New York State Department of Environmental Conservation
Division of Lands and Forests, Region 7
Forestry Office - Salmon River Fish Hatchery
2133 County Route 22 . Altmar, NY 13302
Phone: (315) 298-7467 • **FAX:** (315) 298-6960
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

FOREST STEWARDSHIP PLAN

DATE: December 12, 2006

OWNER: Town of Skaneateles Reynolds Property, Benson Rd.

AD0DRESS: 24 Jordan St. Skaneateles, NY 13152

PHONE NUMBER: (315) 685-6726

PROPERTY:

Total Acres: 125

Stewardship Acres (Forested Acres): 117

Town: Skaneateles

County: ~~Oswego~~ ONONDAGA

Aerial Photo: ARY-1H-37, B-12 USGS: Owasco

*For property location please refer to map.

LANDOWNER PRIMARY GOAL STATEMENT: The Town wishes to manage this property to maintain its present character, to improve public recreation opportunities, wildlife habitat, and long-term sustained yield timber management. In general, the Town wishes to practice good stewardship of the land and natural resources on this property.

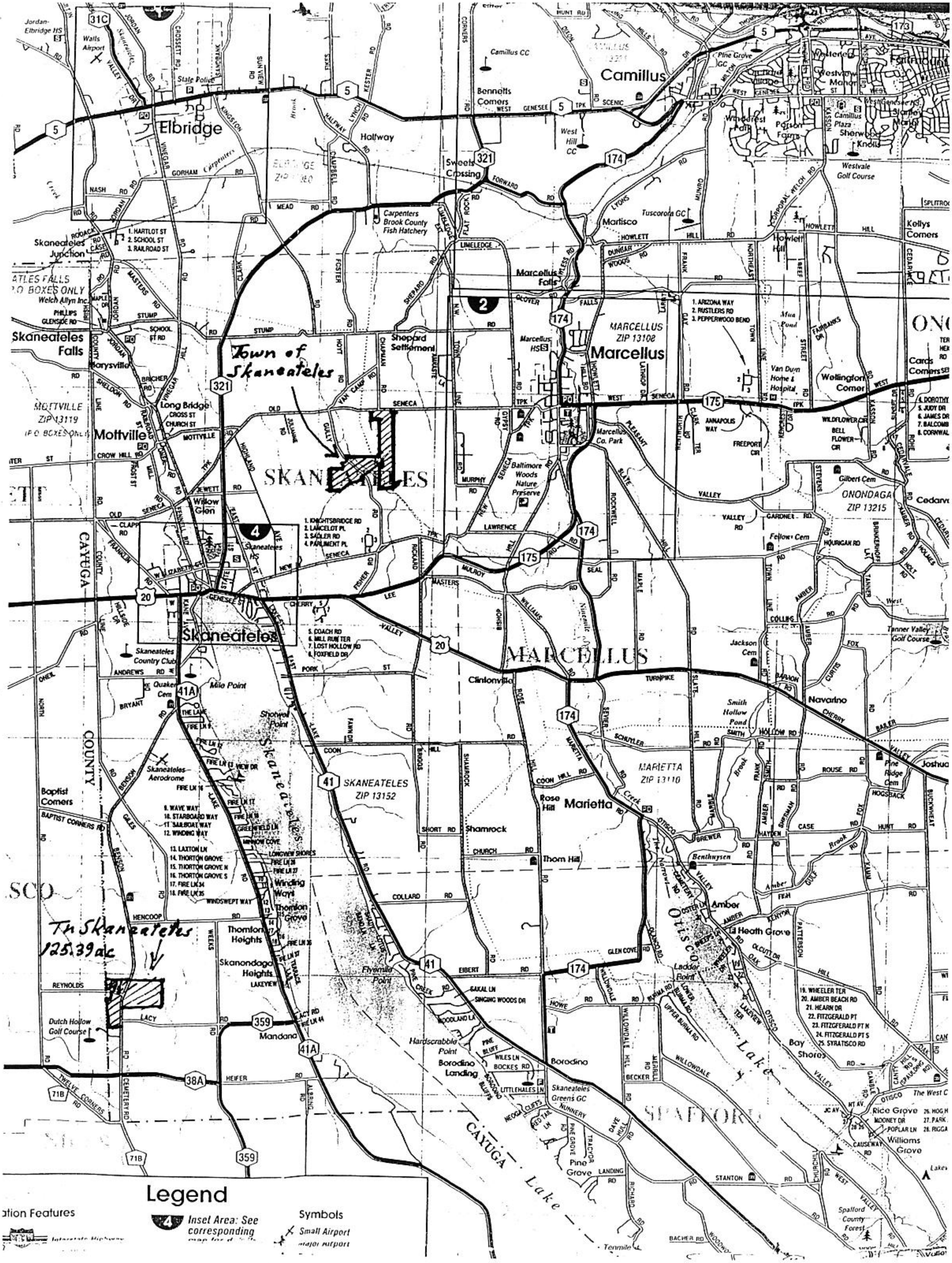
As representative of the Town, I agree that this management plan reflects our goals and intentions for the management of this property.

