FOREST STEWARDSHIP PLAN This is a forest management plan developed under current Federal and State forest stewardship guidelines. Date Prepared: January, 2002 Prepared By: Michael J. Burns Company: Professional Forestry Services Address: PO Box 51 Nelliston, New York 13410 Telephone: (518) 993-2815 Email: Stumpy Cospital.net Property Owner: James James, Jr. Address: PO Box New York Telephone: (212) 496-1626 Email: Property Address: Rock City & Highland Roads Rock City, New York Columbia, t/o Chatham County (518) 392-5149 Legal description Most of the 45 acres of the property lie at the northwest or directions to corner of the intersection of Rock City and Highland site: Roads in Columbia County, New York, Town of Chatham. additional 2.5 acres of forest and 5 acres of non-forest land lie on the south side of Rock City Road. Tax Map # 16-1-1-1 Approvals Landowner: Date: Preparer: Date: Approving Agency:

Date:

GENERAL PROPERTY INFORMATION

Property Owner:

James Johnson, Jr.

Address:

PO Box 200

Charles, New York

County:

Columbia

Telephone:

Email:

24 496-1020

Property Address:

Rock City & Highland Roads

Rock City, New York

Columbia, t/o Chatham County

(518b) 992-514P

Landowner Profile

Mr. Johnson frequently spends time at his property. This stewardship plan is written in part to allow better use of his time by prioritizing work to areas most in need. Mr. has a lot of interest in following the plan. He does not expect immediate results and is planning for the future of the forest.

Mr. Sommson has stated that he is willing to spend the money necessary to implement forest management practices. Mr. Johnson lives part time at the property, has seen the results of past management, in excited about the future of the forest, and willl be further energized by the implementation of this forest stewardship plan.

Legal description or directions to site:

Most of the 45 acres of the property lie at the northwest corner of the intersection of Rock City and Highland Roads in Columbia County, New York, Town of Chatham. An additional 2.5 acres of forest and 5 acres of non-forest land lie on the south side of Rock City Road. Tax Map #

Region/subsection or ecosystem type:

221: Eastern Broadleaf Forest

Total land area: Number of stands:

34.5 acres 4 stands

Landowner's goals for the property:

- Maintain a closed overstory canopy with an open or
- sparse understory - Allow Visual Access - Leave many big trees
- Generate periodic income from timber production

- Develop hiking trails

Goal Comments:

General property description:

Mr. James purchased the property in 1989. His 45 acres were a portion of a nearly 200 acre farm that belonged to Henry and Esther Metzger.

Mr. property includes 10 acres of non forest land, including the old Rock City School. The old schoolhose has fallen down, but is woth noting as a local landmark.

The property has frontage on Rock City, Highland, and Thomas Roads. It is abbutted along the northwest edge by a swamp, but has no water resources within it. The property has been managed as forest for many years. Plantings of tamarack, red pine, Scots pine, and Norway spruce make up nearly 15 of the 45 acres.

Interaction with surrounding properties

The property provides a wildlife transition zone. There are active farms to the north and south, and a swamp to the west. The plantations provide a diversity of habitat not found on the surrounding properties.

Soils information:

The property lies entirely on Nassau Channery silt loam. This soil is shallow, averaging 17 inches to bedrock, and excessively well drained.

Soil productivity is moderate for sugar maple, seedling mortality is high because of the excessive drainage. Windthrow hazard is moderate due to shallow depth to bedrock, and equipment limitation is moderate because of slope. Erosion hazard is slight.

Map Included?

Yes

Presence of threatened and endangered species:

There are no known thretened or endangered species on the property.

Cultural importance

The remains of Red Rock School ar on the property, at the southwest corner of Rock City and Highland Roads. At one time it was a one-room schoolhouse, but has not been maintained for many years and is partially collapsed. The water pump is still visable as well, and could be repaired easily if desired.

EXISTING CONDITIONS FOR UNIT 1: 'MAPLE'

Land area:

8.0 Acres

History

This stand appears to have been forest for many years. There is no evidence of farming or graxing in this stand.

