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FOREST MANAGEMENT PLAN

For the Property of the

Property Owner(s): Gloucester Land Trust

Mailing address: Gloucester Town Hall
Putnam Pike
Chepachet, RI 02814

Phone:

Property Location:

Heditisan Tract, Route 44

Town (s):

Gloucester, RI

RECORDS

Assessor's map No.	Lot/Parcel No.	Deed Book	Deed Page	Total acres	Excluded acres	Acres to be certified
17	116	69	317	206.77	0	206.77
TOTALS				206.77	0	206.77

Excluded Area Description

HISTORY Year Acquired 2001 Year Management began 2001

Is subdivision plan on file with municipality? Yes No X

Are boundaries blazed/painted? Yes * No * Flagged

Previous management practices (last 10 years):

The property has been commercially harvested by the previous owner. Although the exact date of the harvest is unknown stumps are still visible and rutting is evident where skid trails crossed wetlands.

Gloucester Land Trust, Heditisan Tract -June 2001

FOREST STEWARDSHIP PLAN

MANAGEMENT OBJECTIVES

The primary management objectives for the property are to maintain the forest in a healthy, natural condition and to promote wildlife habitat. Secondary objectives are to improve access for nature watching and recreation as well as the sustainable production of forest products.

SUMMARY OF MANAGEMENT RECOMMENDATIONS.

Rare Species

There are no known threatened and endangered plant or animal species on the property. This may change over time and the RI Natural Heritage Program should be contacted prior to any commercial harvests to ensure measures to protect these species are incorporated into plans.

Wetlands and Riparian Areas

The property is in the Pawtuxet River Watershed. Water flows east off the property via Cutler Brook into Watermans Reservoir and south off the property via Hunt Brook into Coomer Lake. Areas adjacent to the streams as well as all of Stand Four are considered wetland. There are also two small ponds on the property.

Best Management Practices (BMP's), such as retaining buffers adjacent to wetlands, carefully planning the location of trails, and seeding trails used in harvesting to stabilize the soil, are recommended throughout the plan to minimize negative impacts associated with harvesting. Additional guidelines are published in *Best Management Practices for Rhode Island, Water Quality Protection and Forest Management Guidelines, 1996*.

Soil and Water Quality

Management recommendations for Stands Two and Three and the abandoned field adjacent to Putnam Pike involve harvesting trees but an un-harvested buffer should be retained adjacent to the brook to filter runoff. Careful planning of harvesting trails, limiting activities to when the ground is frozen or dry, and stabilizing disturbed soil on landings and harvest trails with quickly established vegetation, will minimize erosion and maintain soil and water quality. Erosion control devices, like water bars, may be needed on harvest trails to prevent erosion (this is usually incorporated into a timber sale contract and done by the logger).

Forest Health

The crop tree release harvest recommended for Stand 2 and improvement cut recommended for parts of Stand 3 will reduce competition between the trees for growing space, improving the health and vigor of the remaining trees.

The group selection harvest recommended for in Stand 3 will promote the establishment of tree seedlings. Young forest usually grows quickly and is more vigorous than older stands of trees and is generally more resistant to attack from insects and disease.

The activities recommended for Stand 1 involve girdling some of the large unacceptable trees. The girdled trees will die and cease to compete with adjacent trees for sunlight, improving the health and vigor of the remaining trees.

Wildlife Management

The proposed crop tree selection and improvement harvests in Stands 2 and 3 will stimulate the remaining oaks to produce acorns, providing food for wildlife. White oak in particular should be favored since the acorns from this species are preferred by wildlife.

The group selection harvest recommended for Stand 3 will stimulate the regeneration of the forest in the 15 to 20 openings created. Young forest, which provides food and cover for a wide range of wildlife, is limited to the eastern part of this parcel and is scarce on the surrounding properties

After the proposed harvests in Stands 2,3, and the abandoned field adjacent to Route 44, skid trails will be seeded with Conservation Mix. This will stabilize the soil and also create grassy habitat providing browse for deer and feeding areas for young turkey and grouse.

