CHAPTER 2 - DUMP LOT

PROPERTY DESCRIPTION AND LAND USE HISTORY

The Dump lot is located in the northwest side of Liberty, adjacent to the Palermo town line. The original lot is on both the north (tax map 10, lot 19) and south (lot 17) sides of Arthur Plummer Road, about 1½ miles north of Route 3. An additional lot (# 20) on the northwest side of lot 19 is now considered to be part of the property due to tax forfeiture. The north section has road frontage of 1,366'. The south section also fronts along Crie Hill Rd. on its northeast side, with a total road frontage of about 2,200'. The Sheepscot River flows southwestward through the lot's northwest side. The old town dump had been in the east side of the southern section, but is now covered over and retired. The property totals 59 acres, of which 44 acres are wooded. The river and adjacent shrubby wetland account for 12 acres and a 3-acre field remains where the old dump had been. The original Dump lot was acquired by the town from Charles Cayford in 1937-42.

As with most woodland in this area of Maine, the ownership was farmland (mostly as pasture) a century and a half ago. Stone walls and barbed wire form the west and south boundaries and walls are located internally. A small cemetery is in the south section, west of the field and about 100' from the west boundary line. Red and white pines were planted about 60 years ago. They were thinned and pruned in 1984 and thinned again in 1993 along with the rest of the woodlot. A brief forest management plan was prepared by Mark Miller, of Two-Trees Forestry, in 1993. An additional small harvest occurred in the red pine plantation off Plummer Rd. in 2006 by John Sage of Montville. Lumber was sawn on-site and a small slab pile remains behind. Volumes and income is unknown.

TOPOGRAPHY AND ACCESSIBILITY

The terrain of the south section is a moderate slope. A seasonal stream flows northeast across the lot, beneath Plummer Rd. and into the wetland. A second small stream in the east corner flows north and beneath Crie Hill Rd. North of Plummer Rd., the terrain is mostly flat, except for a drop-off from the town road and a gently sloping knoll in the north end. Another seasonal stream flows west across the north end into the wetland. The highest elevation is the southwest corner at about 480'. The lowest point is the river and wetlands at 300'.

Access into the property is excellent, with each section having an entrance. The old dump entrance in the south section is currently blocked by a fence and locked gate. Wood must have been yarded in the field when the last harvest occurred. Two main skid roads reach into the north and southwest parts of this section while lesser ones fan out elsewhere. The entrance into the north section is in the east corner, with the wood yard just 150' in. A skid road loops around the plantation stand. A snow mobile trail cuts across the north section near the town road, then reenters in the north corner to cross the wetland and river. Two bridges cross the streams just north of the intersection of Plummer and Crie Hill Rds.

BOUNDARIES

The original Dump lot was surveyed by David Brandt of D & L Engineering, Inc, Belfast, ME. The map is dated April 1984 and identified as Job No. 83-024. Referring to the lot north of the river (lot 20), note #6 on the map states, "I have found no reference to return this parcel to the Cayford chain of title or to the town of Liberty." All corners are marked with iron rods. The angle in the town line north of the river is marked by a stone bound. The southeast boundary is a stone wall. The southwest line has a stone wall at its south end but has barbed wire remnants along most of it. Both lines have old blue blazes. The northeast boundary is flagged to the river and is also blazed. The boundaries were not investigated north of the river in the wetland.

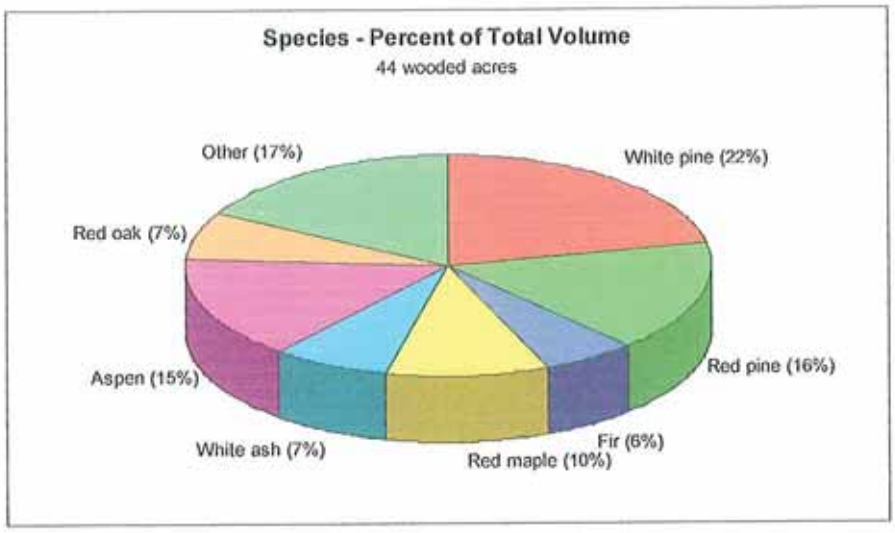
Interestingly, the Liberty/Palermo town line is placed wrong on both the USGS topographic map and the USDA soils map. Instead of angling where the survey shows (along the north side of lot 20), the other 2 maps bend the town line at the road leading to Hostile Valley Rd. This causes it to cut through the east corner of the north section and through the middle of the south section of the Dump lot. It had been corrected on the town tax maps, but not yet on the town's shoreland zoning map.

TIMBER RESOURCE

Forests cover 44 acres of the Dump lot. An open shrub/grass swamp with insignificant wood volume and the Sheepscot River account for 15 acres. Five stands were delineated. The distribution of timber type among them are:

Type	# of stands	# of acres	% of total
Softwood	2	7	16
Mixedwood	1	9	20
Hardwood	2	28	64
	5	44 acres	100%

In June, 2008, inventory data were taken in the forested areas at 26 variable radius plots using a 15 BAF prism on cruise lines running parallel to the southwest boundary. One plot represents an average of 1.7 acres. The overall volume estimate is accurate within ±14% nine times out of ten. Error is greater for individual species, products, and values.



The lot hosts a variety of tree species. For commercial size trees (6"+ dbh) across the entire woodlot, white pine has just over 1/5 of the total volume. Significant associates include, in descending order, red pine, aspen, red maple, white ash, red oak and fir. Minor species include white and yellow birch, hemlock, cedar, sugar maple and beech. Hophornbeam (ironwood), tamarack and black cherry are present in very small amounts.

