

## **CHAPTER 5 - LAMONT LOT**

### **PROPERTY DESCRIPTION AND LAND USE HISTORY**

The Lamont lot is located in the northwest side of Appleton. It is on Collinstown Road, 2 miles north of Route 105 (Burkettville). The lot measures 52 acres, though it is listed by the town as 70. Most of the lot is on the east side of the road, but about 7 acres are west of the road. Road frontage is about 2,200' on the east side and 1,300' on the west. It surrounds a 1-acre houselot with trailer, adjacent to Collinstown Road. The lot is entirely forested and contains no buildings.

As with most woodland in this area of Maine, the ownership was farmland (both for crops and pasture) a century and a half ago. Barbed wire forms the south and east boundaries. Two cellar holes remain along the east side of the town road at the south end. The area in which they're located plus several other areas are depicted as open on the 1961 topographic map. A small garbage dump is over the bank 300' northeast of the cellar holes, just beyond the wood yard. The property has been commercially harvested over the past 1½ years. Two wood yards were established, opposite the trailer and behind the cellar holes. A system of skid roads is in place. The town of Appleton acquired the lot in 1958 as a town forest.

The property fits in a remote, heavily forested area with only a few houses and small fields scattered along the town road. The Appleton Bog is about ¼ mile to the east. Within the past 10 years, the woods on the south side were moderately harvested. A truck road enters just south of the south boundary, and a skid road continues near the 3 legs of the south boundary. The northeast and west sides were heavily cut and now harbor sapling stands.

### **TOPOGRAPHY AND ACCESSIBILITY**

The terrain of the property consists of mostly gentle to moderate slopes. The highest elevation is 360' in the middle of the northeast boundary as it goes over the shoulder of a broad knoll. The lowest point is 300' in the west corner. Wooded swamps east of the town road are located behind the wood yard and the neighboring trailer, plus in the north corner along the road. There are no streams on the lot.

Direct access into both halves of the property is excellent from Collinstown Road through the 2 existing wood yards. There is additional access potential from the town road along the northwest side of the lot.

## BOUNDARIES

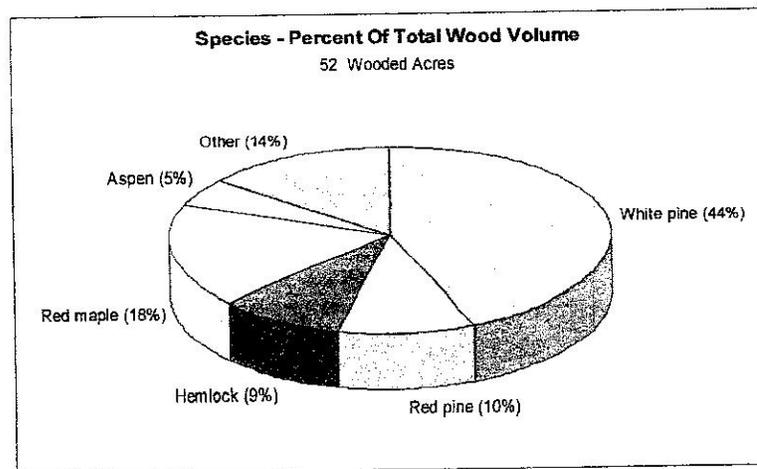
The property has not been surveyed. Collinstown Road is the northwest boundary. The other boundaries are flagged. The northeast boundary and the 3 sections of the south boundary contain segments of barbed wire. The northeast boundary has an iron pin along the road. Although there is no monument in the east corner, about 150' up the line from the corner is an upright stone and stake marking the corner of The Nature Conservancy property. The line has been ax blazed and painted orange, but this differs from the wire by as much as 20'. It is unclear whether the wire or the blazed line is the true boundary.

The middle section of the south boundary is painted bright orange. A 6' fence post is near where it corners to head to the town road, but the exact corner is unclear. The line to the road is marked with flagging and wire at comes out at an electric pole and across the road from an iron pin. This differs from the tax map, however, which shows it further to the southeast then angling up to the road. The southwest line has an iron pin at each end and is flagged. The northwest line, with old blue paint and orange flags, angles out to the road opposite the north end of the trailer lot. This differs from the tax map, which shows it opposite the south end of the trailer lot.

## TIMBER RESOURCE

Forests cover 52 acres of the Lamont lot. A little more than 1/2 of the acreage is classified as Mixedwood. Softwood incorporates a little more than 1/3 of the lot. The remaining acreage is hardwood swamp. The distribution of timber type among the 4 forested stands is:

Type	# of acres	% of total
Softwood	19	36
Mixedwood	29	56
Hardwood	4	8
	52 acres	100%



In May, 2001, inventory data were taken in the forested areas at 31 variable radius plots on cruise lines running parallel to the northeast boundary. One plot represents an average of 1.7 acres. The overall volume estimate is accurate within  $\pm 19\%$  nine times out of ten. Error is greater for individual species, products and values.

