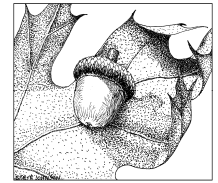




SAMPLE FOREST MANAGEMENT PLAN



Submitted to: DEM, Division of Forests & Parks
For enrollment in CH61/61A and/or Forest Stewardship Program

CHECK-OFFS

CH. 61 cert. CH. 61A cert. STWSHP. new C-S SIP 1
recert. recert. revis. other
amend. amend.

Case No. _____ Orig. Case No. _____
Owner ID _____ Add. Case No. _____
Date Rec'd _____ Ecoregion _____
Plan Period _____ Topo Name Shutesbury
Rare Spp. Hab. _____ River Basin Connecticut

OWNER, PROPERTY, and PREPARER INFORMATION

Property Owner(s) Joseph and Catherine Sample
Mailing Address 132 Maple Rd. Shutesbury, MA 01072 Phone (555) 555-1212

Property Location: Town(s) Shutesbury Road(s) Maple

Plan Preparer Chris Stewart Mass. Forester License # 1
Mailing Address 24 Big Wood Drive Lake Pleasant, MA 01347 Phone (555) 555-6778

RECORDS

Assessor's Map No.	Lot/Parcel No.	Deed Book	Deed Page	Total Acres	(non-Ch. 61/61A) Excluded Acres	(Ch. 61/61A) Certified Acres	Stew. Acres
<u>412</u>	<u>43</u>	<u>17115</u>	<u>181</u>	<u>37</u>	<u>1.5</u>	<u>35.5</u>	<u>35.5</u>
TOTALS				<u>37</u>	<u>1.5</u>	<u>35.5</u>	<u>35.5</u>

Excluded Area Description (if additional space needed, continue on separate paper)
Beginning at a point along the southern boundary approximately 787.25 ft. from the southeastern corner. Thence S85W 255.6', thence N5W 255.6', thence N85E 255.6', thence S5E 255.6'. Includes 1.5 acres more or less.

HISTORY Year acquired 1978 Year management began 2001

Is subdivision plan on file with municipality? Yes _____ no

Are boundaries blazed/painted? Yes _____ no _____ partially

Have forest products been cut within past 2 years? Yes _____ No

What treatments have been prescribed, but not carried out (last 10 years if plan is a recert.)?
stand no. _____ treatment _____ reason _____
(if additional space needed, continue on separate page)

Previous Management Practices (last 10 years)

Stand #	Cutting Plan #	Treatment	Yield	Value	Acres	Date
_____	_____	_____	_____	_____	_____	_____

Remarks: (if additional space needed, continue on separate page)

STEWARDSHIP PLANNING WORKSHEET

Answering these questions will help record your goals and visions for your property. Your private forester and state Service Forester will use this information to insure that the management plan and recommendations accurately reflect your ideas. The resulting plan will help you learn about your property, achieve your goals, and become a better steward of the land.

Ownership

1. How many years have you or your family owned this property? _____
2. How many more years do you expect to own it? ___ 1 to 10 ___ 11 or more
3. Have you done any estate planning? ___ yes ___ no
4. What do you think you will eventually do with this property?
___ Will it as is to heirs ___ Divide among heirs ___ Sell for development
___ Protect some or all land from development Don't know ___ Other _____
5. Are you interested in classifying the property under Chapter 61, 61A or 61B for tax purposes?
___ Yes ___ No ___ Already is ___ Don't know

The Land

1. Are you aware of any important natural or cultural features on your land? (Check all that apply)
___ Abandoned Fields ___ Apple Trees
___ Beaver Pond ___ Springs or Seeps
___ Brooks or Streams ___ Waterfalls
___ Forested Wetlands ___ Stone Walls
___ Rock Outcrops or Ledges ___ Old Foundations
___ Very Large or Unique Trees ___ Vernal Pools
___ Mowed Fields ___ _____
2. Is your property posted against: Trespassing ___ Hunting ___ Fishing ___ Motorized vehic. ___
3. Are your property boundaries well marked? ___ Yes ___ No

