

FOREST STEWARDSHIP PLAN

prepared for the

Town of Jackson's Prospect Farm

450+/- Total Acres

Carter Notch Road

Jackson, NH

June 2020

Prepared for:

Town of Jackson
PO Box 268
Jackson, NH 03846-0268

Prepared by:

Timothy R. Nolin
Forester, NH Lic.#356



Forest Land Improvement
forestlandimprovement.com

65 Walker Hill Rd., Ossipee, NH 03864
603-651-9711

TABLE OF CONTENTS

1. Background	
• Introduction.....	page 1
• Goals and Objectives	page 1
2. WOODLOT DESCRIPTION	
• Location - Description	page 2
• Boundary Lines.....	page 3
• Land History	page 5
• Topography and Aspect.....	page 8
• Aerial Photo	page 9
• Soils Map..	page 10
• Soils	page 11
• Access	page 13
3. FOREST RESOURCES	
• Forest Categorization.....	page 15
• Stand Descriptions	page 17
• Forest Type Map.....	page 18
• Stand Technical Data and Recommendations.....	page 19
• Timber Volumes and Values	page 31
4. OTHER RESOURCES	
• Wildlife	page 32
• Wetlands and Water Resources	page 35
• Aesthetics	page 37
• Recreation	page 42
• Cultural Features.....	page 44
• Rare and Endangered Plant & Animal Species.....	page 47
5. OTHER RECOMMENDATIONS	
• Stabilizing and Reseeding.....	page 48
• Safety	page 48
• Best Management Practices	page 48
• Forest Protection – Fire Hazard	page 49
• Insects and Diseases.....	page 51
6. MANAGEMENT SUMMARY	
• Schedule of Priorities.....	page 52
7. APPENDIX	
•	page 53

INTRODUCTION

This Forest Stewardship Plan is being prepared at the request of the Town of Jackson's Select Board and Conservation Commission. It is designed to document the natural resources in their current state and formulate management recommendations to meet the landowners' long-term goals and objectives. It will replace the previous Stewardship Plan, developed in 2003, taking into account all the various management activities that have occurred in the last 17 years.

GOALS AND OBJECTIVES

The Town of Jackson acquired Prospect Farm from the Estate of Edith Baker (following the death of her son Ezra who had life tenancy) "*to be forever held and used as a Public Park as part of the Forest Reserve so called and as a memorial to my husband, Charles Morill Baker.*". Specific management goals include;

- Providing recreational opportunities for the public;
- The protection and enhancement of the scenic beauty of the area;
- The protection of the cultural and historic features found on the property
- The protection and improvement of wildlife habitat;
- To conserve and protect the wetland and water resources;
- To protect rare or unique plant and animal species;
- The sustainable production of commercial forest products where this does not have undue adverse impact to the other stated management goals;

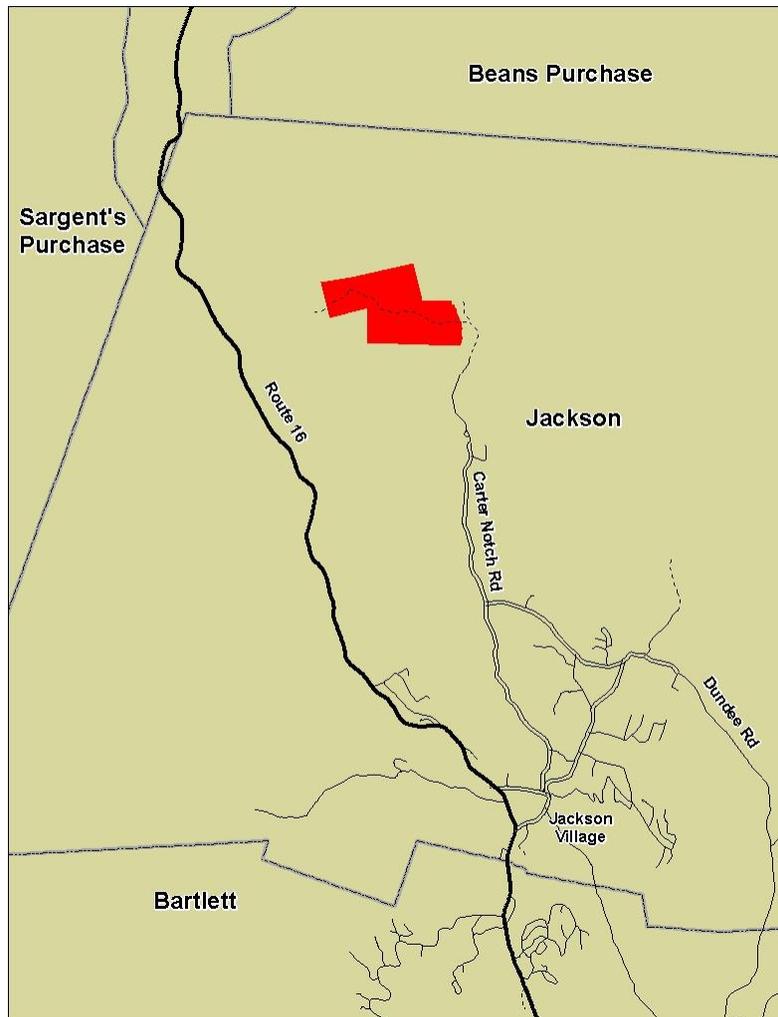
This property is not a Municipally designated Town Forest, and management falls to the Jackson Board of Selectmen with consultation/input from the Conservation Commission.

Permitted uses of the property include passive recreation such as walking/hiking, nature study, snowshoeing, cross-country skiing, hunting, etc. Non-permitted uses include; OHRV/ATV use, camping, and the kindling of fires (camping/fires may be allowed with permit by the Select Board and Fire Warden). The Jackson Ski Touring Foundation maintains many of the trails on the property as part of their extensive network of groomed ski trails during the winter months.

CHAPTER 2: WOODLOT DESCRIPTION

LOCATION - DESCRIPTION

Prospect Farm is fairly irregular in shape and located at the northern end of Carter Notch Road, on the western slopes of the Wildcat Brook Valley and at the southern end of the Wildcat Ridge. The Town of Jackson's Assessment Maps identify the property as R-7, Lot 1 and assess it at 450+/- acres. There has never been a formal survey of the entire property, only a Deed Sketch drawn by H.E.B Engineers in 1982. Several old maps associated with the Publishers Paper Company and the early acquisition of land by the U.S. Forest Service exist, but only offer rough glimpses as to the boundary configuration. A more recent survey, conducted in 1994 by Cartographic Associates for the U.S.F.S. acquisition of the Mark McPherson Tract 1055 details the northern half of the irregular eastern boundary of Prospect Farm and can be found in the Carroll County Registry, Plan Book 151, Page 63. A survey of the southeastern portion of the property in common with Ballentine was conducted in 2011 by Ammonoosuc Survey. I could not find this plan on record at the Registry, but a copy was obtained from Ammonoosuc Survey.



BOUNDARY LINES

The current boundary configuration shown on the Forest Type Map that accompanies this plan is the most accurate depiction of the property so far. It is based on the information that has been compiled over the years, available surveys, USFS boundary records, and a thorough GPS mapping of the lines and corners with a handheld Garmin Unit. With updated and more accurate information, the exact location/depiction of the lines has changed slightly since the original (hand drawn) Forest Type Map in 2003. Previous digital maps, including the kiosk, have been a digitized version of this hand drawn map.

The boundary lines of Prospect Farm were all able to be located during the field work for this plan. They range from extremely well evident to obscure and hard to identify. Those lines in common with the U.S.F.S. are evidenced by red paint and are regularly maintained. The remaining lines, those in the southeast and southwest corners of the property, are much less evident.

The boundary lines in the southeast corner of the property (those in common with Ballentine), from just south of Camp Gout, southward to the corner and then westward to almost the Quail Trail, are the most obscure and in immediate need of being repainted. The course of these lines is marked by an old, fallen wire fence, faded blazes and some old blue flagging and are shown on the 2011 Plan by Ammonoosuc Survey. It was hard to locate in many areas. It is highly recommended to repaint these sections of line in the very near future.



