

Forest
Stewardship
Plan
(10-Year Planning Period)

Kimball Hill Town Forest
Town of Hudson
Kimball Hill Road
Hudson, NH
52.3 Acres
July 25, 2018

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Table of Contents

Landowner Information	Page 1
General Description of the Property	Pages 1-3
<i>Boundaries</i>	
<i>Access</i>	
<i>Forest Types and Harvest History</i>	
<i>Soils, Terrain, & Hydrology</i>	
<i>Wildlife</i>	
<i>Timber Cruise</i>	
Landowner Goals & Objectives	Page 4
Forest Products Summary Table	Page 5
Maps	Pages 6-9
<i>Locus Map</i>	
<i>Aerial Photo Map</i>	
<i>Boundary Map</i>	
<i>Stand Type Map</i>	
General Management Strategies	Pages 10,11
Stand Descriptions and Recommendations	Pages 12-19
Management Schedule & Concluding Remarks	Page 20
Glossary of Forestry Terms	Pages 21,22
Appendix	
<i>NRCS Soil Survey Report</i>	
<i>UNH Coop Extension, Wildlife Habitat Improvement: Woodlands and Wildlife</i>	

Property Owners: The Town of Hudson
Phone Number: 603 886-6000
Location: Kimball Hill Road

Total Acreage: 52.3
Houselot Acres:
Map/Lot Numbers: Map 171 Lot 055
Deed Book/Page:
Date Prepared: 7/25/2018

Forested Acres = 41.6
Wetlands Acres = 5.6
Powerline Acres = 1.9
Cleared Acres = 2.6
Pond Acres = .6
Total Acreage = 52.3

General Description of the Property

The Kimball Hill Town Forest is located in the north eastern part of the Town of Hudson. The property is mostly forested with some wetland areas interspersed. A larger cleared area exists in the central part of the property and has been utilized in the past as a staging area for forestry equipment. A powerline right of way is found in the western part of the property with a large wetland complex located within the right of way. The property was most likely utilized as pasture land in the past as can be seen by the stone walls that are found around the perimeter of the property which would indicate previous animal husbandry. Over time the land use has changed in southern New England and agricultural lands have converted into forest land. A lot of forest land in southern New Hampshire has been cleared and developed over the last 30-40 years so it is very important is a Town like Hudson to conserve open space for the benefits of its residents and for wildlife. There are many hiking trails found throughout the property for residents to enjoy and there is a viewing platform overlooking a small pond also found within the central part of the property constructed to view wildlife in and around this pond.

Boundaries

The property boundaries are very well defined. Many of boundaries are made up of stone walls making them easy to locate. The boundaries were also blazed and painted approximately 20 years ago and although the blazes are recognizable the paint is very faded. It may be a good idea to re-blaze and paint the boundaries. Many of the boundary corners are also well marked with either drill holes in stone walls, iron pins or stone monuments.

Access

Access into the property is via Kimball Hill Road towards the southern part of the property. There is an old road that leads from Kimball Hill Road to the central part of the property where there is a large cleared area where forestry equipment has been staged in the past. This area looks as if there may have been gravel or sand excavated in the past. This cleared area is beginning to grow back to shrubs and small trees however it would still work very well as a landing area for forestry equipment. Because there has been previous forestry operations a series of skid roads can be seen throughout the property, although they are beginning to grow back with vegetation. Access throughout the property for hiking is also excellent as the town has created a series of hiking trails that enable residents to fully explore the entire property.

Forest Types & Harvest History

Like much of southern NH, the Kimball Hill Town Forest is primarily an oak-pine forest type. Overstory trees look to be approximately 80-90 years old and range in size from small to large sawlog. There have been two timber harvests that have taken place over the last 30 years. The first occurred in 1997 and the second took place in 2003. The results from these two harvests are a well-managed healthy forest with a high stocking level in the understory as well as an abundant amount of tree regeneration. There have been some significant weather events that have taken place over the last 10 years, most notably the ice storm of 2008 and the October blizzard of 2011. These storms caused significant damage to forest trees due to heavy snow and ice loads, particularly in oaks. Because these storms caused damage to the crowns of the trees this could have caused a slowdown in growth over the subsequent years. Some of this damage can be seen throughout the property however the trees seem to be recovering well and there appears to have been very little mortality.

Soils, Terrain, & Hydrology

The soils in the upland areas seem to be well drained and productive, while soils in the lowlands areas especially in and around the wetlands are somewhat poorly drained to poorly drained. The terrain can be considered to be mostly operable for forestry equipment. There is no real steep slopes however the terrain is not flat but rather is undulating throughout the property. There is a small stream that flows out of the pond area in the central part of the property to the north east. There are also wetland areas located in the southern portion of the property as well as in the western part of the property under the powerlines. The maps included in this plan show the location of these wetland areas.

Wildlife

Conserving a large piece of property like the Kimball Hill Town Forest is critical for wildlife habitat especially in a town like Hudson that is heavily developed.

Biological diversity can be described as the variety of plants and animals located in a given tract of land or landscape and the communities that are formed by that variety of species. Two of the biggest threats to biological diversity today are loss of due to forest conversion and invasive species altering native habitats. There are several outbreaks of invasive plant species found in the southern and central part of the property along the access road and the open area where previous log landings have been located. These plants include multiflora rose, autumn olive, glossy buckthorn and oriental bittersweet. The plants are mainly located in this southern and central part of the property. Very little invasive plants were located in the northern part of the property however if left unchecked these plants could begin to migrate into other parts of the property.

