

Management Plans for Land Trusts

Gail Kalison Reynolds
Justin Lemma
Haddam Land Trust
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About the Haddam Land Trust, Inc.

- The Haddam Land Trust (HLT) was founded in 1964 as a private, non-profit corporation. Its purpose is to engage in and otherwise promote, for the benefit of the residents of the town of Haddam, the preservation of natural resources of the Town of Haddam, including water resources, marshlands, swamps, woodlands, and open spaces, and the plant and animal life therein and the preservation of unique historical and scenic sites.
- The Haddam Land Trust remains an all-volunteer land trust.
- In 2012, the Haddam Land Trust had paid 259 members.
- The Haddam Land Trust owns 31 properties in fee and holds three conservation easements, for a total of about 800 acres.
- Find us at www.hltrust.org and on Facebook.



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Agenda

- Introduction
- Why Invest in Management Plans?
- HLT Management Plan History
- Current Effort
- Methodology
- Report Content
- Next Steps

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Introduction



- Noticed firsthand by me when I created updated Preserve Guide map in 2005
 - No complete record of preserves and easements, boundaries, property donors, and so on
- What to do?
- HLT won LTA/CLCC challenge grant in 2012 for Assess Your Organization (AYO) evaluation
 - Great opportunity refresh HLT preserve management plans!

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Why Invest In Management Plans?

- Why are management plans necessary?
 - How can a land trust fulfill its mission without knowing what each preserve contains?
 - How decisions for a preserve be made without know what the preserve contains?
 - How can preserves be monitored without knowledge of what exists?

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Why Invest In Management Plans?

Standard 12C

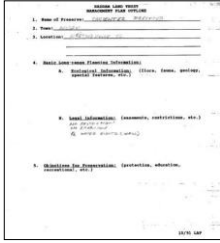
- **12C. Land Management:** The land trust inventories the natural and cultural features of each property prior to developing a management plan that identifies its conservation goals for the property and how it plans to achieve them. Permitted activities are compatible with the conservation goals, stewardship principles and public benefit mission of the organization. Permitted activities occur only when the activity poses no significant threat to the important conservation values, reduces threats or restores ecological processes, and/or advances learning and demonstration opportunities.

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HLT Management Plan History

- Attempt at management plans in early 1990s



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HLT Management Plan History

- We could never seem to find the time to create systematic management plans for our properties



- Hire someone to create management plans!

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Current Effort

- Advertised opportunity at Yale School of Forestry and Environmental Studies
- Justin referred by a friend
- Perfect skill set!
 - Plant Id
 - Wildlife Id
 - Ecological Knowledge
 - GPS and GIS, Navigational Skills
 - Silvicultural Skills
 - Work Independently

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Current Effort

- Board selected management plan template
 - Examples in LTA library
- Selected best fit
- Tailored for our purposes

Current Effort

Haddam Land Trust, Inc.

MANAGEMENT PLAN OUTLINE

I. TITLE PAGE

- A. Name of Preserve
- B. Town, County, State (of Preserve)
- C. Latitude and Longitude
- D. Preserve steward(s) contact information
- E. Plan prepared by
- F. Date
- G. Date adopted by Board of Directors

II. TABLE OF CONTENTS

III. SUMMARY DESCRIPTION OF PRESERVE

- A. Natural and cultural description
- B. Location description
 - 1. Location map
 - 2. Preserve boundary map (aerial photo and USGS map showing preserve boundaries)

Current Effort

IV. INVENTORY

- A. Ecological information
 - a. Topography (description)
 - b. Flora (species list and habitat map)
 - c. Fauna (species list)
 - d. Soils (description and map)
 - e. Hydrologic features (description and map)
 - f. Geology (description and map)
 - g. Special features (description and map)
 - h. Ground site photos
 - i. Cultural and historical information
 - j. Inventory synthesis and summary
- B. Legal information
 - 1. Deeds, leases, management agreements (including any restrictions)
 - a. Easements (e.g., conservation, drainage, access)
 - b. Survey map

V. OBJECTIVES FOR PRESERVATION

- A. Protection
- B. Educational use
- C. Scientific use
- D. Passive recreational use
- E. Restoration or special management conditions