Old faded blazes mark the course of the wire fence along Ballentine.

CHAPTER 2: WOODLOT DESCRIPTION

The lines against Lyons in the southwest corner of the property consist of fading yellow blazes that were last painted in 2004. While not as critical as the Ballentine boundaries, it is recommended to repaint these lines in the next five years.



Faded yellow blazes mark the lines against Lyons.

I generally recommend painting boundary lines red. It is the most common color and stands out well in the woods. However, with the extensive use of red paint by the U.S.F.S., it may prove advisable to use a different color to differentiate these lines from those in common with the Forest Service. Yellow has been used in the past, but I feel this color does not stand out well and tends to fade quickly. I would recommend orange or blue. Regardless of color, I recommend using a quality oil-based enamel that can be brushed on. The Nelson Paint Company makes a paint specifically designed for this that comes in many colors. I have also had good results with the Rustoleum Professional High Performance Protective Enamel.

The cost to repaint these two sections of boundary (including paint) would be \$0.10/ft.

Against Ballentine:	3,145' @\$0.10/ft =	\$315
Against Lyons:	4,336' @\$0.10/ft =	<u>\$434</u>
	Total	\$749

It is generally necessary to repaint boundary lines every 10-15 years to keep them easily identifiable.

LAND HISTORY

Much of the early history of Prospect Farm is detailed other places, chiefly in the publication titled “Prospect Farm” by Margaret Brown Garland in 1986. The following summary of the history is taken from the Town of Jackson’s website.

“In 1774, NH Governor Benning Wentworth granted 8,740 acres to Rogers, Wentworth and Treadwell, including the area that became Prospect Farm. The area became known as Rogers, Wentworth and Treadwell Location.

At some point in the late 1700’s or early 1800’s, the grant was divided, with R.A. Mason getting the western division and J.B. Mason acquiring the eastern division.

In 1830, a partnership of David Pingree and Ebenezer Coe purchased the western division for the timber. The eastern division was sectioned into lots, with lots 14 & 15 making up the bulk of what is now Prospect Farm. The Hall lot was added to these, making up the 500+/- acre Prospect Farm.

In 1831, William Johnson was the first settler with town records showing 100 acres of land (lot 15). The Johnson foundation can be found just uphill of the apple orchard.

The Hall, Baker, Johnson and Garland families settled portions of Prospect Farm and the foundations of their homesites dot the landscape. Tracking land ownership has been a challenge as these records have been found in Grafton, Coos and Carroll Counties. A major void in the records is a result of a fire in the Coos County Courthouse in Lancaster.

The various lots changed hands several times until 1911, at which time the Baker family had acquired all of the original Prospect Farm except for a single 100-acre lot.

In 1942, Edith Baker grants the Prospect Farm lands known as “Camp Wildcat” to the Town of Jackson in her will. Her son Ezra Baker had life tenancy until his death at which time title to the land would pass to the Town of Jackson.

In 1960 (should be 1955), the Town of Jackson acquired the 500 acres Prospect Farm.

In 1961 and 1962 the majority of the timber was harvested off the lot.”

CHAPTER 2: WOODLOT DESCRIPTION

When the Jackson Conservation Commission was formed in 1972, they took an interest in assisting the Selectmen with the management of the property. In 1979, Hub George was involved with rejuvenating the land following the heavy harvesting of the early 1960's, clearing and mapping the cellar holes, reviving the apple orchard, and developing recreational trails. Much of this work is detailed in the 1979 Conservation Commission Newsletter and the Jackson Historical Society meeting notes from January 2, 1980.

In 1981 and 1982, Forest Land Improvement conducted 37 acres of Timber Stand Improvement work in the southeastern corner of Prospect Farm. The work consisted of weeding and thinning the young growth that had resulted from the heavy harvesting of the early 1960's, primarily releasing white birch crop trees. Partial cost-sharing of this work was obtained through the Agricultural Stabilization and Conservation Service (A.S.C.S.).

Also in the early 1980's, then Selectmen David Carta contested his right to access the land that he owned to the southwest of Prospect Farm (now owned by Lyons) over what is now referred to as the Quail Trail or U.S.F.S. Road #512. He also questioned the Town's color of title to Lot 15.

In 1985, the U.S.F.S. completed construction of the Bog Brook Road (Forest Road #233) which developed timber harvesting access to much of the Wildcat Brook Valley. As part of the project, they improved access to the small gravel pit on Prospect Farm.

In 2003, Forest Land Improvement developed a Forest Stewardship Plan on Prospect Farm. Developing an accurate map of the property was a large undertaking and relied heavily on deed references, old maps, and GPS information with some of the earliest handheld units. The following year, the planning for the specific management activities began. A meeting with Karen Bordeau (NH Fish and Game Biologist) was held to determine availability of cost share funds through the Small Grants Program. The southwest boundary (against what is now Lyons) was repainted yellow.

In 2005, the process of restoring the apple orchard was begun. This project was continued in 2007 in conjunction with improvement of the Lookout Rock and Monument Rock views, the clearing of debris and brush from the cellar holes, the stabilization of the Wildcat Valley Trail and the Upper Hall Trail view cut.

In 2008, the U.S.F.S, as part of the "Than Timber Sale", began road improvement projects to Forest Roads #512, 810 and 810A, the Marsh Brook, Carter Notch and Carter Notch Spur Roads respectively. Local logging contractor Garland Lumber had bought this timber sale and was conducting the associated road improvements. These improvements greatly increased access to Prospect Farm and allowed the Town to begin the planning process for implementing timber harvesting per the recommendations found in the 2003 Forest Stewardship Plan.

CHAPTER 2: WOODLOT DESCRIPTION

In 2009, the Upper Hall Trail view area was stumped, rocked and smoothed to allow for mowing and a digital version of the 2003 Forest Type Map was created.

Further road clearing and construction occurred in 2010 and the first timber harvest was conducted on Prospect Farm by Garland Lumber, who was chosen for the logging because they were; A) working in the immediate area on the U.S.F.S. “Than Timber Sale” and B) had Cut-to-Length logging equipment, which was most suited to the work prescribed on the Town’s land. The first timber harvest with Garland netted the Town \$11,018 in stumpage proceeds (after forestry fees) and \$1,477 in Timber Tax.

