

LANDOWNER: - Town of Pittsfield
112 Somerset Ave.
Pittsfield, Maine 04967
Kathryn Ruth, Town Manager
Business: 207-487-3136

TOWN: Pittsfield **COUNTY:** Somerset

TAX MAP: R#12 **LOT:** #25

SOMERSET COUNTY REGISTRY OF DEEDS:

Dated: 1927 BK 390 PG 479

Dated: 1992 BK 1832 PG 128

MANAGEMENT OBJECTIVES

The primary objective of the landowner is to manage the forest in a responsible manner for future commercial wood products removal while always improving the quality of the timber present through sound forest management.

The second objective is to provide multiple uses for the residents of Pittsfield.

PARCEL HISTORY AND GENERAL CONDITION

The Town of Pittsfield has owned the majority of this property since 1927 according to the deed from Sophia Martin. A small part of this was acquired later in 1992. The majority of the property has not been harvested for many years. If you were to divide the property in half from east to west the western portion of the property is heavily wooded. Much of the timber in this western section has not recently harvested and is overcrowded with large, mature or overmature timber. The eastern side is also mostly wooded but this side is much younger in term of timber present. Much of the eastern side was old fields, abandoned gravel pits, and also flood plain for the large wetland and Sebasticook River.

Access around the parcel is quite good along Peltoma Avenue. There are a number of current gravel roads and old roads which could provide even more access through the property if reclaimed and they were to be then maintained as well. A number of the wetlands and forested wetlands make complete access in certain times of the year difficult due to flooding and high water.

I did discover a few white pine with white pine blister rust. There could be more but generally this is not a large problem and the infected trees can be removed during the next harvest entry. No white pine decline syndromes were found. No hemlock woolly adelgid problems have arisen and no Asian longhorned beetle symptoms have been discovered. No signs of the hemlock looper were seen either. The largest problem is that the few American beech present on the parcel do have the beech bark scale disease with the nectria canker as well. However, the beech is still growing and will persist for quite some time.

The landowner allowed much of the old fields and abandoned gravel pit areas to revert naturally to forest land. About 3 acres are mowed across the parcel. Stand #20 is the largest field area and within this field is the Recycled Items Building. Within stand #21 is the rifle range which is used by the local police force. The last field area being maintained, Stand #22, is centered around the stone monument marker for Moses Martin Framed House , 1818-1923.

The soils on this parcel have been classified into 7 different soil mapping unit delineations. The slope of the parcel ranges from 0% to 10%. The soils range from very poorly drained to excessively drained. Generally, the soils on the higher ground are suited for growing high quality timber. Please refer to Soil Information Exhibits #4- USDA Soils Data, Exhibit #4A- Soil Survey map symbols from Somerset County USDA for each individual soil mapping unit present on the ownership. Exhibit #4B – Drainage Classes depicts the drainage of the soils on the parcel. Exhibit #4C - Forestland Management and Productivity charts the management concerns, potential productivity, and suggests what trees to manage on the various soils found on the property. Exhibit #4D – Soil Series Description explains the soil series designations for each found within the boundary of this parcel.

The boundary lines are not all visible. Old blazes were found on the eastern line along Peltoma Avenue. However, the western lines are in question and will have to be determined by meeting with the neighbor, Cianbro, to determine the location of the boundary lines to the west. Contact has been made with the landowner to the east during the field cruising. In all cases the lines need to have the blazes re-established and then painted with high visibility paint. The existing conditions of the lines over all the property need attention as soon as possible. A schedule of line maintenance should then be established in which they are redone every 5 to 7 years.

Figure #1A – MAINE 2F 2006 SPRING PHOTOGRAPHY documents the aerial view from the State of Maine Office of GIS. Figure #1B – MAINE 2009 SUMMER PHOTOGRAPHY documents the aerial view from the State of Maine Office of GIS. Figure #1C – MAINE 2011 SUMMER PHOTOGRAPHY documents the aerial view from the State of Maine Office of GIS.

Exhibit #2 – TOPOGRAPHIC VIEW documents what the ownership looks like from a USGS Topographic map view. This view has elevation as well as certain features named as one would find on a USGS topographic map.

Exhibit #3 – FOREST TYPE MAP documents the generalized forest stand types, their locations, and land characteristics for the parcel. Classifications were developed from doing an intensive inventory cruise of one plot for every 3 acres of forested land.

THREATENED AND ENDANGERED SPECIES

Data received from the Maine Natural Areas Program (MNAP) regarding rare, threatened and/or endangered species of plants, rare and/or exemplary natural communities, or rare, threatened and/or endangered is attached at Exhibit #6A - #6I - MNAP Management Plan Review. Their database showed that this property is associated with a population of threatened freshwater mussel (Tidewater Mucket) and a rare freshwater mussel (Creeper) along the Sebasticook River. No harvesting should be done within 25 feet of the water and then between 25 - 250 feet harvesting is restricted to single-tree or small group selection cuts that maintain a 60-70% canopy cover. Construction of roads and log landings, or any other permanent land use conversion, should be avoided or minimized within the 250 foot management zone. The Sebasticook River and its tributaries support populations of wild Atlantic Salmon as well. The far eastern section also intersects with the uncommon large raised level bog ecosystem.

HABITAT AND WILDLIFE ISSUES

This parcel has 12 different major timber classes organized into 3 softwood, 3 mixedwood, and 6 hardwood classes.