The poor drainage conditions in Stand 4 limits potential management activities here. This area does however have high intrinsic value for wildlife and protecting it by using best management practices, like leaving uncut buffers and preventing erosion on skid trails, in adjacent areas will ultimately benefit wildlife.

Snags (standing dead trees) will be created here by girdling large unacceptable trees in Stands 1 and 3. These trees will die in place and provide habitat for wildlife such as woodpeckers, chickadees, nuthatch and other songbirds. These trees will cease to compete with adjacent trees so girdling them will have the secondary benefit of creating growing space for the remaining trees.

The recommended firewood harvest and subsequent mowing/brush cutting in the abandoned field adjacent to Putnam Pike will maintain this area in young, brushy vegetation. This will provide habitat for songbirds and other wildlife that utilize overgrown fields.

Periodically mowing the abandoned orchard will prevent tree from becoming established and maintain this area as open fields. This area provides critical habitat for species of

songbirds that nest in grassland as well as hunting areas for predators like foxes and hawks that prey on the small mammals that live in open fields.

After harvests, skid trails throughout the property will be seeded to Conservation Mix to prevent erosion but while also providing feeding sites for wildlife like deer and young turkey and grouse.

Forest Products

The recommended crop tree harvest in Stand 2 and improvement harvest in parts of Stand 3 will remove poor quality trees, increasing the growth rate of the better quality trees that remain.

Some of the largest, poor quality trees in Stand 1 should be girdled to remove large improve growing conditions for the remaining trees.

The proposed group selection harvest in Stand 3 will result in the harvest of sawtimber and firewood. The openings created by the recommended harvests will favor the establishment of young forest from stump sprouts and seed from adjacent areas. Although the initial growth rate in this dense young forest will be slow, these conditions usually produce high quality trees.

Witch hazel is well established in parts of Stand 3. Although the plants are too small to harvest now, the high concentration and good access may lend itself to a commercial harvest in the future.

Recreation and Aesthetic Considerations

The proposed harvest in Stand 1 and 2 will enhance aesthetics by improving the viewing distance through these areas. The patches of younger vegetation created by the planned group selection harvest in Stand 3 will enhance aesthetics by increasing the visual diversity here.

The recommended harvest in Stands 2, 3 and the abandoned field will also create a network of trails through these areas. Additional recreation trails should be constructed in stand 1 to improve access for recreational activities.

Management practices, such as leaving buffers adjacent to sensitive areas and chopping slash so it lies close to the ground and to speed decomposition will be used to maintain aesthetics after harvesting activities. Additional recommendations in *A Guide to Logging Aesthetics. Practical Tips For Loggers, Foresters And Landowners, 1993* will be implemented whenever practical.

STAND DESCRIPTION								
GOAL	STAND	TYPE	ACRES	SIZE CLASS MSD	BA/AC	TREES/AC	VOLUME/AC	SITE INDEX
FP, HAB	1	WH	49.4	13.1	109	106	9.6 MBF 3.1 cords	64 (WP)

This is a white pine hardwood forest type on steep, rocky terrain. White pines are the largest, most dominant trees, comprising 81 percent of the basal area. Black oak makes up five percent and white oak three percent of the basal area. It is evident from the form of the pines and the larger oaks that they grew in the open for some time. These large "wolf" trees remain when this area was pasture. There are a few red cedars scattered through this area but for the most part they have been out-competed by other trees and died.

Canton and Charlton rock outcrop complex is the soil here. This soil is sandy with low potential productivity for growing trees. Conifers, such as white pine, are better adapted to grow on the soil here and are larger and healthier than the hardwoods. The oaks and other hardwoods growing here have dieback in the crown and show other symptoms of decline associated with growing on infertile soil. The low productivity of the soil, steep slopes, and rock outcrop are major constraints to forest management here.

Past harvests have left this stand understocked for white pine. White pine is adapted to grow at higher densities than hardwoods and can tolerate very crowded conditions. As the crowns of the trees grow, conditions will become dense and growth of the trees will begin to slow.

