

## New England Forestry Consultants, Inc.

70 Overlook Drive Bristol, NH 03222

### Forest Management & Harvest Plan

Property of:
Town of Poland
Town Farm East Map 9, Lot 42 46 acres
Town Farm West Map 9, Lot 31 116 acres
Hewey Lot Map 9, Lot 40 42.2 acres
Mingo Lots Map 17, Lots 47 & 47A 66.5 acres
Transfer Station Lot Map 15, Lot 1B 49 forested acres
Whittier Lot Map 9, Lot 41 21 acres
Town of Poland
Androscoggin County, Maine

Prepared for: Town of Poland 1231 Maine Street Poland, ME 04274

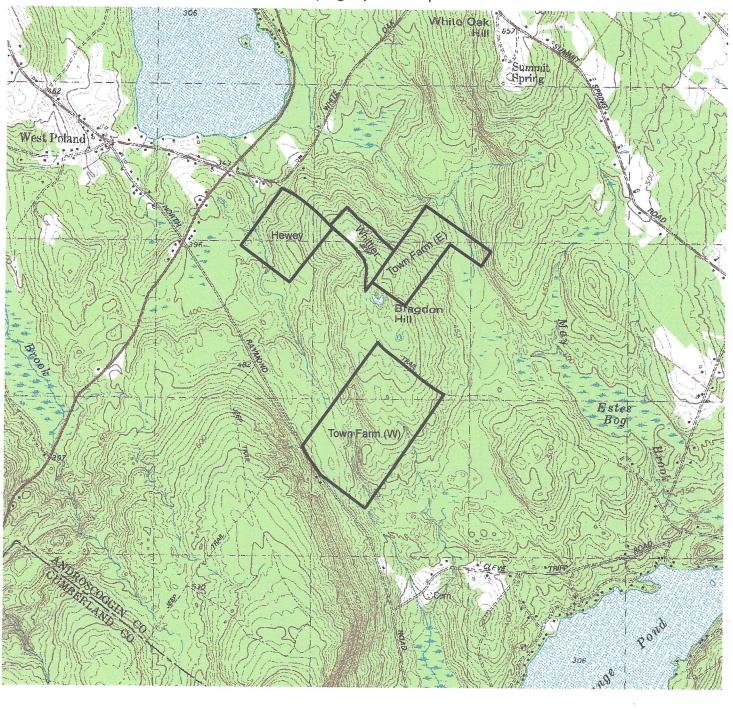
Prepared by: Sherman R. Small

Consulting Forester, License # LF655

P.O. Box 621 Bethel, ME 04217 207 824-6122

September 26, 2019

Town of Poland
Hewey Lot
Whittier Lot
Town Farm East
Town Farm West
Topographic Map



Sketch map for management and planning purposes only, NOTA LEGAL SURVEY Data obtained from Maine Office of GIS & New England Forestry Consultants, Inc.