I did notice many deer tracks during my field review. I also saw moose tracks as well. I did see some partridge, red squirrels, and numerous small songbirds as well. I did

not see any waterfowl but I heard some Canadian geese and other ducks too. The landowner intends to maintain adequate buffer zones according to shoreland zoning on the streams located on the property as well as the wetland and Sebasticook River. The 8 acres of wetland will be managed accordingly within the buffer zone as well.

In order to encourage more wildlife use of the area I would suggest leaving 1 to 2 large snag trees per 5 - 10 acres of forestland. These should be designated wildlife trees to perpetuate over time. In conjunction with this I would also leave large woody debris as downed logs for ground cover as well.

I found a number of apple trees on the property as well. There are likely more apple trees around than this but I simply did not get close enough to them to identify them all. Any additional wild apple trees will be marked and maintained. In all cases the apple trees should be thinned around and pruned so that they can bear more fruit as they are encountered. In addition the landowner intends to leave mast trees such as northern red oak, black cherry, Bur Oak, and American Beech scattered around the property as well during the next harvest for nut and fruit production to aid as a food source for various wildlife.

WATER QUALITY AND BMP ISSUES

Any activities done on the property, including timber harvesting and culvert installation, needs to be done in conjunction with laws governing organized towns since Pittsfield is an organized township. See Exhibit #11 – Shoreland Zoning Map for the Town of Pittsfield. Timber harvesting in the 250' Resource Protection Districts of the wetland and River buffer zones requires a permit issued by the Code Enforcement Officer(CEO). Harvesting in the 75' Stream Protection District can be done without a permit but all harvesting must comply with all applicable land use standards.

Temporary skidder crossings or structures should be installed where small streams are crossed and/or forested wetlands with future harvesting operations as appropriate for the time of year the harvesting takes place. Remember to remove all temporary skidder crossing following harvesting activities. Also, be sure to install waterbars as necessary in conjunction with new logging operations to prevent erosion in skid trails. The ground is quite flat and waterbars should not be needed on this property.

WETLAND ZONES

There are four mapped wetlands as indicated on the maps. Wetland species such as speckled alder, American elm, red maple, brown ash, Bur Oak, and white ash are present in these areas along with wetland shrubs, grasses, and sedges. There are pockets of open water associated with each of these wetlands as well.

The wetlands are zoned 250' due to the changes from the remapping of these wetlands a few years ago in terms of inland waterfowl and wading bird habitat.

Access has been used all around these sections and these areas have been managed well over the years so as not to damage the fragile wet soils in these areas. There are likely many herbaceous species present in these sites such as bulrushes, sensitive fern, blue cohosh, false hellabore, and various sedges in some of these areas as well. Stands #1, #8, and #18 are forested wetlands. Some retain water most of the year such as Stand #18. Stands #1 and #8 are dry for much of the year and only hold spring runoff or high flood waters.

TIMBER PRODUCTION POTENTIAL

Generally, the woodland ownership is well stocked with young sapling, mature to over mature timber stands which will grow into pulpwood, sawlogs, and veneer or are

already in the pulpwood, sawlog, and veneer categories. The current standing timber volume is quite high considering the acreage but this is simply due to heavily stocked white pine stands. The soils are sufficient over half of the property for timber production and have the potential to grow high quality hardwood and softwood over the long-term.

PROTECTION FROM FIRE (ACCESS)

Access around the parcel is quite good along Peltoma Avenue. There are a number of current gravel roads and old roads which could provide even more access through the property if reclaimed and they were to be then maintained as well. A number of the wetlands and forested wetlands make complete access in certain times of the year difficult due to flooding and high water.

AESTHETIC QUALITY

The view of the woodlot is most pleasing from all viewpoints as it is fully stocked young to mature forests along with fields. The young forest stands also provide for a rich visible forest. Walking through the mature sections of the forest in the summer time, with the leaves on, the view is quite limited due to the regeneration thickets in the understory. While other areas one see quite a long way under the mature stands of pine and mixedwood.

The view from the various roads going around the perimeter across the fields and through the parcel do provide some very nice views of this property as well.

SLASH HAZARD REDUCTION

The only slash hazards are along the snowmobile trail where trees and brush has been cleared to keep the trail open. No major harvesting has occurred for many years and thus slash is not an issue.

Future slash will be kept back from 25 feet from the property lines and 50 feet back from public roadways as required by law.

Chipping may be part of the next harvesting activities and this will even reduce further the amount of slash left on site.

LANDOWNER'S LIABILITY

The parcel is gated on the gravel road at the back end of the first field off Peltoma Avenue. This is to keep unwanted vehicle traffic from using the property in a detrimental way.

The landowner will be evaluating various public uses of the property as they move forward with their management. Thus, more uses will be developed over time as more active management occurs on this parcel.

Thus, the land is unposted and therefore, anyone using the property is doing so at their own risk and assumes liability under the state liability laws.

SPECIAL SITES

The data from the Maine Historic Preservation Commission, Earle G. Shettleworth, Jr, Director, including archaeological sites known and 19th century farmsteads (i.e. both Native American and historic archaeological sites) is attached as EXHIBIT #7. They have determined that there are no known nor expected historic archaeology or historic building sites on the property. However, the entire parcel is archaeologically sensitive. Buildings or structures may exist on the property that have not been evaluated for National register eligibility. I did not come across any buildings during my field review.