Forest Type:

Northern Hardwoods

Ecosystem succession:

This stand is dominated by young mature sugar maples. The trees are healthy and high quality. Periodic thinnings and removals in this stand have given it a park-like appereance that Mr. This highly desires.

Forest Health:

Tree health is good. A few gypsy moth egg sacks were observed, and sugar maple borer damage was witnessed. Neither of these forest pests are anticipated to cause problems.

Site Quality:

Site quality appears to be very good. This is shown in the smooth, tight bark on the sugar maple trees.

Approximate age: Trees per acre:

Basal area (BA): Growth Rate: Site Index: 106 Acceptable BA: 100 0 % Timber Quality: high Site Index Species:

Stocking:

This stand is well stocked and even-aged. The periodic thinnings and excessive deer browse have eliminated the

seedling, sapling, and pole timber classes.
Relative density is 80%, with a crown closure of 77%

6 MBF

Stand volume:

Potential for wildlife habitat:

Low. Potential food supply exists as maple seedlings only. Lack of adaquate food, cover, and water limit wildlife opportunities.

Potential for recreation use:

Medium. Area is not suitable for hunting; lack of diversity in tree species and lack ground cover make the area unsuitable for wildlife observation.

Potential for timber production:

High. The sugar maple are of high quality and should mature to veneer quality. Managing for veneer timber in an even-age stand will maximize landowner income for the future, and provide for the park-like apperance desired.

Potential for other uses:

Water quality issues:

The southern portion of the stand has a channel running through it. The channel drains Rock City Road. Prevention of erosion along this channel is a priority.

Important natural features:

No significant natural features were observed in this stand.

PLANS FOR UNIT 1: 'MAPLE'

Landowner's stand:

Maintain and encourage park-like apperance of stand, objectives for this produce high quality timber (veneer) for future harvest.

Recommended silvicultural system:

Even-aged management. Removal of selected lower quality stems to reduce density, improve overall timber quality, and encourage tree growth.

Planned Activities

2002:

removal of lower quality trees sever vines in residual trees

Priority:

2007:

Mark Property Boundaries Update Management Plan

Priority:

10

EXISTING CONDITIONS FOR UNIT 2: 'LARCH'

Land area:

4.0 Acres

History

Plantation. Established about 1960. Thinned periodically to allow good spacing among tamarack.

Forest Type: Ecosystem succession: Tamarack-Red Pine Plantation

3 acres of tamarack with 1 ac. red pine. Some hardwoods, cherry and maple, have grown in openings within the stand. The tamarack were planted about 1960 and have

been thinned periodically since.

There is a lot of raspberry in the understory. Little or

no regeneration present in stand.

Forest Health:

Very good. Growth appears to be excellent and no forest pests were observed in stand. A few vines, both grape and p[osion ivy, are present and should be severed ASAP.

Site Quality:

moderate to poor. Stand lies on crest of hill and is excessively well drained. There is an area of 1/2 acre at the southeast corner of the stand that has no trees, and is a wet basin that drains Highland Road.

Approximate age: Trees per acre: Basal area (BA):

40 Years Size Class: Small Sawlogs (11.5 - 17.5")
154 Mean DBH: 13.5

Basal area (BA) Growth Rate: Site Index:

128 Acceptable BA: 118 0 % Timber Quality: medium Site Index Species:

Stocking:

Stand is well stocked, byt regeneration is lacking. Relative density is 70%, with a crown closure of 72%

Stand volume:

15 MBF

Potential for wildlife habitat:

Moderate. High perches are available in tamarack trees, some cover provided by low vegatation. Food source available from pine and tamarack cones and cherry fruit.

Potential for recreation use:

Hiking, X-C skiing, and riding good if desired. Potential exists to encourage the growth of blackberry, raspberry, and blueberry for harvesting.

Potential for timber production:

Good. Timber growth, quality and forest health all good.

