

TOWN OF GLOCESTER, RHODE ISLAND

Glocester Land Trust

PROPERTY MANAGEMENT PLAN

Site Name: Phillips' Farm

Site Location: Putnam Pike, Harmony, Rhode Island



Robert G. Muckins, Chairperson  
Trustees of the  
Glocester Land Trust

May 21, 1990  
Date

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## 1.0 OVERVIEW

The Gloucester Land Trust (hereinafter called the Trust), a public body having the authority to acquire, hold and manage open space and agricultural land within the town of Gloucester, Rhode Island has acquired a parcel comprising 68 acres, more or less, having approximately 1600 feet of frontage on the south side of Putnam Pike (Rt. 44) in the village of Harmony. This parcel is listed in the Gloucester land records as AP 17, Lot 121.

The parcel is a portion of what is commonly known as the Phillips Farm, although it is referred to as the Cutler Farm and Site of Cutler's Tavern in the Rhode Island Historical Preservation Commission's 1980 report on the town of Gloucester. It has been proposed for inclusion in the National Register of Historic Places. The site includes virtually all of the open fields, pasture, orchards and wooded land which remains of this historic property. The site does not include any of the existing buildings, now owned by Ms. Elizabeth M. Phillips. However, it is the intention of the Trust to foster, in every respect, the preservation of this historic property in its entirety. In particular, if the remaining portion of this property were to become available in the future, the Trust would make every effort to acquire it outright, or, at a minimum, to secure the development rights to it.

The site is an unusually complete example of the Western Upland physiographic region. It contains a large glacially deposited balanced rock and several areas of sharp exposed bedrock. Although much of the woodland is second growth, it is fully mature in several areas with many trees exceeding 60 feet in height. Two year-round streams which flow through the property are pristine in their clarity and their banks give ample evidence of their changing volume throughout the seasons. Fingerling trout are evident in both. Since the elevation varies from 390 to just over 500 feet within this relatively compact parcel there are ample scenic viewpoints to provide visual appreciation of the natural beauty of the site.

The diversity of the site provides an unusual aesthetic quality. From pine-covered hilltop to sparkling gravel-bottomed stream, through dense masses of mountain laurel and azalea, alongside extensive streambank wetlands covered with many different varieties of ferns and flowering plants, the rich variety of this natural setting is inescapable. In addition to the preserved natural features there are the living remains of an apple orchard which is over 100 years of age as well as several well-kept hay fields that continue to be productive.

The site includes a very wide range of habitat types including open pasture, the apple orchard, two year-round streams and associated wetlands, several seasonal springs, mixed hardwood forest including an outstanding grove of mature grey beech, and an impressive stand of mature pine which covers the slopes and top of the highest hill. Ms. Marion Howard, an abutting property

owner and frequent visitor to the site, reports sighting deer feeding and foxes hunting in these fields.

The following note was provided by Mr. Gilbert George of the Rhode Island Wild Plant Society concerning the site:

"During the preliminary survey, only the edges of the property and some of the more interesting locations were checked. One rich botanical site was found...on the banks of the brook flowing into the pond at the Melody Hill Golf Course. ...The bedrock in this location is a feldspathic quartz muscovite schist containing calcite, which locally raises the pH of the soil. This increases the likelihood of rare plants being found here. Please bear in mind that no botanical survey is ever truly complete, and that a more thorough inventory would require several visits during each season." (emphasis added)

Along its southwestern boundary, the site abuts more than 100 acres of undeveloped land similar in both quality of habitat and physiographic type. This parcel, in turn, borders on Heritage Park, an outdoor recreation area of 115 acres belonging to the town of Glocester. The site thus provides the gateway to a potential greenbelt of great significance. This abutting parcel contains several springs which are the origin of one of the two streams which course through the proposed site. The streambank habitat, which is one of the most fecund and diverse of the several found on the site, continues into this abutting parcel for several hundred feet. This abutting parcel is currently being managed in accord with a plan prepared by the Division of Forest Environment of the Rhode Island Department of Environmental Management.

In the Rhode Island State Land Use Policies and Plans, Report No. 22, January 1975, page 7, it is stated that:

"Rhode Island must protect some of its rural areas in their present condition indefinitely in order to maintain the character of the State with its large expanses of open landscape outside the metropolitan and the smaller urban centers." (original emphasis)

In 1986 the Town of Glocester adopted a revised Comprehensive Community Plan which includes the following:

"GOAL: Preserve and protect the recreation, conservation and open space resources of the community, including selected agricultural and forest areas."

"POLICY: Retain substantial amounts of the natural, historic and rural landscape in their present condition for long-term future open space needs ..."