RECREATIONAL OPPORTUNITIES

As mentioned earlier the landowner will be evaluating various multiple uses on the property and will likely provide some additional public use beyond the current snowmobile trails and law enforcement uses at this time. The land is open for traditional foot access and people using the property.

NATURAL FEATURES

The rolling topography with the 12 timber types coupled with the numerous streams and wetlands across the property are quite unique, especially the high volume forests contained within this property. Abutting the Sebasticook River for over 5700 feet is very unique as well. Having 16 acres of Silver Maple Floodplain is very unusual. Almost pure stands of Silver Maple are not common at all. All these features when added together along with the point that the land is also part of a very large raised level bog ecosystem is very unusual as far as natural features are concerned.

INVASIVE SPECIES

The landowner intends to reduce and prevent the establishment and spread of plants known as invasive species which may be encountered on the property. When the landowner encounters established populations of any of the plant species listed below, silvicultural prescriptions will be developed to minimize the risk of further spread. The focus will be on early detection and the development of strategies to prevent incursions into forest stands. The Fact Sheets provided by MNAP below, as well as the links to other resources recommend control practices for each species.

Maine's most Problematic Terrestrial Invasive Plant Species (with links to Fact Sheets)

[Japanese Honeysuckle](#) (*Lonicera japonica*)

[Morrow and Tartarian Honeysuckle](#) (*Lonicera morrowii* and *Lonicera tartarica*)

[Japanese Knotweed](#) (*Fallopia japonica*)

[Japanese Barberry](#) (*Berberis thunbergii*)

[Common and Glossy Buckthorn](#) (*Rhamnus cathartica* and *Frangula alnus*)

[Asiatic Bittersweet](#) (*Celastrus orbiculata*)

[Multiflora or Rambler Rose](#) (*Rosa multiflora*)

Currently, there are no known invasive plants on the property based upon my field review for the plan.

PRUDENT USE OF CHEMICALS

The landowner has not used chemicals in the forest at this point. However, if they decide to use chemicals in the forest all will be used according to the label recommendations set forth for application.

FOREST PRACTICES ACT

The Forest Practices Act was established on January 1, 1991. It was later revised on October 1, 1999. The rule establishes the procedures for notifying the Department of Conservation, Bureau of Forestry, of proposed commercial timber harvesting activities, and sets standards for clearcutting and the forest regeneration following timber harvesting. In general, landowners are required to notify the Bureau of Forestry, in writing, before timber is cut or removed, when the primary purpose of the harvest is to sell or use the timber as forest products. If harvesting activities result in a clearcut larger than 5 acres and less than 20 acres, there must be a 250' separation zone between clearcuts and regeneration standards must be met. These are known as Category 1 clearcuts. For clearcuts > 20 acres and < 75 acres a 250' separation must be between clearcuts and an additional 1:1 ratio of acreage equal to the size of the clearcut must be set aside connected to the clearcut and the regeneration standards must be met and filed with the state and a forest management plan must be prepared for the harvest area. These are known as Category 2 clearcuts. For clearcuts > 75 acres and < 250 acres a 250' separation must be between clearcuts and an additional 1:1 ratio of acreage equal to the size of the clearcut must be set aside connected to the clearcut and the regeneration standards must be met and filed with the state and a forest management plan must be prepared for the harvest area. These are known as Category 3 clearcuts and must be filed with the State of Maine before creating them. No clearcut can be greater than 250 acres.

The notification to the Bureau of Forestry is done by filling out a Forest Operations Notification. These can be obtained at the town office or in Augusta from the Maine Forest Service.

TIMBER INVENTORY, STAND DESCRIPTIONS, AND PRESCRIPTIONS

Species Composition, Tree Height, and Site Utilization was determined by conducting a complete forest inventory. Random plots were computer generated in a grid pattern over the parcel. A total of 37 plots were established in the forested types. This equates to a ratio of less than 3 acres/plot. Then a 10 basal area factor prism was used to collect the data to a 1 inch diameter class specification. The 37 plots were then stratified into 12 different timber stands. The corresponding acreage for each timber stand was digitally mapped and the total stumpage volumes generated for each timber stand. Each stand is briefly described on a single page along with harvesting guidelines outlined on each page as well for each stand. Management guidelines have been outlined per timber type and should be varied as necessary to meet contractor availability, weather conditions, market conditions, and landowner objectives.

The total gross stumpage volume by species and grade for the entire management area along with estimated stumpage pricing at the time of purchase from the combined cruise data is attached as Exhibit #8A – TIMBER BASIS INVENTORY-TOTAL VOLUME. Please reference Exhibit #8B – MANAGEMENT UNIT SPECIES X STAND TABLE (Net board-foot volume by bd. ft./ac) for sawlog volumes for each stand. Then reference Exhibit #8C – MANAGEMENT UNIT SPECIES X STAND TABLE (Net pulp volume by tons/ac) for pulpwood volumes by stand. Exhibit #8D – MANAGEMENT UNIT SPECIES X SIZE CLASS TABLE (Net board-foot volume by the bd. ft./ac) is for sawlog volume distributions by size classes.