Potential for other uses:

Potential exists for the development of agro-forest crops such as blueberry, raspberry, and blackberry.

Water quality issues:

The well suppling the house lies within this stand. All op[eration within this area must take into account how the use of equipment, chemicals, etc. may effect the quality and quantity of the water supply.

Important natural features:

None present.

PLANS FOR UNIT 2: 'LARCH'

Landowner's stand:

Develop timber for long-term profit and harvest. Keep objectives for this understory open for aesthetic and recreation purposes.

Recommended silvicultural system:

Even aged management. No thinning or harvest necessary for at least 5 years. Vines are to be severed immediately.

Mr. Johnson may want to look into developing non-timber forest crops, such as berries, in order to keep area in production and keep understory open.

Planned Activities

2002:

Removal of vines by severing the stems at waist height.

Priority:

2006: Priority: removal of selected tamarack and red pine

2007:

Mark Property Boundaries Update Management Plan

Priority:

10

EXISTING CONDITIONS FOR UNIT 3: 'SPRUCE-PINE'

Land area:

9.5 Acres

History

Plantation of Norway spruce, 2 acres, was established about 1965, Scots pine were established about 1970, and red pine about 1975. Tree size follows tree age. TSI was done in areas of the stand from 1996 to present, but not all marked trees were removed.

Forest Type: Ecosystem succession:

Softwood Plantation

Norway spruce on east portion, red and Scots pine on west

slope.

Some hardwoods, maple and cherry, have encrouched in

those areas where ligh is available to them.

Forest Health:

Moderate. Stand is overstocked and growth and health have suffered accordingly. Some blow-down has taken place in red pines. Scots pines have poor form, most

likely due to genetics.

Site Quality:

Poor. Norway spruce have done well, but plantation did not take in wet area at northeast corner of property. Red pines are stagnant and suffereing from the shallow soils and excessive drainage. Scots pines have poor form.

Approximate age: Trees per acre: 30 Years Size Class: Small Sawlogs (11.5 - 17.5")
425 Mean DBH: 11.4

Basal area (BA): Growth Rate: Site Index: Stocking:

Stand volume:

147 Acceptable BA: 125 0 % Timber Quality: low Site Index Species:

Most of the stand is over stocked. Norway spruce and red pine have the most need for thinning.

Relative density is 75%, and canopy closure is 75% also.

10 MBF

Potential for wildlife habitat:

High. Food source supplied by pine and spruce cones, cover provided by brush and blowdown, nesting areas provided in the hevy crowns of the Norway spruce.

Potential for recreation use:

Few. Some hunting opportunities exist. Lack of trails and many trees per acre discourage hiking.

Potential for timber production:

Moderate. Poor sooils and poor tree selection make this stand less than ideal for timber production.

Potential for other uses:

Water quality

None noted.

issues:

Important natural

None noted.

features:

PLANS FOR UNIT 3: 'SPRUCE-PINE'

Landowner's

objectives for this and home area.

Timber production, buffer zone between adjoining property

stand:

Recommended silvicultural

even aged management of existing plantation. Production of poles in red pine and Norway spruce. Long term goal

system:

of replacing stand with native hardwood species.

Planned Activities

2003:

row thinning in red pine

Priority:

10

2006:

single tree selection harvest in Norway spruce

Priority:

6

2007:

Mark Property Boundaries Update Management Plan

Priority:

10

2009:

Crop tree release in red and Scots pines

Priority:

7

EXISTING CONDITIONS FOR UNIT 4: 'HARDWOODS'

Land area:

13.0 Acres

History

Sheep pasture abandoned about 1950 or earlier. Eastern portion of the stand was used as plantation for black locust to be used as fence posts.

Forest Type: Ecosystem succession:

Northern Hardwoods

Northern hardwood type including an old planting of black locust. Main species are red oak, red maple, black cherry, sugar maple, and white pine. Area appears to have been pasture, most likely sheep given the local history. A few large red oak were established prior to the pasture being abondoned, the rest of the trees have

grown in during the past 50 years or so.