The 1984 Gloucester Recreation, Conservation and Open Space Plan states the following:

"It is therefore recommended that woods, fields and water bodies be acquired or protected for merely passive recreational purposes in addition to land for intensive recreational activity. There are a number of wet areas, streams, water bodies and woody areas which could be purchased and/or protected." (emphasis added)

The site represents one of the last opportunities for the Town of Gloucester to preserve a significant portion of road frontage on Putnam Pike. Furthermore, because its agricultural history has preserved this frontage as open fields, it is one of the very best such parcels as well.

The Trust shall maintain the parcel in keeping with its recent history as a mixture of agricultural land and woodland by cultivating the fields in a timely fashion, by maintaining the existing trails in a passable state without major disruption of the habitat, and by permitting only passive recreational uses such as hiking, birding, photography and cross-country skiing. Initially the agricultural use of the property shall be limited to the cutting of the existing hay fields. However, in the future more active cultivation of agricultural crops shall be encouraged through rental or share-crop arrangements with local farmers.

It shall be available for the enjoyment of the public as an example of agricultural activities as well as a protected habitat for the observation of a diversity of plants and animals.

Vehicles of all types (except emergency and agricultural), overnight camping, fires, hunting and trapping shall be prohibited.

To ensure the preservation of this valuable resource, the Trust has developed, and shall implement this management plan for the property. As it has done in the past, the Trust has incorporated into this plan a definite timetable for each element of the plan, including periodic review of the whole plan.

## 2.0 MANAGEMENT RESPONSIBILITY

The responsibility of managing the site shall rest with the Trust. Specific management activities may be assigned, by the Trust, to one or more persons or organizations. The Trust shall solicit the advisory assistance of persons and organizations with specific expertise in disciplines such as forestry, botany, wildlife management, soil sciences and agriculture.

## 3.0 PROPERTY USE

One primary goal of the Trust is to preserve the character of the site by maintaining agricultural use within that portion

historically devoted to such activity, while maintaining the balance of the site in its current undeveloped state. Passive recreational and educational use of the entire site is the other primary goal. Public access to the site shall be encouraged.

#### 4.0 ACCESS

The site is accessed from Putnam Pike (Rt. 44) at a marked entrance which leads to the primary access path. The Trust shall establish and publicize the times when the site shall be open to public use, and may restrict public access to the site, or portions thereof, for reasons compatible with this plan.

#### 5.0 PROHIBITED ACTIVITIES

The following activities are specifically prohibited on the site:

- o Driving or riding any type of vehicle, motorized or not (unless authorized by the Trust for purposes compatible with this plan)
- o Hunting or trapping (unless authorized by the Trust for purposes compatible with this plan)
- o Fishing
- o Cycling
- o Boating or canoeing
- o Swimming
- o Camping
- o Fires
- o Littering
- o Sound-broadcasting devices
- o Collecting or gathering of any natural objects, living or otherwise (unless authorized by the Trust)
- o Grading, excavating or soil removal (except for maintenance, when authorized by the Trust)
- o Soil paving or oiling
- o Fabricating or placing of structures of any kind (except for maintenance of fences on the boundaries and around the agricultural use areas)

## 6.0 MANAGEMENT ACTIVITIES

### 6.1 Police surveillance

Daily police surveillance along Putnam Pike shall be provided by the Gloucester Police Department.

### 6.2 General surveillance

General surveillance of the site shall be conducted at least monthly by a person or persons designated by the Trust. General surveillance shall include, but is not limited to, the following:

- o Inventory update of plant and animal species and other natural features
- o Verification of the general health of plant and animal species and the physical condition of the site
- o Verification and reporting of fires
- o Verification and reporting of violations of site regulations
- o Identification and reporting of maintenance needs
- o Identification and reporting of practices that would improve site management

### 6.3 Scheduling of activities

Organized activities at the site, such as nature walks and plant or animal field studies, involving groups of ten or more persons, shall be scheduled by the Chairperson of the Trust or a person designated by the Chairperson.

### 6.4 Fire Control

All fires at the site shall be promptly extinguished using methods that shall minimize overall damage to vegetation. Fire control and regulation are the responsibility of state and local fire-protection agencies.

### 6.5 Maintenance

The property shall be maintained as a combination of agricultural land and undeveloped woodland. Management and maintenance practices shall be designed to insure the sustained productivity of the agricultural land and the continued evolution of the woodlands. Special emphasis shall be given to the protection and propagation of less-common plant and animal species, particularly through the protection and enhancement of appropriate habitat.

#### 6.5.1 Litter Removal

Litter is defined as any material that does not occur naturally at the site. Fallen trees, stones and leaves shall not be included in litter removal activities. Litter removal shall be the responsibility of the Trust and shall be conducted monthly, weather permitting, by persons or agencies designated by the Trust.