MANAGEMENT PRACTICES

To be done within the next 10 years

OBJECTIVE	STAND	TYPE	TREATMENT	ACRES	REMOVED		TIMING
					BA	VOL	
FP, HAB	1	WH	Re-evaluate	49.4	NA		2006
HAB	1	WH	Create Snags	49.4			2001-2005
REC	1	WH	Create Recreation trail	49.5	NA		2001-2005

Although the forest products here (mostly white pine sawtimber) are commercially valuable the previous harvest was aggressive and left this area understocked. Even now, there is adequate room in the canopy for the trees to grow. No harvesting is recommended at the present time but this area should be re-evaluated in five years.

As the trees grow, the crowns will expand and the trees will begin competing for growing space. Future forest management activities will most likely involve removing some trees to create growing space for the remaining trees. White pine is better adapted than hardwoods to grow on the soil type found here and should be favored in management. Poor quality trees

The previous harvest here removed only commercially valuable trees and left large trees with poor form and little commercial value. These large trees are remnants from the time when this area was pasture and they stood along the edges of fields. These "wolf trees" have large crowns and will interfere with the growth of the other trees. These trees should be girdled to create wildlife habitat and improve growing conditions for the remaining trees. Creating snags by girdling some of these large unacceptable trees will provide nesting, feeding, and roosting sites for a variety of cavity nesting birds and animals.

There are few standing dead trees (snags) here now, only about 1 per acre. A minimum of five to eight large snags per acre are needed for optimum habitat for song birds and other wildlife that use dead trees. Girdling all large (over 20 inches diameter at breast height) unacceptable trees will create about three snags per acre. Larger snags are more desirable since they provide more area for excavating and feeding and meet the minimum size requirements of a greater number of cavity using species. Additional smaller trees should also be girdled to create a total of eight snags per acre.

This practice will have the dual impact of creating habitat for wildlife that use snags, such as woodpeckers, chickadees, and nuthatches, and owls, as well as improving growing conditions for the remaining trees. The trees that are girdled will die in place, allowing adjacent trees to receive more sunlight, increasing their growth rate and ultimately their health and vigor.

Access through this area for recreation can be improved by constructing trails. These trails would be relatively narrow (4 to 6 feet wide) and connect to proposed trails in Stands Two and Three. This will improve the overall value of the property for a variety of passive recreation activities, such as cross country skiing, horseback riding, hiking and bird watching.

The proposed management activities in this area will:

Enhance wildlife habitat by:

- Creating additional snags to provide habitat.

Promote forest health by:

- Allowing trees adjacent to the girdled trees to receive more sunlight, promoting the growth, health and vigor of the trees.

Enhance recreation and aesthetics by:

- Establishing trail access.

*OBJECTIVE CODE: HAB= Habitat REC= Recreation AES= Aesthetics Hlth= Health
S&W= Soil & Water Protection FP= Forest Products*

Glocester Land Trust, Heditisan Tract -June 2001

STAND DESCRIPTION								
GOAL	STAND	TYPE	ACRES	SIZE CLASS	BA/AC	TREES/AC	VOLUME/AC	SITE INDEX
HAB, FP, REC	2	OM	39.0	8.8	88	215	2.5 MBF 9.7 cords	58 (BO) 62 (WP)

This is a mixed oak forest type on an upland site. This area has steep terrain, with rock outcrop in some places. Black and scarlet oak are the dominant tree species here, comprising 40 percent of the basal area. White oak makes up ten and red oak nine percent of the basal area. White pine is common, comprising 14 percent of the basal area. The fact that this site has unfavorable soil conditions is evident in the size and form of the trees here; many of the larger trees here have small crowns with thin foliage and die-back, indicating the trees are under stress. The growth rate is slow and the trees here are predisposed to mortality if another stress (like drought or gypsy moth defoliation) occurs.

The soil here is Canton and Carlton rock outcrop complex. This soil is very well drained with low potential productivity for growing trees. The steep slopes and rock outcrops affect the management potential by limiting the use of equipment. Trails here need careful design to prevent erosion and trails created by harvests should be seeded to quickly established vegetation, like Conservation Mix, to prevent erosion. Erosion control devices may also be needed on trails to slow down the velocity of water and prevent erosion.