Forest stands are further identified based on dominant canopy height and canopy closure. Much of the woodland is made up of mature pole and sawtimber size trees that are 50-80 years old. Canopy heights for most stands are either tall or moderate to tall. The exception is stand 5, which has younger and shorter saplings and small poletimber. Forest canopies in the natural woods are fully closed with occasional openings. The pine plantations have moderately closed canopies.

Tree quality, defined as trees with the potential to become sawtimber, is below that of the typical woodlot. Most of the unacceptable trees are fir, which virtually always is considered pulpwood, due to its predisposition towards early onset of internal rot. Having reached their physiological maturity, some of the firs have died. These are either still standing as snags or have fallen over, adding coarse woody debris to the forest floor. Others are in serious decline. Many of the maple and aspen are also poor quality. Some of the stems are designated as pulp due only to small size and is actually good quality growing stock. Some of the larger pines are rough, with many large lower limbs and/or multiple stems, which degrade the tree's quality. There are, however, certainly some nice individual stems. White pine and red oak are the most valuable species.

The estimated total wood volume on the Dump lot is 285,000 board feet of sawtimber and 900 cords of pulpwood. This is worth about $45,235. For the 44 wooded acres, this comes to 6,480 board feet and 20½ cords per wooded acre. This is higher than average for the sawtimber and average for the pulpwood. The wood is valued at about $1,030/acre, which is above average. Sawtimber volume is dominated by white and red pine (75%). The pulpwood volume is dominated by hardwoods (70%). Sawlogs comprise 48% of the total commercial wood volume, which is very high.

Assuming an average growth rate of 0.39 cord per acre per year, a sustainable harvest level of 17 cords per year is calculated for the 44 acres of the woodland. For a 15-year cutting cycle, 257 cords can then be harvested (or 5¾ cords per acre per year). For a 20-year cutting cycle, the allowable cut rises to 343 cords (or 7¾ cords per acre per year). This is only a broad total. Due to variability of age, structure and stocking of the forest types, harvest levels will vary among stands. Some may not be cut at all, while others may possibly experience a heavy regeneration cut.

Tree regeneration is abundant and varied – mostly a hardwood mix of ash, red and sugar maple, aspen, oak and beech, plus fir. Blue beech, also known as ironwood or musclewood (in the *Carpinus* genus), a small tree, is also present near the wetland. The density of the regeneration depends on light/shade conditions and wetness on the forest floor. Shrubs include mostly hazelnut plus some honeysuckle, raspberry, spirea and dogwood.

INSECT, DISEASE AND WEATHER INFLUENCES

The most prevalent pathological event is the decline and mortality of the fir and aspen. The red pines are also declining, possibly caused by root rot (either *Armillaria* or *Fomes annosum*) initiated by the previous thinnings. This is especially happening in stand 2.

WILDLIFE

The property has a variety of wildlife habitats. Fresh water, a critical habitat element for all animals, is present in Sheepscot River, shrubby wetlands and the seasonal streams. Fish and other aquatic animals such as muskrats, minks and turtles are probably active in the wetlands along the river. No active beaver sign has been noted. The oaks and beeches provide valuable hard mast with their nuts for many birds and mammals, including deer, squirrels, chipmunks, bear, grouse and turkey. Birch and alder seeds plus hazelnuts are additional food. Grouse feed on the aspen buds.

Spots of hardwood saplings and sprout growth provide browse for deer and hares. Areas of thick ground cover, either the inner herbaceous field or saplings and shrubs in the woods, provide cover for birds and small mammals, which in turn are prey to larger predators. The edges between the forest and the field and roads present an interface of habitat for both food and cover for animals such as deer, moose, partridge, fox and hare. Deer are common. Coyote and fisher are probably in the neighborhood. Gray squirrels and chipmunks are likely active in the non-winter season, feeding on acorns.

The Maine Department of Inland Fisheries and Wildlife has mapped a "Habitat of Management Concern" on most of the area north of the Plummer Rd. plus a strip along the south side of the road (see following page). Identified as "Inland Waterfowl and Wading Bird Habitat," this area includes the river, associated wetlands and 250' buffer. The Maine Natural Areas Program (MNAP) reports no documentation for this site to contain 1) rare, threatened and/or endangered plants, 2) rare, threatened and/or endangered animals, or 3) rare and/or exemplary natural communities. The property does not intersect with Atlantic salmon habitat (though other sections of the Sheepscot River are salmon habitat), nor provides habitat for lynx. The parcel does not intersect with MNAP land trust focus area nor has it been targeted by MNAP for inventory. 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.