#### 6.5.2 Trail Maintenance

Footpaths and trails shall be maintained by persons or agencies designated and supervised by the Trust. All maintenance activities shall be conducted in a manner consistent with the preservation of the natural state of the site and with safe public access.

### 7.0 PUBLIC AWARENESS

#### 7.1 Informational Leaflet

An informational leaflet shall be published, and periodically updated, by the Trust. Copies of the leaflet shall be available at the Town Hall and other locations designated by the Trust.

The leaflet shall describe the natural features of the site and shall include a map illustrating the location of footpaths and trails as well as the locations of noteworthy natural features. A list of prohibited activities shall be included in the leaflet.

#### 7.2 Posting and Marking

Informational signs shall be posted at appropriate locations. The sign at the point of public access shall identify the site and acknowledge financial assistance provided by the State of Rhode Island for acquisition of the property. Public access shall be acknowledged and the visiting hours shall be stated clearly, as shall the rules and regulations governing use of the site.

The site access point, boundaries and footpaths shall be clearly marked. The design and materials of all signs and markers shall be compatible with the natural character of the site and shall conform to the requirements of the Rhode Island Department of Environmental Management.

### 8.0 SPECIES INVENTORY

A breakdown of the general vegetation types is provided in Appendix B (Property Map). A detailed inventory of plant species shall be completed (See Section 9).



Many animal species have been observed at the site. A detailed inventory of species shall be established. For bird species, this shall include surveillance during nesting season for the detection of auditory and visual indications of various species. Nesting areas shall be specifically identified (See Section 9). Various resources including soil and vegetation maps, available from State and Federal agencies, shall be used to evaluate wildlife habitats within the site. Particular care shall be given to the preservation and enhancement of habitat for any species of concern identified at the site.

The Trust shall solicit the assistance of specialists in all relevant disciplines in the management of the site. These shall include, but not be limited to, personnel from the University of Rhode Island College of Natural Resources, the Rhode Island Department of Environmental Management, the Rhode Island Audubon Society, the Rhode Island Natural Heritage Program, The Nature Conservancy, and the Rhode Island Wild Plant Society.

#### 9.0 SPECIES PROTECTION AND ENHANCEMENT

Many plant species which are sensitive to human influence are present on the site. All management activities, including the location and maintenance of footpaths shall take the species inventory into account so that plants may be observed with a minimum impact on their habitat.

Similarly, the nesting, feeding and watering locations of wildlife shall be considered in all management activities on the site. Specific management activities may be undertaken for the purpose of enhancing wildlife habitat.

#### 10.0 MANAGEMENT PLAN SCHEDULE AND PERIODIC REVIEW

The management plan shall be based upon a five-year schedule which shall include a time-table for: publicizing the availability of the site, its designated activities and the regulations for visitors; initiation of surveillance and maintenance routines; continuation of the species surveys; completion of signs and markers; and periodic review of management practices, policies and the management plan. (See Figure 1).

The management plan shall be formally reviewed at a regular meeting of the Trustees at least once in each calendar year. At a minimum, such review shall include:

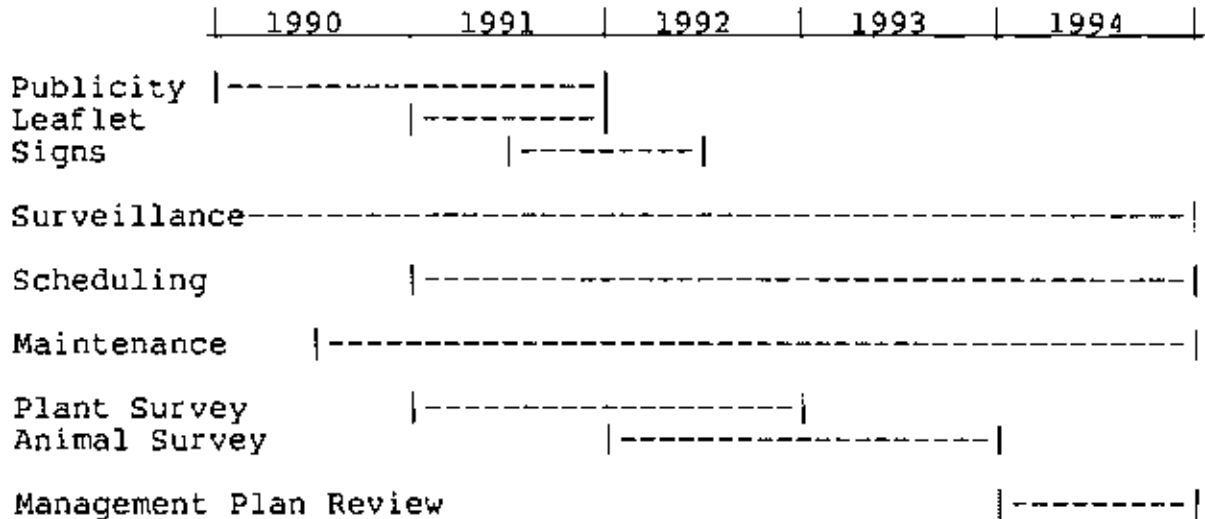
- o Updating of the management plan schedule
- o Review of management activities undertaken by the Trust and designated individuals and agencies
- o Updating of plant and animal species inventories
- o General overview of the natural evolution of the site