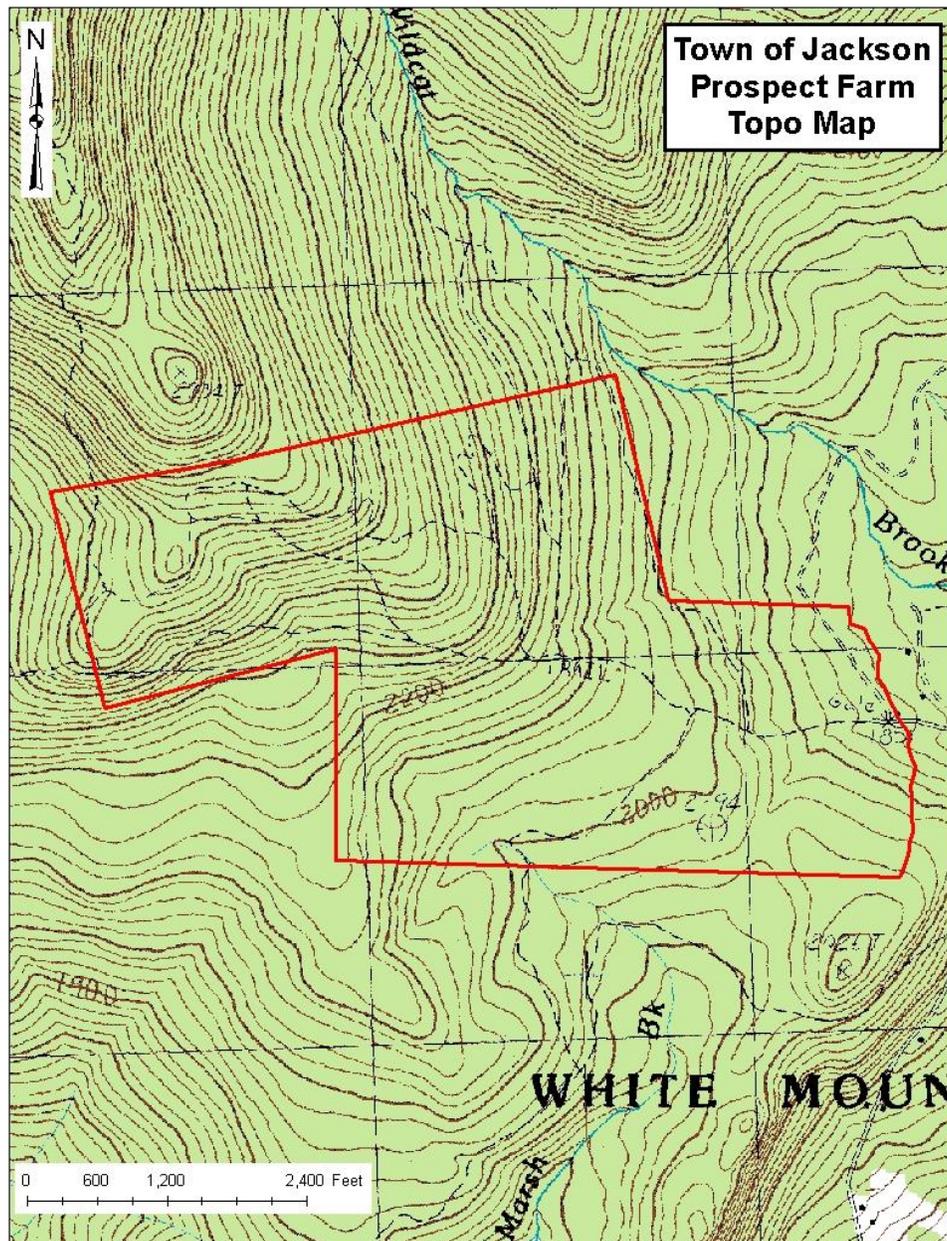
The following winter, Garland conducted the second of the planned timber harvests, netting the Town \$9,496 in stumpage and \$1,251 in Timber Tax.

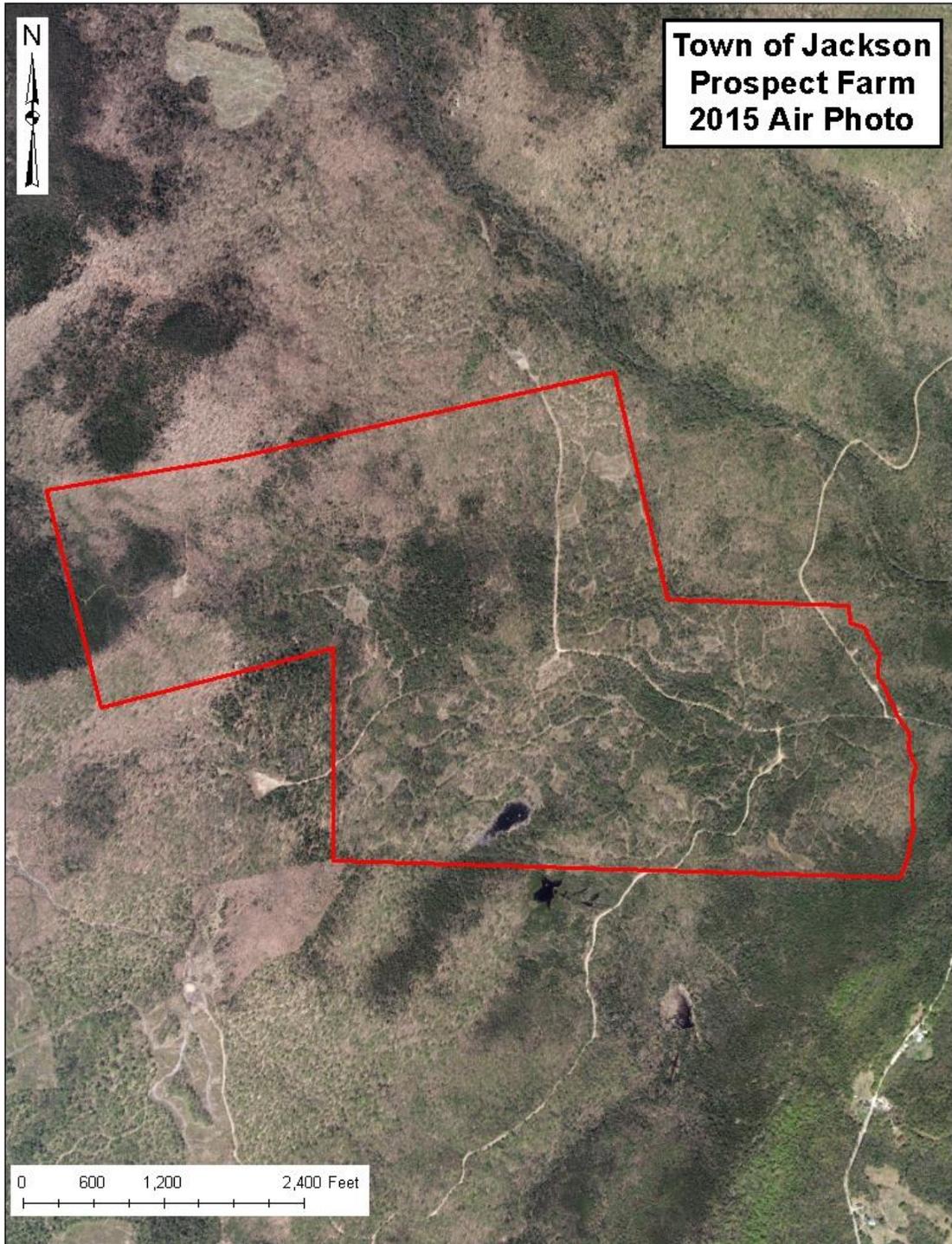
In 2014, Forest Land Improvement developed the map/poster that is currently in place at the Kiosk near the eastern boundary and the main entrance to Prospect Farm.

TOPOGRAPHY - ASPECT

The topography on Prospect Farm is quite varied across the extent, as to be expected with a property this size. In general, the southern and eastern sections have much more gentle slopes, while the northern and western sections contain the more steeply sloping ground.

Aspect also varies greatly, but, in general, the land slopes to the south and east.





SOILS

Seven soil types underlay Prospect Farm, as determined by the Carroll County Soil Survey Manual. The following is a description of the major forest soil groups (taken from the C.C.S.S.M.) along with a list of which soils fall into each group.

Group IA Soils

Symbol	Description
MFC	Marlow-Peru very stony fine sandy loam association, sloping
MEE	Marlow very stony fine sandy loam association, steep
PLC	Peru very stony fine sandy loam association, 0-15% slopes

This group consists of the deeper, loamy textured, moderately well, and well-drained soils, however, on Prospect Farm, there are pockets within the Marlow-Peru and Peru soils that are poorly drained Hydric B soils. Generally, IA soils are more fertile and have the most favorable soil moisture relationships.

The successional trends on these soils are toward stands of shade tolerant hardwoods, i.e., beech and sugar maple. Successional stands frequently contain a variety of hardwoods such as beech, sugar maple, red maple, white birch, yellow birch, aspen, white ash, and northern red oak in varying combinations with red and white spruce, balsam fir, hemlock, and occasionally white pine.

Hardwood competition is severe on these soils. Softwood regeneration is usually dependent upon persistent hardwood control efforts.

Group IB Soils

Symbol	Description
LVE	Lyman-Berkshire very rocky fine sandy loam association, steep.

The soils in this group are generally sandy or loamy over sandy textures and slightly less fertile than those in group IA. These soils are moderately well and well drained. Soil moisture is adequate for good tree growth, but may not be quite as abundant as in group IA soils.

Soils in this group have successional trends toward a climax of tolerant hardwoods, predominantly beech. Successional stands, especially those which are heavily cut over, are commonly composed of a variety of hardwood species such as red maple, aspen, paper birch, yellow birch, sugar maple, and beech, in combinations with red spruce, balsam fir, and hemlock.