Signature

REPORT BY: Charles K Porter, Forester

ADDRESS: NYS DEC
Salmon River Fish Hatchery
2133 County Route 22
Altmar, NY 13302

PHONE: (315) 298-7467



Town of Skaneateles
Tn Skaneateles
125.39 ac
SKANEATELES
MARCELLUS
Skaneateles
Marcellus
Elbridge
Camillus
Skaneateles Falls
Mottville
Long Bridge
Willow Glen
Mile Point
Shotwell Point
Skaneateles Lake
Otisco Lake
Cayuga
Marietta
Clintonville
Navarino
Amber
Borodino
Mandana
Shepard Settlement
Sweets Crossing
Halfway
Martisco
Marcellus Falls
Baltimore Woods Nature Preserve
Skaneateles Country Club
Skaneateles Aerodrome
Dutch Hollow Golf Course
Skaneateles Greens GC
SKANEATELES ZIP 13152
MARCELLUS ZIP 13108
MOTTVILLE ZIP 13119
MARIETTA ZIP 13110
ONONDAGA ZIP 13215
Legend
Inset Area: See corresponding
Symbols
Small Airport
Major Airport

Property Description

This125 acre property is an old dairy farm which went out of farming years ago. Most of the property has been grazed heavily or cropped in the past. Most of the terrain is gentle slopes. The soils are silt loams. There are no beaver ponds, regulated wetlands, or classified streams. There are no known rare or endangered species.
The 10 acre hardwood stand in back has some valuable timber on it but the trees are too small to harvest now. This stand was harvested just before the Town acquired the property. The latest harvest was done well (very little damage to the residual trees and very little rutting). The residual is excellent although less dense than optimum for value per acre growth. It is a good timber investment as it is now since the trees are sugar maple of high quality and have room to expand their crowns and grow fast.
Much of the property was reforested in about1962. They planted many different species. The most common plantation species present now are Norway spruce, white spruce, and Scotch pine. The Norway spruce stands would be good investments if they were marked by a forester for an improvement treatment and harvested. Norway spruce does well on soils like this property has. White spruce and white pine are also adapted to these type soils.
In properties like this which will be forest again, there is a serious problem for the future in that there is no seed source for many native hardwood tree species. Nature will eventually fill the voids but it will take 100 years. Cattle are preferential grazers. They browse on certain species like sugar maple so heavily that they eliminate those species. The fence lines protect seedlings from grazing and sometimes farmers left large trees for shade for the cattle. On this property the trees to conserve and not cut for firewood are sugar maple, white oak, hickory, and beech. There may be some of these scattered through. These species will be needed in the future to help make a healthy, diverse, and valuable forest for the future.
As part of the stewardship of the property the boundary lines of the three private lots should be painted with good quality exterior paint. I did not check for survey pins but the lines should be painted before the evidence of surveying disappears. This will help to insure that the Town won't have to deal with expensive problems in the future.