- o Identification of problems which require action by the Trust

In the fifth year of the schedule, the management plan shall be reviewed in its entirety and updated. In accordance with the findings of this review a new five-year schedule shall be adopted.

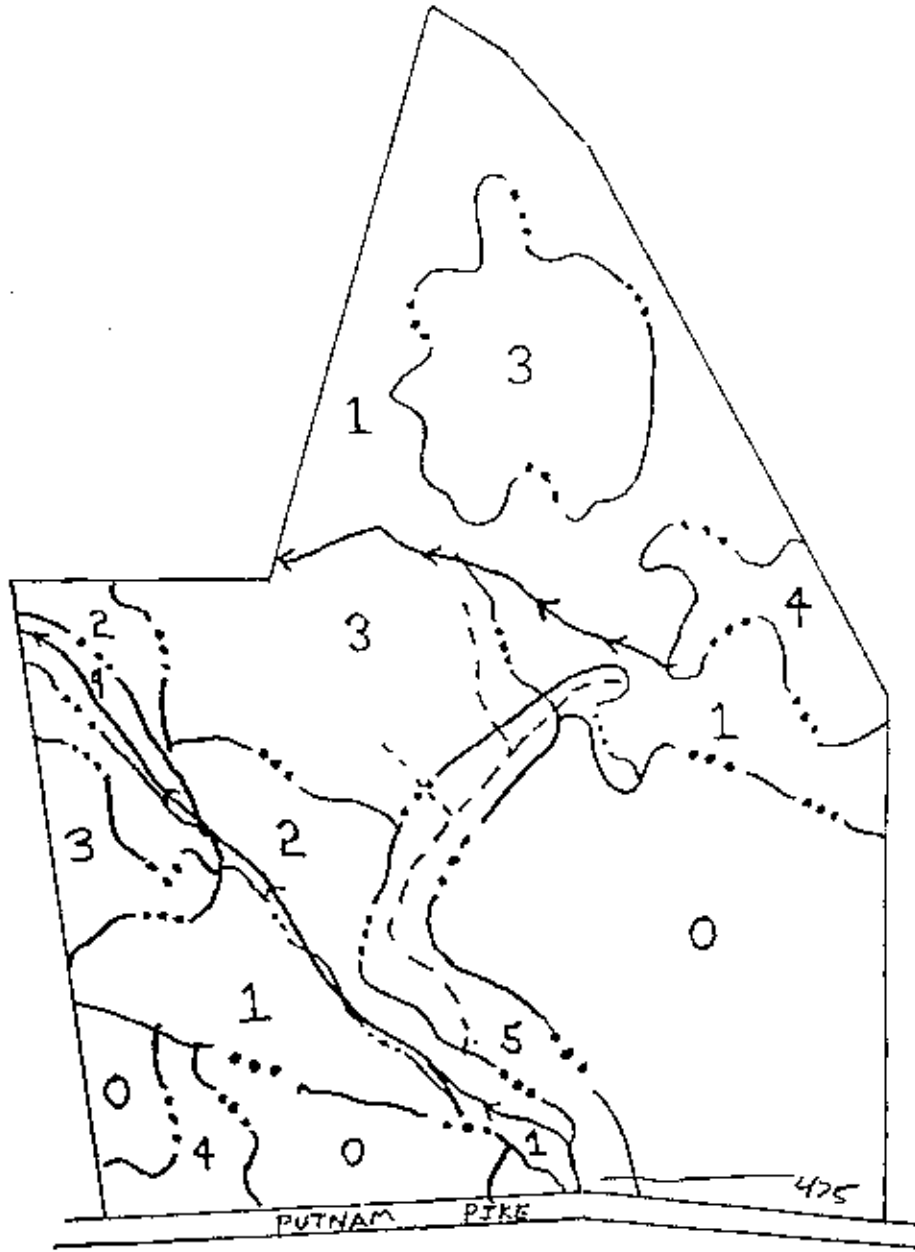
FIGURE 1

Management Plan Schedule: 1990 -- 1994

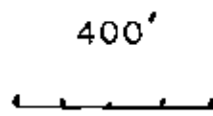


Appendix A -- Property Map

# PHILLIPS FARM GLOCESTER, RHODE ISLAND

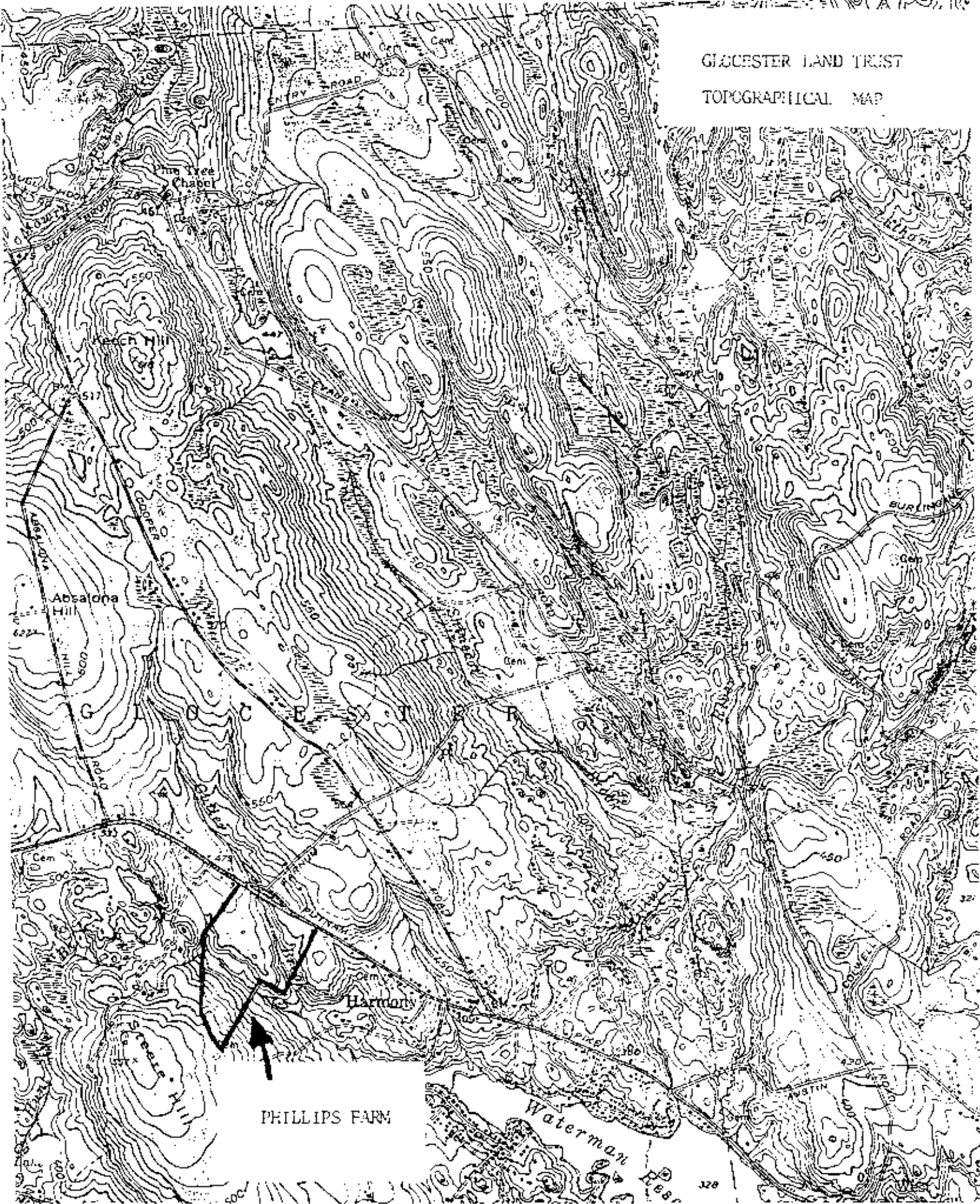


FOREST TYPE BOUNDRY — · · · —  
STREAM ———>—  
TRAIL - - - - -



Appendix B -- Topographical Map

GLoucester Land Trust  
TOPOGRAPHICAL MAP



Appendix C -- Forest Management Plan

FOREST MANAGEMENT PLAN  
for the  
PHILLIPS FARM  
GLOCESTER, RI  
MARCH, 1990

INTRODUCTION

This management plan has been developed to help woodland owners manage their forest land for multiple use purposes. This plan should serve only as a guide for development and should remain flexible to allow for changes in the owners objectives and unforeseen changes in the land due to the effects of man or nature.

This plan includes a map of the property showing the location and approximate acreage of each stand. A forest inventory of the property was conducted to determine the type and condition of the forest habitat. This data was used to develop management recommendations for each stand. Merchantable volume of sawtimber and cordwood has been estimated for each stand. This management plan should be updated every 10 years since the characteristics of the forest will change over the course of time.