Hardwood competition is moderate to severe on these soils. Successional softwood regeneration is dependent upon hardwood control.

Group IIA Soils

Symbol	Description
LVF	Lyman-Berkshire very rocky fine sandy loam association, very steep.
LYE	Lyman-Rock Outcrop-Berkshire loam association, steep
MEF	Marlow very stony fine sandy loam association, very steep.

This diverse group includes many of the same soils as in groups IA and IB. However, these mapping units have been separated because of physical limitations which make forest management more difficult and costly, i.e., steep slopes, bedrock outcrops, erosive textures, surface boulders, and extreme rockiness. Usually productivity of these soils is not greatly affected by their physical limitations. However, management activities such as tree planting, thinning, and harvesting are more difficult and more costly.

ACCESS

As with any property, developing and maintaining access is one of the most important aspects of good land stewardship because, without access, most other management is limited. The extensive road improvements that the U.S.F.S. conducted as part of the Than Timber Sale have greatly improved management access on the property, widening many of the Forest Roads, installing culverts and adding gravel. It is largely because of these access improvements that the Town was able to conduct the timber harvesting in 2010-11.

However, time and use have a way of degrading even the best built roads, and this can certainly be said for some sections of the access road system on Prospect Farm. Just above the gate by the kiosk, the main road into the property passes through a low, wet area. There is evidence of vehicle ruts, caused by unwanted motorized use which appears to have occurred when the gate was left open too long in the spring. These ruts were filled with water at the time of the field work for this plan. Further up the hill, more ruts are evident from past use during inappropriate times. It is critically important that the gate be closed as soon as possible in the spring.



Rutting just uphill of the gate and kiosk.

CHAPTER 2: WOODLOT DESCRIPTION

There are several culverts that need to be cleaned out along the woods road system, and, if it would not interfere with the Ski Touring's grooming operations, probably a dozen more water bars should be installed between the kiosk and the orchard, kicking any running water off the surface of the road. The first culvert uphill of the gate seems to be failing, with water running out from beneath it.

During the most recent timber harvesting, a log landing was used near the old gravel pit on the Quail Trail, just to the south of the Carter Notch Rd. This landing was suitable for accessing the most southern and eastern sections of the property. A second landing was used along the main woods road, but was little more than a wide spot on the shoulder. These two landings gained access to the southern and eastern half of the property, but skidding distances preclude using them to gain logging access to the higher elevation areas in the northern and western sections of the lot. If logging were planned for this area, a landing would have to be located somewhere near the orchard at the intersection of Forest Roads 810 and 810A. The long uphill road between the kiosk and the orchard would be difficult to negotiate with tractor-trailer trucks during the winter months and it would greatly disturb the operations of the Jackson Ski Touring Foundation, so a summer time harvest would ideally be planned for this area.

Since the last forest management plan, the construction of the parking area near the kiosk has greatly improved recreational access during the summer months. During the winter, the nearest parking area is the Jackson Ski Touring lot on the Ballentine property.

In 2007, the long uphill section of the Wildcat Valley Trail between the orchard and the intersection with the Halls Ledge Trail saw significant drainage work, mainly in the form of water-barring. While some of these are still functioning perfectly, some need to be reshaped and cleaned out, as do some of the water control measures on the Orchard Trail.

The lowest section of the Carter Notch Road (just uphill of the gate and kiosk) would benefit from the addition of gravel. This would allow the road to be raised and crowned, helping to force the water off the travel surface into the ditches. The potential exists to develop some of this material from the old gravel pit area on the Quail Trail. At the very least, this area needs to be smoothed and re-shaped to eliminate the ruts and control the flow of water that is running down the road.

An issue that should be addressed is what responsibility the Jackson Ski Touring Foundation has for assisting in the routine maintenance of the roads and trails on the property. They obviously conduct clearing and brushing back of the trails to facilitate grooming, but do they maintain water bars, culverts and the like?

FOREST CATEGORIZATION & INVENTORY

There are many ways a forester can categorize a woodland. The most common way is to break a larger forested area (be it a whole property, compartment, management unit, etc.) down into stands; areas of the forest with similar characteristics (i.e. species composition, size class, and density or stocking). These stands can then, based on their similarity of character, be treated in a uniform manner.

For ease of reference, these stands are given a numerical label (Stand 1,2,3,etc.). These stands can then be broken down into sections (1-1, 1-2, 1-3 etc.). Stands are then given a short coded description on the Forest Type Map to give someone in the field with the map a coarse description of the stand without reading the more involved description contained in the plan. This coded description deals mainly with the overstory by selecting the segment of each of the following categories that best describes the stand.

SPECIES TYPE	SIZE CLASS	STOCKING LEVEL
H: Hardwood	1: Saplings (1-4")	A: Over stocked
M: Mixedwood	2: Poles (5-11")	B: Fully stocked
S: Softwood	3: Sawtimber (12"+)	C: Under stocked
WP: White Pine		

For example, H2A would indicate an overstocked hardwood pole stand, M3C an understocked sawtimber sized mixedwood stand, or WP1B a fully stocked white pine sapling stand. If information regarding the understory were needed to be given in conjunction with overstory information, it would be recorded as ^{WP3C}/_{H1A}, in this case an understocked white pine sawtimber stand with an overstocked understory of hardwood saplings.

CHAPTER 3: FOREST RESOURCES

The following is a list of the abbreviations of the common trees found on Prospect Farm. These abbreviations can be found throughout the detailed stand descriptions.

Species	Abbreviation	Species	Abbreviation
White Pine	WP	Red Pine	RP
Spruce	SP	Balsam Fir	BF
Hemlock	HM	Other softwood	OS
Red Oak	RO	Red Maple	RM
Sugar Maple	SM	White Birch	WB
Yellow Birch	YB	White Ash	WA
Aspen	AS	Beech	BE
Basswood	Bsw	Other Hardwood	OH

On Prospect Farm, a total of 83 inventory points were recorded using a 20 basal area factor (BAF) prism. Each inventory point was located on a grid spacing of 500' by 500'. At each inventory point, data was recorded regarding tree species, dbh, merchantable height by various product, and overall tree quality. This information was analyzed by the **Forest Tally** computer program, developed by Lee Goldsmith.

Detailed descriptions of each stand can be found in the **STAND DESCRIPTIONS** and **STAND RECOMMENDATIONS** sections of the Management Plan.

STAND DESCRIPTIONS

STAND	CODE	ACREAGE	DESCRIPTION
1	H2/3A	350	Fully to over-stocked, pole to small sawtimber sized northern hardwoods (beech, birch maple) with a scattered component of smaller spruce and fir. Fair quality. 60+ year old.
2	M2/3A	74	Fully to over-stocked, pole to small sawtimber sized spruce and fir with a variable component of northern hardwoods, particularly white birch. Fair to good quality. 60+ year old.
3	M1A	20	Fully to over-stocked, sapling sized northern hardwoods, striped maple, grey birch, pin cherry and balsam fir. Poor to quality. This stand is a result of the patch clearcutting during the 2010-2011 timber harvesting. 10-year-old.
		6	Open areas (roads, orchard, beaver bog, log landing, wetland etc.).
		450+/-	Total Acreage

CHAPTER 3: FOREST RESOURCES

Forest type map

STAND TECHNICAL DATA AND RECOMMENDATIONS

STAND 1 H2/3A 350 Acres

TECHNICAL DATA:

Species Composition by Percent (BA)	SM-26%, RM-18%, YB-15%, WB-12%, BE-9%, WA-9%, Other-11%
Mean Stand Diameter	7.9"
Mean Merchantable Stand Diameter	9.7"
# Trees per acre (4"+)	382
Basal Area/Acre	128.5 sq. ft./acre



Mixed northern hardwoods in stand 1.

MANAGEMENT GOAL: To improve the quality of the timber growth as it matures, while maintaining the aesthetics, particularly around the various trails.

TIME FRAME: 2020-2030

STAND 1 RECOMMENDATIONS:

Stand 1 is the largest of the forest types on Prospect Farm, accounting for roughly $\frac{3}{4}$ of the woodland acreage. Stocking is dominated by northern hardwoods (beech, birch maple) that have grown back following the heavy harvesting of the early 1960's. There are scattered pockets of older growth that was spared during this cutting, but by and large, the stand is relatively even aged.