Accomplishing Goals

1. How much of the management work do you plan on doing yourself?
___ None ___ Some of it ___ Most of it
2. How many days of free labor per year do you have (self, family, friends)?
___ None ___ 1 to 5 ___ 10 to 20 ___ more than 20
3. What percent of earnings from woodland are you are willing to reinvest in the land?
___ None ___ 10% to 25% ___ 33% to 50% ___ more than 50% ___ don't know
4. How much out-of-pocket money are you willing to invest to improve your property?
___ None ___ \$100 to \$500 ___ \$1000 to \$2000 ___ more than \$2000
5. Are you willing to work with your neighbors to accomplish mutual goals?
___ Yes ___ No ___ Don't know

Landowner Goals

Please **check** the column that best reflects the importance of the following goals:

Goal	Importance to Me			
	High	Medium	Low	Don't Know
Enhance the Quality/Quantity of Timber Products*	X			
Generate Immediate Income		X		
Generate Long Term Income	X			
Produce Firewood		X		
Defer or Defray Taxes	X			
Promote Biological Diversity				X
Enhance Habitat for Birds	X			
Enhance Habitat for Small Animals	X			
Enhance Habitat for Large Animals	X			
Improve Access for Walking/Skiing/Recreation	X			
Maintain or Enhance Privacy		X		
Improve Hunting or Fishing			X	
Preserve or Improve Scenic Beauty	X			
Protect Water Quality		X		
Protect Unique/Special/ Cultural Areas	X			
Other:				

* This goal must be checked "HIGH" if you are interested in classifying your land under Chapter 61/61A.

1. In your own words please describe your goals for the property:

We would like to improve the forest and generate some income over the long term

while improving wildlife habitat.

Stewardship Purpose

By enrolling in the Forest Stewardship Program and following a Stewardship Plan, I understand that I will be joining with many other landowners across the state in a program that promotes ecologically responsible resource management through the following actions and values:

1. Managing for long-term forest health, productivity, diversity, and quality.
2. Conserving or enhancing water quality, wetlands, soil productivity, biodiversity, cultural, historical and aesthetic resources.
3. Following a strategy guided by well-founded silvicultural principles to improve timber quality and quantity when wood products are a goal.
4. Setting high standards for foresters, loggers and other operators as practices are implemented; and minimizing negative impacts.
5. Learning how woodlands benefit and affect surrounding communities, and cooperation with neighboring owners to accomplish mutual goals when practical.

Signature(s): _____

Date: _____



Property Overview, Regional Significance, and Management Summary

The 37-acre Sample woodland lies in the Pelham Hills (elev. 900+ ft.) in the southern part of sparsely populated Shutesbury along the Pelham town line. The property is typical of the surrounding landscape, which is predominantly forestland, broken only by occasional house lots and wetland areas. Small village centers can be found a few miles to the north and south, with more heavily developed suburban areas radiating from Amherst, five miles to the west.

The seasonally wet but productive soils support regionally typical forest cover on this gently sloped, west facing property. A mix of pole and timber sized hardwoods characterize the eastern half of the parcel. A dense, uneven-age grove of hemlock runs along the western boundary. A thirteen acre stand of young hemlock and mixed hardwoods bounds the west side of the driveway. Forest health is currently good, but hemlock wooly adelgid is a concern addressed in this plan. Habitat diversity is moderate and favors interior forest dwelling species. The intermittent stream traversing the property (and the associated spring) enhance the wildlife habitat value of these woods, as do the large old “wolf” trees scattered throughout the property. Invasive exotic plants are not currently found on this property or in the immediate vicinity. Stone walls and a stone cellar hole offer clues to prior use of the property for animal husbandry.

The stream flows toward the nearby Baker Reservoir, which in turn feeds the Atkins Reservoir (2 miles downstream), a significant portion of the Amherst water supply. Healthy forest cover on the Sample property and careful management activity will help safeguard the quality of that public water resource. The Sample property does not abut any protected lands, although the Metropolitan District Commission’s 45,000 acre Quabbin forest (the largest undeveloped tract in southern new England) and reservoir lie just 2.5 miles to the east. If maintained in forest cover, this parcel will continue to help support the wildlife species that depend on large unbroken tracts of forestland.