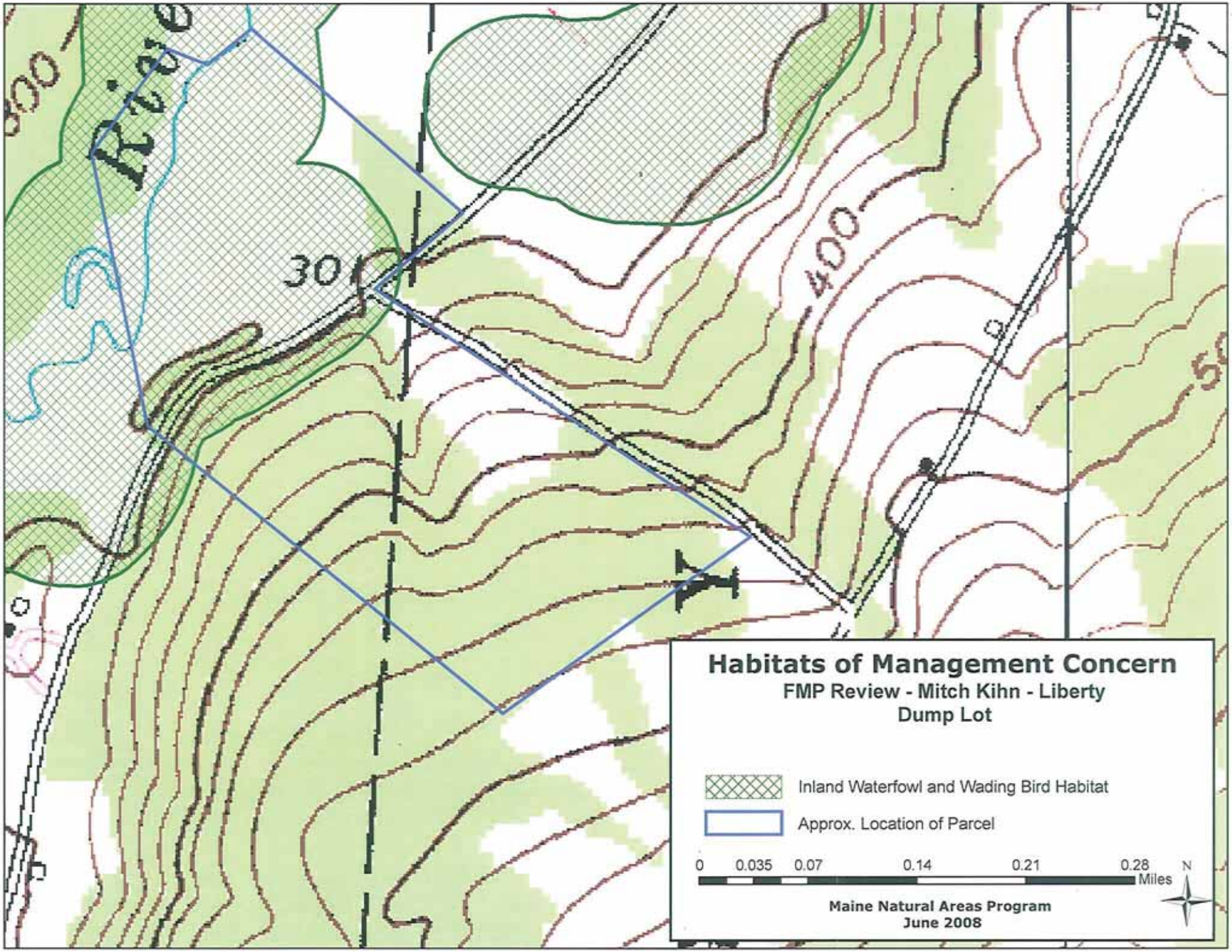
RECREATION, AESTHETICS AND CULTURAL FEATURES

Recreational activity is probably limited to the use of the snowmobile trail north of Plummer Rd. It is doubtful anyone walks the woodland, though hunting is allowed and fishermen may frequent the river. Aesthetic features include the Sheepscot River, wetlands and some of the big pine trees.

The Maine Historic Preservation Commission reports no known historic archaeological sites or existing historic buildings on the property. It does note that "no prehistoric archaeological sites are known only because no survey has been conducted. However, the following area is archaeologically sensitive: The area to the west of the Arthur Plummer Rd, up to 200 meters from the Sheepscot River." The small cemetery is a significant feature.

LEGAL RESTRICTIONS

Because of the erroneous placement of the town boundary line on the Shoreland Zoning map (see Boundary Section), the Dump lot has been overlooked regarding shoreland zoning. However, it seems likely that the shrub swamp associated with the river would be identified as a wetland. Therefore, a 250' wide strip around it would be Limited Residential, the regular shoreland zone. See the General Chapter for details.


Habitats of Management Concern
FMP Review - Mitch Kihn - Liberty
Dump Lot
Inland Waterfowl and Wading Bird Habitat
Approx. Location of Parcel
0 0.035 0.07 0.14 0.21 0.28
Miles
N
Maine Natural Areas Program
June 2008
400
30

18a

ESTIMATES OF TIMBER VOLUMES AND VALUE BY SPECIES

Town of Liberty - Dump lot
Liberty, Maine - June 26, 2008

Products, Species		Volume[1,2]	Stumpage[3] Rate	Value[4]
Sawtimber:		MBF	$ per MBF	
	White pine, grade	102	$140	$14,280
	White pine, pallet	11	60	660
	Red pine	102	90	9,180
	Hemlock	5	50	250
	Tamarack	4	50	200
	Red oak	20	200	4,000
	Aspen	16	50	800
	White ash	8	105	840
	White birch	8	60	480
	Sugar maple	3	225	675
	Red maple	2	110	220
	Yellow birch	2	140	280
	Beech/Pallet	2	40	80
	Totals:	285 MBF		$31,945
Pulpwood:		Cords	$ per cord	
	Spruce-fir	90	$20	$1,800
	White pine	90	6	540
	Red pine	35	8	280
	Cedar	30	0	0
	Hemlock/Tamarack	25	10	250
	Hardwood pulp*	430	14	6,020
	Firewood*	200	22	4,400
	Totals:	900 cords		$13,290

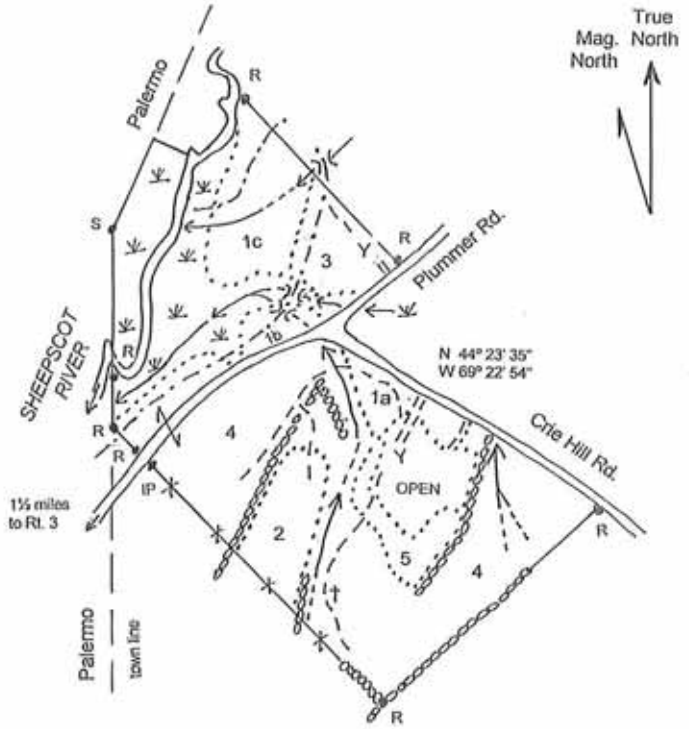
Total Estimated Stumpage Value = $45,235