4,000 Feet

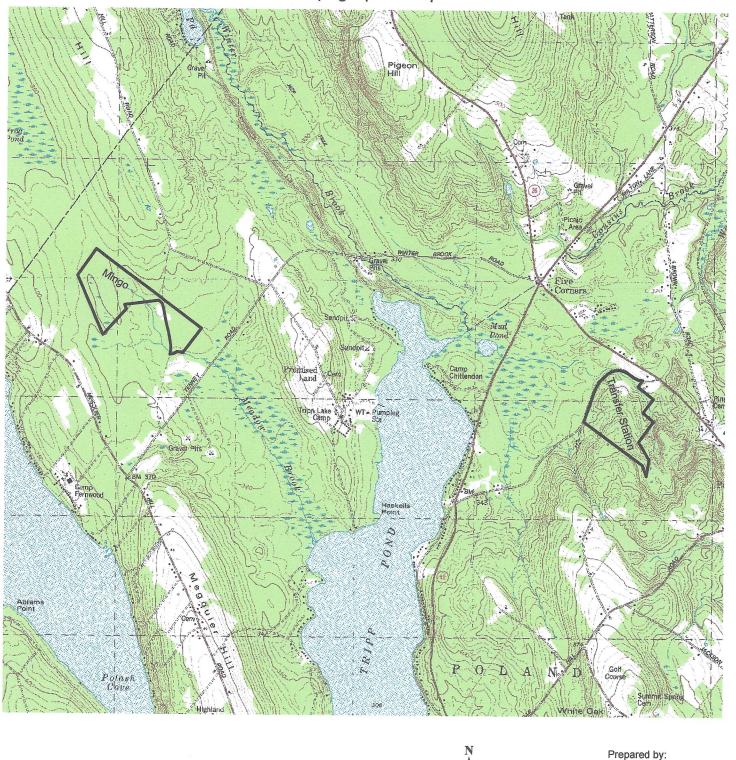
2,000

2,000 1,000

Prepared by: New England Forestry Consultants, Inc

Sherman R. Small, Consulting Forester Maine License # LF655 September 26, 2019

Town of Poland
Mingo Lots
Transfer Station Lot
Topographic Map



Sketch map for management and planning purposes only, NOTA LEGAL SURVEY Data obtained from Maine Office of GIS & New England Forestry Consultants, Inc.

5,280 Feet

2,640

2,640 1,320

New England Forestry Consultants, Inc.

Sherman R. Small, Consulting Forester Maine License # LF655 September 26, 2019

#### TOWN FARM EAST Map 9- Lot 42 46 Acres

This Forest Management and Harvest Plan is based on the 2009 plan prepared by Fred A. Huntress, Jr., LF #157 with updates to reflect current conditions.

LOCATION: This property is located east of Bragdon Hill Road, approximately ½ mile south of White Oak Hill Road. At the nearest point it is 80 feet from the road at the most westerly corner as measured along the line of the Town of Poland Whittier Lot.

OWNER'S OBJECTIVES: This land is to be managed for the long-term financial benefit of the residents of Poland through the sale of commercial forest products. Other uses will include recreational trails for hiking, skiing and snowmobiling. Since this land is at the headwaters of the Tripp Lake watershed the maintenance of a healthy forest is if importance.

GENERAL CONDITION OF THE WOODLAND: This land is well stocked with pulpwood size and sawlog size red oak, white pine, and hemlock except for a few acres which have been flooded by beavers. The quality of the timber ranges from good to excellent. Regeneration is largely shade tolerant hardwood such as beech and red maple with white pine in the larger openings. The growth rate is slow as the hardwood stand on the higher elevation was not thinned early enough for the trees to develop good crowns, and no thinning has been done in mixed wood stands at the lower elevations.

HISTORY: This parcel of land consists of two lots. The larger parcel of about 40 acres is a portion of the former town farm which was purchased from George Fickett on November 4, 1857. A portion of this land on the easterly side of Bragdon Hill Road was sold to Frank Estes on 26, 1908, leaving the land currently owned by the town without a right of way. The adjacent Town of Poland Whittier Lot ties this parcel back to the Bragdon Hill Road. A six acre lot adjacent to the northeasterly corner of the town farm lot was acquired for delinquent taxes. The town has selectively harvested timber on the town farm lot three times since 1968, the most recent being in 1997.

TERRAIN: The land rises from a low elevation of about 410 feet at the beaver flowage to a high elevation of about 570 feet at the westerly corner near the road. The average slope is about seven percent with no steep slopes.

WATER: A small brook flows northwesterly across the six acre lot into Tripp Lake. This brook has been dammed by beavers and about two acres of town land has been flooded. The property is high enough in the watershed that no protection zone is mapped by the Statewide Standards for Timber Harvesting in

Shoreland Areas regulations. The brook and associated beaver pond and wetland should be buffered during any timber harvest to protect water quality.

The "Best Management Practices for Forestry" handbook produced by the Maine Forest Service should be used for guidance during timber harvesting operations near any water or wetland feature to prevent erosion and water quality problems.