The abundant amount of understory growth within the property creates great cover for wildlife as well as nesting and foraging opportunities for birds. The abundance of oak found on the property provides a food source on the form of hard mast from acorn production. Deer, turkey and squirrels utilize acorns as an important food source. Hickory can also be found scattered throughout the property. The nuts produced from these trees can also be an important food source for wildlife. The wetland areas found within the property also offer critical habitat for specific types of wildlife such as frogs, salamanders and turtles as well as a variety of birds. The upland area under the powerline corridor is being maintained by the utility and is primarily growing small trees and shrubs. This is great habitat for wildlife that utilizes this brushy type of growth for shelter and foraging opportunities.

Timber Cruise

A detailed timber cruise was completed on the property using a 300' by 300' spacing, which yielded 20 plots of tree data. This data was used to tabulate the current tree growth on the property and the field notes made during this cruise helped to create many of the maps in this management plan. A cruise is a statistical sample that is used to determine the volumes of various forest products growing on the property. This cruise generates volumes in terms of cords (for all trees 6-11" in diameter, or trees larger than 11" that are not suitable for sawtimber) and board feet (for trees 12" and greater in diameter that could be sold and sawn into boards). The diameter of a tree is measured at 4.5' above the ground, which is an industry standard referred to as diameter at breast height (DBH). From this intensive cruise, a total of five stands are shown for this property. Stands are areas of trees with similar species composition, size, and frequency of occurrence. These stands are depicted on the Stand Map and are described in greater detail later in this plan.

Landowner Goals & Objectives

The Town of Hudson recognizes the importance of maintaining the Kimball Hill parcel as open space for passive recreation as well as managing the forest land for wildlife habitat soil and water conservation and timber production. The Conservation Commission members recognize that the citizens of the town benefit from having wooded areas for hiking and nature watching. The wetland areas within this parcel benefit greatly from the forested buffer provided by the Town Forest instead of having pavement and lawns located in close proximity to these riparian zones. Forests protect water quality by providing a type of filter that keeps non-point source pollution such as sediment from entering wetlands, ponds or lakes directly.

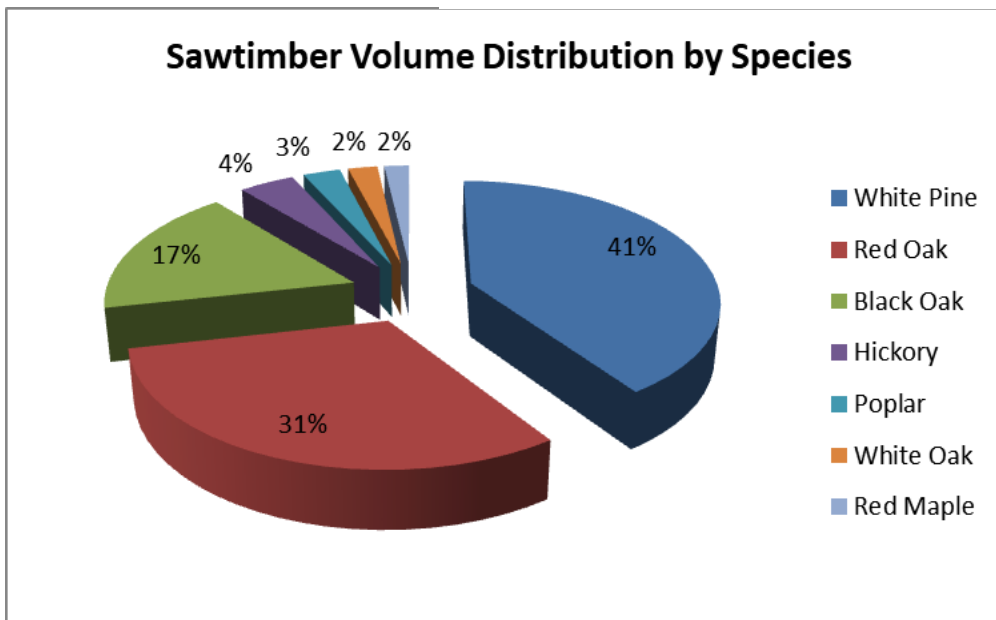
In addition to protecting water quality and wildlife habitat, one of the many benefits that can be derived from long-term sustained yield forestry is the generation of periodic revenue from timber harvests. The benefits from a timber harvest are not only income production, but also the increasing the growth rates of high quality wood on residual trees as well as the encouragement of regeneration of new trees; in order to grow tomorrow's forest beneath the forest of today. In short the main goal of long term forestry is to continually improve the overall health of the forest with each harvest entry, by removing low quality and mature trees.