The following chart explains how the timber cruise diameter distributions are grouped:

Seed (Seedlings)	< 1 inch dbh (Diameter at breast height)
Saps (Saplings)	>1" – 5.5" (Diameter at breast height)
Poles (Pole Timber)	5.6" – 11.5" (Diameter at breast height)
Sm Saw (Small Sawlogs)	11.6" – 17.5" (Diameter at breast height)
Med Saw (Medium Sawlogs)	17.6" – 23.5" (Diameter at breast height)
Lg Saw (Large Sawlogs)	>23.5" (Diameter at breast height)

The following defines the tree species codes which will be encountered on the cruise reports included in the management plan:

EWP	Eastern White Pine
BF	Balsam Fir
QA	Quaking Aspen (Poplar)
RM	Red Maple (Soft Maple)
SM	Sugar Maple (Hard Maple)
NRO	Northern Red Oak
EH	Eastern Hemlock
NS	Norway Spruce
TAM	Tamarack or Larch
PB	Paper Birch (White Birch)
SVM	Silver Maple
BF	Balsam Fir
WA	White Ash
BRO	Bur Oak
AB	American Beech
WLW	Willow
NWC	Northern White Cedar
BA	Brown Ash
BL	Black Locust
YB	Yellow Birch
BC	Black Cherry

The following chart will explain the nomenclature used to describe the stand types encountered on the property. The stand type 3-digit nomenclature is basically broken down into three primary areas for stand classifications. These areas are Species Composition, Tree Height, and Stocking.

SPECIE COMPOSITION

- S** - > 75% Mix of Red Spruce, Balsam Fir, Eastern White Pine, Red Pine, Tamarack, or Eastern Hemlock
- C** - >75% Northern White Cedar
- P** - >75% Eastern White Pine
- A** - >75% Poplar or Poplar Species
- M** - 50% or less of either Softwood species or Hardwood species
- SVM** - >75% Silver Maple
- H** - > 75% Mix of Northern Red Oak, American Beech, Sugar Maple, Red Maple, White Ash, White Birch, Poplar, Yellow Birch, Black Cherry, and American Basswood

TREE HEIGHT

- 1** - 0 – 10 feet
- 2** - 11 – 20 feet
- 3** - 21 – 40 feet
- 4** - 41 – 60 feet
- 5** - 61 – 80 feet
- 6** - 81+feet

STOCKING

- A** - 91 + square feet of basal area or > 22.5 cords/acre
- B** - 51 – 90 square feet of basal area or 12.5 – 22.5 cords/acre
- C** - < 50 square feet of basal area or < 12.5 cords/acre

Stands #4 and #9

TYPE: P6A **ACRES:** 18 **STAND AGE:** 90 + years

STOCKING: 91+ square feet of basal area or greater than 22.5 cords/acre

TREE HEIGHT: 80+ feet **SLOPE:** 0 – 5%

GROWTH RATE: Two-thirds of a cord per acre per year

DOMINANT TREE SIZE: Large Sawlog = greater than 23.5” DBH

SECONDARY TREE SIZE: Medium Sawlog = 17.6” – 23.5” DBH

DOMINANT VEGETATION

The hardwood species present is red maple. The majority of the trees are large eastern white pine.

STAND HEALTH/VIGOR/QUALITY

These stands are slowing and need to be thinned to keep growth at a maximum. Many of the trees meet current sawlog specifications in large diameter trees. Vigor is declining throughout these stands thus causing the health of the forest to decline as well.

STAND HISTORY

No recent harvesting has been done for many years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow high quality eastern white pine in these stands.

DESIRABLE SPECIES/REGENERATION

Balsam fir and some white pine are present with hardwood such as red maple and striped maple. The goal is to get back a high percentage of eastern white pine.

PRESCRIPTION TREATMENT RECOMMENDATIONS

These stands should be harvested in the next 5 years. A 30 - 35% removal leaving a well-distributed stand of trees should be implemented. The trees to be removed should be marked. Emphasis should be placed on removing double topped, damaged and poorly formed, and large limbed white pine after getting out any blister rust white pine.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #3, #5, #12 and #30

TYPE: P5A **ACRES:** 5.5 **STAND AGE:** 90 + years

STOCKING: 91+ square feet of basal area or greater than 22.5 cords/acre

TREE HEIGHT: 60-80 feet **SLOPE:** 0 – 5%

GROWTH RATE: Two-thirds of a cord per acre per year

DOMINANT TREE SIZE: Medium Sawlog = 17.6” – 23.5” DBH

SECONDARY TREE SIZE: Small Sawlogs = 11.6” – 17.5” DBH

DOMINANT VEGETATION

The few hardwood species are red maple and white ash. The majority of the trees are large eastern white pine with some scattered northern white cedar.

STAND HEALTH/VIGOR/QUALITY

These stands are slowing and need to be thinned to keep growth at a maximum. Many of the trees meet current sawlog specifications in large diameter trees. Vigor is declining throughout these stands thus causing the health of the forest to decline as well.

STAND HISTORY

No recent harvesting has been done for many years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow high quality eastern white pine in these stands.

DESIRABLE SPECIES/REGENERATION

Balsam fir and some white pine are present with hardwood such as red maple, striped maple, and other hardwood. The goal is to get back a high percentage of eastern white pine.