Softwood volume outpaces hardwood 2:1. White pine makes up the bulk of the commercial round wood (trees 6"+ dbh). Other moderate volume species, in descending order, are red maple, red pine, hemlock and aspen. Less common species present include spruce, white birch, red oak and cedar. The northern hardwoods group (beech, sugar maple, yellow birch, black cherry, white ash) and fir are present in very small amounts.

Forest stands are further identified based on dominant canopy height and canopy closure. The woodland is made up of a combination of poles and sawtimber, most of which are 50-70 years old. Among the larger sawtimber size trees are scattered large white pines that escaped the last harvest. Stand canopy heights are moderate to tall. The canopies are moderately open in the recently harvested areas and fully closed where there was no cutting.

Tree quality, defined as trees with the potential to become sawtimber, is very good. The recent harvest boosted the percentage of acceptable trees by removing many lower quality individuals. Some of the stems are currently designated as pulp due only to small size and are actually good quality growing stock. White pine and red oak are the most valuable species. Through a program of cutting the poor quality individuals and favoring the better trees, overall tree quality will be maintained or improved over time.

The estimated total wood volume on the Lamont lot is 196,000 board feet of sawtimber and 950 cords of pulp/firewood. This is worth about \$26,600. For the 52 wooded acres, this comes to 3,750 board feet and 18 cords per wooded acre, which is on the low side of average for mixed and softwood forests in this part of Maine. The wood is valued at about \$510/acre, which is average. Sawtimber volume is dominated by softwood (93%), primarily white pine. The pulpwood volume is more evenly divided between soft- and hardwoods. Sawlogs comprise 29% of the total commercial wood volume, which is above average. This percentage will increase over time if the good quality small sawtimber is allowed to continue to grow rather than cut prematurely.

Assuming an average growth rate of 0.7 cord per acre per year, a sustainable harvest level is the equivalent of 33½ cords per year for the 48 acres excluding the wetlands. For a 15-year cutting cycle, 500 cords can then be harvested. This is only a broad total. Due to variability of age, structure and stocking of the forest types, harvest levels will vary among stands.

Tree regeneration is thick in areas within the harvested stands and is fairly varied. It includes aspen and red maple sprouts, fir, white pine and cherry, with lesser amounts of oak, ash, spruce and beech. The density of the regeneration depends on light/shade conditions and wetness on the forest floor. Woody shrubs are limited mostly to blueberry and a little raspberry, honeysuckle and spirea on dry ground and alders in the swamps.

## **INSECT, DISEASE AND WEATHER INFLUENCES**

There are no significant pathological problems on the Lamont lot. The trees are healthy. There are a few big old field pines leftover from the recent logging. Years ago they were affected by the white pine weevil (an insect, the newly hatched larvae of which feed the leading bud at the tips of the trunks and branches). The result is a tree with multiple stems, lowering its economic value. Many of these same pines also have many live lower limbs, a result of growing relatively in the open earlier in its life. These conditions do not harm the tree, but do lower its value as useable sawtimber.

## **WILDLIFE**

Most of the Lamont lot is dry, upland forest. A contrasting habitat is the hardwood swamp type. Fresh water is a critical habitat element for all animals. Streams are absent from this lot, though several vernal pools are present.

Other wildlife habitat features include the small hemlock grove by the inside corner, aspens and fruit trees. Dense softwood canopy serves as good potential winter yarding areas for deer, but it may be too small to be fully functional. Sign of both deer moose has been observed. Ruffed grouse (partridge) feed on the buds of aspen. Cherry and apple trees provide food for birds and mammals.

No Critical Wildlife Habitats have been identified by the Maine Department of Inland Fisheries and Wildlife. No evidence of threatened or endangered plants or animals was noted during the fieldwork. Should such plants or animals be discovered, appropriate measures should be adopted to ensure protection of their habitat.

## **RECREATION AND AESTHETICS**

It is unclear what trails were in place before the recent harvest. Recreational use is less with fewer roads or trails through the woods. Now with the wood yards for parking and skid roads, use will likely increase, by both pedestrians and ATVs. The property is not posted and quite likely is visited by hunters in the Fall. Significant aesthetic features include the red pine groves and the hardwood swamps.

## **LEGAL RESTRICTIONS**

There is no Shoreland Zoning on the Lamont lot. See the General Chapter for details.