The two timber harvests that have been implemented since the last management plan occurred primarily in stand 1. They were a combination of single tree selection thinning and group selection harvesting, focusing heavily on removal of the maturing aspen and white birch component. These two species are relatively short lived (in comparison to the maples, yellow birch and beech) and have little place in a mature forest. Because the harvesting focused heavily on these two species, with a goal towards improving the species mix as the forest aged, they now play a much less significant role in the sections of the forest where cutting occurred, and the species mix is heavier to the maples, yellow birch, beech and ash. This is not to say that white birch is not still the dominant species in some areas of the stand.



Yellow Birch is more prevalent in this section.

CHAPTER 3: FOREST RESOURCES

The many (44) small areas that were clearcut during these harvests, totaling roughly 20 acres, have regenerated quickly and are now being recognized as a separate Stand.

Future management of stand 1 will seek to foster the development of a mature northern hardwoods forest. In this region, with these soils, one could expect the species mix to, over time, trend towards sugar maple, yellow birch and beech. These are the three common species in a northern hardwood forest that are very shade tolerant, long-lived, and most likely to perpetuate. In addition, the red maple and spruce components should be encouraged over the shorter-lived white birch and aspen.



Sugar maple dominates the stocking in some areas of stand 1.

The ash component of the stand presents an interesting topic of conversation. On the whole it only makes up 9% of the stocking in the stand, but is not evenly distributed. On some of the wetter, southern and eastern slopes, it plays a significant role in the make-up of the forest, and was encouraged in the areas of selection thinning during the 2010 and 2011 harvests. It is generally of good quality and there is roughly 51 MBF (thousand board feet) of ash sawtimber currently on the lot.

However, the future of the ash on this property, as well as everywhere else in the Northeast, is very much in doubt, as an invasive insect, emerald ash borer, spreads eastward. While I did not encounter any evidence of its presence, it has already been documented in Carroll County and this area is under a federal restriction which limits the movement of ash products in and out of the quarantine area in an attempt to slow the spread of the insect.

Based on what has happened west of here where the insect has been established for many years, we can expect mortality in excess of 80% and in some cases, nearly 100%. Nothing can be done to treat trees on a forest level (there are chemical treatments that can be done to individual trees in people's yards). There is some evidence that younger trees (saplings and seedlings) will not be as greatly affected with the initial wave of infestation and may be able survive.

If the ash component on Prospect Farm were more significant, more condensed, and more readily accessible, I would seriously consider a preemptive "salvage" harvest of much of the ash sawtimber, to capture the value before it is lost. However, as spread out as this species is, and occurring on some of the more challenging (wet) ground, it does not seem practical. On a positive note, once these trees are killed by the insects, ash is very slow to rot, so it will be a significant addition to the standing and down coarse woody debris on the property. Coarse woody debris and snags are lacking on this property because of its relatively young age structure. This woody debris will be extremely beneficial to many bird species for food, nesting sites (cavities) and perches. Once on the forest floor, it will provide nutrients to the soil and home for many species of insects and salamanders.

With a stated goal of creating a more mature forest, management activities in stand 1 should focus on thinning the existing timber growth, looking to promote the development of the longer-lived species such as sugar maple, yellow birch, beech, spruce and to a lesser extent, red maple. As with the thinning that occurred in 2010-11, aspen and white birch should be targeted for removal when they are competing with the more desirable species.

With the last harvest only 10 years behind us, the next harvest should occur during the latter part of this decade, sometime between 2025-30. Spacing the harvests 15-20 years apart gives the stand ample time to respond to the cutting, the regeneration a chance to become established, and the wildlife time to adjust to the changing forest.

This selection thinning would focus on reducing the stocking down to around 85-90sq.ft./ac., which will allow for adequate room in the residual stand for increased crown expansion and growth of the desirable, longer-lived stems. This thinning would serve the goal of creating a more mature stand over time, dominated by sawtimber-sized maple, yellow birch, beech and spruce. These long-lived species are able to be managed on a rotation well in excess of 100 years.

The conundrum occurs when dealing with the sections of the stand that are still dominated by the shorter-lived aspen and white birch. Many of these sections have a dense understory of poor-quality balsam fir. A thinning harvest in these areas (at this point in time) would serve to increase growth in the residual stems for the short-term, but, with a much shorter total life-span, eventually these areas will need to be regenerated. At 60 years of age currently, they will benefit from one more thinning harvest, but the harvest after that (est. 2045-50) would need to be a regenerative cutting, as these trees will have reached or passed maturity.

Another question that needs to be addressed during the planning processes for the next harvest is how much of the stand to cover. Access to the southern and eastern sections of the stand is established and suitable for use. The northern and western sections of the property were not covered during the last harvest. This was largely due to difficult access, and a lesser prevalence of aspen and white birch. Sugar maple, yellow birch and beech are more common in these areas which made it less important to cover these areas at the time of the last cutting. However, going forward, these areas of the stand would certainly benefit from an improvement thinning designed to promote growth in the better quality, more desirable stems that have the potential to develop into valuable, large sawtimber.

A landing area would have to be developed somewhere along the Forest Service Road leading north from the orchard (Carter Notch Spur Rd). Terrain and existing trails will limit access to some areas altogether, but many of the higher elevation sections of stand 1 could be accessed. As with the last harvest, cut-to-length logging equipment is the most suitable to the prescribed work on Prospect Farm and its challenging ground conditions. This mechanized system is well suited to cutting large volumes of pulpwood, while minimizing stand and soil disturbance.

STAND 2 M2/3A 74 Acres

TECHNICAL DATA:

Species Composition by Percent	SP-37%, BF-27%, WB-20%, RM-6%, YB-5%, Other-5%
Mean Stand Diameter	7.1"
Mean Merchantable Stand Diameter	9.7"
# Trees per acre (4"+)	500
Basal Area/Acre	136.4 sq. ft./acre



Good quality spruce mixed with northern hardwoods.

MANAGEMENT GOAL: To promote softwood cover in a forest otherwise dominated by hardwood growth. To preserve the aesthetics of property from the trail system.

TIME FRAME: 2020-2030

STAND 2 RECOMMENDATIONS:

Stand 2 is widely scattered throughout the property and contains the majority of the softwood component found on Prospect Farm. The spruce is generally of good quality and the balsam fir is of very poor quality. The variable hardwood component trends heavy towards white birch in many areas, with other hardwood species making up the remainder of the stocking. There are several areas of the stand, most notably in the far western regions of the property near the Halls Ledge Vista, where the average diameter is much smaller than many other sections.

Little cutting took place in this stand during the 2010-11 harvests. Where it did, it was focused on removing some of the poor-quality fir and more mature birch. The largest areas of the stand are found in the central and western sections of the property and tend to occupy some of the steeper slopes.



Poor quality mixed growth.

CHAPTER 3: FOREST RESOURCES

Softwood cover makes up a much smaller percentage of the forests on Prospect Farm than hardwoods, as is common in many of the second growth forests nearby. Management goals for the property include promoting this softwood cover for not only the diversity of forest growth, but for the wildlife habitat it provides. There are many species that rely on softwood cover for winter habitat, particularly deer and moose, and potentially pine martin.

Future management of the accessible areas of stand 2 would focus on thinning to promote the existing spruce growth. The removal of some of the shorter-lived hardwood species (white birch) and poor-quality softwoods (fir) would seek to foster growth in the existing stems and hopefully produce regeneration of this very shade tolerant species.

Many areas of this stand will see little to no work in the foreseeable future due to terrain limitations, proximity to trails, and relatively small size (commercially unviable). The areas that do see work will largely be those in close proximity to the more accessible areas of stand 1.



Spruce and fir mixed with white birch.

STAND 3 M1A 20 Acres

TECHNICAL DATA:

The small size of the trees (generally <1.5” diameter and ≤ 10 years of age) in stand 3 preclude the same type of systematic inventory as was conducted over the remainder of the property. Stocking is quite variable, consisting of a mixture of northern hardwoods (beech, birch, maple), striped maple, pin cherry, aspen, grey birch and balsam fir.