Soils

As mentioned previously, the soils here are silt loams which are moderately well drained for the most part. Most of the land has Honeoye and Lima silt loam. In places where there is enough slope for surface drainage most species of trees do quite well. In flat areas red maple, elm, green ash, and basswood do well. These soils have the limitation of not being able to tolerate equipment traffic in wet times of the year. The Norway spruce stand on the southern part of the property west of the Benson Road has enough slope that care should be taken to limit equipment to dry times of year. Significant erosion could occur if the shallow mat of spruce roots is cut. Once it occurs it is difficult to stop. Because this was a field the natural small drainages aren't there. Eventually they will become established again but in the meantime there is some reason to be cautious.

Narrative Description of Interrelationship of Resources

The soils on the property (see "soils" section above) are such that there is a serious concern with rutting and erosion (timber harvesting in the spring when the frost is still in the ground and soils are water saturated is to be avoided at all costs on these soils). The soils are very subject to rutting, compaction, and, most importantly, to tree root damage from equipment in wet times of the year. As far as timber harvesting goes, research has shown that it is not the act of cutting trees or their absence that causes erosion. Studies made to date estimate that 90 to 95 percent of erosion results from exposed soil in roads and from concentrated water runoff on poorly drained soils. By applying the Timber Harvesting Guidelines for New York, soil and water resources will be protected.
The only forest health problem noted was Beech Bark Disease. Beech is not a major component of these forest stands so the loss of the large beech will not have a great effect even on wildlife. Beech will still get large enough to produce seed so the species will not be lost. We have gotten used to the ecological effect of the Dutch Elm Disease, now we have to get used to the effect of Beech Bark Disease.

It should also be mentioned that there is a newly discovered, very serious, exotic insect which kills ash trees very quickly and completely. It has killed all ash trees in the areas that it has spread to. It is called the Emerald Ash Borer. I have enclosed pest leaflets. It was first discovered in a small area in Michigan. They tried to eradicate it by cutting and chipping all ash trees in a 20 mile circle around the initial infestation point. It has since spread to Ohio, Indiana, and Ontario. It is less than 100 miles away from us. The reports from foresters in the affected areas say that the insect simply kills all ash trees. I am always skeptical about reports of new pests which are "going to completely destroy the ecosystem", but the reports on this one are apparently not exaggerated much. They are, of course, working on biological control organisms but that is a long term effort. This insect has spread rapidly through people cutting firewood and transporting it but it also spreads naturally. I am telling landowners to be prepared to lose their ash trees.

There is also another newly discovered insect called the Sirex Woodwasp. It is native to Europe, Asia and North Africa. It has caused serious damage to pine plantations in New Zealand and South America. It attacks hard pines like Scotch and red pine. It is more destructive when the trees are unhealthy as the Scotch and red pine on this property are. We will have to wait and see how serious this insect is in this area.

Maintaining diversity and vigorous tree growth through income driven timber management should contribute to a more stable forest ecosystem. We can safely predict that new, serious threats will appear in the future. Maintaining diversity of species, age classes, and density seems like a wise course.

This property supports or helps to support populations of wild turkey, grey squirrel, raccoon, white-tailed deer and ruffed grouse along with other game and non-game species. Cover and food for many of the species can be enhanced by active management. Because of the plantations, the property has great cover for many species. It would be of value for the future if some seedlings of hardwoods like sugar maple, beech, basswood, black cherry, and hickory could be planted in semi-open areas. Planting under a heavy shade canopy doesn't work, they must have some light. The only seed source for these species is on the west boundary against Cayuga County or in the sawtimber hardwood stand. Many of these species have a short seeding distance. In some cases it is only 100 yards. Another species which would be of great value for wildlife and aesthetics would be white oak. It is well adapted to these soils and provides a large amount of mast. I did not see any white oak on this property. The easiest way to establish it would be to collect acorns with a tarp under a tree and then heel them in on semi-open areas.

