

Land Owner Forest Stewardship Plan
[REDACTED] LLC
September 2003

Owner:

[REDACTED] LLC
[REDACTED] Road
[REDACTED], New York
[REDACTED] New York [REDACTED]

Mailing Address:

[REDACTED]
[REDACTED] New York [REDACTED]

Phone:

[REDACTED]

Current owner purchased property April 2002.

Plan Preparers:

[REDACTED], Member LLC
[REDACTED], DEC Forester [REDACTED], New York

Plan Preparation Date: August 2003

Forest Stewardship Acres: 110 acres, total farm 220 acres

Landowners goals:

1. To develop a showplace sugarbush,
2. Demonstrate that sugarbush management and saw log and veneer crop tree management can coexist in the same forests,
3. Develop the wood lots into sustainable uneven age forest classes if possible and utilize the wood lots as demonstration and test plots. BMP's will be used as appropriate.
4. Plant cloned high sugar content sugar maple trees,
5. Reduce forest ownership expenses
6. Develop agroforestry gardens of forest grown crops such as leeks and ginseng.
7. Tree specie diversity is desired.
8. Sustainable saw timber and maple sap production is a priority over wild life needs but not to the exclusion of wildlife.
9. The existing woods roads provide for most recreation needs. Additional trails for single track mountain biking and down hill skiing for private use will be added.

General Property Description:

Tax ID# [REDACTED]

SWISS Code [REDACTED]

GPS/GIS Coordinates [REDACTED]

Property is located at [REDACTED] Hollow Road. Generally 110 acres are located on the West Side and 110 acres are located on the East Side of [REDACTED] Hollow Road. Of the 220 acres approximately 110 acres are wooded and 110 acres are working cropland. All cropland is hill top, typical of the local landscape. Cropland is currently hay, oats, wheat, and corn and is actively managed for production.

This land is the headwaters of a [REDACTED] River tributary. The elevation at the lowest point is 1800 feet. The highest elevation is 2250 feet. The forests have generally western exposures. Soils are very porous with little run off during heavy rainstorms. Water springs are prevalent but intermittent depending on time of year and rainfall.

Endangered Species:

A review of the state's Natural Heritage Program geographic data suggests that this stewardship property is within the range of an occurrence of northern wild comfrey (*Cynoglossum virginiana* var. *boreale*), a state listed endangered species. This perennial herb is generally found in rich woods and thickets, often associated with hemlock. There are however no hemlock trees on this property. No rare and endangered species have been observed on the property."

Classified Streams and wetlands:

There are no classified streams or protected wetlands contained on the property.

Forest Types:

Forest types are northern hardwoods with good specie diversity. Species include sugar maple, red oak, beech, white ash, black cherry, white pine, black birch and basswood. The forest stands are various stages of succession. Some woods have never been pastured, some have been pastured and some are pasture succession. The previous owners had managed the forest by high grading, clear cutting and allowing succession to "just happen".

Soils:

Referenced attached soils map for tax purposes from USDA FSA.

Lk Lordstown

Ln Lordstown

The Lordstown series consists of moderately deep, well drained soils formed till and cryoturbated material derived from siltstone and sandstone on bedrock controlled landforms of glaciated dissected plateaus. They are nearly level to very steep soils on hillsides and hilltops in glaciated bedrock controlled uplands. Slope ranges from 0 to 90 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 39 inches.

RANGE IN CHARACTERISTICS: Thickness of solum and depth to bedrock ranges from 20 to 40 inches. Rock fragments are dominantly flat angular fragments and flagstones and occupy 10 to 35 percent of the volume in the Ap horizon and 20 to 60 percent in the B and C horizons, but the weighted average for the control section is less than 35 percent. Reaction is very strongly acid through neutral in the surface layer, very strongly acid through moderately acid in the subsoil and strongly acid or moderately acid in the substratum.