The Samples’ primary management objective is to balance wildlife habitat protection and enhancement with long term income generation. Both goals can be realized through several careful timber harvests designed to: 1)increase the health and vigor of the forest, 2)improve both tree species diversity and age class diversity, and 3)focus growth on more valuable timber species such as red oak. These harvests will result in more food for mammals and birds while protecting important nesting, perching and den trees. The income from the harvests can be put toward the goal of improved recreational opportunity by creating the proposed hiking/skiing trail loop.

Owner(s) Joseph and Catherine Sample

Town(s) Shutesbury

STAND DESCRIPTIONS

OBJ	STD NO	TYPE	AC	MSD OR SIZE-CLASS	BA/AC	VOL/AC	SITE INDEX
CH61	1	HK	6.0	12.0	135sqft	7MBF 15 cords	58 (HK)

This is a stand of predominantly small sawlog size hemlock (HK), ranging from fair to good quality. Associated species include scattered white pine, yellow birch, and red maple. The topography is relatively flat with a seasonally high water table. The site is rocky with poorly drained but moderately productive forest soils (Ridgebury very stony fine sandy loam). Access for harvesting would be difficult during the spring, but would not be a problem during dry or frozen conditions. Regeneration is sparse due to the heavy crown cover and includes scattered hemlock, red maple and yellow birch saplings. There is evidence of past cutting in this stand. The stone wall on the west side indicates past agricultural use. The stream and spring may have served as a watering spot for sheep or cattle, but the spring was never developed.

The dense hemlock overstory provides thermal and bedding cover for deer. Deer and grouse also feed on the hemlock needles and seeds. There is a seasonal spring near the stream in the center of the stand. Both of these areas provide excellent habitat for a variety of wildlife species. The early succulent growth around the seasonal spring provides critical spring forage for turkeys.

Although the current health is good, this stand is susceptible to invasion by the hemlock wooly adelgid. This introduced insect feeds on hemlock trees by attaching to small branches and feeding through their sucking mouthparts. Infestation usually results in the death of trees within three to five years. Control is difficult in a woodland setting and the best hope lies in maintaining healthy hemlocks that are better able to resist damage.

The desired future condition of this stand is a mixed hemlock hardwood stand with increased vigor. Emphasis will be placed on maintaining the wildlife benefits and water quality of this stand while trying to increase tree species diversity.

CH61	2	HH	13.0	8.0	97sqft	2.5MBF 10 cords	60 (RO)
------	---	----	------	-----	--------	--------------------	---------

This stand is composed of a mixture of hemlock, red maple and red oak (HH). Also present are white pine, yellow and white birch. The majority of trees in this stand are in the pole (5-10") and small sawlog size classes. The soil is a well drained loamy sand (Scituate, extremely stony, fine sandy loam) and is capable of producing good quality upland oak, northern hardwoods, and white pine timber. The present quality of trees in this stand range from poor to excellent. Regeneration includes seedlings and saplings of red maple, red oak, yellow birch and white pine. In some areas regeneration is hampered by clumps of mountain laurel and witch-hazel.

The variety of tree species provides excellent vertical and species diversity to support interior forest wildlife species. The relatively young age of this stand, supports a different group of wildlife species than the rest of the property. Common animals using the area include deer, fox, turkey, grouse, songbirds, hawks, and upland reptiles and amphibians. The intermittent stream that flows into stand one provides a source of water and breeding habitat for amphibians.

OBJECTIVE CODE: CH61 = stands classified under CH61/61A STEW= stands not classified under CH61/61A
 STD= stand AC= acre MSD= mean stand diameter MBF= thousand board feet BA= basal area VOL= volume

Owner(s) Joseph and Catherine Sample Town(s) Shutesbury

STAND DESCRIPTIONS

OBJ	STD NO	TYPE	AC	MSD OR SIZE-CLASS	BA/AC	VOL/AC	SITE INDEX
-----	--------	------	----	-------------------	-------	--------	------------

The driveway to the house runs through this stand and crosses the stream over a culvert. Some erosion at the crossing could be prevented by stabilizing the side slopes with vegetation. Using a fast growing conservation mix and mulching the area will help establish the needed vegetation. No other cultural resources were found in this area.