**Forest Products Summary Table for Accessible Stands
Kimball Hill Town Forest Property—Hudson, NH
Total Easement Acreage: 52.3 acres**

<u>Species</u>	<u>Board Feet</u>
White Pine	99,260
Red Oak	76,559
Black Oak	42,355
Hickory	10,328
Poplar	6,945
White Oak	5,483
Red Maple	4,593
Total	245,523¹



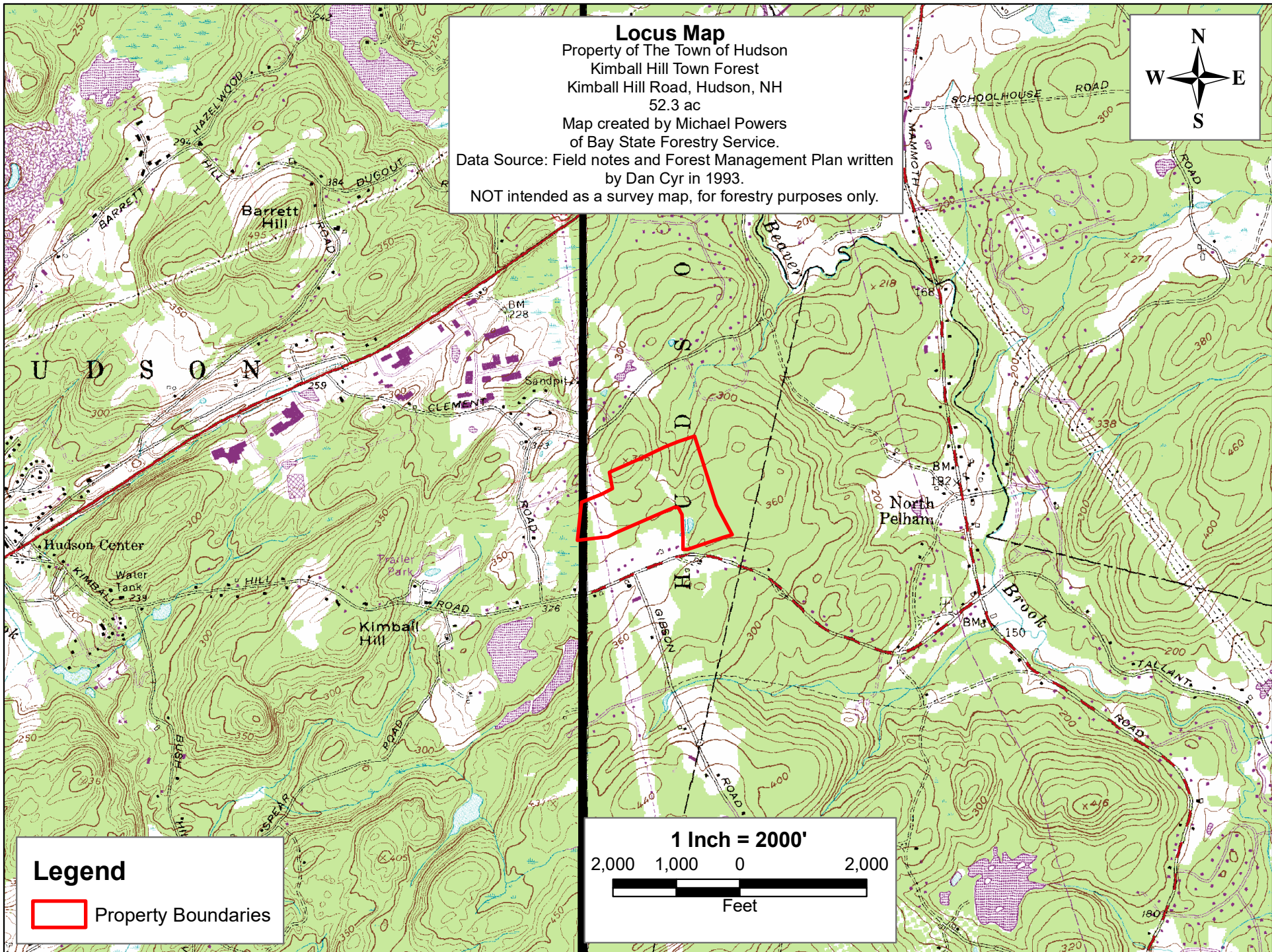
Hardwood Cordwood	286
Softwood Pulpwood	71
Total Cordwood	357²



A basal area factor 10 prism was used to conduct the inventory sample. A total of 20 plots, distributed across each forested stand, were taken to arrive at this cruise summary.

¹ This sawtimber total represents all the trees of sawtimber quality 12 inches and greater in diameter found in this management unit. In order to capture this total volume, all trees of this specification would have to be harvested.