Current Effort

- I. PLANS FOR IMPLEMENTATION OF OBJECTIVES
- A. Protection
 - 1. Boundary marking
 - 2. Entrance signs
 - 3. Surveillance
 - 4. Additions of land
 - 5. Vehicle control
 - 6. Visitor management
 - 7. Public and governmental relations
 - B. Educational use
 - 1. Trails and related developments, with maps and plans
 - 2. Interpretative materials
 - 3. Policies for group use
 - 4. Liaison with educational institutions, governmental bodies, and other conservation groups
 - C. Parking
 - 1. Collection policy
 - 2. Research studies and monitoring systems
 - 3. Liaison with scientific community
 - D. Passive recreational use
 - 1. Trails with maps and plans
 - 2. Information signs
 - 3. Policy for group use
 - 4. Monitoring of use
 - 5. Parking
 - 6. Public relations
 - E. Special management consideration
 - 1. Restoration or improvement
 - 2. Artificially maintained habitats and/or species populations
 - 3. Research
 - 4. Other

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Methodology

- Physically go to preserve
 - Identify preserve coordinates
 - Perform natural resource inventory
 - Set plots within preserve
 - Identify tree species and dbhes within plots
 - Inventory other flora, fauna, cultural information



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Methodology

- Natural resources research
 - Bedrock and surficial geology, soils, hydrology layers
 - Consult with HLT Board of Directors as necessary
 - Determine forest composition and trends based on plot data
 - Create species observed and expected tables



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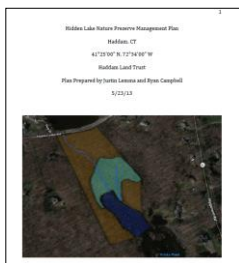
Methodology

- Create report



Report Content

- Title Page



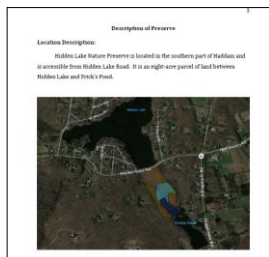
Report Content

- Table of Contents

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Natural Description	4
Inventory	5
Topography	5
Flora	6
Fauna	9
Soils	10
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Hydrological Features	11
Objectives for Preservation	13
Implementation of Objectives	14

Report Content

•General Description

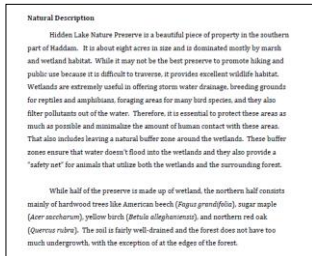


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Report Content

•Natural Description



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Report Content

•Inventory

- Topography
- Flora
 - Species frequency and dominance
- Fauna
- Soils
- Geology

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Report Content

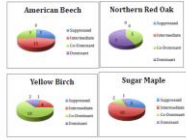
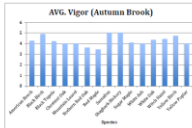
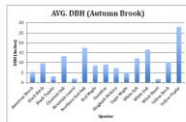
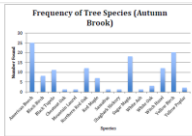


In order to get an accurate analysis of the vegetation present in the preserve, a series of plots were established (shown above). At each plot the trees within 15 meters of the plot center were recorded. For each tree I recorded its species, diameter at breast height (DBH), crown position, and vigor. Additionally, in each plot the understory species were recorded and abundance for each species was estimated in percentages. Soil type and the percent canopy cover were also recorded for each of these plots.

Report Content

Overstory Species	Understory Species
American Beech (<i>Fagus grandifolia</i>)	Black Tupelo (<i>Dryas sylvatica</i>)
Black Birch (<i>Betula lenta</i>)	Highbush Blueberry (<i>Vaccinium corymbosum</i>)
Black Tupelo (<i>Dryas sylvatica</i>)	Sugar Maple (<i>Acer saccharum</i>)
Chestnut Oak (<i>Quercus prinus</i>)	Black Cherry (<i>Prunus serotina</i>)
Mountain Laurel (<i>Loiseleuria longifolia</i>)	Lawlorwood (<i>Dryas palustris</i>)
Northern Red Oak (<i>Quercus rubra</i>)	Black Birch (<i>Betula lenta</i>)
Red Maple (<i>Acer rubrum</i>)	American Beech (<i>Fagus grandifolia</i>)
Sassafras (<i>Sassafras albidum</i>)	Marginal Woodfern (<i>Dryopteris marginalis</i>)
Shagbark Hickory (<i>Carya amara</i>)	New York Fern (<i>Thelypteris novboracensis</i>)
Sugar Maple (<i>Acer saccharum</i>)	Partridge Berry (<i>Mitchella repens</i>)
White Ash (<i>Fraxinus americana</i>)	Maple Leaf Vibernum (<i>Viburnum acerifolium</i>)
White Oak (<i>Quercus alba</i>)	Christmas Fern (<i>Polystichum acrostichoides</i>)
White Birch (<i>Betula pumila virginiana</i>)	Shank Cabbage (<i>Symplocos foetida</i>)
Yellow Birch (<i>Betula alleghaniensis</i>)	False Solomon's Seal (<i>Maschkeella racemosa</i>)
Yellow Poplar (<i>Liriodendron tulipifera</i>)	Poison Ivy (<i>Toxicodendron radicans</i>)
	Virginia Creeper (<i>Parietocissus quinquefolia</i>)
	White Oak (<i>Quercus alba</i>)
	Groundnut (<i>Smilax rotundifolia</i>)
	Cinnamon Fern (<i>Microsorum cinnamomeum</i>)
	Northern Red Oak (<i>Quercus rubra</i>)
	Sensitive Fern (<i>Onoclea sensibilis</i>)