SOILS: Soils have been mapped by the Soil Conservation Service, U.S.D.A, as:

ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrC Hollis fine sandy loam, 8 to 15 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes.

The location of these soils and some of their woodland characteristics are shown on the attached Soils Map and Soils Map Legend.

WILDLIFE: The numerous red oak trees provide an abundance of acorns which are food source for deer, bear, turkey, squirrels, bluejays and other wildlife. The beaver flowage should provide habitat for aquatic birds and animals as long as it is active. The dead and dying trees will continue to provide habitat for woodpeckers and other birds for many years.

RECREATION: This land is not currently used the public for recreation except by deer hunters. An existing logging road could be used for hiking and snowmobiling if access across abutting lands could be obtained.

ACCESS: There was no legal access to this property prior to the Town of Poland obtaining the Whittier Lot. Former logging operations have been across Map 9 Lots 44, 41 and 47 with permission of the owners. All except the small portion of the lot east of the brook can now be accessed across the Whittier Lot. Due to the beaver activity, the area east of the brook would still require permission from abutters to access the timber for harvesting.

LOGGING CONDITIONS: Logging conditions are good at all seasons except spring and early summer due to the well drained Hollis and Charlton soils.

BOUNDARIES: Portions of the southeasterly and southwesterly boundaries are defined by stonewalls. Blazed and painted trees define the remaining boundaries. Iron pipes or rebars were located at all corners except the northeasterly corner. The portion of the boundaries that border the New England Forestry Foundation land were cleared, blazed, and painted by the Foundation in 2013.

#### STAND DESCRIPTIONS

STAND 1 - 30 acres Red oak and white pine sawlogs and pulpwood.

This predominantly red oak stand is located on the higher elevation at the southwesterly portion of the property. The red oak, which is of good quality, averages 2,577 board feet per acre.

This stand has been selectively harvested three times in the last thirty years, leaving the better trees to grow. Growth is slow due to the shallow and rocky soils.

A 36-inch white pine and a 36-inch red oak were found below the logging road on the northerly portion of this stand. Both of these trees are in good condition and should be preserved for their aesthetic value.

STAND 2 - 8 acres White pine, hemlock, red oak and other hardwoods of pulpwood and sawlog size. The white pine is of good quality while the hemlock and red oak are of average quality. The average volume per acre for all species is 7,717 board feet. No harvesting has been done in this stand for over fifty years.

STANDS 3A & 3B - 6 acres These two small stands are located on either side of the beaver flowage. The merchantable timber consists largely of sawlog size white pine and red oak of good quality. The average volume per acre is 2,376 board feet of white pine and 2,674 board feet of red oak.

STAND 4 - 2 acres This area has been flowed by the beaver flowage and all the trees have been killed, most of which were red maples and a few white pines along the edges.

#### RECOMMENDATIONS

STAND 1 was last harvested in 1997. It should be examined in five years to see if it ready for another harvest.

STAND 2 should be examined at the same time to see if a harvest is required.

STANDS 3A and 3B could be harvested at any time. Access would need to be obtained for 3B across an abutting property. Approximately 35,000 board feet of white pine, 15, 000 board feet of hemlock, 10,000 board feet of hardwoods and 100 cords of pulpwood are currently ready for harvest.

## TIMBER INVENTORY Town Farm East Map 9- Lot 42

#### <u>SAWTIMBER</u>

White Pine Hemlock Red Oak White Oak Sugar Maple Yellow Birch White Birch Total Sawlogs	10" DBH + 12" DBH +	72,600 board feet 20,700 board feet 128,000 board feet 1,700 board feet 2,000 board feet 800 board feet 1,500 board feet
Total Sawlogs		227,300 board feet