A typical section of stand 3.

MANAGEMENT GOAL: To improve the species mix and growth rates and maintain some areas as early successional habitat.

TIME FRAME: 2020-2030

STAND 3 RECOMMENDATIONS:

Stand 3 represents the only areas of early successional growth on Prospect Farm and is a direct result of the group selection harvesting that occurred during the 2010-11 timber harvests. At 20 acres, these areas of young forest growth make up 4.5% of the total acreage. From a wildlife perspective, it is recommended to keep 5-15% of the forest in early successional growth. With a stated goal of managing the forests of Prospect Farm to large-sawtimber size, I feel that maintaining several of the openings that make up Stand 3 as early successional habitat makes sense.

In general, these openings have regenerated to a mix of hardwoods (beech, birches, maples, aspen, and pin cherry) and softwoods (primarily fir), along with the typical early successional species such as raspberries, blackberries, grasses, and shrubs. The browse pressure has been immense on the young hardwood growth. The moose and deer have taken full advantage of the veritable buffet of young hardwood shoots in this area. While early successional growth makes up the minimum recommended levels on Prospect Farm, it is at much lower on the abutting USFS property, despite the recent Than Timber harvest, that regenerated hundreds of acres of forest. Animals are drawn to these patch cuts from miles around. The heavy browse pressure that results can have significant negative impact on the ability to produce good quality hardwood growth.



Heavily browsed hardwood saplings.

CHAPTER 3: FOREST RESOURCES

Going forward, I recommend selecting several of these patch openings that comprise stand 3, and maintaining them as early successional growth through brontosaurus mowing on a 12-15-year cycle. A brontosaurus mower is an excavator mounted tree mulching head that is commonly used for conducting power line R.O.W. maintenance. These machines grind up the young forest growth, leaving the shredded trees and chips on-site. Doing all 20 acres of this stand would be incredibly expensive and impractical, but selecting a few of the more accessible openings (particularly those that do not have much good quality regeneration) totaling around 3 acres might be feasible. In particular, the patch cuts near the beaver bog and the one adjacent to the Forest Service road north of the orchard (for the added benefit of vista maintenance) would be good candidates. Funding to help offset a good portion of the cost associated with this practice could be sought through the New Hampshire Fish and Game Dept's Small Grants Program. They were involved with funding some of the wildlife habitat work that was conducted between 2005-2009 and biologist Karen Bordeau is familiar with the property.



Mixed regeneration in stand 3.

In the remaining patch cuts, management would seek to foster the growth of the more desirable stems (where present) through pre-commercial Timber Stand Improvement (weeding and thinning). In another 5-10 years, once the young hardwood growth has hopefully had a chance to express itself, this project would select the desirable crop trees and release them from competition with adjacent stems. Sugar maple, yellow birch and spruce would be considered the most desirable crop tree species with red maple and white birch being secondary crop trees species. If more information is available about the ability of young ash to survive infestation by emerald ash borer, ash could potentially be considered a crop tree species. The better-quality softwood growth should also be considered desirable during this project. An assessment of the appropriate acreage would need to be taken at the time of the project, but it is likely that 5-10 acres would benefit from the treatment.



Softwood regeneration along the edge of one of the patch cuts.

ESTIMATED TIMBER LIQUIDATION VOLUMES AND VALUES
May 2020

Species	Total Volume	Stumpage Value	Total Value
<i>Sawlogs</i>			
Spruce	405 MBF	\$125/MBF	\$50,625
Sugar Maple	73 MBF	300/MBF	21,900
White Ash	51 MBF	150/MBF	7,650
Yellow Birch	76 MBF	200/MBF	15,200
White Birch ^{*2}	24 MBF	50/MBF	1,200
Mat Logs ^{*1*2}	214 MBF	150/MBF	32,100
Mixed HW Pallet	207 MBF	25/MBF	5,175
Total Sawlogs	1,050 MBF		\$133,850
<i>Pulpwood</i>			
Hardwood	20,708 tons	\$6/ton	\$124,248
Softwood	2,429 tons	1/ton	2,429
Total Pulpwood	23,137 tons		\$126,677
		Total	\$260,527

TOTAL TIMBER VALUE PER FORESTED ACRE (444ac): \$587

Notes:

- **MBF** is the abbreviation for "thousand board feet", the standard measurement for sawlogs.
- **Tons** can be converted to **Cords** using the following conversion rates;
Hardwood 2.55tons/cord
Softwood 2.2tons/cord
- At the time of this report, the timber markets are quite unstable, and these values represent my best estimate of what the Town of Jackson would receive for stumpage rates on the recommended harvesting.
- ^{*1} – Mat logs are the sawlogs used to create the cants (squared timbers) that are then bolted together to make the portable bridge panels used for temporary wetlands crossings, particularly during utility line construction/maintenance. The prevalence of their use has increased greatly over the last 10 years, creating a market for logs that would otherwise be used for pallet stock or firewood.
- ^{*2} – At the time of this report (and for the past several years) white birch and red maple sawlogs are more valuable as Mat logs and, when meeting that product specification, have been lumped into that category for the purposes of this inventory.

WILDLIFE

From observed sign, there is a modest variety of wildlife currently using the woodland and wetland habitat on Prospect Farm. Sign of primarily moose, deer, bear, porcupine, pileated woodpecker, beaver, raccoon, ruffed grouse, snowshoe hare, owls, many songbirds and squirrels was encountered during the field work for this plan, which occurred during the early spring of 2020. Seasonally, there are probably many more species that use the area, particularly the wetlands in the summer.

The small beaver bog wetland area near the southern boundary is an excellent addition to the wildlife habitat that the property offers. This area not only provides open water habitat for fish and amphibians, but the open air above it is home to countless insects associated with the water, and the birds that prey upon them. The many standing dead trees with cavities (from woodpeckers) provide nesting sites. Many predator species will hunt around this opening. Raccoon tracks were observed in the mud around the edge of the bog

As discussed in the recommendations for stand 3, I feel that maintaining several of the patch openings as early successional growth would be appropriate, notably the ones closest to the beaver bog. Keeping the area well stocked with beaver food will encourage the beavers to use the area, maintaining the dam and keeping this wetland habitat intact.

Periodic cutting maximizes forest succession to the benefit of many forms of wildlife. A dynamic mix of all age classes is considered advantageous for most species for both food and cover. The forests on Prospect are generally even-aged and, by the stated goal of growing the majority of the forest to a mature sawtimber age class, will largely remain that way. This makes the recommendation of keeping some of the 2010-11 patch cuts in early successional growth all the more significant. During the next timber harvest, some small patch cuts should be created, away from the trail system, to help to diversify the age structure on the property. These patch cuts could be strategically laid out to provide viewshed maintenance.

The lack of red oak trees on Prospect Farm (only 1 was encountered during the field work for this plan) leaves beech as the sole producer of hard mast. During mast years, beech nuts are an important source of food for bears, squirrels, some bird species, and deer. Some beech in particular seem to be good nut producers and these individuals are often identified with bear claw marks resulting from the bear climbing the trees to get at the nuts before they fully ripen and fall to the ground. Retaining these “marked” trees during any timber harvesting is recommended. In general, favoring healthy beech that is not severely impacted by the bark disease is recommended, as these individuals tend to be better nut producers.

Trees containing cavities should be left for cavity dwelling birds and animals. Any standing rotten trees should be left as habitat for insects upon which woodpeckers

CHAPTER 4: OTHER RESOURCES

and bear feed. Larger, poor quality, oversized (non-marketable) trees are usually decreasing in vigor which makes them good candidates for future "critter condos". Maintaining a minimum of 6 cavity/snag trees per acre with one exceeding 18" in diameter and 3 exceeding 12" in diameter is recommended. By leaving the standing dead trees and those close to dying, you are, over time, adding to the amount of coarse woody debris on the forest floor. The relatively young age of the trees on Prospect Farm limits the presence of those large diameter snags. As discussed in the recommendations for stand 1, the impending infestation by emerald ash borer will likely cause an abundance of standing dead ash trees. This species is more rot resistant than most, and these snags should persist for some time.