# ESTIMATES OF TIMBER VOLUMES AND VALUE BY SPECIES

Town of Appleton - Lamont Lot  
 Appleton, Maine  
 May 19, 2001

Products, Species	Volume <sup>1,2</sup>	Stumpage <sup>3</sup> Rate	Value <sup>4</sup>
<b>Sawtimber:</b>			
	MBF	\$ per MBF	
White pine, grade	107	\$130	\$13,910
Red pine	41	60	2,460
White pine, pallet	15	60	900
Hemlock	10	60	600
Spruce	10	110	1,100
Red maple	5	50	250
Red oak	4	225	900
Aspen	3	40	120
Yellow birch	1	100	100
Totals:	196 mbf		\$20,340
<b>Pulpwood:</b>			
	Cords	\$ per cord	
White pine	350	\$5	1,750
Hemlock	90	6	540
Red pine	50	6	300
Spruce-fir	40	15	\$600
Cedar	20	0	0
Hardwood pulp*	250	5	1,250
Firewood*	150	12	1,800
Totals:	950 cords		\$6,240

**Total Estimated Stumpage Value = \$26,580**

- <sup>1</sup> Total timber volume estimate is  $\pm 19\%$  nine times in ten. Error is greater for individual species or products.
- <sup>2</sup> Pulpwood volumes include topwood from sawtimber trees.
- <sup>3</sup> Stumpage price estimates based on recent local averages, Spring, 2001. They are gross values and do not reflect forester fees.
- <sup>4</sup> Represents the "liquidation value" if the entire property was cleared. This is presented for illustrative purposes only and is not recommended.
- \* Aspen and white birch is pulpwood; balance of the hardwood pulp is split evenly between firewood and pulp

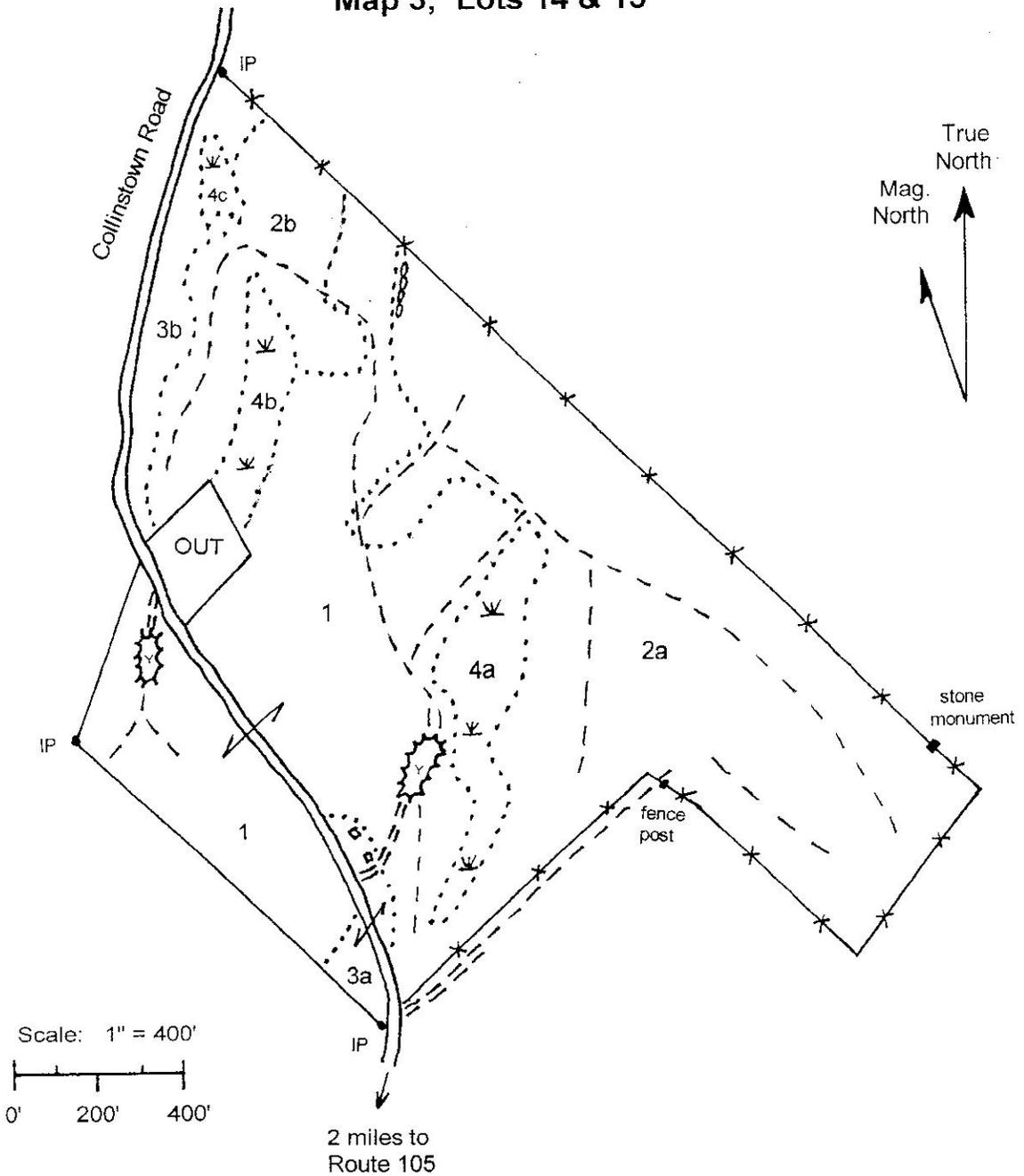
Mitchell Kihn; LPF # 3206  
 Mid-Maine Forestry