There are stumps here remaining from a harvest that most likely occurred 10 to 15 years ago. This was a light harvest, removing scattered trees, and had little impact on the growth and development of the forest here. The infertile soil conditions being the dominant factor influencing the condition of the present forest. The largest trees here have small crowns and there are few tree seedlings given the amount of sunlight reaching the forest floor.

MANAGEMENT PRACTICES

To be done within the next 10 years

OBJECTIVE	STAND	TYPE	TREATMENT	ACRES	REMOVED/ACRE		TIMING
					BA	VOL	
FP, HAB, REC	2	OM	Crop Tree Release	39.0	20	4.5 cords	2006

Past harvests have removed enough trees to open up the canopy and allowed the crowns of the trees to receive sunlight. In about five years the trees will have grown enough to begin to compete for growing space and a crop tree release harvest should be done.

Crop tree release differs from other types of thinning because it focuses on the most promising trees to help you meet your objectives. Releasing a tree means giving the tree more room to grow by removing other trees that compete with it for water, sunlight and nutrients.

This harvest should remove 20 to 25 percent of the trees, mostly trees with signs of dieback in the crowns. Locate trees to favor and mark them. The goal is to promote the growth of a "crop tree" by removing competing trees on at least three sides, leaving the crown of the tree free to grow with about 10 feet between it and the nearest tree. Don't try to save all trees, just 50 to 100 per acre (one every 20 feet). Favoring large oaks (especially white oaks) with large, well-formed crowns will increase the amount of acorns available for wildlife. White pines should be favored since they are adapted to grow on the soil conditions found here and have high value for forest products.

At this stage in the life of this stand the goal of management is to promote the growth of existing trees not stimulate seedlings. Future management objectives for this area should include promoting white pine seedlings since pine it is better adapted to grow on the soil type found here than hardwoods.

The proposed management activities in this area will:

Enhance production of forest products by:

- Resulting in the removal of fuelwood in the harvests and promote the growth of the best quality trees.
- Increase the growth rate of the trees, reducing the time until they are large enough to be harvested for sawtimber.

Enhance wildlife habitat by:

- Stimulating acorn production from mature oaks to provide food for wildlife.
- Favoring white oak, where possible, since it is a preferred food source by many species of wildlife.
 - Retaining some "wolf trees" to provide habitat for birds and small mammals.

Promote forest health by:

- Reducing competition for growing space, promoting the growth, health, and vigor of the trees.

Glocester Land Trust, Heditisan Tract -June 2001

Enhance recreation and aesthetics by:

- Removing some trees thereby increasing the viewing distance through the area.
- Establishing harvest trails through the area that will improve access for a variety of activities.

STAND DESCRIPTION								
GOAL	STAND	TYPE	ACRES	SIZE CLASS	BA/AC	TREES/AC	VOLUME/AC	SITE INDEX
FP, HAB, REC, S&W	3	OH	45.4	9.8	107	207	3.8 MBF 11.2 cords	62 (RO)

This is an oak- mixed hardwood forest type on a sloping hillside. This area has the most productive soil on the property; hence there is a more diverse mix of tree species than the rest of the property. Red oak is the most common tree species making up 21 percent of the basal area. Scarlet and black oak, make up 13 and 8 percent of the basal area and white oak 7 percent of the basal area. Large aspen, probably the first trees established here when agriculture stopped, are common. Red maple is the most common non-oak species; comprising 18 percent of the basal area. The red maple and birch (black and yellow) here are much smaller than the dominant oaks, and likely became established in openings created here from past harvests. The moist soil here promotes the growth of shrubs here. Although greenbriar and sweet pepperbush dominate, shrubs with value to wildlife, like viburnums, are common. Witch hazel, a shrub valuable for its medicinal uses, is also well established in some places.

Canton and Charlton extremely stony fine sandy loam is the soil here. This soil is well drained with moderate productivity for growing trees. Stones and boulders are common and are the main factor limiting management.. The fact that the soil here is more conducive to tree growth is evident in the good form and healthy appearance of the trees. Wetland shrubs are common in some parts of this stand, indicating the water table is close to the surface in some areas. These "wet spots" and the proximity of wetland habitat (Stand Four) makes the use of best management practices (BMP's) a necessity. These include: leaving an un-harvested buffer adjacent to Stand Four, carefully planning the location of trails before harvests and seeding disturbed soil on trails to prevent erosion.