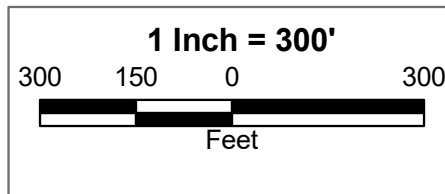
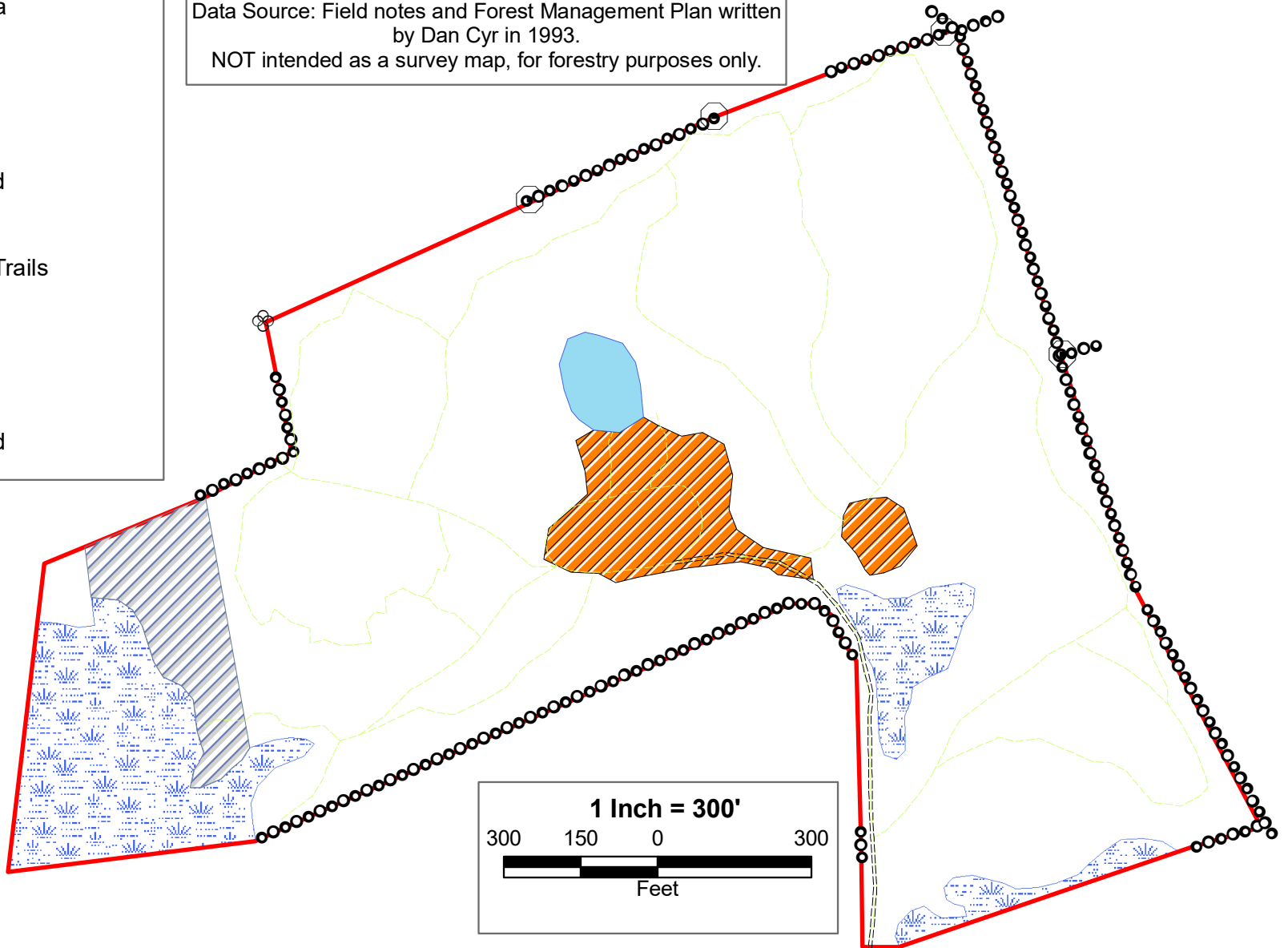
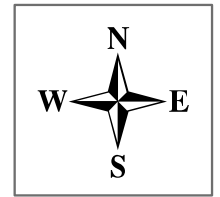
² These cordwood totals, both softwood and hardwood, represent all the standing trees with diameters of 5-11 inches found in this block, as well as trees of larger diameters that do not meet sawtimber quality specifications. In order to capture this total volume, all trees of this specification would have to be harvested.



Legend

-  Property Boundaries
-  Powerlines
-  Cleared Area
-  Wetlands
-  Pond
-  Roads
-  Woods Road
-  Stone Walls
-  Kimball Hill Trails
-  Streams
-  Drill_Holes
-  Iron_Rods
-  Stone Bound

Boundary Map
Property of The Town of Hudson
Kimball Hill Town Forest
Kimball Hill Road, Hudson, NH
52.3 ac
Map created by Michael Powers
of Bay State Forestry Service.
Data Source: Field notes and Forest Management Plan written
by Dan Cyr in 1993.
NOT intended as a survey map, for forestry purposes only.



Legend

 Property Boundaries

Photo Map


Property of The Town of Hudson
Kimball Hill Town Forest
Kimball Hill Road, Hudson, NH
52.3 ac

Map created by Michael Powers
of Bay State Forestry Service.



Data Source: Field notes and Forest Management Plan written
by Dan Cyr in 1993.

NOT intended as a survey map, for forestry purposes only.



1 Inch = 300'
300 150 0 300

Feet

Legend

-  Property Boundaries
-  Powerlines
-  Cleared Area
-  Wetlands
-  Pond

Stands

Forest Types

-  Mixed Hardwood Poles
-  Mixed Oak
-  Mixed Oak/Scattered White Pine
-  Oak/Hardwood/Scattered White Pine
-  White Pine/Oak
-  White Pine/Scattered Oak