#### <u>PULPWOOD</u>

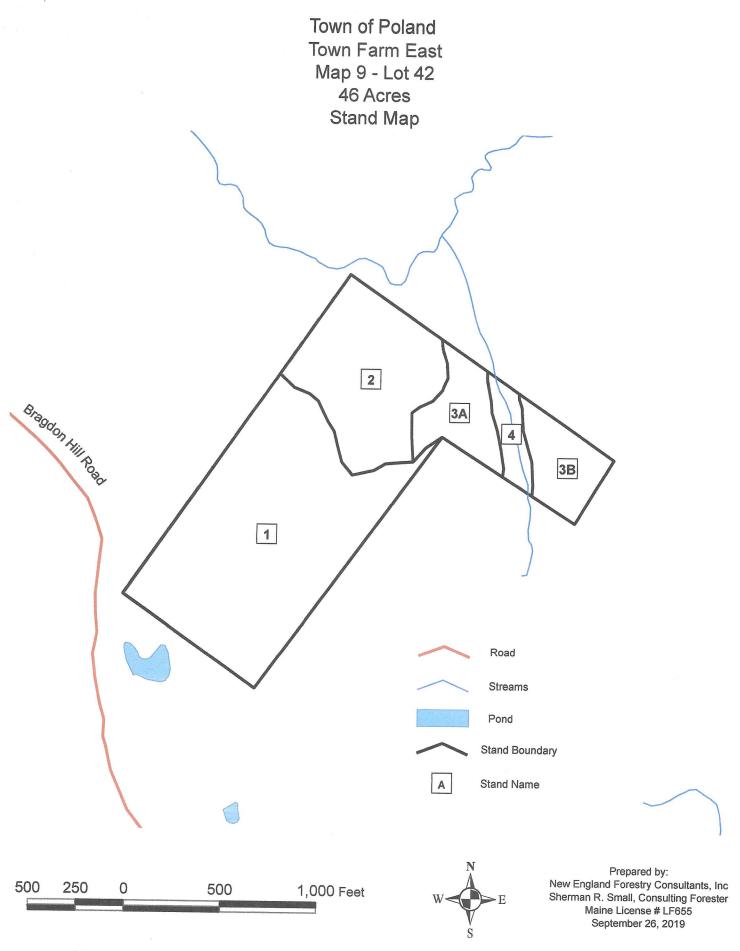
Hardwood #	7" DBH +	480 cords
White Pine #	10" DBH +	67 cords
Hemlock #	10" DBH+	61 cords
Total Pulpwood		608 cords

<sup>#</sup> Includes tops of sawlog trees and cull trees.

Volume estimate is based on 23 one- fifth acre plots.

#### Cruised By:

Fred A. Huntress, Jr. LF #157 November 2009 2009 volumes were adjusted by Sherman R. Small LF #655 for estimated growth to arrive at an estimated 2019 inventory.



Town of Poland Town Farm East Map 9 - Lot 42 46 Acres 2018 Aerial Photo

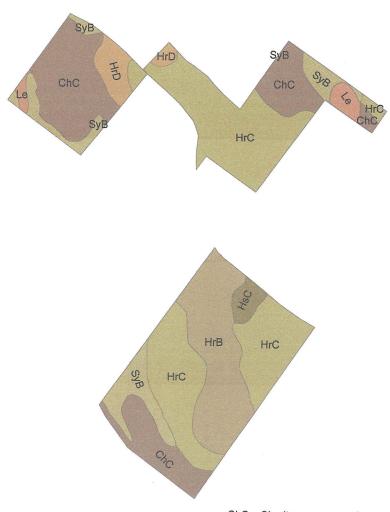


500 250 0 500 1,000 Feet



Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

Town of Poland
Hewey Lot
Whittier Lot
Town Farm East
Town Farm West
Soils Map



ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrB Hollis fine sandy loam, 0 to 8 percent slopes
HrC Hollis fine sandy loam, 8 to 15 percent slopes

HrC Hollis fine sandy loam, 8 to 15 percent slopes HrD Hollis fine sandy loam, 15 to 45 percent slopes

HsC Hollis very rocky fine sandy loam, 8 to 15 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes





Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 24, 2019

## Soils Map Legend Woodland Characteristics

## Property of: Town of Poland, Hewey Lot, Whittier Lot, Town Farm East and Town Farm West Poland, Androscoggin County, Maine