Creation of a pond, if possible, could provide habitat for species not already present. Because of the soil types and slopes here, ponds are practical on this property. For wildlife and aesthetics it is only necessary to have shallow ponds. The Natural Resources Conservation Service in Lafayette has expertise in pond design. I recommend that you contact them for efficient use of machine time and possibly for funding from federal programs.

Forest stewardship involves a recognition that human life spans are fairly short and that we are the stewards of something which future generations will need to use. These recommendations are made assuming that the owners have the underlying goal of wise use of land while protecting it from damage which would permanently reduce its ability to provide all the different benefits which forest land provides. Long-term sustained yield is a part of this. Recommendations for timber management are made on an "even flow" basis to the extent possible given the present condition of the forest.

The management recommendations prescribed for the various forest types should enhance the recreation and aesthetic potentials of the property. Any active forest management, by design, should increase the road and trail systems in the forest acreages of the property. The development of access roads and trails, which are so important in managing forest products are also available for hiking or skiing. Thinnings will allow the trees to grow at faster rates, becoming larger and creating a more aesthetically pleasing woodlot. Recreational opportunities are as varied and diverse as the many individuals owning forest land; the landowners objectives and goals will dictate the possible recreation and aesthetics scenarios.

The management practices that occur on individual parcels have the potential to impact fisheries and water quality on other properties in the watershed. Utilization of Best Management Practices can prevent negative watershed and fisheries impacts.

Most commonly accepted economic analyses consider financial maturity of good quality trees of high value hardwoods like sugar maple, yellow birch, and black cherry to be 18-20 inches in diameter at breast height. Until they reach that size, they are probably increasing in value at a rate of 8-10% per year (providing that they are

thinned out for fast growth). Financial maturity for firewood quality trees is about 11 inches in diameter. Proper timber management has the goal of increasing the overall rate of return from the timber stands on the property which means cutting the low grade firewood at every practical opportunity. Firewood trees take up growing space but increase in value at less than 1% per year.

Stand Descriptions and Recommendations

The following is a description of various forest types found on the property. At the top of each description the acreage is listed along with size class, species composition, site evaluation, and level of stocking.
There are three size classes (1) *seedling-sapling* [1"-5"], (2) *pole* [6"-11"] and (3) *sawtimber* [12" and up].
The species composition is listed in order of abundance.
There are three site classifications with 1 best and 3 worst.
Three categories are used for the level of stocking (1) understocked, (2) well-stocked, and (3) overstocked.
An *understocked* stand would lose growth by not having enough stems to adequately utilize the growing potential of the site. An *overstocked* stand has too many stems in competition, and a corresponding reduction in the growth rate. A *well-stocked* stand represents a somewhat ideal density for realizing the growth potential on a site.

Stand Number (See attached forest type map for stand numbers and locations)

1. Sapling white spruce, white ash, Norway spruce, elm, aspen, 8 acres. Overstocked, good site, unknown quality, pioneer hardwood, old field, even aged. This is a variable stand. There are areas of thick spruce and areas of low density hardwoods. This stand is very good for wildlife as it is now. No recommendations for this.

2. Sapling Scotch pine, pioneer hardwoods, 9 acres. Overstocked, good site, fair quality, plantation/hardwood, old field, even aged. The Scotch pine can be expected to die off in the future. It doesn't seem to be very well adapted to conditions in this area. Scotch pine is well known as a "nurse crop" for the establishment of hardwoods. It casts a light shade and probably modifies the soil so that conditions are good for seedlings. In nature, pine seeds in on areas of forest fires or blow down. It has to have full sunlight to become established. It is normally replaced by hardwoods as it reaches the age of physiological over maturity.
The process is happening in this stand. No recommendations, let nature take it's course.