Report Content



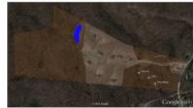
Report Content

Overview:
The majority of the area covered by Jackson Brook Preserve is covered by "Thin To Depress" while "Thick To Depress" under portions of the property. With the exception of remnants, there were very a few areas with significant wetland. These were located at the top of the hill and were identified as areas with "Thin To Depress".



This image shows a view of the larger track. But could be found situated through out the preserve. It is about 2.5 mi in diameter.

Special Features:



Besides the drainage pond, there are some other unique features in Jackson Brook Preserve. There is a rock wall in the southern portion of the area, as well as a few other sections of rock wall in the western portion of the preserve. There is some PVC piping extending from a drainage pond in the southern portion of the area at well as a small amount of other.



The portion to the left is a drainage pond on top of the hill. There is a 10 ft. It is the only one with a rock wall.



The portion to the right shows the line to the area. It is a drainage pond. It is about 10 ft. It is the only one with a rock wall in the area.

Report Content

Objectives for Preservation:

Preservation:

When protecting a preserve such as this it is important to consider what the land is being used for. For Jackson Brook a good objective would be to have what activities are occurring on the land. As of now it is hard to tell where the preserve ends on the forested side of the property, so a good objective would be to make sure the boundaries are clearly marked. It is also important to be an idea of how many visitors the preserve has. That way the human impact can be appropriately assessed.

Educational Use:

The Jackson Brook Preserve is a potential resource for both ecological and historical education. The main objective for educational use should be to provide a place where people of all ages have the opportunity to learn about Connecticut's ecological and cultural history. Another primary objective would be to make sure that any educational activities that do occur never impinge upon the ecological integrity of the preserve.

Private Recreational Use:

There is a need for a facility provided for recreational use of the Jackson Brook Preserve. Most of the recreation occurring in the Jackson Brook Preserve would be through hiking, and if there were any trails in the preserve. With that being the case, another objective should be to make the preserve safe and easy for hikers to navigate with out taking away from its ecological integrity. It might also be prudent to limit the recreational use to hiking.

Restoration or Special Management Considerations:

The only objective as far as special management considerations goes will be to make sure that the drainage pond doesn't become a hazard for visitors.

Plans for Implementation of Objectives:

Preservation:

The first step in a plan for preservation would be to monitor the area frequently to make sure the land isn't being used for reasons it shouldn't be. This will include looking for fire and horse tracks. In order to determine how many people are using the preserve signs to be posted at entrances to the preserve. Putting signs along the boundaries of the park will allow visitors to know where the boundary lines are.

Educational Use:

If the Jackson Brook Preserve is to be used as an educational resource it will be prudent to construct a trail system and provide maps at the entrance. Being that it is a fairly wet area the trail system will have to include some boardwalks. Trails will also have signage through the preserve to monitor and will also protect vegetation from being trampled. At the entrance to these trails educational materials should be provided. These might include pamphlets describing the flora and fauna and historical aspects of the area. Getting school kids the area of an outdoor classroom could really benefit the students of the area. A partnership like this can only work if the land is being used as a recreational resource.

Private Recreational Use:

In order to limit the objectives for recreational use that were laid out in the previous section some issues should be addressed. Designated parking areas should be made to improve accessibility of the preserve to hikers. An assessment of the educational use services if this area is going to be used by the public there should be a system of trails and boardwalks implemented. These trails should be clearly marked with hiker signs should also be considered to regulate the direction in which trails are going. Trails should also be monitored for ATR and horse use. Warning signs posted at trailheads and in the parking areas explaining what is prohibited in

Next Steps

- Finish management plans for all preserves
- HLT Land Management Committee must review each plan, amend as necessary, insert deed and survey material, etc.
- Align management plans with stewardship network
- Implement plans

Questions



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