# PROPERTY MAP

## Town of Appleton

Fred Lamont Lot

Map 3; Lots 14 & 15



### LEGEND

Stand number and boundary	..... 2 .....
Iron pin	IP •
Stone wall	oooooooooooo
Barbed wire	-x-x-
Swamp	⌘

### FOREST STANDS

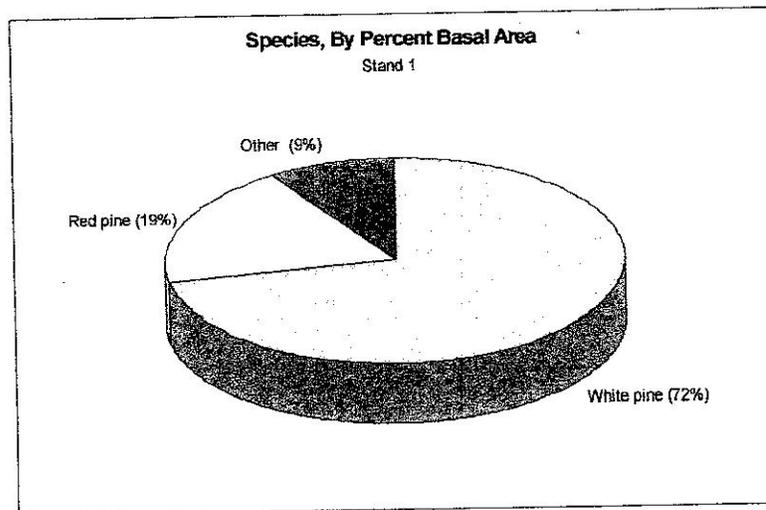
Stand	Type	Acres
1	S2/3B Softwood sawtimber	19
2	M2/3B Mixedwood pole/sawtimber	26
3	M2/3A Mixedwood pole/sawtimber	3
		48 acres
Swamps:		
4	H2A Hardwood pole/sawtimber	4
<b>TOTAL PROPERTY =</b>		<b>52 acres</b>

## STAND DESCRIPTIONS AND RECOMMENDATIONS

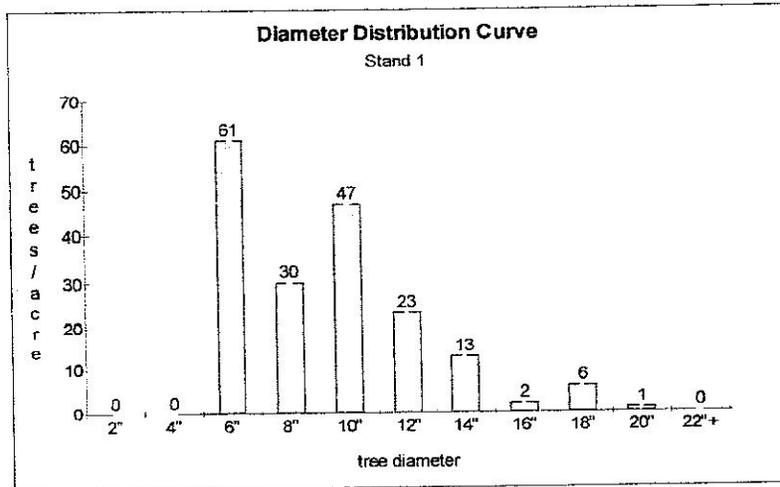
### STAND 1 - SOFTWOOD SAWTIMBER (S-2/3-B)

19 acres

Stand 1 is on both sides of Collinstown Road. A finger extends out to the northeast boundary. Access is easy via a truck road and wood yard on each side of the road. Many skid roads traverse the stand. The road heading west out of the wood yard on the west side of the town road crosses onto the neighbor's land and is supposedly a R-O-W for the neighbor. The terrain undulates with moderate to gentle slopes. Soils are mostly moderately deep to bedrock and well drained, but may be interspersed with shallower and drier soil. Site quality is excellent for white pine and red oak, and is good for spruce and northern hardwoods. Operability with machines is very good. It was harvested in 2000-01. A squatter's tent is along the west boundary, behind the wood yard.