Forest Health:

Fair. White pine are poor quality and show the effect of white pine weevil damage. All other species appear healthy.

Site Quality:

Poor. Shallow and well drained soils make for poor site quality. By allowing native species to populate the area, the few resources available are maximized. The black locust fix nitrogen into the soil, enriching it and making the site more productive for the associated black cherry.

Approximate age:

Trees per acre: Basal area (BA):

91 Acceptable BA: 80 0 % Timber Quality: medium

Site Index Species:

Growth Rate: Site Index: Stocking:

Moderately stocked, with good natural spacing. Little regeneration present most likely due to deer browse and poor soil quality.

poor

Stand volume:

4 MBF

Potential for wildlife habitat:

Very good. Stand provides good contrast to surrounding land and forest types. Also has good food and cover sources, with water available nearby.

Potential for recreation use:

Very good. Several hunting stands are present in stand. Turkey and white-tail deer opportunity are high due to the swamp to the west, the acorn source, and the pines for cover or roost.

Potential for timber production:

Fair. Low soil productivity limits timber production, timber quality is good.

Potential for other uses:

Water quality issues:

The main portion of the stand slopes fairly steeply (up to 30%) towards the adjoining swamp along the west boundary. Roads and trails must be properly laid out to

Forest stewardship plan for James James, Jr.

boundary. Roads and trails must be properly laid out to prevent erosion of the hillside and sedimentation of the stream & swamp at the base of the hill. Use of water diversion devices such as rubber dams is strongly recommended.

Important natural features:

None present.

January, 2002

PLANS FOR UNIT 4: 'HARDWOODS'

Landowner's objectives for this

stand:

Provide firewood for heating and atmosphere within the house, provide for long-term income on the property, and to create/maintain a park-like apperance near the living area.

Recommended silvicultural

Unevenaged management. Favor the high quality oak, maple, and cherry.

system:

Planned Activities

2007:

Mark Property Boundaries Update Management Plans

Priority:

10

2010:

crop tree release of favored hardwwod trees

Priority:

10

DETAILED PLANS BY YEAR

- 2002 -

UNIT	PRIORITY	ACTIVITY				
Maple	6	removal of lower quality trees sever vines in residual trees				
Larch	10	Removal of vines by severing the stems at waist height.				

- 2003 -

UNIT	PRIORITY	ACTIVITY				
Spruce-Pine	10	row thinning in red pine				

- 2006 -

UNIT	PRIORITY	ACTIVITY				
Larch	5	removal of selected tamarack and red pine				
Spruce-Pine	6	single tree selection harvest in Norway spruce				

- 2007 -

UNIT	PRIORITY	ACTIVITY					
Maple 10		Mark Property Boundaries Update Management Plan					
Larch	10	Mark Property Boundaries Update Management Plan					
Spruce-Pine	10	Mark Property Boundaries Update Management Plan					
Hardwoods	10 Mark Property Boundaries Update Management Plans						

- 2009 -

UNIT	PRIORITY	ACTIVITY						
Comuse Dine	7	0						
Spruce-Pine	/	Crop tree release in red and Scots pines						

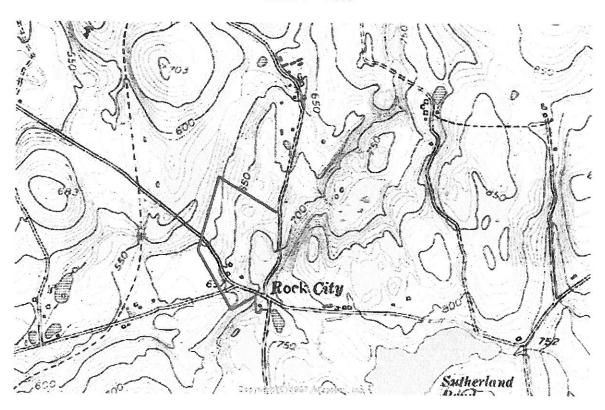
- 2010 -

UNIT	PRIORITY	ACTIVITY						
Hardwoods	10	crop tree release of favored hardwwod trees						