[1] Total timber volume estimate is ±14% nine times in ten. Error is greater for individual species or products.
[2] Pulpwood volumes include topwood from sawtimber trees.
[3] Stumpage price estimates based on recent local averages, Summer, 2008. They are gross values and do not reflect forester fees.
[4] The "liquidation value" if the entire property was cleared. Illustrative purposes only and 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 Liberty - Dump Lot
Map 10; Lots 17, 19 and 20



Scale: 1" = 600'

0' 300' 600'

LEGEND

Stand number & boundary	2 .....
Stone wall	oooooooo
Barbed wire	-x-x-
Rebar / Iron pipe / Stone	R / IP / S
Seasonal stream	- - - →
Swamp	
Truck road	= = = =
Skid road	– – – –
Wood Yard	Y
Snomobile trail & bridge	– · –⛷–
Cemetery	†

FOREST STANDS

Stand	type		Acres
1	M-3-A*	sawtimber	9
2	P-3-B	sawtimber	4
3	RP-3-B	sawtimber	3
4	H-2/3-A	pole/sawtimber	26
5	H-1/2-A	sapling/poletimber	2
		WOODLAND =	44 acres
	Opening		3
	Wetland and river		12
		NON-WOODLAND =	15 acres
		TOTAL PROPERTY =	59 acres

*Codes:
P = 75%+ Red & white pine; RP = 75%+ Red pine;
H = 75%+ Hardwood; M = Mixedwood
1 = 0-30' height; 2 = 30-60'; 3 = 60'+
A = 70-100% crown cover; B = 40-70%; C = 15-40%

sapling = trees 1-4" dbh; poletimber = trees 5"-9" dbh;
sawtimber = trees 10"+ dbh for softwoods & white birch;
12"+ dbh for hardwoods

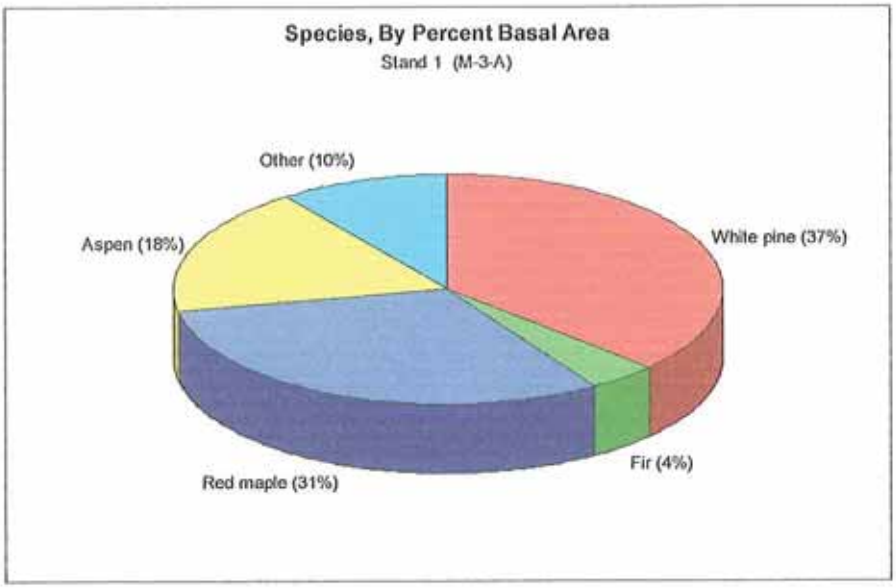
Map details are approximate and based on previous management plan map, survey map and personal reconnaissance in June, 2008. **For forest management purposes - not a boundary survey.**

Mitchell Kihn, LPF #3206
Mid-Maine Forestry
September, 2008

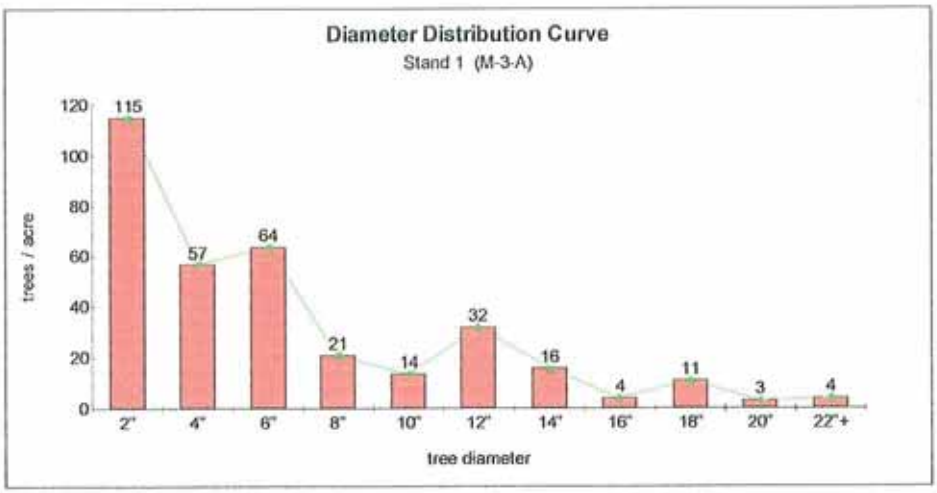
STAND DESCRIPTIONS AND RECOMMENDATIONS

STAND 1 - MIXEDWOOD SAWTIMBER (M-3-A) 9 acres

Stand 1 is in 3 sections. Stand 1a (formerly stand 3 on the 1993 plan) is by the gated entrance, between Crie Hill Rd. and the inner field. A skid road goes through its northwest end. Access is excellent via the skid road, the entrance road and the field. Both stands 1b and 1c were formerly labeled as stand 6 in the 1993 plan. Stand 1b is north of, but adjacent to, Plummer Rd. Access is via the snowmobile trail, which crosses a stream by a small bridge. Stand 1c is also north of Plummer Rd., adjacent to the northeast boundary, the river and wetland. Access to the south side of a dividing stream is easy from stand 3, but more challenging on the north side. The snowmobile trail runs through the north half and enters a neighbor's field. The terrain is moderate sloping with well drained soil in stand 1a. It is gently sloping to flat in stands 1b and c. Soils are poorly drained in stand 1b and the south half of 1c, and moderately well drained in the north half of stand 1c. Site quality is good to excellent for growing white pine. Operability with machines is good, but limited by seasonal wetness in the wetter ground. The 250' strip along the swamp is Shoreland Zone. Stand 1a was thinned in 1993 but not stands 1b and c.