GEOGRAPHIC SETTING: Lordstown soils are nearly level to very steep soils with slopes ranging from 0 to 90 percent. These soils formed in till and cryoturbated material derived from siltstone and sandstone on bedrock controlled landforms of glaciated dissected plateaus. Mean annual air temperature ranges from 45 to 50 degrees F., mean annual precipitation ranges from 32 to 45 inches, and the mean frost-free season ranges from 110 to 145 days. Elevation ranges from 800 to 1800 feet above sea level.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the very deep well drained [Bath](#) soils, the moderately deep [Mardin](#) soils, and the somewhat poorly drained [Volusia](#) soils that occupy associated deep deposits of till. Shallow somewhat excessively drained [Arnot](#) soils, and somewhat poorly drained [Tuller](#) soils, are closely associated on landforms where the soil mantle is thinner over bedrock.

DRAINAGE AND PERMEABILITY: Well drained. The potential for surface runoff is low to very high. Permeability is moderate throughout the soil.

USE AND VEGETATION: Large areas on the steep and very steep landforms are in cut-over forest, composed of American beech, oaks, sugar maple and associated species. Some cleared areas are in pasture

or are used for hay, but mostly they are idle or have reverted to woodland or brush. A limited acreage is in corn and small grains. Potatoes are grown locally on undulating to sloping areas. Some areas have been reforested, mainly with red pine.

Md Mardin

The Mardin series consists of very deep, moderately well drained soils formed in loamy till. They are in glaciated uplands, mostly on broad hilltops, shoulder slopes and backslopes. The Mardin soils have a dense fragipan that starts at a depth of 14 to 26 inches below the soil surface. Slope ranges from 0 to 50 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 38 inches.

RANGE IN CHARACTERISTICS: Solum thickness ranges from 38 to 72 inches. Depth to the top of the fragipan ranges from 14 to 26 inches. Depth to bedrock ranges from 60 inches to 20 feet or more. There is 60 percent or more silt plus very fine sand in the fine-earth fraction above the fragipan. Rock fragments are dominantly channers, flagstones, or gravel, and range from 5 to 35 percent in the horizons above the fragipan, and commonly from 15 to 60 percent in the Bx and C horizons. Some pedons do not have rock fragments in layers below a depth of 40 inches.

The Ap horizon has hue of 7.5YR through 2.5Y, value of 3 or 4, and chroma of 2 through 4. Texture of the fine-earth fraction is silt loam. Structure is weak or moderate granular. Consistence is friable or very friable. Some pedons in uncultivated areas have a dark A horizon 1 to 5 inches thick. Reaction ranges from extremely acid through moderately acid, unless limed.

The Bw horizon has hue of 7.5YR through 2.5Y, value of 4 through 6, and chroma of 3 through 8. Texture of the fine-earth fraction is loam or silt loam. Structure is very fine through medium subangular blocky or granular. Consistence is very friable through firm. Reaction ranges from extremely acid through moderately acid, unless limed.

The E horizon has hue of 10YR or 2.5Y, value of 5 through 7, and chroma of 2 or 3. Texture of the fine-earth fraction is loam or silt loam. Structure is subangular blocky or platy. Consistence is friable or firm. Reaction ranges from extremely acid through moderately acid. The E or Bw horizons have redoximorphic features in some part above 20 inches, but are not distinct or prominent within 12 inches.

The Bx horizon has hue of 7.5YR through 5Y, value of 3 through 5, and chroma of 2 through 4 with faint to prominent redoximorphic features. Texture of the fine-earth fraction is loam or silt loam. The Bx horizon has weak through strong very coarse prismatic structure. Consistence is firm or very firm. Reaction ranges from very strongly acid through slightly acid. Some pedons have a BC or a CB horizon.

The C horizon has hue of 7.5YR through 5Y, value of 3 through 5, and chroma of 2 through 4. Textures are similar to the Bx horizon except silty layers that do not have rock fragments are in some pedons below a depth of 40 inches. The C horizon is massive, or has weak plate-like divisions. Consistence is firm or very firm. Reaction ranges from strongly acid through neutral in the upper part, but can range to slightly alkaline below a depth of 60 inches in some pedons. Some pedons lack C horizons.