3. Sawtimber sugar maple, beech, basswood, 10 acres. Well stocked, good site, good quality, northern hardwoods, grazed forest, uneven aged. This is the only natural forest area on the property, all the rest was cleared for field or pasture. There is just enough slope here that surface drainage is good. It was harvested before the Town acquired the property. The residual is of good quality. The only concern with this area is that the reproduction (and therefore the future forest) will be mostly beech. It is one of the effects of Beech Bark Disease that, as they are killed slowly, beech trees sprout vigorously from their roots. Since they are shade tolerant and are not browsed by deer in winter (almost no food value, starvation browsing only) they tend to dominate the future forest. Unfortunately, beech in the future will only get to 8" in diameter before the insect attacks it and the fungus kills it (like elm and the Dutch Elm Disease). This leads to the establishment of what are called "beech thickets". These areas are not very useful for anything.
Recommend looking at this stand in two years time to see if the problem is serious here. Hunting is useful to control deer population levels. Because of the excellent thermal cover of the spruce plantations here, deer are concentrated on this property in winter. It is probably similar to the spruce-fir deer yarding areas in the Adirondacks. Deer browse on the buds of seedlings to survive through the winter when snow covers their summer food. They will not browse on beech unless they are starving. On properties with a population higher than the caring capacity of the land, hardwoods (like sugar maple) and some shrub species are just not present in the understory. This creates a problem for wildlife now and for people in the future.

4. Pole bitternut hickory, basswood, white ash, 8 acres. Overstocked, good site, good quality, northern hardwoods, old field, even aged. This stand could be thinned but it is not a desperate case. This stand is flat and has some wet areas in the southeast corner. The most well adapted species to this shallow soil site is probably basswood. It should be favored over the other species.

5. Seedling-sapling pioneer hardwood, 27 acres. Well stocked, good site, unknown quality, pioneer hardwood, old field, even aged. This is old field which has seeded in to hardwoods and shrubs. It is valuable habitat for many species as it is now. This property is favorable for wildlife because it has a diversity of vegetation types and succession stages. Possibly parts of this area could be bush hogged once every three years to keep it in an early succession stage. Another thing which could be done is to cut hardwood trees which are shading out wild apple trees. Apple doesn't grow that tall so it is killed when the hardwoods overtop it. There is one section on the east boundary of this stand which has white spruce planted on it. This was probably a later planting. This spruce will probably be shaded out by the sapling hardwoods there.

6. Plantation white pine, 1 acre. Overstocked, good site, fair quality, plantation, old field, even aged. No recommendations for this now. In the future it will need thinning to select the straight stems. White pine is attacked by an insect which kills the central leader of the tree. This forces one of the side branches to take over as leader. That causes the trunk of the tree to be crooked. The insect does not attack once the tree is 25 feet tall. White pine is well adapted to this site. It is the largest conifer in the northeast. Eventually these trees will be valuable for the aesthetics of having large, very tall trees.

7. Plantation red pine, 2 acres, Overstocked, good site, good quality, plantation, old field, even aged. Red pine is one of the hard pines. It has a tap root like a carrot. It is not well adapted to the soils here. It needs a deep, well drained soil to grow well. These trees will be short lived and will not get very large. No recommendations for these areas.

8. Plantation Norway spruce, 29 acres. Overstocked, good site, good quality, plantation, old field, even aged. Norway Spruce is very well adapted to these soils. They grow rapidly and are healthy. This plantation has a good future.

This stand is in need of thinning. Thinning will double or triple the growth rate on the trees left to grow, and we get the chance to pick the highest quality trees to leave. Plantations start with a thousand trees per acre and eventually there is only room for about 200. If we don't thin them out, nature will do it for us, except much more slowly and often favoring the poorest quality and least valuable trees.

Often poor quality hardwood trees in plantations grow taller than the planted trees. When this happens, the conifers will be shaded out and killed. The poor quality hardwoods should be cut to give the spruce full sunlight. If there are straight stemmed black cherry present then they should be favored over the spruce.

These areas are very valuable for wildlife thermal cover. Wildlife biologists say that the best cover is when the trees are small and up to the point where they still have live branches with needles on them at a height of 15 feet. This stand is beyond that point but it is still valuable. Thinning will let some light reach the ground and get some seedlings and herbaceous plants started. There isn't any understory vegetation now.