Although this area has been harvested before, the productive soil and increased sunlight reaching the tree crowns after the harvest promoted rapid growth of the trees. This area has extremely dense growing conditions. This stand is currently stocked at 95 percent. At this density, the trees are competing intensely for growing space and growing slowly.

MANAGEMENT PRACTICES

To be done within the next 10 years

OBJECTIVE	STAND	TYPE	TREATMENT	ACRES	REMOVED		TIMING
					BA	VOL	
FP, HAB, REC,	3	OH	Group Selection Harvest	4-10.0	107	3.8 MBF 11.2 CDS	2002-2004
FP, HAB, REC,	3	OH	Improvement Cut	30.4- 36.4	35	5.1 CDS 0.5 MBF	2002-2004
HAB	3	OH	Create snags	45.4			2002-2004
HAB, S&W	3	OH	Seed trails with Conservation Mix	--	NA		2002-2004

This stand should receive a group selection harvest to promote the regeneration of a young forest and increase the diversity of age classes on the property. An improvement cut should be applied to other areas of the stand to reduce competition between the trees for growing space.

This area should receive a group selection harvest, creating fifteen (15) to twenty (20) small openings' scattered throughout the stand. The size and location of the openings is flexible but each should be large enough to allow sunlight to reach the center of the opening ($\frac{1}{4}$ to $\frac{1}{2}$ acre). In essence these are small clear cuts that allow a young forest to become established. The extra sunlight reaching the forest floor and soil disturbance created by the harvest will stimulate regeneration of trees. The tree species found in these openings will be different than in the existing forest; pioneer species (birch, aspen, cherry) will be established from seed carried into the openings by wind and birds. Oak seedlings will become established from stump sprouts as well as acorns from tree adjacent to the openings. White pine seed will be carried in by wind. Since little young forest (less than 20 years old) is found in the surrounding landscape. This will improve wildlife habitat as well as aesthetics by increasing the diversity of vegetation as well as the age classes of the vegetation found here.

The area between the openings should receive an improvement harvest; removing 33 percent of the trees, leaving about 150 trees per acre. This will reduce competition for growing space and improve the growth rate of the remaining trees. Oaks (especially white oak) with large, healthy crowns should be favored by removing competing trees on at least three sides, since the acorns they produce benefit many species of wildlife including deer, turkeys, grouse, squirrels, and many species of songbirds.

About 5 acres of this stand is inaccessible since access would necessitate impacting significant wetlands. This area (in the extreme west of the property) is excluded from management.

There is only about one large snag per acre here now. Snags provide essential nesting, feeding, and roosting sites for a variety of cavity nesting birds and animals. There are numerous large poor quality trees here now and killing some of them by girdling will improve wildlife habitat. A minimum of four (4) additional snags per acre should be created by girdling large (12 to 16 inch DBH) unacceptable trees.

After the harvest, seed disturbed soil along trails with *Conservation Mix* will stabilize the soil and prevent erosion. Test the soil beforehand and add lime and fertilizer as needed. This will also establish additional grassy habitat throughout the property providing feeding sites for deer as well as young turkey and grouse. Erosion control devices, like water bars, may also be needed on steep sections of trail to slow down runoff.

The recommended activities will enhance the property for your forest management objectives including:

Enhance forest health by:

- Reducing competition between the trees for growing space to improve the growth of the remaining trees, which will promote their health and vigor.
- Establishing patches of young forest that is usually more vigorous and withstands stress better than older forest.

Improve wildlife habitat by:

- Increasing production of acorns by favoring oaks with large, well-formed crowns.
- Establishing young forest that doesn't exist on the property now and is uncommon on the surrounding properties. This will provide feeding and nesting habitat for songbirds like vireo and warbler and browse for larger animals like deer.
- Improving the diversity of habitat by creating patches of young forest intermingled with mature forest.
- Maintaining five to eight snags per acre to provide feeding and nesting sites for bird species like chickadee, nuthatch, and woodpeckers.
- Establishing grassy habitat along harvest trails, providing browse for deer as well as feeding areas for young turkey and grouse.