January, 2002

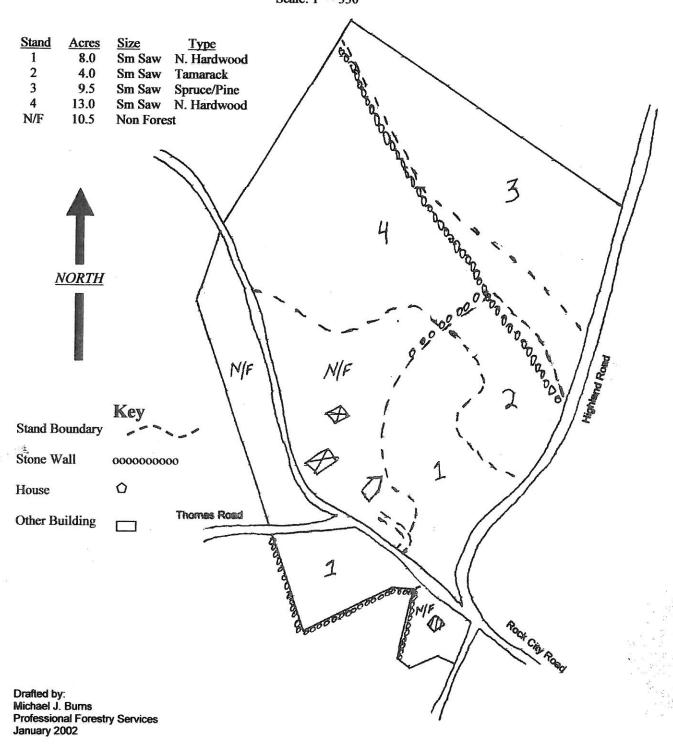
Topographic Map Showing Property of James E. Johnson, Jr.

Town of Challand Scale: 1" = 2000'



Map Showing Property of James Liberty, Jr.

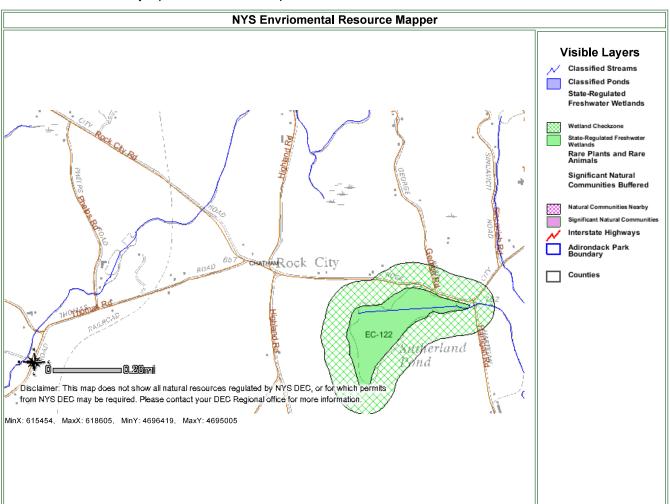
Town of Scale: 1" = 330'