Stand 1 is a softwood stand, dominated by white pine. Red pine is a significant component, too, much of which was planted. Minor species include aspen, white birch, black cherry, red maple and cedar. Although poles are present, the stand mostly consists of sawtimber. Trees range from 6" to 22" in diameter, with an average of 10". It is even-aged, mostly 50-70 years. With an average basal area of 98 ft<sup>2</sup>/acre, stand 1 is at the minimum stocking for white pine. The site is less than fully utilized. Ideally, the stocking should be 120 ft<sup>2</sup>/acre of basal area. Diameter growth will be fast, but volume growth per acre will be diminished. Stocking is variable, with openings and thin canopies intermixed with denser spots. Basal area ranges from 45 to 150 ft<sup>2</sup>/acre. Canopy height is moderate to tall. Closure of tree crowns is moderate.



Tree quality is very good, except for an occasional butt scar from logging. With the recent cutting, the growth rate should increase to 500 board feet per acre per year. Since the site is not fully utilized, however, it will be less – more like 400 board feet. Standing volume per acre is moderate with 6.5 mbf of sawtimber and 19 cords of pulp. White pine makes up 2/3 of the sawtimber volume and red pine is 1/3. Sawtimber volume comprises a high 41% of the total volume of commercial wood. Where it wasn't destroyed during the logging or buried beneath thick slash, regeneration is profuse and diverse. Aspen sprouts are thick in spots. Other common species include fir, red maple, white pine and cherry, with a little bit of oak, ash and beech.

Apple trees behind and downhill from the cellar holes have been released from neighboring competition. An old deer stand is downhill from the cellar holes. Woody shrubs include blueberry, honeysuckle, raspberry and spirea.

### *RECOMMENDATIONS*

The long-term objective should be timber production. Manage the existing pine stand on an even-aged basis. The structure goals should be a basal area of 120 ft<sup>2</sup>/acre and a largest diameter tree of 24". A 15-year selection harvest cycle will produce a sustainable yield of 170 cords per harvest from an adequately stocked stand.

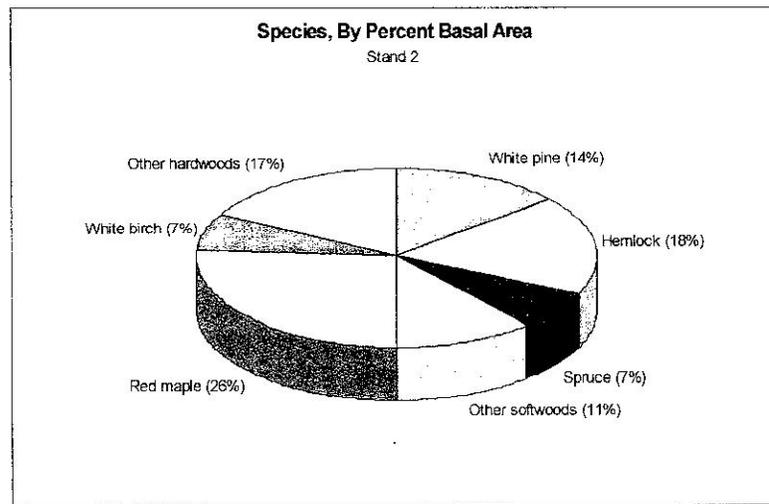
Stand 1 is currently below the ideal stocking level, for which it will take 10-15 years to reach. Allow to grow and re-evaluate in 10 years. Low priority.

Adjacent swamps (stands 4a and 4b) should be protected for wildlife habitat, aesthetics and ecological integrity by either a no-cut buffer, or at least a buffer where cutting is minimal.