According to the NH Fish and Game Department's Wildlife Action Plan, there are some areas of the property mapped as Highest Ranked Habitat in the Biological Region, with the remainder of the property designated as Supporting Landscape. The most important feature they have identified is the high elevation spruce/fir forest found running down portions of the Wildcat Ridge. If present on the property, these forests would be used by pine marten.



The apple orchard.

CHAPTER 4: OTHER RESOURCES

The apple orchard has seen significant work over the years to get it to the productive state it is currently in. During the field work for this plan (May 2020) there were still piles of apples on the ground from the prolific crop in the fall of 2019, as well as extensive evidence of them being eaten by bear and coyote. Maintaining this orchard through annual mowing has been undertaken. Periodically, the cutting of encroaching or dying trees is required. A thorough pruning of the trees should be undertaken every few years to keep them healthy and productive. Advice from UNH Cooperative Extension could be sought in regards to proper pruning methods, particularly in a situation like this where commercial production is not the primary concern.

WETLANDS - WATER RESOURCES

The wetland and water resources on Prospect Farm are fairly modest for a property this size. The largest single resource is the small beaver bog near the southern boundary, through which flow the headwaters of Marsh Brook. The Dana Place trail runs along the edge of the bog and this area is a scenic and ecological highlight of the trail. Much of the remainder of the property drains eastward through a series of seasonal streams and drainages to join the Wildcat Brook.



The beaver bog near the southern boundary and the Dana Place Trail.

While not legally required, it is recommended to maintain a 75' management zone around all streams and wetlands in which no more than 50% of the basal area is removed during any individual harvest. This management zone should be extended out 100' from the beaver bog wetland, except for harvesting/management designed to promote young growth for beaver food. If this is done, extra care and consideration should be taken to avoid creating ruts and adding silt to the water course, and, if possible, occur on the northern edge of the wetlands, to minimize the loss of shade.

Before crossing any watercourse, either seasonal or perennial, with logging equipment, or constructing a permanent crossing during woodsroad construction, it is necessary to file a ***Statutory Permit by Notification - Forestry*** with the State of New Hampshire's Department of Environmental Services Wetlands Bureau. Crossings must be constructed, in accordance with the standards set forth by the State of New Hampshire's ***Best Management Practices for Erosion Control on Timber Harvesting Operations***. Using the appropriate method to cross a stream will prevent the addition of sediment through soil erosion, which is highly problematic as the levels of particular matter increase.

AESTHETICS

When planning and implementing any management activity, the affect on the aesthetics of the property should be taken into consideration. This is of particular importance on Prospect Farm, as the aesthetics associated with the intense recreational use are a driving factor in some management activities.

Logging in particular can have negative impacts on aesthetics. Matching the kind of logging operation to the needs of the forest as well as aesthetic considerations is important. Having conscientious operators goes a long way towards leaving a site with a reasonable post-harvest appearance. It is the job of the forester who is marking and laying out the harvest to take these concerns in mind and make sure the logging contractor does what is needed to minimize the visual impact.

Throughout the property, appropriate buffers should be retained along the trails wherever possible. Where harvesting is very visible from the trails, I generally am in favor of posting some signage to explain what type of harvesting occurred, why it was done this way and what the expected results are. The public often responds much more favorably to visual impacts if they feel informed as to why it has occurred.

There are several established views on the property that are a major part of the experience when using the recreational trails. The following is a discussion of each of the maintained views.

Orchard View: The view from the reclaimed apple orchard is primarily to the southwest and is filtered through the tree tops. It is much better during the winter months without leaves on the trees. Without extensive commercial harvesting, there is not much to be done to improve this view. However, the open nature of the orchard, with the apple trees, old foundation, and wildflowers, make it an aesthetically special area without having an expansive view to the distance.

Lookout Rock: This view, found westerly of the apple orchard along the south side of the Orchard Trail, saw maintenance/improvement in 2007. Thirteen years later, it could use some cutting of trees along the southern edge of the clearing to knock back the encroaching tree line. While some of this work could be done by hand, in order to be done properly, it should be part of a commercial timber harvest.



The view from Lookout Rock

Memorial Rock View: This view is actually just below memorial rock on the Wildcat Valley Trail. It improved through non-commercial cutting in 2007, and like the Lookout Rock View, would benefit from additional cutting. There are some trees encroaching into the view from the bottom and sides. While some work needs to be done by hand in the near term, it is possible that future harvesting could dramatically improve this vista.



The View from the Wildcat Valley Trail just below Memorial Rock.

CHAPTER 4: OTHER RESOURCES

Hall's Trail View: This expansive panorama view was largely created by extensive cutting of trees during the summer of 2007. The upper area was stumped, smoothed and seeded during 2009 to facilitate easier maintenance. There is currently a picnic table at the site, along with a picture of the view with the prominent mountains identified.

The young hardwood growth is beginning to encroach into the view from the picnic table, and the first 20-30' of saplings south of the maintained grassy area should be knocked back to re-establish the aesthetics while they are still small enough to be easily manageable.



The expansive view from the Hall's Trail.

Hall's Ledge View: This viewshed can be found near the western boundary of the property and looks westward directly at the Presidential Range. I have no record of the last maintenance to this view, and do not feel that it was done in conjunction with the other view work in 2007. It currently needs some of the encroaching trees cut back and the picnic table is quite rickety. This view maintenance needs to be done by hand, not in conjunction with a timber harvest.



The view of the Presidential Range from the Hall's Ledge View.

There is an excellent view from the patch cut along the Carter Notch Spur road near foundation #3. I have recommended this patch cut for bronto mowing to maintain this view in conjunction with the retention of the early successional wildlife habitat.

RECREATION

The extensive network of well-maintained recreational trails on Prospect Farm is certainly the highlight of the property. The quality of the trails, the remote nature of the property, the numerous interesting cultural features, the expansive views, the potential to see wildlife, all contribute to an excellent experience. Adding to the opportunities is the proximity and connectivity with the Forest Service trails in the area, and all that they have to offer.

During the summer months, the newly (10+/- years ago) constructed parking area just to the north of the kiosk offers parking for 6-8 vehicles. During the winter months the closest parking area is on the Ballentine property and operated by the Jackson Ski Touring Foundation. Jackson residents qualify for a free pass but non-residents must pay to use this parking area.

The Wildcat Valley Trail (on this property) begins at the kiosk, initially running along the USFS Carter Notch Road. The Wildcat Valley Trail is the backbone of the trail system on Prospect Farm, eventually exiting the property and running up the Wildcat Ridge. Off this main trail, the Quail Trail (also USFS Marsh Brook Road) and Dana Place Trail run southward and exit the property, eventually connecting with the Hutsmen's Trail. The Orchard Trail leaves the orchard and runs westward, exiting Prospect Farm to the west onto the Lyons property.

Two loop trails can be found on the north side of the Wildcat Valley Trail, the Hubs Loop and Beth Hendrick's Trail. High on the ridge, the Hall's Ledge Trail connects, running southwestward past two excellent views and exiting the property on its way to Route 16 and the Ellis River Valley.

From the same parking area near the kiosk, the Bog Brook Trail heads eastward on the National Forest, heading towards Perkin's Notch. The Wildcat River Trail branches westward off the Bog Brook Trail and heads to the Carter Notch AMC hut.

Add to this the miles of easy walking that the USFS Wildcat Brook Road offers, and the recreation opportunities that occur on and around Prospect Farm are magnificent.

As discussed in the **Access** section of this plan, the lowermost section of the Wildcat Valley Trail (that which runs along the USFS Carter Notch Road) has some rutting from untimely vehicular use, clogged culverts, and would benefit from the installation of water bars in some of the steeper sections. I presume it is the responsibility of the Jackson Ski Touring Foundation to close the gate near the kiosk at the end of the ski season and that they didn't get to it in time keep at least one vehicle out.



Once ruts are created, they only get worse as water runs down them. These need to be fixed as soon as possible.

The upper sections of the Wildcat Valley Trail (from the orchard “up”) and the Orchard Trail have water bars that need to be reshaped/cleaned out to ensure they function properly. There are some steep sections of Hubs Loop that would benefit from the installation of several water bars as well.