GEOGRAPHIC SETTING: Mardin soils are nearly level to very steep with slopes ranging from 0 to 50 percent. These soils developed in till, and are on slightly convex parts of dissected glaciated uplands. Mean annual temperature ranges from 45 to 52 degrees F. Mean annual precipitation ranges from 30 to 45 inches, and mean annual frost-free season ranges from 120 to 160 days. Elevation ranges from 800 to 1800 feet above sea level.

GEOGRAPHICALLY ASSOCIATED SOILS: [Bath](#) soils are well drained and occupy higher, more convex parts of adjacent landscapes. Somewhat poorly drained [Volusia](#) soils and poorly drained [Chippewa](#) soils are drainage associates, and occur on footslopes, toeslopes, level hill tops and in depressions. [Arnot](#), [Greene](#), [Lordstown](#), [Nassau](#), and [Tuller](#) soils are in nearby areas where depth to bedrock is less than 40 inches. [Valois](#) soils do not have a fragipan and are commonly on nearby lateral and end moraines. [Alton](#), [Chenango](#), [Hoosic](#), [Howard](#), and [Otisville](#) soils are on nearby glaciofluvial terraces.

DRAINAGE AND PERMEABILITY: Moderately well drained. The potential for surface runoff is medium to high. Permeability is moderate in the surface layer, subsurface layer, and upper part of the subsoil; and slow or very slow in the lower part of the subsoil (fragipan) and the substratum.

USE AND VEGETATION: Most areas have been cleared and are used for producing silage corn, small grains, hay, and pasture. A significant acreage is idle or has reverting to brush and trees. Woodlots contain sugar maple, beech, white ash, black cherry, hemlock, and occasionally red oak and white pine.

Wf Valois

Wg Valois

The Valois series consists of very deep, well drained soils on nearly level to steep lateral moraines along lower valley sides. They formed in glacial till dominated by sandstone, siltstone, or shale. Slopes range from 0 to 60 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 38 inches.

RANGE IN CHARACTERISTICS: Thickness of solum ranges from 30 to 70 inches. Depth to bedrock is greater than 60 inches. Rock fragments range from 5 to 35 percent by volume above a depth of 20 inches, and from 15 to 35 percent in the solum below 20 inches. Contrasting layers containing 35 to 70 percent rock fragments are common below 40 inches. Rock fragments are mostly fine gravel, gravel and cobbles. The Ap horizon has hue of 7.5YR through 2.5Y, value of 2 through 5, and chroma of 2 or 3. Texture is sandy loam, fine sandy loam, very fine sandy loam, loam or silt loam in the fine-earth fraction. Structure is weak or moderate granular. Reaction ranges from extremely acid to moderately acid, unless limed. In wooded areas the soil has a A and/or O horizon with value ranging as low as 2, chroma ranging as low as 1 and in some pedons with neutral hue.

The E horizon, if present, has hue of 7.5YR or 10 YR, value of 5 to 7 and chroma of 2,3, or 4. Texture of the fine earth fraction is sandy loam, fine sandy loam, very fine sandy loam, or loam. Structure is weak or moderate granular or subangular blocky. Reaction ranges from extremely acid to moderately acid.

The B horizon has hue of 7.5YR through 2.5Y, value of 3 through 5 and chroma of 3 through 6. Texture ranges from sandy loam through silt loam in the fine-earth fraction. Structure is weak or moderate granular or subangular blocky, and consistence is friable or very friable. Below a depth ranging from 20 to 40 inches and including a thickness ranging from as little as 6 to as much as 36 inches, some pedons have slight evidence of clay segregation as linings in pores and patchy clay films on pebbles, and layers or bodies of darker color and greater coherence than described for the B horizon. This part is not an argillic horizon. Soil acidity increases as depth increases within most such layers, and it is less than 6.0 above a depth of 30 inches. Some pedons have a BC horizon.