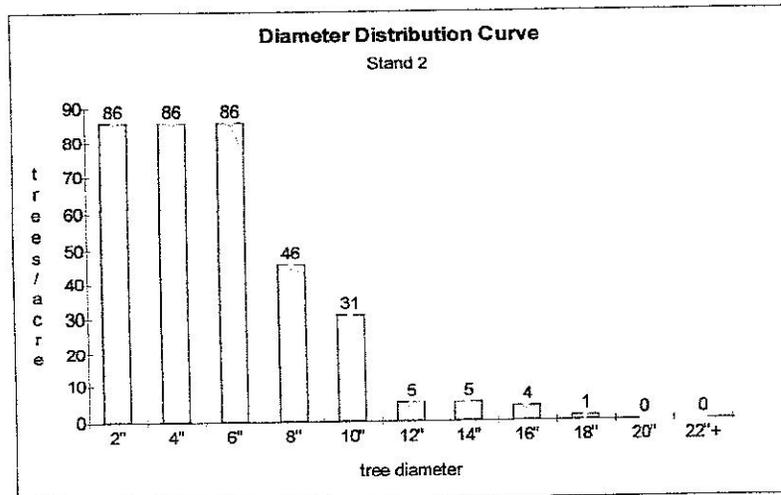
STAND 2 - MIXEDWOOD POLE/SAWTIMBER (M-2/3-B)

26 acres

Stand 2 is in 2 units, separated by a thin area of stand 1 by the northeast boundary. Stand 2a is the eastern 40% of the property, adjacent to the south and northeast boundaries. It is accessed through stand 1 on either side of a thin wooded wetland (stand 4a). Stand 2b is in the north end of the property, stretching from the neighboring trailer lot to the northeast boundary. It is close but separated from Collinstown Road. The terrain of both units ranges from flat to moderately sloping. The soils are mostly shallow to bedrock and dry, with some ledge. Pockets of moderately deep soil are intermixed. Site quality is excellent for white pine, good for oak, fair for northern hardwood and poor for spruce. Operability with machines is very good. Skid roads reach throughout both units. Both sections were logged in 2000-01.



This mixed stand is evenly divided between soft- and hardwoods. Red maple is the most prevalent, followed by hemlock and white pine, and in lesser amounts white birch and spruce. Minor softwoods are cedar, fir and red pine. Minor hardwoods include beech and sugar maple (both mostly in the north end of stand 2a), red oak, white ash and yellow birch. Poles take up the most growing space, but sawtimber is still a significant component. Trees range from 2- 4" saplings to 18" in diameter, with an average of 6". It is uneven-aged. The total basal area is 78 ft<sup>2</sup>/acre. Stocking for commercial (6"+ diameter) canopy stems is low, at only 69 ft<sup>2</sup>/acre of basal area. The ideal stocking is 100 ft<sup>2</sup>/acre of basal area. Thus, the site is less than fully utilized. Like stand 1, diameter growth will be fast, but volume growth per acre will be diminished. Also like stand 1, stocking is variable, with openings and thin/low canopies intermixed with denser spots. Basal area ranges from 45 to 150 ft<sup>2</sup>/acre. The canopy height is moderate to tall and has a moderately closed crown.



Tree quality is very good, resulting from the recent logging having removed many low quality stems. In particular, there are some very nice scattered white pine sawtimber. There are the unavoidable occasional butt scars along the skid trails. A few snags and cavity trees also remain. With the recent cutting, the growth rate should increase to 0.8 cords per acre per year. Since the site is only 70% fully utilized, however, it will be more like 0.6 cords. Standing volume per acre is moderately low with 4.5 mbf of sawtimber and 14 cords of pulp. White pine makes up  $\frac{1}{2}$  of the sawtimber volume, with the balance being hemlock, spruce, red maple, oak, and red pine. The percentage of sawtimber volume is high (24%). Where it wasn't destroyed during the logging or buried beneath thick slash, regeneration is light to moderate. It includes red maple sprouts, fir, spruce, white pine and aspen, plus beech in the north end. Blueberry is a common ground level woody shrub, plus some raspberry in openings.

### *RECOMMENDATIONS*

The long-term objective should be timber production. Manage on an uneven-aged basis. The structure goals should be a basal area of 100 ft<sup>2</sup>/acre and a largest diameter tree of 24". Maintain the hemlock grove by the inside corner of stand 2a. Favor the less common species, such as oak, sugar maple and ash. A 15-year selection harvest cycle will produce a sustainable yield of 190 cords per harvest from an adequately stocked stand.

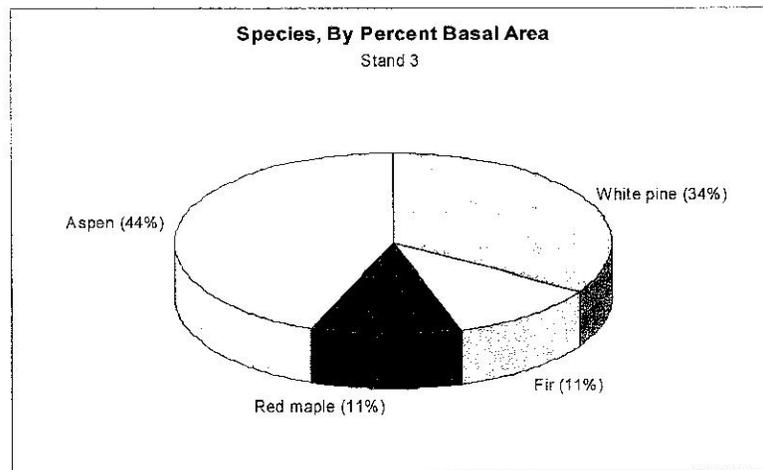
Stand 1 is currently below the ideal stocking level, for which it will take 15 years to reach. Another 15 years will be needed to grow the "allowable cut" for the next harvest. Allow to grow and re-evaluate in 10 years. Low priority.