Stand 1 is an uneven-aged mixedwood stand, with a bit more hardwoods than softwoods. White pine and red maple each take up about 1/3 of the growing space, while aspen is about 1/5. Minor species include fir, tamarack, sugar maple, black cherry, white birch and hophornbeam. The stand is dominated by sawtimber-size trees. Trees range 2-28" in diameter, with an average of 11". With a basal area of 115 ft^2/acre for canopy stems, stand 1 is at the lower end of the adequately stocked range. Canopy height is tall and crown closure is high.



Tree quality is fair to good. Some of the pines are rough, forked and/or broken or dead. Many of the maples and aspens are pulpwood quality only. The average growth rate is 175 board feet per acre per year. Volume per acre is moderate with 8.0 mbf of sawtimber and 28 cords of pulp. Sawtimber volume comprises a high 36% of the total volume of commercial wood. Seven-eighths of it is white pine, some of which are old-field remnants. Nearly ¾ of the pulpwood is hardwood. Regeneration is abundant – a hardwood mix in stand 1a (ash, sugar maple, oak and beech) and mostly red maple and fir in 1b and 1c.

The mapped Inland Waterfowl and Wading Bird Habitat covers all of stand 1b and most of 1c.

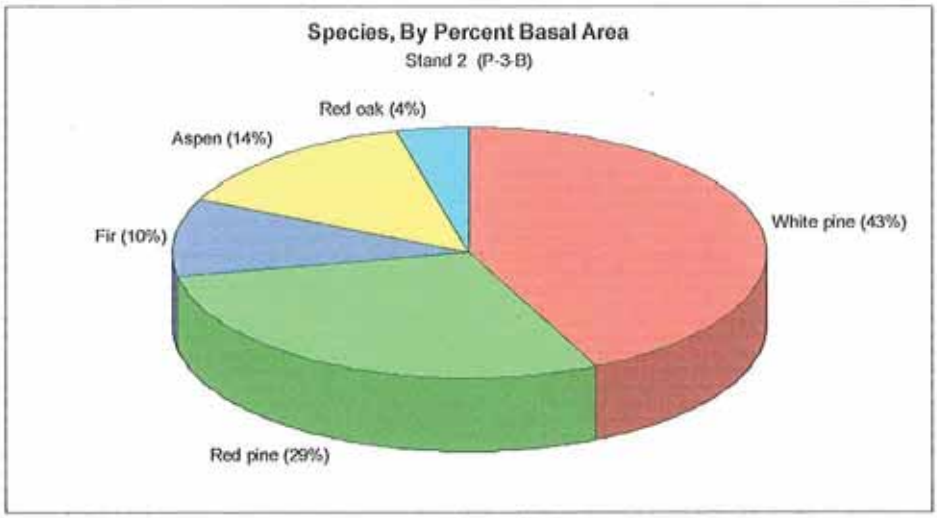
RECOMMENDATIONS

For stands 1b and 1c, priorities should be the protection of the wetlands, riparian zone and wildlife corridor, maintaining aesthetics and recreational use of the trail. Commercial timber harvesting should not take place. A timber production focus can apply to stand 1a. Strive for a minimum basal area of 100 ft^2/acre, based on a 15-year selection harvest cycle.

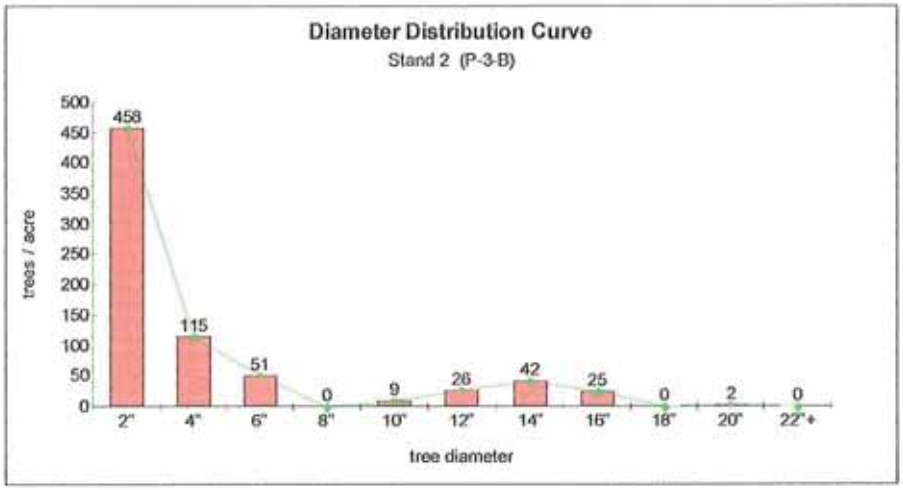
A small harvest can be done in stand 1a but only if joined with additional areas to make a commercial harvest. About 30% of its basal area can be removed. Discriminate against the aspen and poor maple in favor of the pine. Estimated yield is 22 cords of pulp/firewood, worth $350.

STAND 2 - WHITE & RED PINE SAWTIMBER (P-3-B) 4 acres

Stand 2 is the same as stand 2 in the 1993 plan. It is south of Plummer Rd. and on the west side of the middle stream. It is bounded by stone walls on the northwest and partly on the south end. It is accessible by an existing skid road from the north. It sits on a gently sloping plateau. The soil is well drained with excellent site quality for white pine. Operability with machines is very good. It was thinned and pruned in 1984 and thinned again in 1993.



Stand 2 is a mature plantation of white and red pine sawtimber. Together they make up ¾ of the growing space. Other trees mix in near the northwest stone wall where the planting didn't extend, including aspen, fir and red oak. Trees range up to 20" in diameter, with an average of 12". It is even-aged. The basal area is 120 ft^2/acre for canopy stems, which is sub-optimal stocking for pine. Canopy height is tall and crown closure is only moderate.