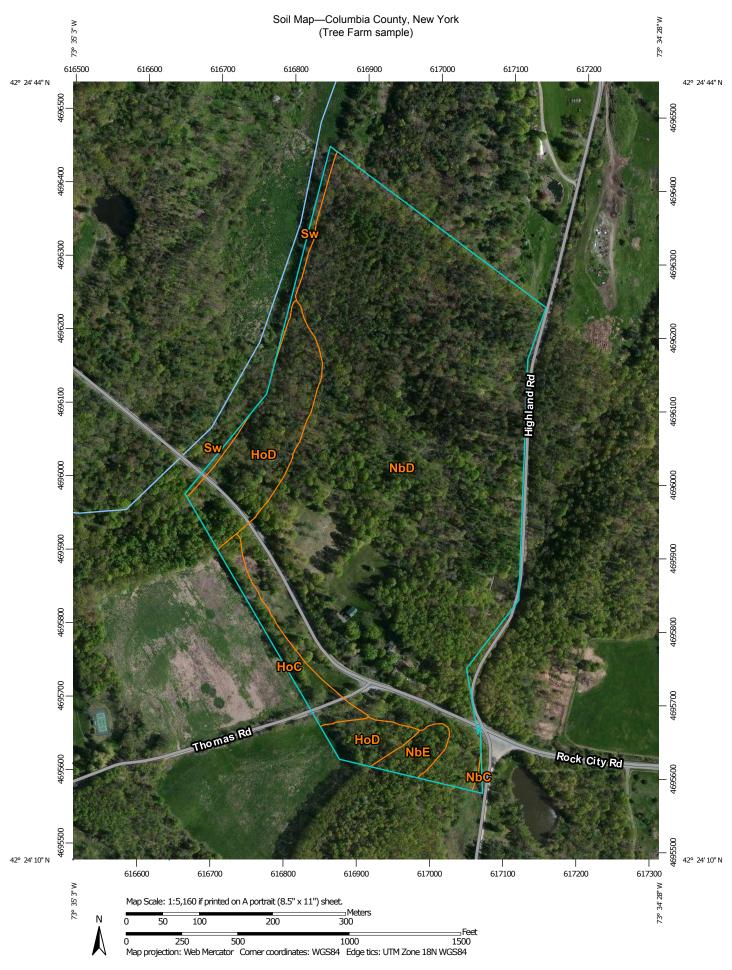
6/19/2015 Map Output

[print page] [close window]

Please set your printer orientation to "Landscape".



Disclaimer:This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

→ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Nery Stony Spot

Wet Spot
Other

Special Line Features

Water Features

Streams and Canals

Transportation

→ Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Columbia County, New York Survey Area Data: Version 10, Sep 14, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2010—May 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Columbia County, New York (NY021)							
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
HoC	Hoosic gravelly sandy loam, rolling	2.0	3.2%				
HoD	Hoosic gravelly sandy loam, hilly	7.2	11.3%				
NbC	Nassau channery silt loam, rolling, very rocky	0.1	0.1%				
NbD	Nassau channery silt loam, hilly, very rocky	52.5	82.8%				
NbE	Nassau channery silt loam, steep, very rocky	1.0	1.5%				
Sw	Sun silt loam	0.7	1.1%				
Totals for Area of Interest		63.4	100.0%				



Soil Conservation Service In cooperation with Cornell University Agricultural Experiment Station

Soil Survey of Columbia County, New York



TABLE 8.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

		Management concerns				Potential productivity			·	
Soil name and	Ordi-		Equip-			Potential productivity				
map symbol	nation	Erosion hazard	ment limita-	Seedling mortal-	throw	Common trees		Produc- tivity	Trees to plant	
	<u> </u>		tion	ity	hazard			class*		
FdE**: Farmington	2D	Moderate	Moderate	Severe	Moderate	Sugar maple Northern red oak Eastern white pine American basswood White ash Eastern hemlock	50 55 55 55	2 2 6 2 2		
Rock outcrop.	į				Ì	 	!	!		
FrFredon	3W	Slight	Severe	Severe	Severe	Northern red oak Eastern white pine Red maple		3 5 9		
GaA, GaB, GaC Georgia	ЗА	Slight	Slight	Slight	Slight	Sugar maple	66 75 65	3 4 3 3 10 3	Eastern white pine, larch, Norway spruce, red pine.	
Ha Halsey	2W	Slight	Severe	Severe	Severe	Red mapleWhite oakSwamp white oakAmerican beechRiver birch		2 		
HoA, HoB, HoC Hoosic	4A	Slight	Slight	Slight	Slight	Northern red oak Sugar maple White pine	75 65 75	3 4 10	Eastern white pine, red pine, black locust.	
HoD Hoosic	4R	Slight	Moderate	Slight	Slight	Sugar maple Northern red oak White pine	65 75 	3 4 	Eastern white pine, red pine, black locust.	
HpE**: Hoosic	4R	Slight	Moderate	Slight	Slight	Sugar maple Northern red oak White pine	75	3 4	Eastern white pine, red pine, black locust.	
Blasdell	3R	Slight	Moderate	Slight	Slight	Sugar maple Northern red oak		3 4	Eastern white pine, red pine, European larch.	
HvA**, HvB**: Hudson	4A	Slight	Slight	Slight	Slight	Northern red oak Sugar maple Eastern white pine White ash		4 3 10 4	Eastern white pine, Norway spruce, white spruce.	
Vergennes	8C	Slight	Moderate	Severe	Slight	Eastern white pine Northern red oak Sugar maple		8 3 3	Eastern white pine, Norway spruce, white spruce.	