Enhance aesthetics and recreation potential by:

- Creating a mixture of regenerating forest and older forest that will improve visual diversity.
- Improving the viewing distance through the mature forest by removing some trees in an improvement cut.
- The trail system created by harvesting will improve access into this area for walking as well as nature viewing.

Protect soil and water quality by:

- Carefully planning harvest trails to avoid steep slopes and wet spots.
- Using erosion control devices, such as water bars, to slow down the movement of water and reduce erosion on areas of skid trails that cross steep slopes.
- Seeding harvest trails with *Conservation Mix* (or another grass mix that becomes established quickly) to stabilize soil and prevent erosion.

STAND DESCRIPTION								
GOAL	STAND	TYPE	ACRES	SIZE CLASS	BA/AC	TREES/AC	VOLUME/AC	SITE INDEX
HAB, S&W	4	RM	35.3	7.8	115	345	1.4 MBF 21.0 cords	57 (BO)

This is a hardwood swamp forest type in low -lying areas of the property. Runoff from higher elevations collects here and eventually enters streams that flow off the property. Red maple is the most common trees species, comprising over 90 percent of the basal area. Some areas within this stand have standing water much of the year, restricting tree growth and promoting the dense growth of wetland shrubs, like high bush blueberry, sweet pepperbush, and viburnums.

Ridgebury, Whitman and Leicester fine sandy loam is the soil here. This soil is wet with a high water table. This soil is so poorly drained that tree growth is reduced. Consequently trees and shrubs adapted to grow in wetlands out-compete other species here. The high water table, which is within two feet of the surface most of the year forces tree roots to grow near the surface, making windthrow (trees toppled by the wind) a problem. Rutting could also be a problem if heavy machinery is used to harvest this area. Best management practices should always be used when working in or adjacent to this area. These include: harvesting only when the ground is frozen or very dry, limiting the amount of trees harvested at one time, and seeding disturbed soil on trails to prevent erosion.

Growing conditions are very dense here, with stocking at 100 percent, and the trees are competing intensely for growing space. Consequently, the trees here are growing slowly and are not very vigorous. As the weaker trees die, the crowns of the remaining trees grow into the openings created in the canopy.

MANAGEMENT PRACTICES**To be done within the next 10 years**

OBJECTIVE	STAND	TYPE	TREATMENT	ACRES	REMOVED		TIMING
					BA	VOL	
HAB, S&W	4	RM	Re-evaluate	35.3	NA		2006

The low value of the forest products and difficult access limit management options here. This area does however have high intrinsic value as wildlife habitat, as a natural water purifier, and for flood control. The riparian area along the edges of this wetland protect this area by providing shade and stabilizing soil erosion as well as providing travel corridors for wildlife.

No harvesting is recommended now since further thinning could stress trees and would lower tree quality by encouraging the growth of side branches. Reevaluate this area in ten years. The course of management will depend on the kind and amount of seedlings at that time.

Although other areas of the property may be actively managed for multiple use purposes, an un-harvested buffer should be retained around this area. Logging roads and skid trails should be located at least 100 to 200 feet away from this area depending on slope.

The recommended activities will enhance the property for your forest management objectives including:

Improve wildlife habitat by:

- Maintaining dense cover in riparian areas.

Enhance soil and water protection by:

- Maintaining an un-harvested buffer in adjacent areas to filter runoff
- Restricting trail construction in adjacent stands that could affect this area.

Non –Forested Areas

Abandoned pasture.

This area was open when the property was used as a farm but trees became established when agriculture ceased. Eastern red cedar and juniper, two plants common to old pastures are common. Large hardwood trees are scattered through the area and sapling and pole size trees (less than 20 years old) are common.

Canton and Charlton fine sandy loam is the soil here. This soil has few limitations for growing trees, except for rock outcrop in some places, but has low potential productivity. This site slopes to the south and runoff from this area travels to a seasonal stream that flows into a marsh on the property. Management here has the potential to impact these wetlands so intensive activities, like trail building or harvesting trees should be carefully planned to avoid negative consequences.