## STAND ONE. MIXED HARDWOODS.

This is a mixed hardwood stand located in the northwestern part of the property. This forest type is found on the slopes adjacent to the stream. This is a productive site for growing trees as evidenced by the large size and good form of the trees. Large boulders and poor drainage in some areas could interfere with efforts to practice forest management in some parts. The quality of the trees in this stand is good, with over 75% of the trees being acceptable growing stock with the potential to be sold as sawlogs now or sometime in the future.

This stand is overstocked, at 100%, and should receive a thinning/improvement cut. This treatment would create space in the canopy for the crowns to grow and improve the overall quality of the stand. The density of this stand should be reduced to 60 square feet of basal area or about 215 trees per acre. Good hardwoods, especially mast producing species (oak & hickory), should be favored by releasing their crowns on at least one side. Larger cull and defective trees, trees of poor form, those that show signs of insect or disease attack and lower value species should be discriminated against in this treatment. Many of the black and yellow birch show signs of being attacked by nectria canker. The less vigorous trees of these species should be removed. Enough acceptable trees should be removed to achieve a spacing of about 14 feet between trees.

One to 5 cavity trees per acre should be left for wildlife. Additional snags can be created by killing some of the unacceptable trees in place through girdling. Rotten culls in advanced stages of decay are not as valuable to wildlife as living cavity trees. Most of these trees do not contain dens and don't survive long enough for dens to form. If all unsalvageable dead trees in the stand are left standing this should provide all that are necessary.

In thinning this stand the decision to harvest potential den trees should be based on the characteristics of each tree. If it is desirable to promote the species of wildlife which use cavities, trees with dens or nest holes should be retained whenever they occur. Cull trees and trees with existing cavities should be harvested only when removing them will release a high quality crop tree.

STAND ONE.

Acres: 19.6

Site index: 67 RO

Species	Trees/acre	Basal area	Avg. DBH
WHITE PINE	33	10.0	6.5
RED MAPLE	211	38.3	5.4
YELLOW BIRCH	30	11.6	8.4
BLACK BIRCH	104	26.6	6.4
HICKORY	8	1.7	6.0
WHITE ASH	3	3.3	15.5
ASPEN	5	1.7	8.0
WHITE OAK	1	1.7	30.0
RED OAK	3	6.7	18.4
<b>Total</b>	<b>398</b>	<b>101.6 ft<sup>2</sup></b>	<b>6.2 "</b>

Species	Board feet/acre	Cords/acre
WHITE PINE	618	0.3
RED MAPLE	0	5.7
YELLOW BIRCH	76	2.6
BLACK BIRCH	229	6.6
HICKORY	0	0.3
WHITE ASH	0	0.8
ASPEN	0	0.4
WHITE OAK	148	0.3
RED OAK	640	0.7
<b>Total</b>	<b>1711</b>	<b>17.7</b>

## STAND TWO. PINE.

This is a polesize white pine stand on a level to gently rolling site with few limitations toward management. Canton and Charlton is the dominant soil type in this area.

This stand is overstocked and should be thinned to create space in the canopy for the crowns to receive sunlight. The basal area should be reduced to 90 square feet or about 350 trees per acre. This should result in the spacing of crop trees at about 12 feet apart. Hardwoods interfering with the growth of pine should be removed- those not directly competing with crop trees can be left to avoid making large holes in the canopy. Trees of poor form and low vigor should be removed in this operation, thereby improving the quality as well as the growth and vigor of this stand.

Because of persistent branches and the degrade associated with white pine weevil damage, pruning is a necessary practice to grow high quality sawtimber. Dead limbs persist on pine, forming loose black knots and degrading the potential value of the tree for lumber. Live branches form red knots which do not limit the use of the wood. Thinning and pruning should go hand in hand to promote the rapid growth of crop trees and the early healing of wounds. In choosing crop trees, pick dominant large-crowned trees, these are the fastest growers. The objective is to eliminate dead branches and minimize the size of live branches by pruning the butt log and adjusting the density of the stand to encourage a healthy stand. Additional periodic thinnings are needed to provide light to the top of the crown, where the branches are small, and encourage the development of wide crowns which shade the lower stem

After thinning, one hundred trees per acre should be selected as potential crop trees. Crop trees between 6 & 10 inches DBH should be pruned. This will allow the new wood added as the tree grows to be free of knots.