The hemlocks in this stand are also susceptible to the previously mentioned adelgid. The desired future condition of this stand is a mixed hardwood stand with well spaced trees that have reduced competition. Due to their value for wildlife and timber production, oak and pine will be favored over birch, hemlock and maple.

CH61	3	OH	16.5	13.0	108sqft	9.2MBF 8.7 cords	60 (RO)
------	---	----	------	------	---------	---------------------	---------

This stand is composed of pole and sawlog sized hardwoods. The majority of the stand consists of red oak, black oak, white oak, and red maple with some yellow and white birch (OH). The timber trees in this stand are of good to fair quality. The soils in this stand, similar to stand two, are well drained and slightly stony. An area of ledge creates a unique feature in the south central part of the stand. Regeneration in this stand is mainly red maple and birch saplings. These are well distributed and seem to be a result of a harvest that selectively removed the most valuable oak and pine approximately 15 years ago. There are also quite a few oak seedlings, especially in the more open parts of the stand.

Although the majority of the trees are hardwoods, there also is a component of overmature white pine trees in the overstory. These trees were left after harvesting and are known as wolf trees. A wolf tree is a large heavy-branched tree that is usually larger and older than the surrounding forest. These trees are important nest and perch sites, and add aesthetic diversity to the area. Several of these trees have hollow cavities that may be used by song birds, owls, flying squirrels, porcupines, and raccoons.

The stand contains a well preserved stone wall and cellar hole near the south boundary. The size of the cellar hole indicates that this was a smaller house. Some artifacts may be found in an old dumpsite behind the house.

The desired future condition is a mixed aged stand with healthy regeneration and an overstory of seed producing oak, birch, and pine. The stand has the capacity to grow high quality hardwoods. Red oak will be the favored species, due to its consistent timber value and its ability to support a wide range of wildlife.

OBJECTIVE CODE: CH61 = stands classified under CH61/61A STEW= stands not classified under CH61/61A
STD= stand AC= acre MSD= mean stand diameter MBF= thousand board feet BA= basal area VOL= volume

Owner(s) Joseph and Catherine Sample

MANAGEMENT PRACTICES

to be done within next 10 years

OBJ	STD NO	TYPE	SILVICULTURAL PRESCRIPTION	AC	TO BE REMOVED		TIMING
					BA/AC	TOT VOL	

CH61	1	HK	Commercial thinning	6	30	35 cords	2002
------	---	----	---------------------	---	----	----------	------

The primary objective of this treatment is to improve the health and vigor of the hemlock trees. The secondary objective is to increase the amount of mixed hardwood regeneration. Suppressed trees and those with low vigor will be selected for removal. These trees can be identified by their smaller crowns, poor growth form and lower position in the canopy. By reducing the competition the remaining trees will be more vigorous and better able to resist any possible wooly adelgid infestation. Although this treatment is not designed to regenerate the stand, the increased sunlight is expected to result in some regeneration of shade tolerant species. This regeneration may become critical if the stand is eventually damaged by the adelgid. This treatment will generate hemlock and hardwood pulp as well as hardwood firewood. Entry should be limited to dry or frozen conditions to minimize any negative impacts to the soils and reduce damage to the root systems of the remaining trees.

CH61	2	HH	Crop Tree Management	13	20	40 cords	2002
------	---	----	----------------------	----	----	----------	------

Treatment in this stand will be focused on improving the quality of the timber trees and maintaining the diversity of the stand. The stand contains well-distributed and desirable oak, white pine, and yellow birch. A crop tree release is recommended to reduce the competition and improve the vigor of the desirable trees. These desirable trees will be identified to meet the landowner's goals of timber production, wildlife habitat, and aesthetics. This will include valuable timber trees, mast producing trees, den and roost trees or trees that are unique and/or aesthetically desirable. After these crop trees (mostly dominant and codominant individuals) are identified, a three-side crown release will be applied. This will remove poorer to fair quality intermediate trees of all species. The products generated will be cordwood and a small amount of small diameter sawlogs. The remaining stand will consist of well spaced dominant and codominant oak, maple, birch and hemlock trees.

