetation on the three properties, please see Appendix II , pages 20 – 31. Appendix III is a very thorough survey of wildflowers done by two volunteers.

The Pine Swamp was most probably originally dominated by Atlantic White Cedar, and although most of these were removed for ship masts several hundred years ago, there are still some remaining in the swamp. Once a common component of peat swamps in southeastern Connecticut, there are very few remaining stands of this tree. It is important that the white cedar present be protected and encouraged to reproduce. There is also a good stand of Rosebay Rhododendron (*Rhododendron maximum*), the largest native rhododendron, present in the Pine Swamp. The area under the power line has been maintained as a dense shrub layer by the power company. This has created an artificial but effective shrub habitat, which is in steep decline locally. This kind of habitat, however, is important for the breeding success of a number of resident warblers and other birds, and is an important habitat type to maintain.

ANIMALS, FISH, AND BIRDS

There are no known endangered species on the properties, although the old field and power line habitats combined with the ponds form good habitat for the state-listed Eastern Box Turtle (*Terrapene carolina*). The predominant large animals on site are whitetail deer which pass through the properties regularly. Unfortunately high deer density favors decreased forest diversity.

SOILS AND BEDROCK GEOLOGY

Please see Appendix II, pp 8 – 9 for a discussion of the soils underlying the PSWC. Appendix II also has maps and an in-depth discussion of the soils.

HYDROLOGIC FEATURES

Please see Appendix II, p. 10, for a discussion of the water resources of the preserve.

SPECIAL FEATURES AND CULTURAL RESOURCES

Pine Swamp Wildlife Corridor has a number of features which make it unique among Avalonia's Ledyard preserves. The large Pine Swamp with its unique history as well as flora stands out as one of them. This preserve is also the only one to have such large ponds. One of the special features is the area of large boulders which represent the terminal moraine of one of the glaciers which reached southern Connecticut. The boulders are so large and piled so haphazardly that they form caves and dens for large mammals, and also a unique habitat for plants.

MANAGEMENT OBJECTIVES

Stewardship policies Avalonia Land Conservancy Fee Land Stewardship Principles were approved on December 16, 2009 and the document is available at the Conservancy's office on Hatch Street in Mystic, CT. This document sets forth the general principles governing stewardship of all Avalonia properties. The document or any approved successor is hereby incorporated as part of this management plan.

Protection

As with all Avalonia properties, the exterior boundaries of these preserves shall be marked with approved Avalonia Land Conservancy boundary signs following the guidance given in Avalonia stewardship policies.

Entrance signs are currently in place and shall be maintained or replaced as necessary at the eight entrance points to the preserve.

An annual walk around the boundaries of the properties is required to ensure that boundary signs are in place and that there are no intrusions. Other surveillance should take place using due vigilance on occasional hikes on the properties.

All motorized vehicles are prohibited. All three properties are open to the general public. Visitor controls consist only of posted entrance signs giving accepted activities on the properties. Persons found in violation of these restrictions on use may be asked to leave. If significant problems persist, visitors may be cited for trespass and asked not to come back.

Protection of special natural and cultural features has not been an issue to date. The features will be monitored for damage in the future to detect problems.

Maintaining properties' appearance

No mowing has taken place or is planned on these properties. Boundary walls are generally clear of significant plant growth. Trails should be maintained clear of deadfalls on routine hikes through the property. Significant deadfalls should be reported to the Ledyard Town Committee for cleanup.

Public use

All three tracts are open to the public and hiking trails are maintained for the use of visitors. Motor vehicles, bicycle riding, and horseback riding are not permitted. Hunting and the use of firearms on the property including bow hunting and target practice are not permitted. Camping is not allowed. Dogs must be kept leashed. Visitors are not allowed to pick vegetation or disturb wildlife excessively. Otherwise, the properties are open to all passive recreational activities including fishing in the ponds.

A parking area is located at 113 Whalehead Road, providing access to the eastern end of the blue trail. Parking is available in the cul-de-sac of Merry Lane for direct access to the blue-dot loop trail. Likewise, road parking is available on Robin Hood Drive or Hillside Drive for access to the red trail.