The C or 2C horizon has hue that ranges from 2.5Y through 7.5YR, value of 3 through 5 and chroma of 2 through 6. Texture is sandy loam, fine sandy loam or loam, but pockets or lens range from loamy sand to silty clay loam in the fine-earth fraction. Structure is granular or platy or the horizon is massive.

Consistence is very friable to firm. Some pedons may have redoximorphic features. Reaction ranges from very strongly acid to neutral at depths above 6 feet. Weak stratification is common in most pedons.

GEOGRAPHIC SETTING: Valois soils are typically on complex slopes characteristic of end or lateral moraines. Some landforms are conglutinate covered or till covered valley terraces. Slopes range from 0 to 60 percent. They formed in glacial till dominated by material from sandstone and siltstone or shale with some slate or phyllite and typically have a small component of material from calcareous rocks. The till commonly is calcareous at depths greater than 12 feet. Fluvial sorting in the substratum commonly results in weak stratification. Mean annual temperature ranges from 46 to 50 degrees F., mean annual precipitation ranges from 30 to 45 inches, and mean annual frost-free days ranges from 120 to 180 days. Elevation ranges from 600 to 1600 feet above sea level.

GEOGRAPHICALLY ASSOCIATED SOILS: These are most commonly the [Bath](#), [Langford](#), and [Mardin](#) soils that have fragipans and formed in nearby upland ground moraines. [Chenango](#) and [Howard](#) soils are on adjacent gravelly outwash terraces, and [Arkport](#) and [Dunkirk](#) soils are in nearby lake sediment deposits.

DRAINAGE AND PERMEABILITY: Well drained. The potential for surface runoff is negligible to very high. Permeability is moderate to rapid. The rooting zone is rarely saturated during the growing season.

USE AND VEGETATION: Most nearly level to rolling areas are cleared and used for growing hay, pasture, corn or small grains. Woodlots include sugar maple, American beech, red oak, and similar hardwoods.

Narrative Description and Discussion of Interrelationship of Resources:

The diversity of slopes, exposures, grades, open fields and existing woody vegetation, previous management practices and the adjacent landscapes provide sufficient area to achieve landowners goals.

A healthy forest is more likely to be compatible with forest stewardship plans than an unhealthy forest. Just like people, healthy forests are better able to resist damaging agents than unhealthy ones.

Agents that cause damage to individual trees include insects, diseases and wildlife pests, along with adverse weather events and undesirable activities by people, such as wounding of trees and air pollution. Types of damage range from reduced visual quality, deformity, growth loss, or wood destruction, to dying back of branches or premature mortality. The extent of damage ranges from a few trees to whole forest stands. When a few trees are affected the forest remains healthy, but when most of the trees are damaged the forest is at risk.

Most insects, diseases, wildlife and weather events are part of a set of natural forces changing the forest. Some of these are beneficial or do not cause much damage. Others are extensive and cause severe damage (for example, insect outbreaks). Maintaining the health of the forest to help prevent serious damage is something to keep in mind. Preventive care will help ensure that the forest provides the desired benefits.

Stand #2 (reference stand map, see below) had a commercial harvest and post harvest TSI in the fall of 2002. In April 2003 a severe ice accumulation in this stand was experienced. Due to the 2002 management activities little damage was sustained by this stand.

Maintaining the health of the forest is important to help prevent damaging problems from interfering with the benefits received from the forest. The following general guidelines to maintain forest health will be considered:

1. Consider that some amount of damage from disease, wildlife pest, insects, and weather is normal and can be beneficial to the overall health of the forest.
2. Remove excessive numbers of over mature, weak or damaged trees that are most likely to be affected by damaging agents. However, consider that some of these trees are beneficial to certain wildlife species.
3. Encourage mixtures of tree species to minimize damage from problems that attack specific types trees.
4. Discourage tree species that are not well adapted for the climate and soil properties in the area.
5. Maintain a density of trees that provides them with adequate growing space.
6. Avoid wounding the trees and compacting the soil during treatments and recreational activities.
7. Prevent livestock from grazing in the woods.
8. Avoid implementing treatments during or soon after events like droughts or outbreaks of insects or diseases.
9. Stay informed of pest alerts and current problems.
10. Monitor the forest frequently for symptoms of damaging agents.
11. Consider utilizing pest suppression programs recommended by the state or county forestry agency.
12. Support regulations geared toward reducing the spread of non-native pests, and reducing levels of air pollution.
13. Follow quarantine regulations for specific pests and their host plants.
14. Salvage dead or damaged trees after a problem occurs.

Stands number 5 and 11 contain significant quantities of American beech. The beech stands are infested with the beech bark disease. There are a few non-diseased beech trees with in these stands. Any thinning and commercial harvest will favor the diseased trees. The non-diseased beech trees will become crop trees.

Wildlife Habitat:

The potential for wildlife species is linked to the combination of environmental factors, such as food, water, cover, and their spatial distribution, that a given species needs to survive and reproduce in a given area. Each species has unique habitat requirements. Food sources include fruit and nuts, foliage, wood, insects and other animals. Cover includes hiding places that provide animals with protection from weather, predators, or other dangers. Specialized types of cover include breeding cover, escape cover, resting cover, and travel cover. Sources of water are streams, ponds, temporary pools and springs.

While wildlife is valued by the landowner, there are no specific plans to manage the forests for wildlife habitat. Habitat management will be incidental to sugarbush and timber management activities. The 110 acres of actively worked cropland provides significant food for birds, deer, turkey and bear. Due to the deer density which is higher than the carrying capacity of the land antlerless deer permits are utilized.

To preserve certain wildlife values arising from the forest the following will be implemented:

1) Den and Cavity Tree Preservation - Many species of birds and mammals require cavities in dead or living trees for nesting or shelter. The number of these trees can be a limiting factor in the number of bird and wildlife species found on the property. Timber harvesting will preserve some of these (1-4 per acre).

2) Hard & Soft Mast Production - Trees and shrubs that produce fruits or nuts are valuable to many species of wildlife as a source of food. The retention of some of these species during harvesting and timber stand improvement treatments can be done with minimal effect on overall timber production goals.

3) Brush Piles - Not all logging debris will be allowed to leave the site. Limbs and logging debris is important for nutrient cycling and the protection of new regeneration, but these piles can also be used as cover for small mammals, especially snowshoe hare, birds and reptiles and amphibians.

During the 2002 harvesting of stand #2 at least two snags per acre were retained. Two undesirable saw timber or maple sap producing trees were girdled per acre.

Fisheries Habitat:

The management practices that occur on individual parcels have the potential to affect fisheries and water quality on other properties in the watershed. Utilization of Best Management Practices can prevent a negative watershed and fisheries impact. This property does not contain fisheries habitat.

By applying the Timber Harvesting Guidelines for New York, and following Best Management Practices (BMP) soil and water resources can be protected.

Narrative description of Forest Stands/Management Units and Planned Activities:

See the aerial photo below for reference to stands and locations and the summary table, at the end of this document, that details the current status and future plans for each stand.

STAND 1 – This is good stand of pasture succession sugar maple. The stand is almost monoculture. This area is primarily managed for saw timber with the possibility maple sap production in the future. The site is not easily accessible for sap collection. A TSI treatment is scheduled for 2005.

STAND 2 - This is a high quality Northern Hardwoods stand. It is dominated by sugar maple, black cherry, white ash, northern red oak and American basswood. This area is primarily managed for maple syrup production with the secondary goal of saw timber production. The stand was harvested in 2002 with a follow-up TSI treatment to remove culls and other undesirables that could not be effectively marketed as part of the timber sale. Another commercial harvest is planned for 2012.