See footnotes at end of table.

TABLE 8.--WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued

		Management concerns				Potential productivity				
Soil name and	Ordi-		Equip-	!	!	!	1	, , , , , , , , , , , , , , , , , , ,	1	
map symbol		Erosion	ment	Seedling		Common trees		Produc-		
	Symbol	hazard	tion	mortal-	throw	i	index	tivity	plant	
	 	 	1 01011	ity	hazard			class*	<u> </u>	
MbE**:	<u> </u>	}	}	!			ĺ	ĺ	İ	
Taconic	2D	Slight	Moderate	Severe	i !Moderate	Northern red oak	50	2	Eastern white	
		l			liouerace	Sugar maple		2	pine, red	
	į	ļ	İ	į	•	White spruce		8	pine, Norway	
	!	1	Ì	İ	į	Balsam fir		7	spruce.	
	!	:	1	ļ		Red spruce		6		
	!		!	;	!	American beech				
				!	!	Paper birch	53	3		
		i		!		Eastern hemlock			!	
	•	!	1	Ì		White oak	50	2		
MnA, MnB, MnC	4A	Slight	Slight	Slight	Slight	Northern red oak	70	4	Eastern white	
Manlius	į		}	!		Sugar maple		3	pine, red	
				!		Red maple	60	3	pine, Norway	
	i		į	į					spruce,	
	,		į	ļ	i				European	
			!	ļ					larch.	
MnD	4R	Slight	Moderate	Slight	Slight	Northern red oak		4	Eastern white	
Manlius						Black cherry		3	pine, red	
			į			Sugar maple		3	pine, Norway	
			į	į		Red maple	60	3	spruce,	
			ł	•					European	
									larch.	
MsA, MsB	10W	Slight	Moderate	Moderate	Moderate	Eastern white pine	75	10		
Massena			!			Northern red oak		4		
			į			Red maple		3		
			!			Hemlock				
NaB, NbC	2D	Slight	Slight	Severe	Moderate	Sugar maple	50	2	Eastern white	
Nassau						Northern red oak	50	2	pine, red	
						Eastern white pine	55	6	pine, black	
			•			Chestnut oak	50	2	locust.	
NbD, NbE	2D	Slight	Moderate	Severe		Sugar maple	50	2		
Nassau						Northern red oak	50	2		
						Eastern white pine		6		
						Chestnut oak	50	2		
NgA, NgB	3₩	Slight	Moderate	Moderate		Sugar maple			Eastern white	
Niagara						Northern red oak			pine, white	
						White ash	75	3	spruce, Norway	
						Black cherry		3	spruce.	
						Red maple	60	3		
Om	10A	Slight	Slight	Slight		Eastern white pine	80	10	Eastern white	
Occum						Northern red oak	75	6	pine, red	
						Sugar maple	70	6	pine, Norway	
			!			White ash	80	6	spruce, black walnut.	
								1		
OvA, OvB	4W	Slight	Moderate	Moderate		Northern red oak	70		Eastern white	
Ovid			!			Sugar maple	60	3	pine, white	
						Eastern white pine	70 60	9	spruce, Norway spruce.	
!										

See footnotes at end of table.