Tree quality is fair to good. Quite a few of the red pines have died, and are either remaining upright as snags or have fallen. This was predicted in the 1993 plan, suggesting that the mature red pines should be harvested in 2000 (but haven't). Some of the white pines are also dying. Growth rate is high on the remaining trees – 500 board feet per acre per year. For a softwood stand, volume per acre is only moderate at 17.4 mbf of sawtimber and 11 cords of pulpwood. Sawtimber volume comprises a very high proportion (76%) of total commercial wood volume. The regeneration contains no pine, as was hoped for in the 1993. Rather, it is thick with aspen, red maple, ash, oak, fir and beech.

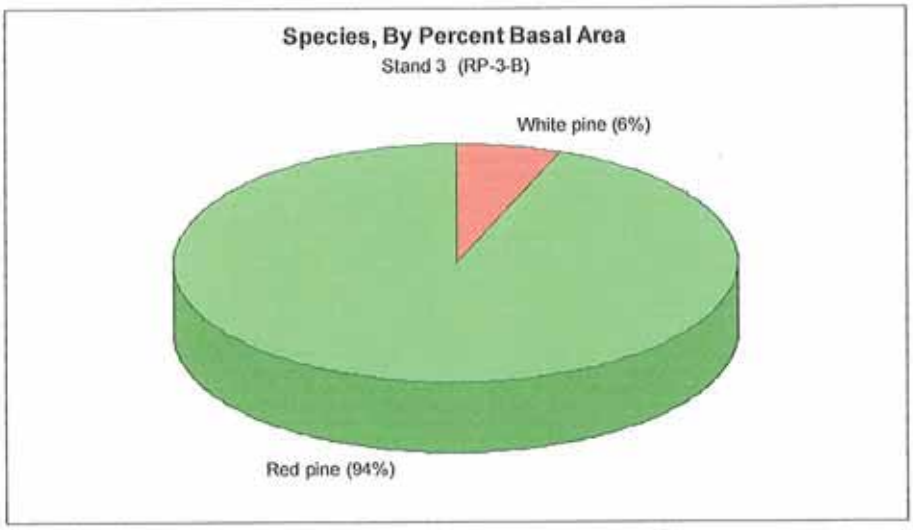
The thick ground level saplings are a beneficial habitat for some wildlife. This will continue in the short term, until they grow into the poletimber class.

RECOMMENDATIONS

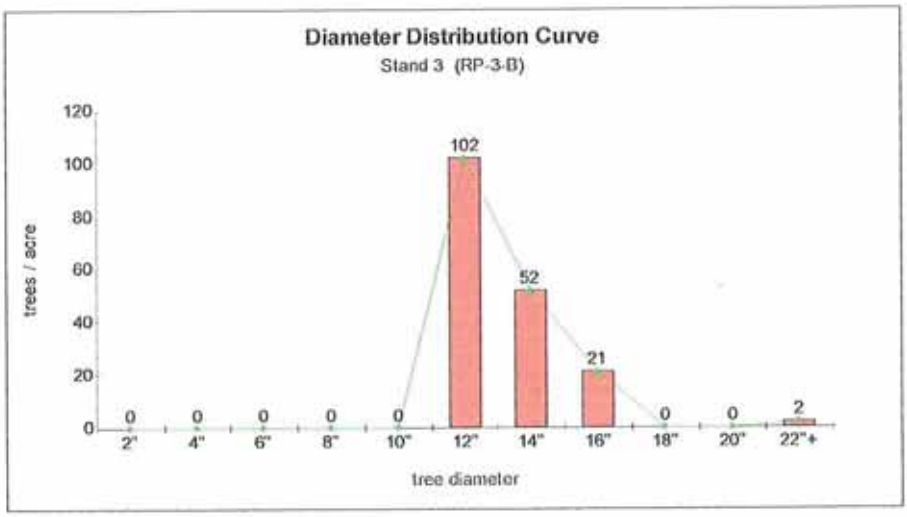
Manage for timber. The remaining red pine should be harvested soon. Otherwise, the balance will die and the opportunity will be lost. This would knock the canopy stocking down to 80 ft^2/acre basal area and would possibly serve as a shelterwood for white pine regeneration. At the least, the advance regeneration would be released. Anticipated volume is 27 mbf sawtimber and 10 cords of red pine, for a value of $2,500. For the best value, the red pines should be marketed as large poles. Two Maine-based companies are active buyers: Prentiss & Carlisle in Bangor and Maine Wood Treaters in Mechanic Falls.

STAND 3 - RED PINE SAWTIMBER (RP-3-B) 3 acres

Stand 3 is the former stand 1 on the 1993 plan. It is in the east corner of the section north of Plummer Rd. Excellent access is provided by a truck road leading to the old wood yard. A skid road continues in a loop around the stand. The snowmobile trail runs along the west portion of the skid road and then crosses the northeast boundary. The flat terrain and somewhat excessively drained soil make for excellent machine operability. Site quality is fair for growing white pine, but red pine is recommended for planting due to droughtiness. The west end is within the 250' Shoreland Zone and the mapped Inland Waterfowl and Wading Bird Habitat. The stand was thinned and pruned in 1984 and thinned again in 1993. An additional small harvest occurred in 2006 by John Sage of Montville. Lumber was sawn on-site and a small slab pile remains behind.



Stand 3 is an even-aged red pine plantation with just a few white pines on the sides. Trees are 40-50 years old. Diameters mostly range 12-16", with a couple of bigger white pines. Average diameter is 13". With a basal area of 170 ft^2/acre, stocking is adequate. Canopy height is tall and crown closure is moderate.



Tree quality is quite good – better than the dying pine in stand 2. Some white pines are rough, however. Growth rate is about 500 board feet per acre per year. Volume per acre is high at 27.0 mbf of sawtimber and 10 cords of pulpwood. Sawtimber volume comprises a very high proportion (84%) of total commercial wood volume. Regeneration consists of oak, red maple, fir and white pine, but no red pine.