I am unaware of the agreement between the Town of Jackson and the Jackson Ski Touring Foundation as to the maintenance responsibilities of the trail system. It would seem as though the JSTF should shoulder some of the responsibility for the maintenance given that they are using them as part of their network of trails that people pay to use. They should be contacted to see if they are willing to share in the cost/labor for the remediation efforts that are sorely needed at this time.

CULTURAL FEATURES

There are numerous cultural features to be found on Prospect Farm. Chief among them are the 6 cellar holes/foundations that have been identified. The Garland cellar hole is the first encountered when entering the property. It is located on the north side of the intersection with the Quail Trail.

The Johnson cellar overlooks the orchard and is likely the most scenic. The Baker foundation is located high on the ridge at the intersection of the Hub's Loop and Beth Hendrick's Trail and appears to have been the most recently occupied. Just west of there is the Hall cellar hole situated on the south side of the Wildcat Valley Trail. The last of the known foundations is located just to the east of the newly renovated Carter Notch Spur Road.



Remnants of the chimney at the Baker foundation

CHAPTER 4: OTHER RESOURCES

I did encounter a small foundation that appears to have not been previously recognized. It is located just north of Memorial Rock on the west side of the Wildcat Valley Trail. It was not a house, and appears to be a roughly 16' square raised pad that was likely the footing for a small barn/shed/sap house or the like.



**The downhill side of the previously unmapped foundation.
It was likely a small barn or shed.**

The Memorial Rock that Edith Baker placed the placard upon should certainly be listed among the cultural features of the property.

CHAPTER 4: OTHER RESOURCES

High among the list of landmarks on the property is the old car along the Orchard Trail. It appears to be a 1957 Buick Special with the rare rear tri-window.



The extensive documentation of the history of Prospect Farm can almost be considered a cultural feature. The efforts of many people to preserve the history of the Property, chief among them Margaret Garland, have allowed for a greater understanding and appreciation of the property.

RARE AND ENDANGERED PLANT & ANIMAL SPECIES

There were no rare or endangered plant or animal species encountered during the field work for this plan. That is not to say that none occur.

I searched the databases of the New Hampshire Natural Heritage Bureau to see if they had any records of rare species or exemplary natural communities on the property. They have nothing on the property, but catalog a high-elevation spruce-fir ecosystem within one mile of the property. This ecosystem could be home to pine marten if they were to occur in the area.

STABILIZING AND RESEEDING

When any harvest operation or road construction project is completed, all critical skid roads and landings should be stabilized. Steep skid roads and truck roads should be waterbarred, outsloped, ditched and smoothed. Truck roads, major skid roads and landings, as well as any sensitive areas (such as near brook crossings) should be seeded with conservation seed mix and mulched with hay where needed. This will help stabilize the soil, provide feed for wildlife, help control woody plant growth and provide an aesthetically pleasing road or trail. Conservation Mix, combined with white clover is the recommended seed mixture in most applications. The clover species have the additional bonus of being beneficial for pollinator species.

SAFETY

In the forested areas, the safety hazard is currently low. There have been no recent logging operations or damaging storms that have created the hazard of falling limbs. In the event that a timber harvest occurs, it would likely prove advisable to limit public access to any areas deemed high risk.

While I did not encounter any open wells during my field work, with the many foundations, there is a distinct possibility that one or more may exist. Perhaps someone has already covered them.

BEST MANAGEMENT PRACTICES

All woods road construction/use/maintenance and wetland/brook crossings should follow recommendations as made, (and required by law on brook crossings), in the "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire", a resource manual by J.B.Cullen, DRED, Division of Forests and Lands. A copy of this publication can be requested through the above contact at the Department of Resources and Economic Development, P.O. Box 856, Concord, NH 03301 or call 271-2214.

NOTES: Before crossing a stream/wetland for the purpose of logging or road construction with the eventual intent of logging, a **Statutory Permit by Notification - Forestry** (see **Appendix**) form must be filed with the N.H. Wetlands Board.

FOREST PROTECTION - FIRE HAZARD

Practicing good forestry by maintaining species diversity, avoiding monoculture and promoting varied stages of forest succession should minimize mortality from common pathogens, and environmental stress. Based on what limited evidence is available, maintaining a diverse forest will help to minimize the effects of climate change.

There is no significant fire threat on the property and the kindling of fires is prohibited. The care, maintenance and development of access roads/trails will provide access to the property should the need for fire suppression occur.

The invasive species issues on the property are fairly modest for a parcel this size and it is likely that its remote location has protected it. The only real infestation I encountered was that of Japanese knotweed at the location of the stump dump, just north of the gate on the USFS Wildcat Brook Road. This area has been used by the Town to dispose of stumps and debris. It is actually quite surprising that there is not a greater variety of invasive species originating from this location. It appears as though some efforts have been taken to chemically control the growth of the knotweed. If this is the case, they should be continued several times per year until the infestation is eradicated, and then monitored.



Knotweed sprouting back following a chemical application.

CHAPTER 5: OTHER RECOMMEDATIONS

In my opinion, the use of this stump dump should be discontinued. The risk of importing invasive species onto the property is great and cannot be practically managed as long as the stump dump is in use. I have seen this on countless properties over the years, including in municipal highway department stump dumps in the Towns of Madison, Brookfield, and Barrington.

As discussed in the **Access** and **Recreation** sections, getting the gate closed each spring before someone drives up the road and causes damage to the access system is of paramount importance. Jackson Ski Touring Foundation should be contacted about this issue.

INSECTS AND DISEASES

From observed evidence, there is a fairly low occurrence of forest disease problems on Prospect Farm. Beech makes up a relatively small percentage of the woodlot, and, in general, seems to be fairly healthy and minimally affected by beech bark disease.

Sugar maple borer is a native insect that can impact the health of sugar maple trees, boring into the trees just below the bark and severely impacting the vascular system. It is present on the property, more widespread in some areas than others, but on the whole, does not offer a severe threat.

The impending infestation of emerald ash borer seems inevitable at this point. As discussed in the recommendations for Stand 1, it has been discovered within Carroll County and is spreading rapidly. There is nothing to be done to treat infected trees on a forest level and the State of NH is recommended preemptively salvaging ash sawtimber during timber harvests. Doing so on Prospect Farm is not practical due to the scattered nature of the ash component, the challenging (wet) ground that it occurs on, and the relatively low total value of the product that might be removed (\$8,000+/-) not being enough to justify a standalone timber sale and the remainder of the property not being ready to conduct a harvest. The loss of this timber seems wasteful, but it will benefit the property through nutrient recycling, standing and down coarse woody debris, and as a home to insects that feed on dying wood and the bird species that feed on the insects.

MANAGEMENT SUMMARY – SCHEDULE OF PRIORITIES

2020-2022

Stands	Recommendation	Goal	Page Reference
	Repaint the boundary lines in common with Ballentine and Lyons	Firmly identify all boundary lines.	3,4
	Discontinue use of stump dump and combat the spread of invasive species through chemical applications.	Protect ecosystem integrity.	49,50
	Contact JSTF about more timely closing of the gate and the sharing of costs/labor associated with road/trail maintenance.	Clarification of roles and responsibilities.	13,14,42,43,50
	Access road/trail improvements on the Carter Notch Road, Wildcat Valley Trail and Orchard Trail.	Maintain the integrity of the access system.	13,14,42,43
	Non-commercial view maintenance at Memorial Rock, Halls Trail Vista and Halls Ledge Vista	Vista maintenance.	39-41

2023-2025

Stands	Recommendation	Goal	Page Reference
3	Bronto mowing of several of the 2010-2011 patch cuts.	Maintain early successional wildlife habitat, provide beaver food and maintain views.	28,29,32,36

2025-2030

Stands	Recommendation	Goal	Page Reference
1,2	Improvement cutting per recommendations.	Improve timber growth, diversify wildlife habitat, maintain views.	19-26
3	Pre-commercial timber stand improvement.	Improve timber growth.	30

APPENDIX

APPENDIX

~Natural Heritage Bureau Printout

~Statutory Permit by Notification - Forestry