Adjacent swamps (stands 4a, 4b and 4c) should be protected for wildlife habitat, aesthetics and ecological integrity by either a no-cut buffer, or at least a buffer where cutting is minimal.

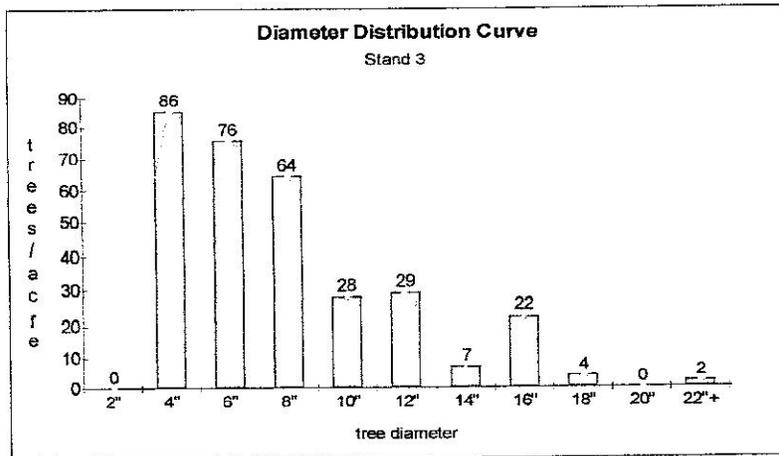
STAND 3 - MIXEDWOOD POLE/SAWTIMBER (M-2/3-A)

3 acres

Stand 3 is in 2 separate units. Stand 3a is in the south end west of Collinstown Road and around the cellar holes. It is accessible directly from the town road, or indirectly through stand 1. Stand 3b is a thin strip along Collinstown Road on the northwest side of the lot. It can be directly accessed from the road or, more realistically if the current wood yard is to be used, from stand 2b. The terrain is mostly a gentle slope, except where stand 3a dips down to a hollow west of the road. Operability with machines is fair in stand 3a because of the hollow and good elsewhere. The soils are moderately deep to bedrock and well drained in stand 3a and shallow to bedrock in stand 3b. Site quality is excellent for growing white pine. No recent timber cutting has occurred here, though the middle of stand 3b contains some marked trees.



Stand 3 is a mix of soft- and hardwoods. The pioneer species of aspen and white pine are the most common species, indicating an open condition in the past. Red maple and fir are associates. Sawtimber dominates the growing space, but there are plenty of pole size trees, too. Trees range up to 24" in diameter, with an average of 9". The basal area is 135 ft<sup>2</sup>/acre for all stems. Stocking of canopy trees is adequate range. The canopy height is moderate to tall with full crown closure.



Tree quality is fair. Most of the aspen and half of the others are poor. Growth rate is about 0.4 cord per acre per year. Standing volume is moderately high at 30 cords of pulpwood and 2.7 mbf of sawtimber per acre. Sawtimber is white pine and aspen. Sawtimber volume comprises an average proportion (15%) of total commercial wood volume. Where present, the regeneration is mostly fir but includes some white pine and aspen.

#### *RECOMMENDATIONS*

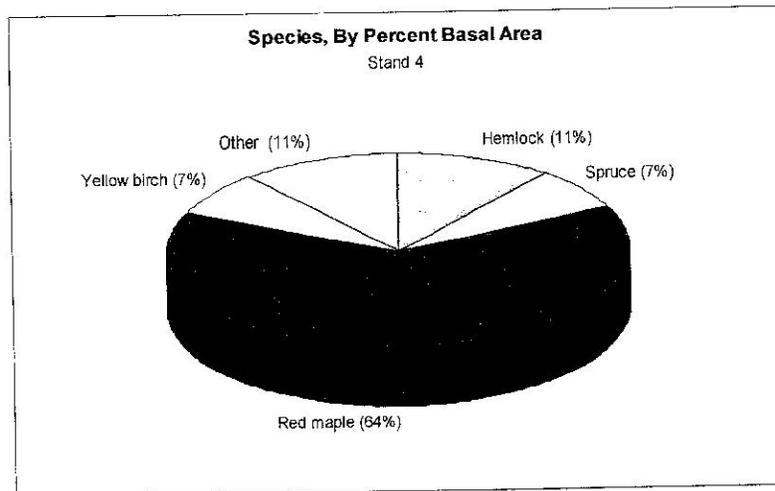
Long-term objective for stand 3 is timber production. This should be moderated for aesthetics because of its position along the town road and for wildlife because of its position around a wooded swamp (stand 4c). Stocking should be 100 ft<sup>2</sup>/acre of basal area. Favor the better quality white pine. A 15-year selection harvest cycle will produce a sustainable yield of 25 cords per harvest from an adequately stocked stand.