PRESCRIPTION TREATMENT RECOMMENDATIONS

These stands should be harvested in the next 5 years. A 30 - 35% removal leaving a well-distributed stand of trees should be implemented. The trees to be removed should be marked. Emphasis should be placed on removing double topped, damaged and poorly formed, and large limbed white pine after getting out any blister rust white pine.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #6 and #7

TYPE: P3A **ACRES:** 0.5 **STAND AGE:** 31 – 60 years

STOCKING: Fully stocked with commercial and non-commercial sized smaller stems.

TREE HEIGHT: 21 – 40 feet **SLOPE:** 0 – 5%

GROWTH RATE: One-half of a cord per acre per year

DOMINANT TREE SIZE: Pole Timber = 5.6” – 11.5” DBH

SECONDARY TREE SIZE: None

DOMINANT VEGETATION

White pine is the dominant species present.

STAND HEALTH/VIGOR/QUALITY

These stands are overcrowded and growing slowly. Quality is poor as this is an old field grown up. The health of the trees are declining.

STAND HISTORY

These stands were not thinned at all.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow a higher percentage of eastern white pine and some future hardwood as well.

DESIRABLE SPECIES/REGENERATION

Not a concern at this stage in the forest.

PRESCRIPTION TREATMENT RECOMMENDATIONS

The stand should be harvested in the next 5 years. A 25% removal leaving a well-distributed stand of trees should be implemented. The trees to be removed should be marked. Emphasis should be placed on removing poorly formed, double-topped, and low quality stems.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #13 and #31

TYPE: M5A **ACRES:** 6 **STAND AGE:** 61 – 90 years

STOCKING: 91+ square feet of basal area or greater than 22.5 cords/acre

TREE HEIGHT: 61-80 feet **SLOPE:** 0 – 5%

GROWTH RATE: Two-thirds of a cord per acre per year

DOMINANT TREE SIZE: Large Sawlog = greater than 23.5” DBH

SECONDARY TREE SIZE: Medium Sawlog = 17.6” – 23.5” DBH

DOMINANT VEGETATION

Red spruce, balsam fir, northern white cedar, eastern white pine, and eastern hemlock are the dominant softwood species present with eastern white pine being the most abundant softwood species varying depending on which stand you are in. The hardwood species are American beech, white birch, bur oak, and red maple.

STAND HEALTH/VIGOR/QUALITY

This stand is in declining health and is overcrowded. Vigor is slowing as well and the health of the forest will decline as well.

STAND HISTORY

No recent harvesting has taken place in this stand for many years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow mixedwood sawlogs with the intent of increasing the percentage of good quality eastern white pine in the stand as well as northern hardwoods for the future.

DESIRABLE SPECIES/REGENERATION

The stands are quite thick and vary from having more hardwood regeneration in some areas to more softwood regeneration in others. Generally, red maple, balsam fir, and hardwood are common throughout them.

PRESCRIPTION TREATMENT RECOMMENDATIONS

These stands should be harvested in the next 5 years. A 30 - 35% removal leaving a well-distributed stand of trees should be implemented. The trees to be removed should be marked. Emphasis should be placed on removing mature eastern white pine to get sunlight to the forest floor.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #10, #14, #28 and #29

TYPE: M4A **ACRES:** 17 **STAND AGE:** 61 – 90 years

STOCKING: 91+ square feet of basal area or greater than 22.5 cords/acre

TREE HEIGHT: 41-60 feet **SLOPE:** 0 – 10%

GROWTH RATE: One-half to two-thirds a cord per acre per year

DOMINANT TREE SIZE: Small Sawlogs = 11.6” – 17.5” DBH

SECONDARY TREE SIZE: Medium Sawlog = 17.6” – 23.5” DBH

DOMINANT VEGETATION

Norway spruce, balsam fir, northern white cedar, eastern white pine, tamarack, and eastern hemlock are the dominant softwood species present. The hardwood species are white ash, quaking aspen, white birch, bur oak, northern red oak, and red maple.

STAND HEALTH/VIGOR/QUALITY

This stand is in declining health and is overcrowded. Vigor is slowing as well and the health of the forest will decline as well. Quality of the trees is good for future sawlog and veneer production on the hardwood.

STAND HISTORY

No recent harvesting has taken place in this stand for many years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow mixedwood sawlogs with the intent of increasing the percentage of good quality eastern white pine in the stand as well as northern hardwoods for the future.

DESIRABLE SPECIES/REGENERATION

The stands are quite thick and vary from having more hardwood regeneration in some areas to more softwood regeneration in others. Generally, red maple, balsam fir, and hardwood are common throughout them.

PRESCRIPTION TREATMENT RECOMMENDATIONS

These stands should be harvested in the next 5 years. A 30 - 35% removal leaving a well-distributed stand of trees should be implemented. The trees to be removed should be marked. Emphasis should be placed on removing poor quality trees first to gain desired spacing.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #34, #37, #38 and #39

TYPE: M3A **ACRES:** 8 **STAND AGE:** 31 – 60 years

STOCKING: Fully stocked with non-commercial sized stems and larger commercial stems scattered in this stand as well.

TREE HEIGHT: 21-40 feet **SLOPE:** 0 – 5%

GROWTH RATE: One-third to one-half a cord per acre per year

DOMINANT TREE SIZE: Pole Timber = 4.6” – 11.5” DBH

SECONDARY TREE SIZE: Sapling = 1.0” – 4.5” DBH

DOMINANT VEGETATION

The hardwood species are quaking aspen, red maple and white ash. The softwood species is eastern white pine.