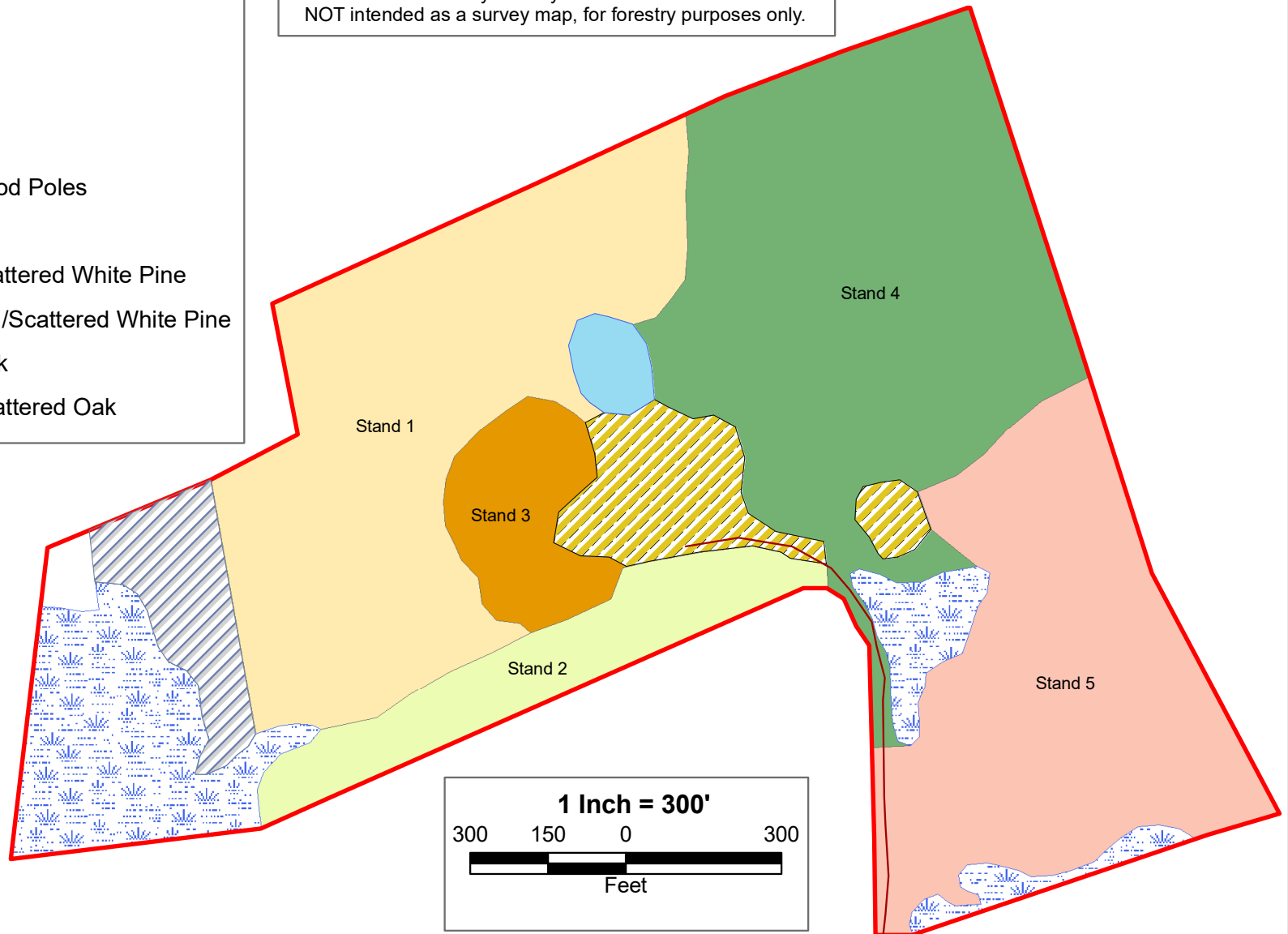
Stand Map

Property of The Town of Hudson
Kimball Hill Town Forest
Kimball Hill Road, Hudson, NH
52.3 ac

Map created by Michael Powers
of Bay State Forestry Service.

Data Source: Field notes and Forest Management Plan written
by Dan Cyr in 1993.

NOT intended as a survey map, for forestry purposes only.



General Management Strategies

These strategies should be implemented if and when timber harvesting was to occur on the property.

Timber – One of the main goals for this property is sound timber management in order to produce a periodic income, as well as promote overall forest health. A list of management strategies on a stand-by-stand basis is discussed later in this plan.

Fish/Wildlife Habitat – Although some activities can manage for a specific plant or animal (species specialists), most forest management activity focuses on habitat generalists by managing for a diversity of tree species, protecting and possibly enhancing existing habitat. The following practices should be implemented during harvest operations in an effort to enhance and retain various wildlife species:

- 1.) Seek diversity in species composition and in the stages of forest growth of species which make up the forest canopy. Patch cuts of varying sizes within mature stands or stands with marginal tree growth can result in tree regeneration, which in turn can serve as browse and cover for a wide variety of wildlife species. Group harvesting of mature species such as white pine and hemlock can also aid in creating openings for regeneration.
- 2.) Large diameter trees having cavity openings should be retained to serve as nesting and denning sites for mammal and bird use.
- 3.) Large diameter dead trees (especially hardwood species) should be retained as potential cavity sites and to serve as feed trees for insect eating wildlife.
- 4.) Primary hard mast producing trees such as red oak and hickory should be retained as a food source for wildlife such as deer, turkey and squirrels. A stocking of at least 6 oaks per acre having diameters of 16 inches through 20 inches at DBH should be maintained, if possible. White oak is preferred over red and black oak for wildlife purposes.
- 5.) Trees containing hawk nests or trees exhibiting the three limb support characteristic which forms the platform for hawk nest construction should be retained.