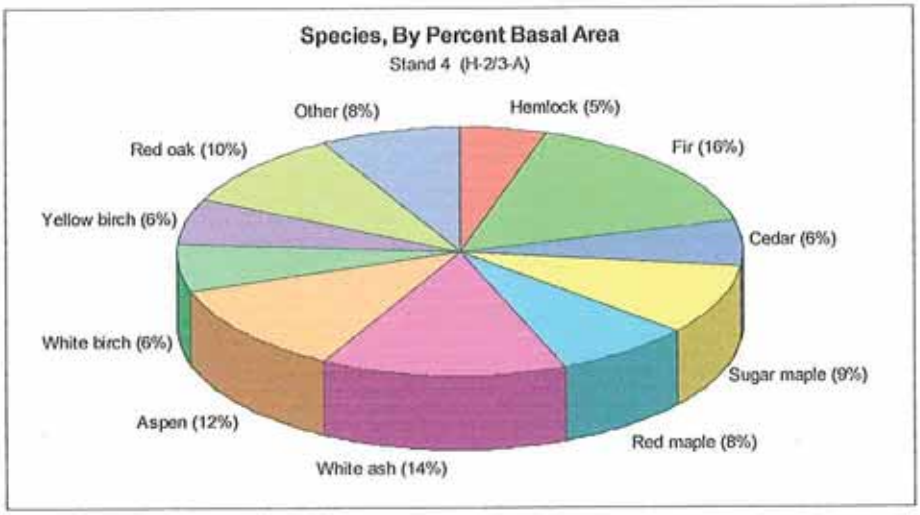
RECOMMENDATIONS

Manage for timber, at least during the rest of the life-cycle of the red pine. Recommended stocking is 100 ft^2/acre basal area. An additional 70 ft^2/acre basal area can be thinned. Anticipated volume is 26 mbf sawtimber and 10 cords of red pine, for a value of $2,400. Pursue selling the cut trees as large poles, as mentioned under stand 2.

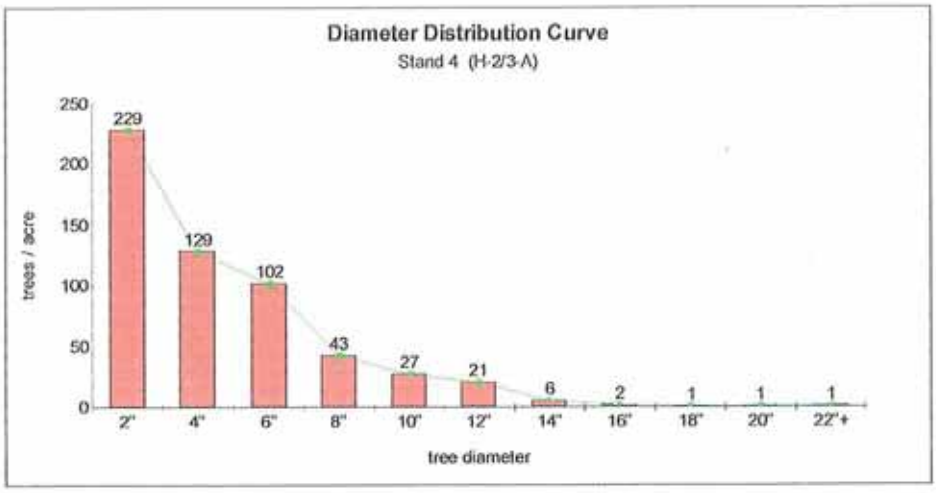
Maintain higher stocking along the wetland and stream for their protection and wildlife habitat.

STAND 4 - HARDWOOD POLE/SAWTIMBER (H-2/3-A) 26 acres

Stand 4 is the largest stand of the lot. It is a combination of stands 4 and 5 in the southern section from the 1993 plan, touching all 4 sides. It also includes the roadside upland strip on the north side of Plummer Rd. It is accessible via skid roads that originate from the field. A snowmobile trail parallels the town road on the north side. Slopes are moderate and the soils are well drained and mostly very stony. A seasonal stream flows north through the middle of the stand. Another smaller drainage also flows north in the east corner. Site quality is excellent for white pine. Operability with machines is very good contingent on frozen or very dry conditions for the stream crossings. The strip along Plummer Rd. falls within both the 250' Shoreland Zone and the mapped Inland Waterfowl and Wading Bird Habitat. It was thinned in both 1984 and 1993. Of cultural interest is an old single-grave cemetery located 100' from the west boundary and along the skid road.



Stand 4 is a hardwood stand containing a wide variety of species. Fir and white ash take up the most growing space with 1/6 each. Associates include aspen, red oak, sugar and red maple, white and yellow birch, cedar and hemlock. Minor species are white pine, beech and hophornbeam. Canopy trees consist of both poles and sawtimber. Trees range up to 40" in diameter, with an average of 9". With a basal area is 84 ft^2/acre, stocking is adequate. Canopy height is moderate to tall and crown closure is high. Small patch openings in the canopy are common near the south corner and the stone wall along the north side of stand 2.



Tree quality is good, with decent growing stock and timber. A tallied 40" white pine and a 22" sugar maple are old pasture trees with little commercial value. The fir is only pulp quality and the cedar is not even marketable for that. Growth rate is ¼ cord per acre per year. Volume per acre is average with 2.5 mbf of sawtimber and 21 cords of pulpwood. Regeneration is abundant and varied, a result of the past harvests, especially in the patch openings. All the overstory species are found in the regeneration. Hazelnut is sporadically present.