STAND HEALTH/VIGOR/QUALITY

This is grown up old fields and the species are not of best quality but vigor looked okay. Health will decline as they stands are getting overstocked.

STAND HISTORY

These stands were not harvested recently and are a result of old fields growing back to forest

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

Concentrate growth on the younger quality stems moving into the stands as the pioneer trees are removed.

DESIRABLE SPECIES/REGENERATION

This is the stand that is here today.

PRESCRIPTION TREATMENT RECOMMENDATIONS

No harvesting in the next 10 years.

WOODSWISE PRACTICE RECOMMENDATIONS

Could possibly do some Crop Tree/Mast Tree Release work in a few of the areas.

Stands #15 and #16

TYPE: H4A **ACRES:** 10 **STAND AGE:** 61 – 90 years

STOCKING: 91+ square feet of basal area or greater than 22.5 cords/acre

TREE HEIGHT: 41 – 60 feet **SLOPE:** 0 – 5%

GROWTH RATE: One-half a cord per acre per year

DOMINANT TREE SIZE: Medium Sawlogs = 17.6” – 23.5” DBH

SECONDARY TREE SIZE: Small Sawlogs = 11.6” – 17.5” DBH

DOMINANT VEGETATION

The hardwood species are bur oak, red maple, and northern red oak. Some eastern white pine and northern white cedar present as well.

STAND HEALTH/VIGOR/QUALITY

This stand is in good health and needs to be thinned to keep growth at a maximum. Many of the trees meet current sawlog and veneer specifications with a good mix of diameters in the secondary stand.

STAND HISTORY

No recent harvesting has occurred for many years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow high quality hardwood sawlogs and veneer in these stands for the future while reducing the red maple component and placing most emphasis on northern red oak, bur oak, and other high quality hardwoods.

DESIRABLE SPECIES/REGENERATION

The goal is get back white ash, sugar maple, and yellow birch and reduce the red maple regeneration.

PRESCRIPTION TREATMENT RECOMMENDATIONS

The stand should be harvested in the next 5 years. A 40% removal leaving a well-distributed stand of trees should be implemented over most of the stands. The trees to be removed should be marked. Emphasis should be placed on removing red maple and poorly formed hardwood. Other species should be removed as spacing allows.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #8, #35 and #36

TYPE: H4B **ACRES:** 11 **STAND AGE:** 61 – 90 years

STOCKING: 51 – 90 square feet of basal area or 12.5 to 22.5 cords/acre

TREE HEIGHT: 41 – 60 feet **SLOPE:** 0 – 5%

GROWTH RATE: One-third to one-half a cord per acre per year

DOMINANT TREE SIZE: Medium Sawlogs = 17.6” – 23.5” DBH

SECONDARY TREE SIZE: Small Sawlogs = 11.6” – 17.5” DBH

DOMINANT VEGETATION

The hardwood species are red maple, bur oak, black locust, and yellow birch. Eastern hemlock and northern white cedar are present as well.

STAND HEALTH/VIGOR/QUALITY

These stands are located in some very wet areas and quality will be poor due to the wet soils. Vigor is slow and health is in question as well.

STAND HISTORY

No harvesting in recent years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

The intent is to grow high quality hardwood sawlogs and veneer in these stands for the future while reducing the red maple component.

DESIRABLE SPECIES/REGENERATION

The goal is get back white ash, sugar maple, and yellow birch and reduce the red maple component.

PRESCRIPTION TREATMENT RECOMMENDATIONS

Some stands should be harvested in the next 5 years. A 40% removal leaving a well-distributed stand of trees should be implemented over most of the stands. The trees to be removed should be marked.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #1 and #40

TYPE: H3B **ACRES:** 6 **STAND AGE:** 0 – 30 years

STOCKING: Not fully stocked with non-commercial sized stems and some scattered larger commercial stems in places.

TREE HEIGHT: 21 - 40 feet **SLOPE:** 0 – 5%

GROWTH RATE: Less than one-third a cord per acre per year

DOMINANT TREE SIZE: Pole Timber = 4.6” – 11.5” DBH

SECONDARY TREE SIZE: Sapling = 1.0” – 4.5” DBH

DOMINANT VEGETATION

The hardwood species are red maple, white ash, and American Elm and likely some silver maple regeneration as well.

STAND HEALTH/VIGOR/QUALITY

This is a forested area which will never really grow well due to periodic high water flooding.

STAND HISTORY

This again is old partial fields left to grow up. No harvesting has been done in these stands.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

Let nature grow what it will in this area with the hopes of more white ash moving in as well.

DESIRABLE SPECIES/REGENERATION

Whatever is currently present.

PRESCRIPTION TREATMENT RECOMMENDATIONS

The stand should be harvested in the next 20 - 30 years.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for this stand due to the poor quality potential in this wet area.

Stand #18

TYPE: H3C **ACRES:** 1.5 **STAND AGE:** 0 – 30 years

STOCKING: Scattered few larger trees in the overstory with non-commercial sized stems in the understory.

TREE HEIGHT: 21 – 40 feet **SLOPE:** 0 – 5%

GROWTH RATE: Less than one-third a cord per acre per year

DOMINANT TREE SIZE: Pole Timber = 5.6” – 11.5” DBH

SECONDARY TREE SIZE: Sapling = >1.0” – 5.5” DBH

DOMINANT VEGETATION

The hardwood species are red maple and likely some brown ash and white ash as well.