## STAND TWO.

Acres: 5.1

Site index: 58 WP

Species	Trees/acre	Basal area	Avg. DBH
WHITE PINE	467	130.0	6.4
RED MAPLE	83	10.0	4.6
Total	550	140.0 ft <sup>2</sup>	6.1 "

Species	Board feet/acre	Cords/acre
WHITE PINE	2236	19.3
RED MAPLE	0	0.8
Total	2236	20.1

### STAND THREE. PINE.

This is a sawtimber size white pine stand that was selectively harvested in the last 10 years. The largest and best formed trees were removed. The current stand is of poor quality and understocked, at 35-40%, which is just above the B line for white pine.

This area should receive site preparation to stimulate natural regeneration. The goal of this treatment is to stimulate adequate pine regeneration so that in 20-25 years conditions will be similar to those in Stand Two. In this operation competing vegetation should be removed and scarification of the soil encouraged to prepare a favorable seedbed for white pine germination and growth. Some of the mature trees may have to be removed to increase the amount of light that is reaching the understory only the worst quality pine should be removed since these are the seed trees for the future stand.

## STAND THREE.

Acres: 15.3

Site index: 68 WP

Species	Trees/acre	Basal area	Avg. DBH
WHITE PINE	131	90.0	10.7
WHITE OAK	1	3.3	22.0
RED OAK	10	3.3	8.0
OTHER HARDWOOD	13	6.7	9.5
Total	155	103.3 ft <sup>2</sup>	10.5 "

Species	Board feet/acre	Cords/acre
WHITE PINE	3170	14.1
WHITE OAK	0	0.8
RED OAK	0	0.7
OTHER HARDWOODS	0	0.6
Total	3170	16.2

#### STAND FOUR. HARDWOOD SWAMP.

This forest type is located adjacent to the streams in the central part of the property. This stand is located on moderately productive soils of the Ridgebury series with severe limitations because of extreme wetness. Due to the high water table in this area the trees are shallow rooted, and the windthrow hazard is severe. Equipment use in this stand is seasonally restricted and special precautions, such as hay bales and water bars, are needed to avoid damaging the residual stand.

This stand is overstocked, at 72%, and in need of an improvement cut. The density of this stand should be reduced to 65 square feet of basal area or about 160 trees per acre. This treatment should be done in two cuttings over the next 10 years to avoid removing too many trees at one time, which could encourage windthrow. Large, poorly formed trees, which will never have any value as sawtimber, can be killed in place by girdling. These trees will remain on the site as den trees for wildlife and fall down slowly over time. At least 1-5 of these larger trees (10"+) should be left on each acre for wildlife. Killing these large trees will create openings in the canopy to stimulate the growth of trees and shrubs in the understory. Smaller trees will sprout from the stump when they are cut providing an important winter food source for whitetail deer. Additional wildlife cover can be created by piling the tops from harvested trees.

The wildlife potential of this stand could be further improved by underplanting conifers to provide cover during the winter months. Hemlock would be a good choice for this site, especially near the stream, since it tolerates shade and is adapted to grow in a wet environment. A spacing of 10 x 10 would require planting 400 trees per acre.

## STAND FOUR.

Acres: 4.8

Site index: 55 RO

Species	Trees/acre	Basal area	Avg. DBH
WHITE PINE	1	2.5	18.0
E. RED-CEDAR	5	2.5	10.0
RED MAPLE	95	35.0	7.5
YELLOW BIRCH	8	5.0	10.8
BLACK BIRCH	12	12.0	7.5
WHITE ASH	22	7.5	7.5
CHERRY	7	2.5	8.0
ELM	53	10.0	5.5
WHITE OAK	2	5.0	23.1
Total	205	77.5 ft <sup>2</sup>	7.6 "

Species	Board feet/acre	Cords/acre
WHITE PINE	443	0.1
E. RED-CEDAR	0	0.4
RED MAPLE	0	6.9
YELLOW BIRCH	0	1.1
BLACK BIRCH	0	1.5
WHITE ASH	0	1.6
CHERRY	0	0.4
ELM	0	1.5
WHITE OAK	260	0.7
Total	703	14.2



## STAND FIVE.

This is a early successional site along the edges of the field. The current stand is a mixed eastern red-cedar/pioneer hardwood stand. Red maple is the most common species in this area, making up 50% of the basal area. Pioneer hardwoods, such as black cherry and grey birch, are being outcompeted by more shade tolerant hardwoods. Cedar makes up about 13% of the basal area in the stand.