This stand would be a good timber investment if it were thinned out. They will be a lot of useful timber here in the future.

9. Plantation white spruce, Scotch pine, red pine, Norway spruce, Austrian pine, 7 acres. Overstocked, good site, good quality, plantation, old field, even aged. The species which are adapted to these soils are Norway spruce and white spruce. They should be favored in thinning. The pines will be short lived here. This is probably more valuable for wildlife than for anything else. It may be that the most useful action here would be to leave this undisturbed.

10. Plantation white spruce, 12 acres. Overstocked, good site, good quality, plantation, old field, even aged. These plantation areas are fairly well-stocked and growing well. White spruce plantations make a thick cover for wildlife of all species. White spruce grows slowly at first so some hardwoods usually seed in. The

recommended management is to do timber stand improvement to get rid of the hardwoods. This will let the spruce grow thicker to make better cover for animals and to make better timber in the future. White spruce grows slowly at first and then, at some point, it takes off and begins to grow rapidly. That hasn't happened here yet but it will.

11. Sapling white ash, hickory, sugar maple, aspen, 4 acres. Overstocked, good site, good quality, pioneer hardwood, old field, even aged. This is young hardwood which has seeded in from the older trees in the fence line and the forest beyond it. They are useful as a seed source to eventually replace the conifers. This doesn't really need thinning yet, it is not that dense.

Schedule for Completion of Recommended Activities (By stand numbers)

	Immediate	0-5 Years	5-10 Years	10-15 Years
Harvest				#3, 10 acres
Commercial Thinning		#8, 29 acres		#4, 8 acres #8, 29 acres
Non-commercial Thinning				
Other Activity	Paint Boundary Lines			
Wildlife Habitat Improvement		#5, Mow some areas, Cut hardwoods from around wild apple trees #10, 12 acres, cut hardwoods		
Reforestation				

Note: High potential stands recommended for commercial timber stand improvement should, in most cases, be treated non-commercially if firewood/pulpwood markets are so poor that commercial sales are not feasible.