Soil – Care will be taken to avoid harvesting during wet times of the year, when the ground is too soft, or on excessive slopes, to minimize rutting and erosion during harvest operations. Landings will be seeded with a conservation mix and limed at the conclusion of the job to stabilize the soil, and waterbars will be installed on skid trails where necessary.

Water Quality – In accordance to the State of NH best management practices, buffers will be left along streams and the wetland edge to avoid removing too many trees at once; this will provide soil stabilization along waterways and adequate shade. This shade will decrease water temperature and therefore increase the water’s oxygen-holding capacity. The wetlands and streams will be left intact to keep the water clean and silt-free. Poled fords, culverts or bridges will be used as needed when crossing smaller streams to prevent siltation. Fueling of machines will not take place near the water’s edge to prevent pollution.

Wetlands – In order to preserve the integrity of more sensitive areas of this property, *forested* wetlands will only be harvested under dry or frozen conditions if at all.

Recreational Resources –When a harvesting operation is complete, skid trails can provide good access into the woods for recreational opportunities, both for walking and wildlife viewing. To this end, main trails will be kept free of slash where possible.

Aesthetic Values –To maintain aesthetics, logging operations will minimize rutting and will cut up the tops so they lay close to the ground for rapid decay.

Cultural Features – Care will be taken to avoid breaching or breaking the stone walls during timber harvests unless no openings exist to allow the trees to be skidded to the landing. To accomplish this, loggers will use existing barways for skidding.

Forest Protection – The diversity of tree species does well to protect this property from a forest pest looking for a monoculture of trees. By keeping logging slash low to the ground, decay is speeded up, preventing too much of a buildup of fuels as a fire hazard. Invasive plant species have been found on the southern part property. Most of the property in the northern sections do not show signs of invasive plant infestation, however the property should be continued to be monitored over time to ensure that there are no further infestations. This is especially important after a timber harvest when invasive plants tend to spread after a disturbance.

Threatened/Endangered Species and Unique Natural Communities – During all the walks through this forestland, no species were identified as either threatened or endangered. If at some time any flora or fauna are identified on this property as such, appropriate measures will be taken to prevent disturbing that species.

Forest Management Plan

Stand 1 – Mixed Oak, 11.9 acres, MSD = 13.7”

Stand 1	Mixed Oak	11.9	Acres
Species	Average BA/acre (sq. ft./ac.)	Volume per acre (bd. ft./ac.)	Total Volume (bd. ft.)
Red Oak	28	2,712	32,273
Black Oak	42	2,576	30,654
White Pine	7	504	5,998
Hickory	22	435	5,177
Red Maple	12	386	4,593
White Oak	3	133	1,583
Sawtimber Total:	114	6,746	80,278
		Cords/ac.	Total Cords
Cordwood		7.5	89
Softwood Pulp		0.7	8
Total Cordwood		8.2	97
Total BA/acre	114		

Description:

Overstory Species Composition and Size Class: Red oak, black oak: Large pole to medium sawlog size. More red maple located in the south western part of the stand.

Mid-Story Species Composition and Size Class: Medium to high density, hickory, red maple, white pine, red maple: Medium sapling to small pole size.

Regeneration: Low density, suppressed white pine, red oak, hickory seedlings 1-4’ tall.

Forest Health Concerns: The stand healthy but somewhat overstocked. Some scattered dead white ash can also be found in the south western part of the stand.

Slope/Aspect: Gently sloping to the south east.

Soil Drainage: Moderately well drained to well drained. The south eastern part of the stand is somewhat poorly drained. Scattered surface boulders 1-3’ in diameter.

Recommendations:

This stand is located in the western part of the property. The cruise data shows that this stand is somewhat over-stocked. A single tree/group selection harvest could be carried out in this stand specifically targeting some of the low quality black oak for removal. The high quality red oak within the stand should be retained for future growth. These oak will continue to increase crown growth which will translate into greater acorn production, which will continue to benefit wildlife. Hickory within this stand should also be retained

for future growth which will also serve to benefit wildlife that utilize the hickory nuts as a food source. Care should be taken when harvesting within this stand to protect the understory sapling and pole growth.

Stand 2 – White Pine/Scattered Oak, 3.4 acres, MSD = 14.6”

Stand 2	WP/Scattered Oak	3.4	Acres
Species	Average BA/acre (sq. ft./ac.)	Volume per acre (bd. ft./ac.)	Total Volume (bd. ft.)
White Pine	120	15,757	53,574
Hemlock	20		
Sawtimber Total:	140	15,757	53,574
		Cords/ac.	Total Cords
Cordwood			
Softwood Pulp		8.4	29
Total Cordwood		8	29
Total BA/acre	140		

Description:

Overstory Species Composition and Size Class: White pine, scattered oak: Small to large sawlog size.

Mid-Story Species Composition and Size Class: Medium to high density where previous openings have been created. White pine, red oak, white oak: Medium to large sapling.

Regeneration: Low density of regeneration where white pine growing in the overstory has created shady conditions on the forest floor. Regeneration is primarily made up of red maple and red oak seedlings.

Forest Health Concerns: The stand is somewhat overstocked and there are some invasive plants found in the far eastern part of the stand.

Slope/Aspect: This stand is relatively flat but slopes slightly to the west.