RECOMMENDATIONS

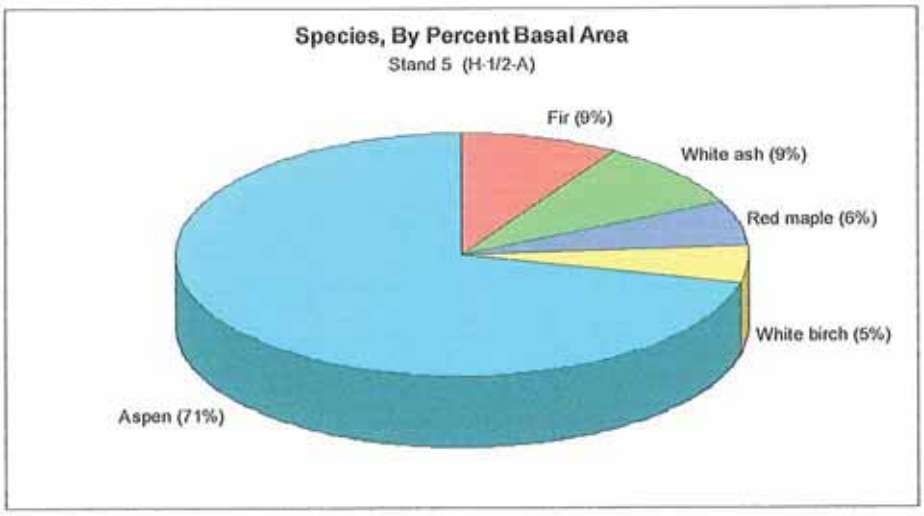
Long-term objective is to manage for timber production under an uneven-aged regime, while also protecting the stream and wetland and preserve the cemetery for cultural edification. Strive for a minimum stocking of 65 ft^2/acre basal area. Maintain a variety of tree sizes and species.

Harvest ¼ of the growing stock, ideally removing the low quality unacceptable stems. Favor the better quality hardwoods, especially oak, sugar maple, and ash. Although not commercially valuable, beech could be retained for their nuts, which are favored by wildlife. Estimated yield is 9 mbf of sawtimber and 80 cords of pulp, worth $1,850. Maintain a no-cut buffer strip along the middle stream and north of Plummer Rd. Retain some of the large cull wildlife trees.

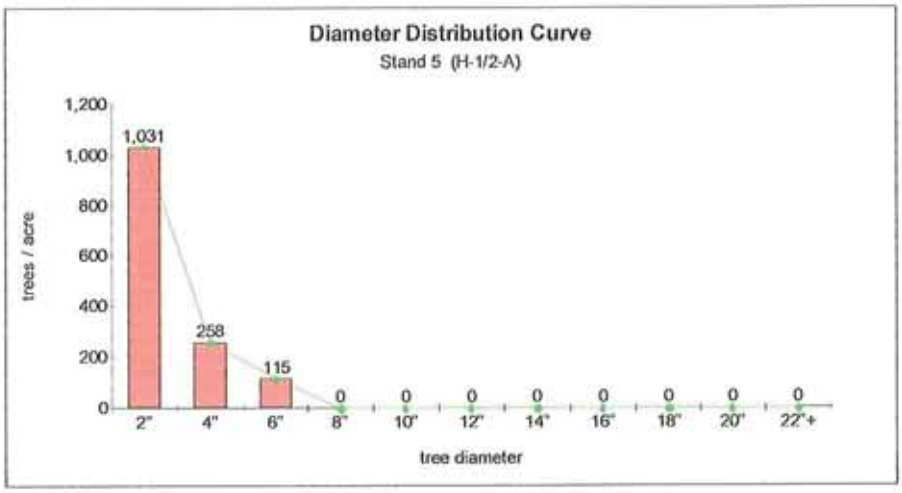
Keep clear and maintain the cemetery and the trail (skid road) leading to it – a good potential project for the Scouts, school children or other interested citizens, which could include researching the deceased and how life was in his time.

STAND 5 - HARDWOOD SAPLINGS (H-1/2-A) 2 acres

Stand 5 is a thin crescent around the west half of the field. It is easily accessible through the field. The woods road that is an extension of the entrance road goes through it. The terrain is a gentle to moderate slope. Soils are well drained and very stony. Site quality is excellent for white pine. Operability with machines is excellent. The stand was once part of the original opening for the town dump.



Stand 5 is composed of hardwood "pioneer" saplings and small poles. Trees are young and are reforesting this previously open area. Aspen takes up most of the growing space, with fir, white ash, red maple, white birch and red oak making up the balance. Trees range only up to 6" in diameter, with an average of 3". The basal area is 67 ft^2/acre, which is adequate stocking. Canopy height is low to moderate and crown closure is full.



Tree quality in the stand is fair. Most of the aspen and fir are pulp quality only. Some of the other species are nice. Some maple and oak are in sprout clumps. Growth rate is ¼ cord per acre per year. Volume per acre is low with only 7 cords of pulpwood and no sawtimber. Regeneration includes the above species, plus sugar maple and white pine.

RECOMMENDATIONS

The long-term objective could be for wildlife habitat plus stream protection for the area north of the road and along the stream. The aspens are utilized by ruffed grouse. At this stage, though, it has outgrown its usefulness as a roosting ground but the grouse can begin to feed on the aspen buds. When the stand becomes more fully a pole stand, with more commercial volume, it can be clearcut to reinitiate another young stand of aspen (south of the woods road). Thus, the management would be on an uneven-aged basis. Leave alone the portion north of the woods road.

Alternately, set the long-term objective for timber production. The stocking goal would be a basal area of 70 ft^2/acre. The next cut would be a thinning and weeding of undesirable trees, which would include many of the aspens.

Either way, there's no need for treatment now. Leave along and reinspect in 10 years.

CONCLUSIONS

The upland portions of the property (stand 1a, 2, 3, 4 and 5) are excellent sites for timber production. Trees can easily be harvested for either timber or wildlife management. To protect the wetlands for ecological integrity, wildlife habitat and aesthetics, stands 1b, 1c and the adjacent edges of 3 and 4 should be left alone and commercial timber management avoided. A no-cut buffer should be maintained along the middle stream south of Plummer Rd. The cemetery is a cultural resource, upon which education and service projects can be based. Recreational use of the snowmobile trail should continue.

SUMMARY OF MANAGEMENT PRIORITIES
2008-2018

Year	Stand	Activity	Estimated Income/(cost)
2008-13	All	Establish location lot 20 boundary lines north of Sheepscot River	($50/hr.)
		Blaze and paint all lines (~5,300')	($312)
2008-10	2	Salvage harvest; 27 mbf & 10 cords	$2,500
	3	Thin; 26 mbf & 10 cords	$2,400
2010-14	1a	Selection harvest; 22 cords	$350
	4	Selection harvest; 9 mbf & 22 cords	$1,850
2008-18	4	Maintain cemetery and trail	($?)
2018	All	Update management plan	($?)