STAND HEALTH/VIGOR/QUALITY

This is a forested wetland with scattered trees. Quality and vigor is poor.

STAND HISTORY

No harvesting done in this stand.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

Just let grow what can due to the saturated soils and high water.

DESIRABLE SPECIES/REGENERATION

Just let grow what can due to the saturated soils and high water.

PRESCRIPTION TREATMENT RECOMMENDATIONS

No harvesting ever scheduled. Just let it go naturally.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #23, #24, #25 and #33

TYPE: H1A **ACRES: 2** **STAND AGE: 0 – 30 years**

STOCKING: Mostly fully stocked with non-commercial sized stems.

TREE HEIGHT: 0-10 feet **SLOPE:** 0 – 5%

GROWTH RATE: Less than one-third of a cord per acre per year

DOMINANT TREE SIZE: Sapling = > 1.0” – 4.5” DBH

SECONDARY TREE SIZE: Seedlings = < 1" DBH

DOMINANT VEGETATION

Red maple, white birch, and quaking aspen comprise most of this stand. Some eastern white pine are present as well.

STAND HEALTH/VIGOR/QUALITY

These are regenerating stands and they are trying to colonize the barren land. Thus, vigor is high in this endeavor but quality will likely not be good.

STAND HISTORY

These are sites which no harvesting has been done. The forest is naturally coming back through succession.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

Let grow what can in these tough pioneer conditions.

DESIRABLE SPECIES/REGENERATION

This is the stand that is here today.

PRESCRIPTION TREATMENT RECOMMENDATIONS

The next major harvest entry will be in more than 30 years from now.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #17 and #19

TYPE: SVM4B **ACRES:** 16 **STAND AGE:** 61 – 90 years

STOCKING: 51 – 90 square feet of basal area or 12.5 to 22.5 cords/acre

TREE HEIGHT: 41 – 60 feet **SLOPE:** 0 – 5%

GROWTH RATE: One-third to one-half a cord per acre per year

DOMINANT TREE SIZE: Medium Sawlogs = 17.6” – 23.5” DBH

SECONDARY TREE SIZE: Small Sawlogs = 11.6” – 17.5” DBH

DOMINANT VEGETATION

The hardwood species are silver maple, red maple and willow.

STAND HEALTH/VIGOR/QUALITY

These stands are located in flood plain areas adjacent to rivers and quality will be poor due to the wet soils and periodic flooding. Vigor is slow and health is in question as well.

STAND HISTORY

No harvesting in recent years.

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 - #4D.

LONG-TERM SILVICULTURAL OBJECTIVES

Silver maple forests are quite unique and one should continue to grow this species there.

DESIRABLE SPECIES/REGENERATION

Grow what is currently there which is mainly silver maple.

PRESCRIPTION TREATMENT RECOMMENDATIONS

No harvesting scheduled in these areas due to regulations and the uniqueness of this forest stand type in the state of Maine.

WOODSWISE PRACTICE RECOMMENDATIONS

I have not recommended any practices for these stands.

Stands #2, #20, #21, #22

TYPE: Field **ACRES:** 3 **STAND AGE:** N/A

STOCKING: N/A

GROWTH RATE: N/A

TREE HEIGHT: N/A **SLOPE:** 0 - 5%

DOMINANT TREE SIZE: N/A

SECONDARY TREE SIZE: N/A

DOMINANT VEGETATION

N/A

STAND HEALTH/VIGOR/QUALITY

N/A

STAND HISTORY

N/A

SOIL CHARACTERISTICS

See attached detailed soils information in Exhibits #4 – 4D.

LONG-TERM SILVICULTURAL OBJECTIVES

None

DESIRABLE SPECIES/REGENERATION

N/A

PRESCRIPTION TREATMENT RECOMMENDATIONS

Periodic mowing to maintain the small sections of fields.

Stands #11, #26, #27, and #32

TYPE: Wetland **ACRES:** 10 **STAND AGE:** N/A

STOCKING: Some scattered trees present but mostly shrubs, speckled alder, grasses, ferns, and sedges.

GROWTH RATE: N/A

TREE HEIGHT: 0-10 feet **SLOPE:** 0%

DOMINANT TREE SIZE: N/A

SECONDARY TREE SIZE: N/A

DOMINANT VEGETATION

Sedges, grasses, woody shrubs, and herbaceous plants dominate these wetlands. Speckled alder, American elm, brown ash, and red maple are present especially around the edges and higher spots within these stands.

STAND HEALTH/VIGOR/QUALITY

Very poor growth and quality.

STAND HISTORY

N/A

SOIL CHARACTERISTICS

The soils are very poorly drained soils in lowlands.

LONG-TERM SILVICULTURAL OBJECTIVES

None

DESIRABLE SPECIES/REGENERATION

N/A

PRESCRIPTION TREATMENT RECOMMENDATIONS

Maintain the integrity of these areas by not entering them.

RECOMMENDATIONS SUMMARY

Pittsfield is an organized township and falls under the Department of Environmental Protection (DEP). See Exhibit #11 – Shoreland Zoning Map for the Town of Pittsfield. Timber harvesting in the 250' river and wetland zones require a permit from the CEO. Harvesting in the 75' Stream Protection District can be done without a permit but all harvesting must comply with all applicable land use standards.