STAND 3 – This stand was harvested for saw timber in 2002. A post harvest TSI is planned for 2004. Significant amounts of maple sap is yielded from this stand. The site quality is considered excellent. Tree species include sugar maple, white ash, black cherry, black birch and some beach. This stand has ginseng and goldenseal planted. Significant quantities of spring leaks are present. This stand will also be expanded for maple sap collection in 2003. A three acre TSI of the expanded sugarbush was conducted in 2003.

STAND 4 - This stand was clear cut about 10 years ago. A few sugar maple and cherry were retained for seed trees. Unfortunately the majority of the subsequent forest is beech and stripped maple. The few desired sugar maple and black cherry trees were crop tree released in 2002. Significant efforts are required to regenerate this stand into desirable tree species. Help is sought for 2004.

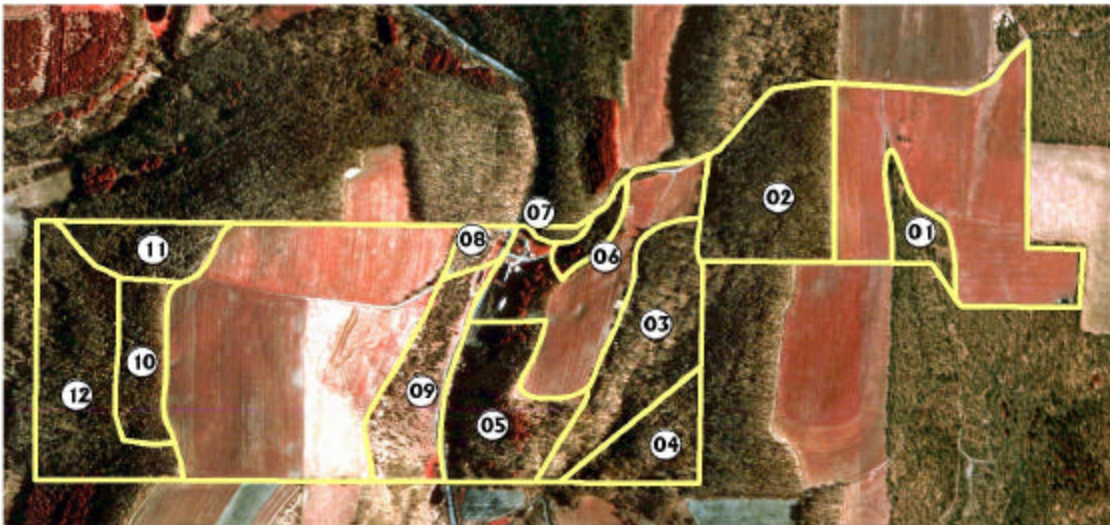
STAND 5 - This stand is dominated by American beech with some soft maple and white pine. The stand is infested with beach bark disease. The plan is to manage the beech to promote quality trees. A few beech

trees do not show the signs of beech bark disease. Harvest will be for fire wood and/or scrag wood in 2005. This stand will be utilized for down hill glade skiing and single track mountain biking.

STANDS 6, 7, 8 - These stands are small and are predominately sugar maple and a few black cherry and white ash. The sugar maple is overstocked and needs TSI. TSI to occur in 2004. The stands will be developed for use as sugarbush stands and for saw timber.

STAND 9 – This stand is a thicket of thorn apple, pear, apple and now some sugar maple succession. Some portions are open land. This stand has an eastern exposure. The land was pasture about 10 years ago. The plan is to plant high sugar content sugar maples on 30 foot centers as they become available. The stand is expected to be developed into a show place sugarbush. The sugar maples are planned to be tapped in 2030. Where sugar maples are now regenerating they will be left alone until they reach pole size. At that time the stand will be thinned based on sugar content of the sap for each tree.

Contiguous with this stand is five acres of open grass land to the west. This open land will be included in the stand 9 high sugar content sugar maple tree planting efforts.



Forest Stand Map

110 stewardship acres

New York State Department of Environmental Conservation



0 660 1320 Feet



1:15840

Map printed 8/21/2003



Planting to occur 2004 through 2008. Limited sugar maple sweet tree planting (25 trees) was done in 2002.