The most common trees found here (cedar and birch) become established quickly in abandoned fields but eventually are out-competed by hardwoods. Junipers and other shrubs common to overgrown fields are common here but will be shaded out as oaks and other tree species with larger crowns become established. This site is destined to become a hardwood forest unless measures to maintain it are undertaken.

Abandoned fields provide unique habitat, such as low cover and different heights of vegetation not found in other areas. Songbirds and other species of wildlife that use brushy fields, like rabbits benefit from this area. Similar habitat is scarce in the surrounding area. This area should be maintained by harvesting most of the larger hardwood trees for firewood and periodically mowing to maintain young, brushy growth. Access trails into this area must be carefully planned and maintained to prevent erosion into the adjacent wetlands.

The recommended activities will enhance the property for your forest management objectives including:

Improve wildlife habitat by:

- Maintaining a unique vegetation type.
- Promoting fruit production from the remaining trees and shrubs.

Enhance soil and water protection by:

- Carefully planning the location of harvest trails in this area.
- Using erosion control devices where appropriate and establishing vegetation on trails to stabilize soil and prevent erosion.

Abandoned orchard.

This orchard was once used for commercial production of apples but has been inactive for several decades. The remaining apple trees are in poor health, the fields have become overgrown, and trees are becoming established along the edges.

Although this site is nearly level, it is well drained with above average productivity for growing trees. Paxton fine sandy loam is the soil here. This soil has large stones but few other limitations to growing trees.

Although the Phillips Farm with its hayfields is nearby, open grassland is uncommon in this part of the State. This area provides unique habitat for wildlife that uses open fields such as songbirds, small rodents as well as foxes and hawks that feed on them. The scattered apple trees provide fruit for deer, birds and other animals.

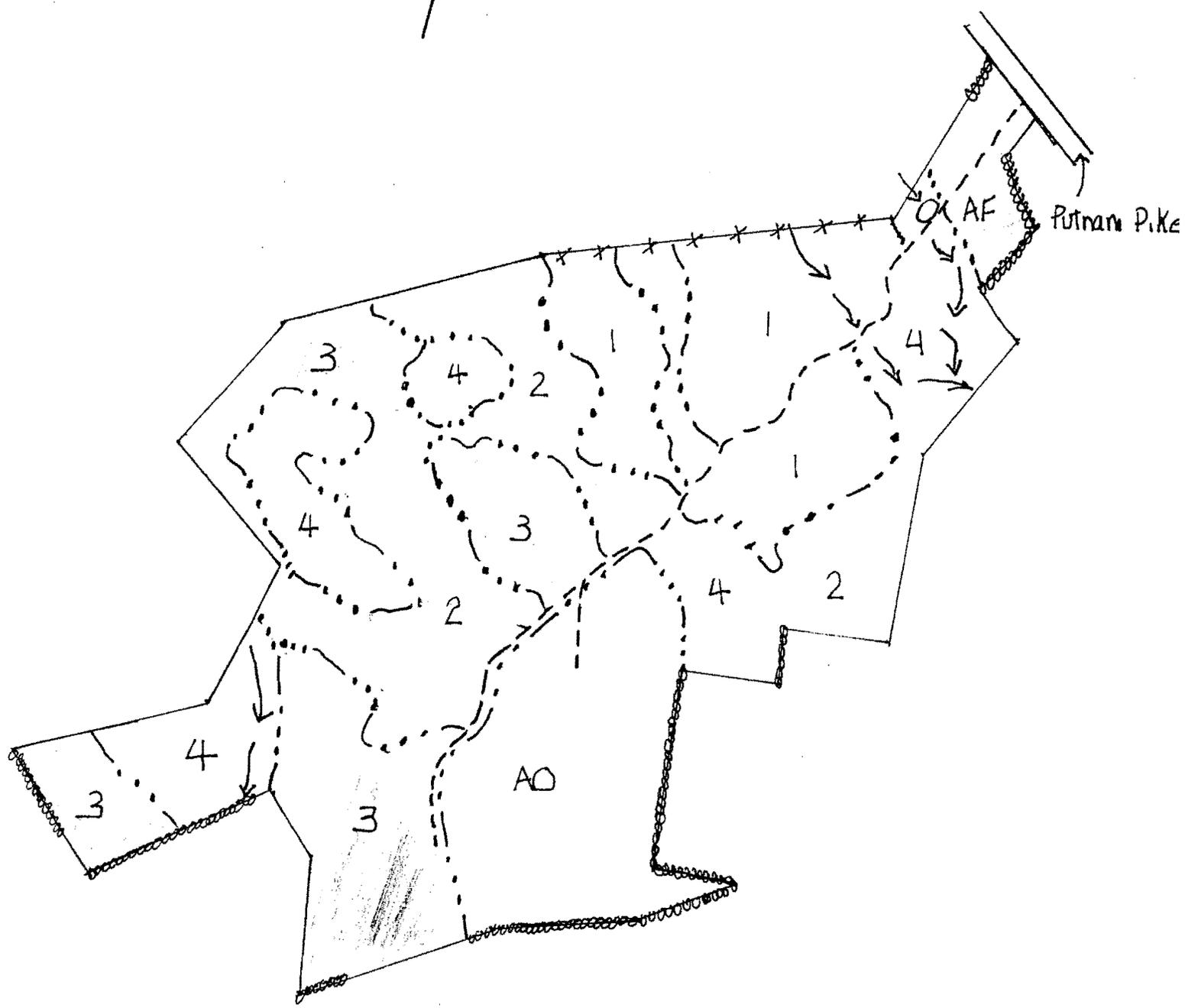
Initiate a mowing schedule to this entire area from reverting to forest. Mow the area closest to the forest once every four to eight years, to allow tall shrubs and saplings to get established. These "brushy" areas that haven't been mowed for several years provide plants like raspberry and grape that don't grow in the forest. Try to save specimens of trees, like apple trees eastern red cedar, black cherry, and aspen that provide food and cover for wildlife. This will also create another canopy layer of small trees between the tall trees in the forest and the grasses and low growth in the field. Establishing this vertical diversity will benefit songbirds that nest on the edges of fields.