In the short run, the marked trees in the middle of stand 3b can still be harvested. The modest yield is estimated to be about 8 cords and 1 mbf, for a value of about \$100. Moderate priority. Stand 3a and the north and south ends of stand 3b do not have any marked trees. This is O.K., since it will contrast nicely against the adjacent harvested areas.

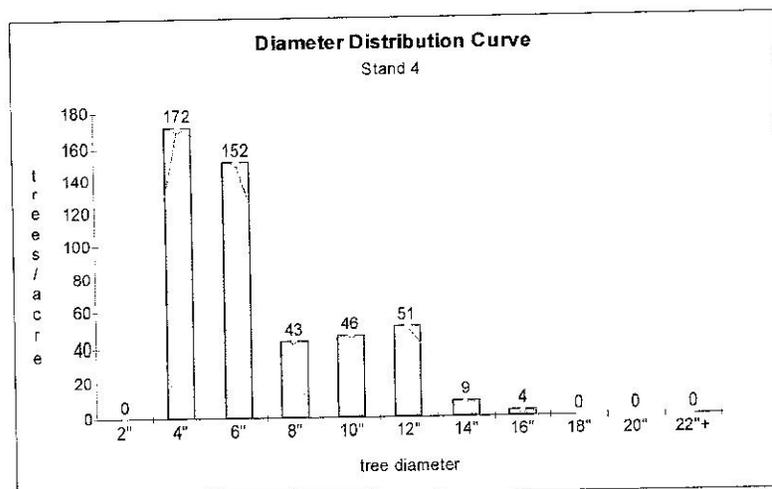
STAND 4 - HARDWOOD POLETIMBER (H-2-A)

4 acres

Stand 4 is in 3 units, all east of Collinstown Road. Stand 4a is a thin area on the east side of the wood yard, accessible through stand 1. Stand 4b is behind the neighboring trailer and is accessible from stands 1 and 2b. Stand 4c is up in the north corner and is accessible from stands 2a and 3b. Stand 4 is a wooded swamp. The terrain is flat and soil is very poorly drained. Both site quality and operability are poor. No harvesting occurred here, though the recent logging picked at the edges.



This hardwood stand is dominated by red maple. Associates include hemlock, spruce and yellow birch, plus some cedar, white pine and fir. Canopy trees are both poles and saw-timber size. Trees range from 4" to 16" in diameter, with an average of 7". The total basal area is 140 ft<sup>2</sup>/acre. It is adequately stocked. The canopy height is moderate to tall with full crown closure.



Tree quality is poor to fair. Except for a few acceptable stems, most trees are pulpwood quality. Growth rate is low, at less than ¼ cord per acre per year. Standing volume per acre is moderate with 32 cords of pulpwood and 1.6 mbf sawtimber. The sawtimber volume is mostly spruce, plus some red maple, white pine, yellow birch and hemlock. Sawtimber accounts for 9% of the total wood volume. Regeneration is limited to fir and red maple. Woody shrubs alder and spirea are present.

### RECOMMENDATIONS

The long-term management objective is protection of the wooded wetlands for their intrinsic ecological function and beauty, as well as wildlife habitat value.

Stand 4 should be left undisturbed and left to develop naturally. No-cut buffer strips (about 25') around the swamps should be honored in the adjacent stands.

### CONCLUSIONS

The Lamont lot contains excellent sites for timber production for white pine. Access and operability are both very good. Wood yards and skid roads have recently been established during the timber harvest of 2000-01. Recreational use by the public may increase now with easier trail access.

SUMMARY OF MANAGEMENT PRIORITIES 2001-2011			
Year	Stand	Activity	Estimated Income/(cost)
2001-06	All	Clarify the locations of the northeast boundary and western leg of the south boundary Blaze and paint all lines (~5,900')	(\$300)
2001-02	3b	Finish selection harvest; ~8 cords & 1 mbf	\$100
2011	All	Update management plan	(\$?)