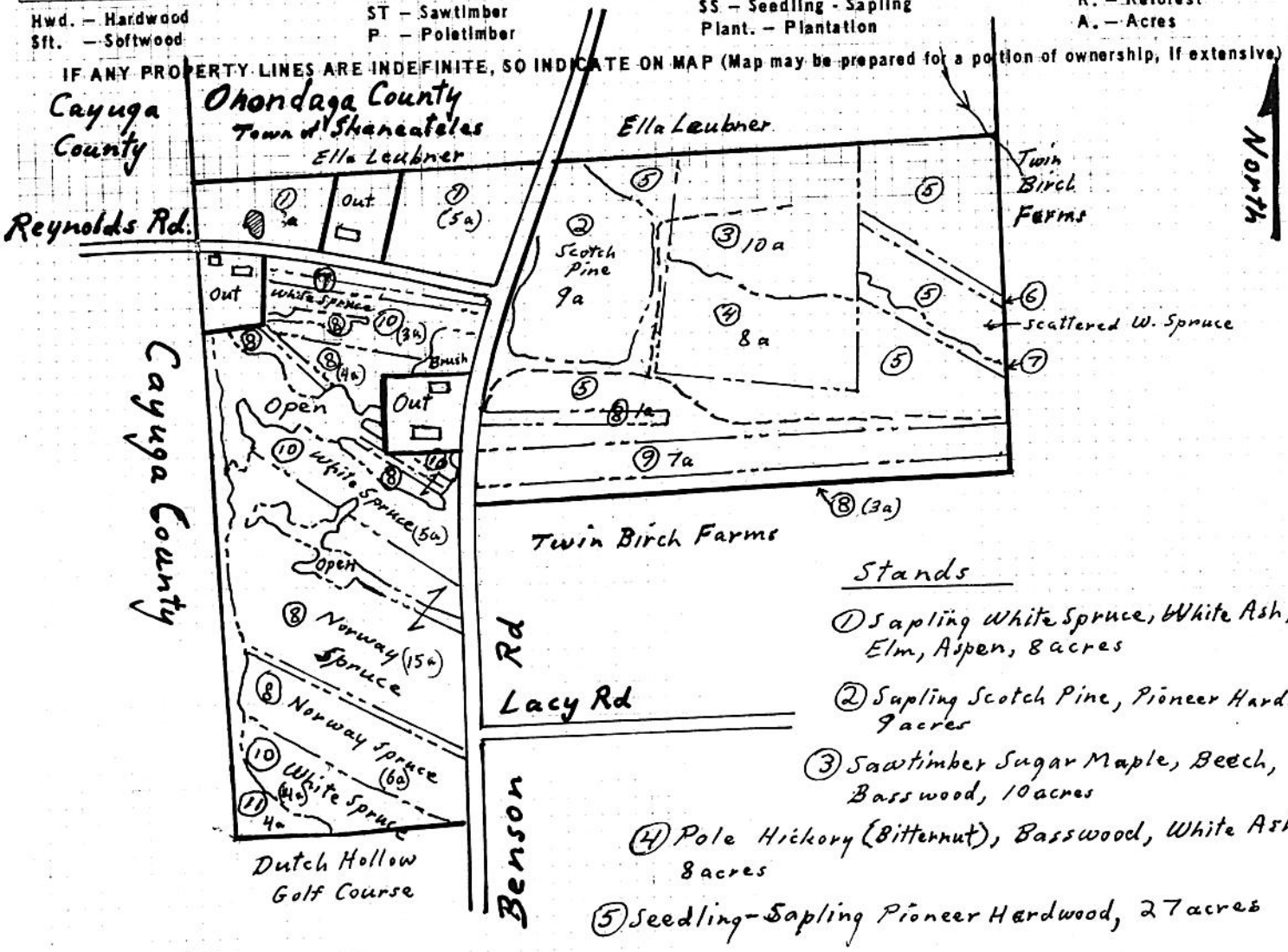
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

MANAGEMENT GUIDE FOR FOREST PRACTICE ACT COOPERATORS

REGION	COUNTY	COOP. NO.	DATE
7	Oswego		December 2006
OWNER	Town of Skaneateles	TOWN Skaneateles	WOODLAND ACRES 117
ADDRESS 24 Jordan St. Skaneateles, NY 13152		AERIAL PHOTO NO. ARY-1H-37, B-12	ACRES TO BE PLANTED
		USGS Owasco	TOTAL 125

Hwd. – Hardwood
Sft. – Softwood
ST – Sawtimber
P – Poletimber
SS – Seedling - Sapling
Plant. – Plantation
R. – Reforest
A. – Acres

IF ANY PROPERTY LINES ARE INDEFINITE, SO INDICATE ON MAP (Map may be prepared for a portion of ownership, if extensive)



Stands

(1) Sapling White Spruce, White Ash, Elm, Aspen, 8 acres

(2) Sapling Scotch Pine, Pioneer Hardwoods, 9 acres

(3) Sawtimber Sugar Maple, Beech, Basswood, 10 acres

(4) Pole Hickory (Bitternut), Basswood, White Ash, 8 acres

(5) Seedling-Sapling Pioneer Hardwood, 27 acres

(6) Plantation White Pine, 1 acre

(7) Plantation Red Pine, 2 acres

(8) Plantation Norway Spruce 29a

(9) Plantation White Spruce, Scotch Pine, Red Pine, Norway Spruce, Austrian Pine, 7 acres

(10) Plantation White Spruce, 12 acres

(11) Sapling White Ash, Hickory, Sugar Maple, Aspen, 4 acres

Scale: 1 inch = 660 feet = 1/8 mile 1 square inch = 10 acres

PREPARED BY		PHONE
Charles H Porter, Forester	NYS DEC Salmon River Fish Hatchery 2133 CR 22 Altmar, NY 13302	315 298-7467

81-11-3 (7/77)
Formerly LF-253