STAND 10 - This stand is pasture regeneration. Desirable tree species include sugar maple and black birch. Crop tree selection TSI will be performed in 2005. The stand is not thought to be a very productive stand due to extensive pasturing. One road requires the implementation of broad base dips.

STAND 11 - This stand is similar to stand 5 containing predominately mature American beach. This stand too is contaminated with the beach bark disease. Forest treatments timing will be the same as stand 5.

STAND 12 – This stand is a combination of sugar maple, red oak, black cherry, black birch and white ash all of saw timber size. Previous owners have high graded it. The forest will be developed into a quality sustainable saw timber stand. A 2004 salvage harvest and a 2004 post harvest TSI is planned. Forest road broad base dips are required to be implemented as part of the salvage harvest. It is expected this stand will produce a quality timber sale every 15 years

Other:

During the fall of 2003 the entire perimeter of the 220 acre farm will be marked with boundary paint.

As owners, we agree that this forest stewardship plan reflects our goals and objectives for the forest management of this property.

Member 1 September 2003

Member 2 September 2003

Member 3 September 2003

Summary Table of Stands for Sugar Bush Plan

Stand #	Acres	Forest Type	Dominant Species	Size Class	Relative Stocking (under, well, over)	Site Quality	Timber Quality	Stand History	Stand Management Objectives	Management Activity	BMPs Required	Date of Activity	Priority, 1=high, 5 = low
1	5	Northern hardwood	Sugar maple	Pole	Over	Good	Good	Successional pasture	Timber and maple syrup	TSI	None	2003	2
2	22	Northern hardwood	Sugar maple, black cherry, White ash Red oak, Basswood	Pole, small sawtimber	Well	Excellent	Excellent	High-graded, no evidence of pasturing, commercial harvest 2002, TIS 2002, basal area 90 in 2003	Timber and maple syrup	Commercial harvest	None	2012	1
3	16	Northern hardwood	Sugar maple White ash Beech	Sawtimber and pole	Well	Excellent	Good	High graded, no evidence of pasturing	Timber and maple syrup	3 acre TSI 2003	None	2004	2
4	9	Northern hardwood	Sugar maple Stripped maple Beech	Sawtimber and brush	Under	Good	Fair	Clear cut approx. 1992	Regenerate to sugar maple	Clear areas of striped maple and beech for hardwood regeneration	None	2004	3
5	10	Northern hardwood	Beech	Sawtimber	Well	Good	Fair beech disease	None	Healthy beech	TSI for hardwood regeneration, harvest diseased trees	None	2005	4
6	3	Northern hardwood	Sugar maple Black cherry	Pole	Over	Good	Good	Pastured, partial TSI 2002	Timber and Maple syrup	TSI	None	2004	2
7	1	Northern hardwoods	Sugar maple black cherry	Pole	Over	Good	Good	Pastured	Timber and maple syrup	TSI	None	2004	2
8	2	Northern hardwood	Sugar maple	Pole	Over	Good	Good	Pastured	Timber and maple syrup	TSI	None	2004	2
9	8	Open	Sugar maple Thorn apple Pear, Apple White ash	Brush	Under/over	Good	None	Pastured	High sugar content maple and tree orchard	Plant sugar maple trees, maintain apple and pear for wildlife	None	2004 – 2008	2
10	4	Northern hardwood	Sugar maple Black birch	Brush	Over	Good	None	Pastured	Timber, sugar maple, black birch	TSI	Broad based dips	2005	3
11	5	Northern hardwood	Beech	Sawtimber	Well	Good	Poor	High graded, no evidence of pasture	Healthy beech	Harvest diseased trees, promote healthy trees	None	2005	4
12	25	Northern hardwood	Sugar maple Black cherry White ash Black birch, Red oak	Sawtimber	Well	Excellent	Good	High graded not pastured	Timber	Salvage harvest, post harvest TSI	Broad based dips	2004	1