CH61	3	OH	Shelterwood	16.5	30	60MBF 70 cords	2005
------	---	----	-------------	------	----	-------------------	------

Unlike the previous thinning recommendations, this treatment will focus on establishing mixed hardwood regeneration. At present the stand is regenerating with shade tolerant red maple and birch. The landowner would like to encourage more high quality hardwood regeneration. This can be accomplished by using a shelterwood harvest that will allow more sunlight to reach the ground and will also stimulate seed producing trees of the desired species. The shelterwood harvest will remove a mix of sawlogs and cordwood. The concentration will be on removing trees from around desirable seed producing trees with well-formed crowns. The remaining overstory will consist of dominant seed producing oak and yellow birch, and a few mature white pine. The resulting regeneration is expected to consist of these species as well as the previously established white pine and red maple seedlings. This first cut will stimulate these seed producers and will be followed up by a second harvest designed to promote more regeneration. Throughout the stand small openings of 1/4 to 1/3 ac. will be created to release existing oak seedlings. The resulting new growth will create browse for mammals and a foraging area for birds.

OBJECTIVE CODE: CH61 = Forest Products (for Ch. 61/61A) STEW= Stewardship Program practices
 STD= stand Type= Forest type AC= acre MBF= thousand board feet BA= basal area VOL= volume

Owner(s) Joseph and Catherine Sample Town(s) Shutesbury

MANAGEMENT PRACTICES
to be done within next 10 years

OBJ	STD NO	TYPE	SILVICULTURAL PRESCRIPTION	AC	TO BE REMOVED		TIMING
					BA/AC	TOT VOL	

CH61 All All Paint and Blaze Property Boundaries NA NA NA 2002

All Boundaries will be painted and blazed in the first year of certification. Boundary marking will be examined and renewed if necessary in five years

FOR STEWARDSHIP PROGRAM ONLY

STEW All All Hiking/Skiing Trail

Several proposed trails totaling 3,800 ft. are shown on the stand map to complete loops to the existing road system. If the trail system were constructed prior to logging, the landowner can locate the trails and design scenic areas and vistas to be protected during logging. The alternative is to use the skid roads created during logging as the basis for the trail system. This is generally a lower cost option, but the landowner has less control over location and aesthetics, unless the trail locations are carefully selected prior to and protected during logging. The ledge feature may be an interesting destination to consider in locating the trail. Landowner will review options and explore feasibility of obtaining SIP cost sharing to create the trail network.

OBJECTIVE CODE: CH61 = Forest Products (for Ch. 61/61A) STEW= Stewardship Program practices
STD= stand Type= Forest type AC= acre MBF= thousand board feet BA= basal area VOL= volume

Owner(s) Joseph and Catherine Sample Town(s) Shutesbury

CH. 61/61A Management Plan I attest that I am familiar with and will be bound by all applicable Federal, State, and Local environmental laws and /or rules and regulations of the Department of Environmental Management. I further understand that in the event that I convey all or any portion of this land during the period of classification, I am under obligation to notify the grantee(s) of all obligations of this plan which become his/hers to perform and will notify the Department of Environmental Management of said change of ownership.

Forest Stewardship Plan. I pledge to abide by the management provisions of this Stewardship Management Plan for a period of at least ten years, following approval. I understand that in the event that I convey all or a portion of the land described in this plan during the period of the plan, I will notify the Department of Environmental Management of this change in ownership.

Signed under the pains of perjury:

Owner(s) _____ Date _____
_____ Date _____

I attest that I have prepared this plan in good faith to reflect the landowner's interest.

Plan Preparer _____ Date _____

I attest that the plan satisfactorily meets the requirements of CH61/61A and/or the Forest Stewardship Program.

Approved, Service Forester _____ Date _____

Approved, Regional Supervisor _____ Date _____

In the event of a change of ownership of all or part of the property, the new owner must file an amended Ch. 61/61A plan <u>within 90 days</u> from the transfer of title to insure continuation of Ch. 61/61A classification.
--

Owner(s) Joseph and Catherine Sample Town(s) Shutesbury