Soil Drainage: Moderately drained. The western part of the stand is more poorly drained than the eastern part of the stand.

Recommendations:

This stand is located in the south western part of the property. The soils in the western part of the stand are more poorly drained making it somewhat difficult to access. This part of the stand should only be harvested under dry or frozen conditions to minimize rutting from forestry equipment. Some of the low grade hardwoods can be targeted for removal as well as the white pine with poorly formed or suppressed crowns. There is more white pine growing in the western part of the stand. The eastern part of the stand contains more oak in the overstory. The better quality oak in this part of the stand should be retained for future growth.

Stand 3 – Mixed Hardwood Poles, 2.3 acres, MSD = 9.7”

Stand 3	Mixed Hdwd Poles	2.3	Acres
Species	Average BA/acre (sq. ft./ac.)	Volume per acre (bd. ft./ac.)	Total Volume (bd. ft.)
Poplar	45	780	1,794
Red Oak	10		
White Oak	5		
White Birch	5		
Sawtimber Total:	65	780	1,794
		Cords/ac.	Total Cords
Cordwood		11	26
Softwood Pulp			
Total Cordwood		11	26
Total BA/acre	65		

Description:

Overstory Species Composition and Size Class: Poplar, white birch, gray birch, red oak: Large Sapling to medium pole.

Mid-Story Species Composition and Size Class: Medium to high density. White birch, gray birch, red oak: Medium to large sapling.

Regeneration: Low density. Hickory, red oak, white pine, seedling to small saplings.

Forest Health Concerns: There are no health concerns in this stand.

Slope/Aspect: This stand is relatively flat.

Soil Drainage: Moderately drained. The western part of the stand is more poorly drained than the eastern part of the stand.

Recommendations:

This stand was probably cleared approximately 20-30 years ago and has now regenerated into an even-aged sapling-pole size stand. It would be difficult to conduct a commercial type of harvest within this stand because most of the trees are in the pre-commercial stage of development. A couple of different management options would include clearing this stand again or at least portions of the stand in order to create early successional habitat for wildlife. The cut trees would sprout back into a dense growth which would be beneficial to wildlife such as ruffed grouse and woodcock as well as species such as New England cottontail. The other management option would be to conduct a pre-commercial thinning targeting poplar, white and gray birch for removal and retaining red and black oak for future growth. Because these trees are small and not of commercial value, there would be cost associated with these types of treatments.

Stand 4 – White Pine/Oak, 13.7 acres, MSD = 12.5”

Stand 4	WP/Oak	13.7	Acres
Species	Average BA/acre (sq. ft./ac.)	Volume per acre (bd. ft./ac.)	Total Volume (bd. ft.)
White Pine	20	1,913	26,208
Red Oak	13	1,080	14,796
Black Oak	11	565	7,741
Poplar	9	376	5,151
Hickory	13	113	1,548
Red Maple	1		
Yellow/Black Birch	1		
White Birch	7		
Sugar Maple	3		
White Oak	13		
Sawtimber Total:	91	4,047	55,444
		Cords/ac.	Total Cords
Cordwood		8.3	114
Softwood Pulp		1.6	22
Total Cordwood		9.9	136
Total BA/acre	91		

Description:

Overstory Species Composition and Size Class: Red oak, black oak, white oak, hickory: Small to medium sawlog. White pine: Medium to large sawlog.

Mid-Story Species Composition and Size Class: Red oak, red maple, white pine: Medium to large sapling. Some scattered hemlock in the northern part of the stand also small to medium sapling. Scattered clumps of witch hazel also located throughout the stand.

Regeneration: Mixed oak, white pine: Seedling to small saplings. Abundant amount of low bush blueberry found throughout the stand.

Forest Health Concerns: Scattered dead white ash. Some signs of ice damage on overstory trees as well as trees in the understory.

Slope/Aspect: The southern part of the stand slopes gently to the south while the northern portion of the stand slopes gently to the north west.

Soil Drainage: Moderate to moderately well drained. A small stream is located in the northern part of the stand. It flows out of the small pond area to the north east and off of the property.

Recommendations:

This is one of the larger stands on the property is mainly comprised of mixed oak and white pine in the overstory. There is a small area in the northeastern part of the stand where the soils are somewhat poorly drained there is more hemlock growing in the overstory. However this area was too small to type as its own stand. For the most part the trees within the stand are healthy and the cruise data shows the stand as only being slightly over-stocked, therefore it is recommended that only a very light harvest occur within this stand, focusing on the removal of any trees with damaged or suppressed crowns. There is an abundance of growth happening in the understory of this stand and care should be taken when harvesting to minimize damage to these younger sapling and pole size trees. Higher quality white pine, red and white oak should be retained for future growth. Hickory growing within this stand should also be retained as the nuts produced by these trees provide an important food source for wildlife.

Stand 5 – Oak/Scattered White Pine, 10 acres, MSD = 13.1”

Stand 5	Mixed Oak/Scat WP	10	Acres
Species	Average BA/acre (sq. ft./ac.)	Volume per acre (bd. ft./ac.)	Total Volume (bd. ft.)
Red Oak	45	2,949	29,490
White Pine	15	1,348	13,480
Black Oak	10	396	3,960
White Oak	8	390	3,900
Hickory	13		
Sawtimber Total:	91	5,083	50,830
		Cords/ac.	Total Cords
Cordwood		5.7	57
Softwood Pulp		1.2	12
Total Cordwood		6.9	69
Total BA/acre	91		

Description:

Overstory Species Composition and Size Class: Red oak, black oak, white oak, scattered white pine: Small to large sawlog size.