Mow other areas more frequently, some every year to maintain grasses, and other areas every two to four years to allow herbs and small shrubs to become established.

IMPLEMENTATION SCHEDULE

STAND	TYPE	TREATMENT	ACRES	VOLUME REMOVED/ACRE		TIMING
				BA	VOL	
1	WH	Re-evaluate	49.4	NA		2011
1	WH	Create Snags	49.4			2005-2010
1	WH	Create Recreation trail	49.5	NA		2001-2005
2	OM	Crop Tree Release	39.0	20	4.5 cords	2011-2015
3	OH	Group Selection Harvest	4-10.0	108	3.8 MBF 11.2 CDS	2008-2012
3	OH	Improvement Cut	30.4- 36.4	36	5.1 CDS 0.5 MBF	2010-2015
3	OH	Create snags	45.4			2005-2008
3	OH	Seed trails with Conservation Mix	---		NA	2010-2015
4	RM	Reevaluate	35.3		NA	2011
	AF	Remove hardwood trees	7.6	70	5.0 CDS	2002-2005
	AF	Seed trails with Conservation Mix	---		NA	2002-2005
	AF	Periodic mowing (bush hog)	7.6		NA	2003, 2008
	AO	Maintain fields by mowing	30.0		NA	2001-2011
All		Locate and Mark boundaries	206.7		NA	2002, 2007, 2012

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Forest Type Map For The Property of
Glocester Land Trust- Heditsian Tract
Glocester, RI

	Stand	Forest Type	Acreage
Forest Type Boundary	1	White Pine-Hardwood (WH)	49.4
Stone Wall	2	Oak- Mixed (OM)	39.0
Remnants of Wire Fence	3	Oak- Hardwoods (OH)	45.4
Trail	4	Red Maple (RM)	35.3
Stream	AO	Abandoned Orchard (AO)	30.0
	AF	Abandoned Field (AF)	7.6
	TOTAL		206.7

1 inch = 660 feet

PREPARED BY GREGG J. CASSIDY, CONSULTANT FORESTER. June, 2001