Exhibit #5 – GRADICULE is to be used in conjunction with a GPS unit to assist the landowner in navigating around the ownership. The graduations are in degrees, minutes, and seconds for longitude and latitude.

Good well-defined boundary lines make for good neighbors. All of the lines need to be reblazed and painted to make them more evident. Reblazing and painting should be done every 5 to 7 years on a regular schedule. Meeting with the neighboring landowners to the west to re-establish those lines in question should be done first. I think the lines to the east will be easier to locate when leaves are off in the spring or fall.

As far as harvesting goes about 65 acres of the parcel is in need of harvesting in the next 5 years. The prescription should be a selection harvest by marked wood. I would conduct this harvest in the dry part of summer and early fall. This will minimize disruption for the snowmobile multiple use of this area as well as scarify the soil for better pine and oak regeneration purposes. Specific volume removals will vary depending on the amount of mature timber present in each area. For detailed information please reference the individual stand sheets for each mapped timber stand. EXHIBIT #9 – HARVEST SCHEDULE PRIORITIZED shows the location of the stands and their suggested harvest schedule. The following chart summarizes the harvesting activities recommended in each of the following timber stands as well as other recommendations of concern over the parcel.

EXHIBIT #8A – TIMBER BASIS INVENTORY-TOTAL is the total value of all the standing timber and is by species and grade along with estimated stumpage pricing at the time of the timber cruise. EXHIBIT #10 – MANAGEMENT PLAN SUGGESTED HARVEST spreadsheet is the estimated volume and stumpage value expected from the harvest recommendations outlined in this forest management plan over the next 10 years if the harvest were to take place today. Specific pricing for a harvesting contract will be established at the actual time of harvest. The actual timber volume harvested will be determined after layout and marking have occurred on the property per the landowner's final approval of the harvesting operational plan. EXHIBIT #8B – MANAGEMENT UNIT SPECIES X STAND TABLE (Net Board Foot Volume), EXHIBITS #8C – MANAGEMENT UNIT SPECIES X STAND TABLE (Net Pulp Volume), and EXHIBIT #8D – MANAGEMENT UNIT SPECIES X SIZE CLASS TABLE (Net board-foot volume by the bd. ft./ac) for sawlog volume distributions by size classes show the raw data generated by the cruise program for the cruise plots done on the property.

PROJECT SCHEDULE TABLE FOR NEXT 10 YEARS		
STAND/AREA	PROJECT/ACTIVITY 1 TO 5 YEARS	PROJECT/ACTIVITY 6 TO 10 YEARS
P6A	<ul style="list-style-type: none"> • 30-35% marked selection harvest 	N/A
P5A	<ul style="list-style-type: none"> • 30-35% marked selection harvest 	N/A
P3A	<ul style="list-style-type: none"> • 25% marked selection harvest 	N/A
M5A	<ul style="list-style-type: none"> • 30-35% marked selection harvest 	N/A
M4A	<ul style="list-style-type: none"> • 30-35% marked selection harvest 	N/A
M3A	<ul style="list-style-type: none"> • Possibly some CTR/MTR release work 	<ul style="list-style-type: none"> • Possibly some CTR/MTR release work
H4A	<ul style="list-style-type: none"> • 40% marked selection harvest 	N/A
H4B	<ul style="list-style-type: none"> • 40% marked selection harvest 	N/A
H3B	N/A	N/A
H3C	N/A	N/A
H1A	N/A	N/A
SVM4B	N/A	N/A
WETLAND	<ul style="list-style-type: none"> • Leave in natural state 	<ul style="list-style-type: none"> • Leave in natural state
FIELD	<ul style="list-style-type: none"> • Periodic mowing of the fields 	<ul style="list-style-type: none"> • Periodic mowing of the fields
ACCESS	<ul style="list-style-type: none"> • Maintain existing access roads and improve old roadways 	<ul style="list-style-type: none"> • Maintain existing access roads and improve old roadways
BOUNDARY LINES	<ul style="list-style-type: none"> • Blaze and paint 	<ul style="list-style-type: none"> • Repaint blazes

Be sure to use a Certified Logging Professional (CLP) harvesting contractor who will incorporate Best Management Practices (BMPs) on your property. Many of the CLP are now Master Loggers as well. The Master Logger Association does periodic review of those contractors meeting their standards. By using BMP's, which are those practices used to reduce erosion and protect water quality, you will ensure that future generations will be able to enjoy clean water and a well managed woodlot.

Working with a licensed professional forester will add value, stability, and integrity to the management of your property. Their job should be to provide you with a suitable and reputable contractor mix for the wood to be harvested, highest pricing and best markets available for timber harvested, and professional expertise in the woods to meet your goals and objectives.

This plan is intended to be used for the next 10-year period. In ten years the landowner's objectives should be carefully re-evaluated and any changes in their plans should be incorporated in the updated management plan at that time. In case of a catastrophic natural event or landowner objectives change this plan should be revisited and changed accordingly.

My signature below testifies that I was the licensed professional forester who did indeed prepare this plan for The Town of Pittsfield, Peltoma Avenue Lot.

Maine Licensed Professional Forester:

Stephen D. Gettle, LPF#3033

Date