Mid-Story Species Composition and Size Class: Red oak, white oak, red maple: Medium sapling to large sapling. Some patches of dense white pine mixed with hardwood species: Medium sapling to small pole.

Regeneration: Mixed oak seedlings, white pine small sapling size. Low bush blueberry found throughout the stand.

Forest Health Concerns: Scattered ice/snow damage but not severe.

Slope/Aspect: Fairly flat. The northern part of the stand slopes gently to the north west towards the wetland area.

Soil Drainage: Moderately well drained.

Recommendations:

This stand is located in the southern-most part of the property. There is some very good quality oak and pine growing within this stand. Like Stand 4 it is only somewhat overstocked, so a light harvest targeting low grade trees with poor or suppressed crowns may be warranted. If the basal area can be kept at an acceptable level, some of the mature oak and pine may be harvested for sawtimber. Understory stocking is at a high level and care should be taken when harvesting timber to minimize the amount of damage to these trees growing in the understory. There is also a wetland area located just to the south of

this stand and care should be taken when harvesting near this wetland to protect its ecological integrity.

Management Schedule

2018

- Prepare the forest management plan.
- Blaze and paint identifiable boundary lines. (recommended)
- Conduct a conventional timber harvest in harvestable areas.
- Carry out TSI project in Stand 3 if Conservation Commission desires.

2018-2028

- Monitor the property for wind damage, ice/snow damage, fire, or disease and take appropriate corrective actions as needed to ensure the continued health of this forest block.
- Re-assess the property in 10 years and write a new 10-year management plan, specifically looking at TSI potential and another harvest midway through the next management period.

Concluding Remarks

The recommendations proposed in this 10-year management plan should be implemented within the next 10 years, although timing will depend on landowner priorities, market conditions, and environmental conditions such as pest outbreaks and weather. Through sound silvicultural practices and using best management practices (BMP's), mature, diseased, and defective trees will be harvested to provide healthier more vigorous growing trees additional growing space, and to stimulate regeneration on the forest floor. This forest should be monitored for pest outbreaks and destructive weather events; corrective action should be taken as needed over the next 10 years in response to any such events. These recommendations are silviculturally and operationally sound and should result in meeting the landowners' objectives for their property. Implementing these recommendations will help ensure that this forestland is being managed with long-term sustainability in mind.

Respectfully Submitted,



Michael F. Powers, Consulting Forester
N.H. License #379

Glossary of Forestry Terms

Basal Area - Cross sectional area of a tree stem at a height of 4.5 feet (diameter at breast height) expressed in square feet per acre.

Browse - The twigs and leaves of woody plants, that are edible to wildlife.

Butt - The base of a tree; the lower end of a log.

Canopy - The upper layer of branches and foliage, or tree crowns, in a forest.

Crop Tree - A tree identified to be grown to maturity and not removed from the forest before the final harvest cut. Usually selected on the basis of its quality and location with respect to other trees.

Cull - A tree or log of merchantable size but with little or no market value.

DBH - The diameter of a tree as measured at breast height which is taken at 4.5 feet from the ground surface.

Dominant - Trees with crowns able to receive full sunlight from above and partially from the side.

Form - The shape of a tree or log.

Habitat - The local environment in which a plant or animal lives.

Harvesting - In general use, removing all or portions of trees on an area.

Mast - Acorns or other fruits or nuts edible to wildlife.

Maturity - For a given species or stand, the approximate age beyond which growth falls off or decay begins to increase at a rate likely to reduce economic importance.

Merchantable - pertains to a log or tree with qualities that would permit an economically profitable harvest

Mean Stand Diameter (MSD) - The mean diameter of all trees within a stand or compartment.

Merchantable Mean Stand Diameter - The mean diameter of all trees considered as sawlog stocking within a compartment or stand.

Pole - A tree whose diameter at DBH ranges from 5.1 through 11 inches.

Pulpwood - Roundwood converted into specific lengths or chips for commercial use as in paper making or as a fuel.

Regeneration - New forest growth by artificial reproduction, by means of seeding or planting; or natural reproduction, from natural seeding or sprouting.

Sapling - A small tree, usually defined as being between 2 and 4 inches at DBH.

Sawtimber - Trees that will yield logs suitable in size and quality for the production of lumber; generally having a minimum diameter at DBH of 11.1 inches.

Sawlog - That part of a tree which has economic value as sawed lumber.

Site - An area evaluated as to its capacity to produce a particular forest or other vegetation based on the combination of biological, climatic, and soil factors present.

Site Index - A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and co-dominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75 feet.

Silviculture - The science of producing and caring for a forest by applying the principals of forest management within a sound economic framework.

Snag - A standing dead tree; a portion of tree remaining standing.

Stand - A grouping of trees occupying a site and sufficiently uniform in composition, age, and condition so as to be distinguishable from the forest on adjoining areas.

Stand Density - An expression referring to the total stocking of a stand of trees, usually expressed in square feet of basal per area.

Stocking - The degree of occupancy of trees on land, by measurement and/or the number of trees in a stand.

Thinning - The reduction in density of stocking by harvesting trees to prevent overcrowding and stagnation of a stand of trees.