Rules of use signs are posted at all entrances. These signs will be maintained in the future. Trails in the North Tract are blazed in three colors, blue and yellow, the single trail in the South Tract is red-blazed, and the trail in the Harry Leiser tract is blue-blazed. See map on page 4. The blazes are approximately 2 inches wide by 6 inches tall and are rectangular. Where trails are concurrent, both blaze colors are used.

There is one interpretive signs on the property at present. This sign is located at the north end of the Red Trail, in the terminal moraine area. It explains the development of this boulder-strewn area and indicates other areas in Ledyard where this kind of feature can be seen. More interpretive signs may be added in the future if found appropriate.

Trail maps are available on the Avalonia website: <http://www.avalonialandconservancy.org>.

Special events are permitted on the property at the discretion of the Ledyard Town Committee or the Board of Directors. Events to date have consisted of guided hikes on the properties.

Enhancing wildlife habitat(s)

Maintaining the dense shrub thicket habitat along the power line will be an important priority, as this is a declining habitat in Connecticut, and will continue to be done by the power company. However, Eversource is responsible for maintenance of its right of way. The forestry management plan provided by Connwood suggests creating several small clear cuts to also create some early succession habitat as well as to allow for greater forest diversity. Dead trees should be maintained as snags, providing foraging areas for woodpeckers and cavities for a variety of animals.

Controlling invasive species

Although large parts of the preserve are essentially free of invasive plants, the areas around the ponds and around the periphery of the red maple swamp in the North Tract do have moderate problems with autumn olive, Japanese Barberry, and oriental bittersweet. These plants should be removed.

Erosion control

Erosion has not been a significant problem and no action is needed.

Productive uses

The landscape of swamps and glacial features make any kind of future productive use of this property unlikely, and none is anticipated.

Scientific and educational activities

These are permitted by our deed. The main activities at present are limited to educational guided hikes on the property.

Response to large natural disasters

The first response to a natural disaster will be to clear away trees and debris from the hiking trails and repair damage to bridges. Logging is permitted to recover trees knocked down or damaged in a major disaster.

Special management considerations

There are no special management considerations at this time.

IMPLEMENTING THE PLAN

Recurring and occasional requirements

Trail hikes by one or more members of the Ledyard Town Committee should take place on a regular basis to look for and clear deadfalls from the trails and to look for other problems. Our phone number is posted at the entrances so that visitors can contact us for resolution of serious problems such as downed trees, graffiti, dumping, or other damage to the property.

Annual obligations

A boundary walk around the outside perimeter of all three properties is required to look for intrusions and to ensure that the boundary is marked with Avalonia Land Conservancy signs.

Short term plan (1 – 5 years)

The highest priority will be to begin a program of eradication of the invasive plants, especially those surrounding the red maple swamp of the north tract. In the eastern portions there are moderate stands of autumn olive (*Eleagnus umbellata*). These need to be cut and painted with herbicides, and then continually monitored for regrowth. Further west and along Whalehead Road there is oriental bittersweet (*Celastrus orbiculatus*) climbing the trees. This needs to be removed before the trees are killed. Also in this area is an extensive area of Japanese barberry (*Berberis thunbergii*) that should be removed by manual cutting and painting with herbicides.

Long term plan (5+ years)

As suggested in the forestry plan prepared by Connwood, early succession habitat should be fostered by cutting several small canopy openings in the forest of the North Tract and creating brush piles. Also, a

crop-tree release program of removing undesired trees, thus releasing more desirable hardwoods could be undertaken.

Schedule for revising this plan

This plan shall be reviewed at least every five years and updated as necessary.

APPENDICES

- I. Legal documentation
 - a. Survey maps are available at the Hatch Street Office of Avalonia.
 - b. Zoning map for property and surrounding area is available at the Ledyard Town Hall or online at <http://www.ledyardgis.com>.
 - c. Deeds and Restrictions follow
- II. Forestry Management Plan
- III. Botany Survey From the Trails of the Pine Swamp Wildlife Corridor in Ledyard, Connecticut by Meredith and Wayne Petrie