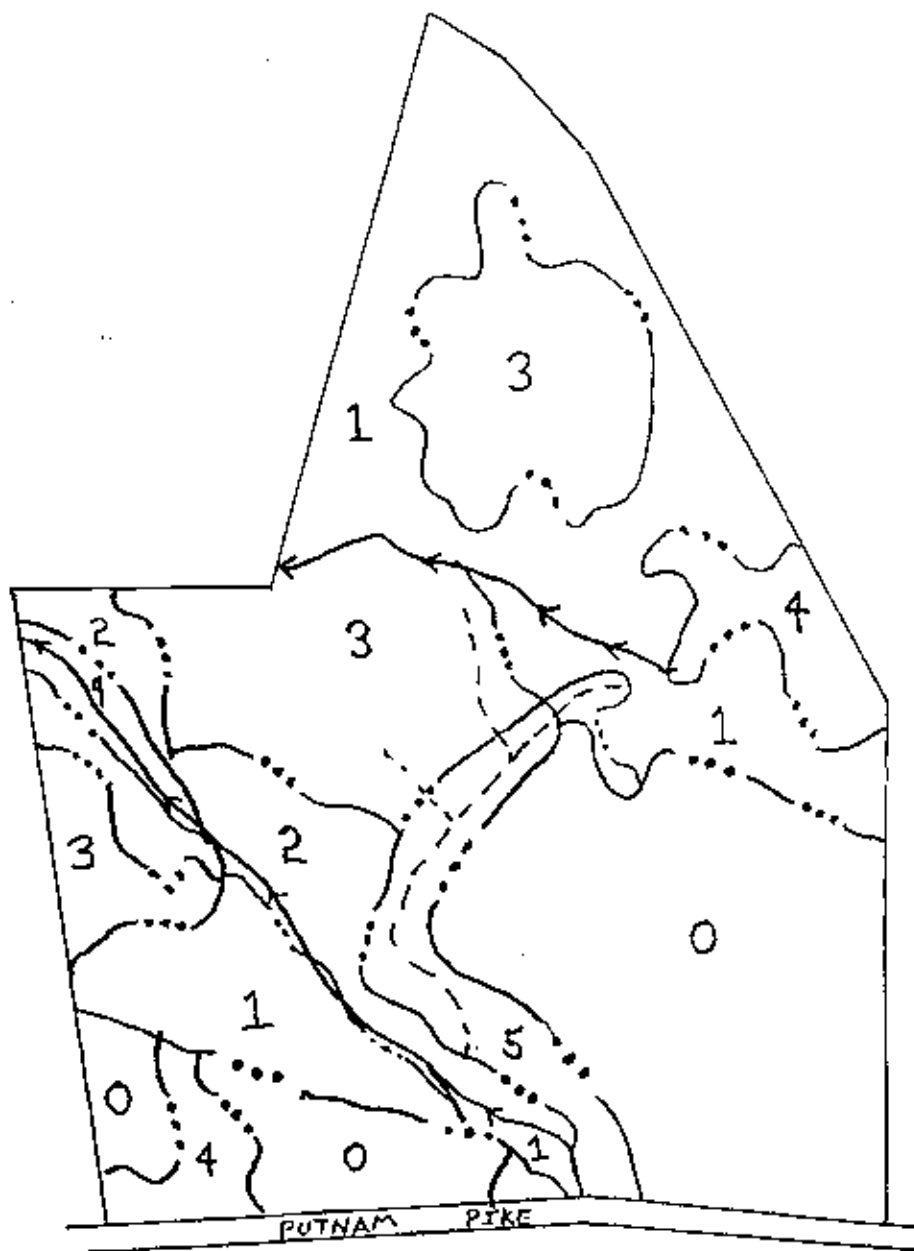
Eastern red cedar is a pioneer species which is gradually replaced by more shade-tolerant species as the stand ages. Red cedar is an important tree for wildlife, especially songbirds, since its evergreen foliage and berries provide cover and food for many species. This stand will have the highest value for wildlife if thinned heavily in patches to retain its mixed species nature. Areas in this stand where cedar is growing well should be selected for special treatment. Heavy thinning will halt this transition to hardwoods by selectively removing them to favor existing cedar and creating enough light in the stand for cedar to regenerate. Dark green foliage and a large crown should be the most important factors in determining which cedars to save. Some hardwoods which produce mast (acorns), such as oak and hickory, should be retained in this stand. These trees should be favored during a "crop tree" thinning which removes one major competitor and allows the crown of the selected crop trees to receive sunlight.




GENERAL RECOMMENDATIONS.

- 1). Locate and mark property boundaries.
- 2). Contact ASCS, at 828-3120, for information on forestry cost sharing programs. Stands One and Four
- 3). Contact SCS, at 949-1480, to obtain soil maps of the property.
- 4). Schedule treatments, such as mowing or burning, to maintain the open areas.

# PHILLIPS FARM

## GLOCESTER, RHODE ISLAND



FOREST TYPE BOUNDRY   
 STREAM   
 TRAIL 

400'



STAND	ACRES
1 MH	19.6
2 P	5.5
3 P	15.3
4 HS	4.8
5 SC	4.8
0 OPEN	18.4
<b>TOTAL</b>	<b>68</b>