				Soil Symbols			
Characteristic	ChC	HrB	HrC	HrD	HsC	Le	SyB
Erosion Hazard	moderate	slight	slight	moderate	severe	severe	slight
Equipment Limitation	slight	slight	slight	moderate	severe	moderate	
Seedling Mortality	slight	severe	severe	severe	severe		slight
Windthrow Hazard	slight	moderate	moderate	moderate		severe	moderate
Drainage *1	wd	wd	wd		severe	severe	slight
Common Tree		THE RESERVE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAME		wd	wd	pd	mwd
Common free	white pine	white pine	northern hwd	white pine	white pine	northern hwd	northern hwd

\*1 Drainage abbreviations:

ed: excessively drained mwd: moderately well drained

pd: poorly drained

sed: somewhat excessively drained

spd: somewhat poorly drained vpd: very poorly drained

wd: well drained

REFERENCE: Soil Survey of Androscoggin & Sagadahoc Counties, Maine - issued November 1970 USDA, Soil Conservation Service

#### TOWN OF POLAND Town Farm West Map 9- Lot 31 116 Acres

This Forest Management and Harvest Plan is based on the 2009 plan prepared by Fred A. Huntress, Jr., LF #157 with updates to reflect current conditions.

LOCATION: This property is located between North Raymond Road and Bragdon Hill Road, approximately one mile southeasterly from Route 11.

OWNER'S OBJECTIVES: This land is to be managed for the long-term benefit of the residents of Poland through the sale of commercial forest products. Other uses will include trails for hiking, skiing and snowmobiling. Since this land is at the headwater of Tripp Lake and the Range Ponds the maintenance of a healthy forest is of great importance.

GENERAL CONDITION OF THE WOODLAND: This lot is well stocked with pulpwood and sawlog size white pine, hemlock, and red oak. The quality of the timber ranges from good to excellent. Regeneration is largely shade tolerant hardwood such as beech and red maple with white pine in the larger openings. The growth rate varies with soil conditions with slower growth in the soils that have a seasonal high water table, and faster growth rates on the well drained soils and in stands that have been thinned.

HISTORY: This property is a portion of the land acquired by the Town of Poland from George Fickett on November 4, 1857 to be used as a poor farm. This land was actively used as a town farm until about 1884 and has been managed as woodlots since then. Timber has been selectively harvested three times from 1966 to 2002.

TERRAIN: The land rises from a low elevation of about 430 feet at the southwesterly corner to a high elevation of about 570 feet on Bragdon Hill Road near the northeasterly corner. There is a steep slope running across the lot on the easterly side of the brook.

SOILS: Soils have been mapped by the Soil Conservation Service, U.S.D.A. as:

ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrB Hollis fine sandy loam, 0 to 8 percent slopes

HrC Hollis fine sandy loam, 8 to 15 percent slopes

HsC Hollis very rocky fine sandy loam, 8 to 15 percent slopes

SyB Sutton very stony loam, 0 to 8 percent slopes`

The location of these soils and some of their woodland characteristics are shown on the attached Soils Map and Soils Map Legend.

WATER: A year around brook and an intermittent brook flow southerly from this property into Upper Range Pond while a small brook flows northerly into Tripp Lake. The large brook flows through a steep sided gully in the center of the property. The property is high enough in the watershed that no protection zone is mapped by the Statewide Standards for Timber Harvesting in Shoreland Areas regulations. The brook and associated wetland should be buffered during any timber harvest to protect water quality.

The "Best Management Practices for Forestry" handbook produced by the Maine Forest Service should be used for guidance during timber harvesting operations near any water or wetland feature to prevent erosion and water quality problems.

WILDLIFE: The numerous red oaks provide an abundance of acorns, which are valuable food source for deer, bear, turkey, squirrels, bluejays and other wildlife. This well stocked mixed species forest provides excellent habitat for many species of migratory songbirds as well as pileated and other woodpeckers.

RECREATION: The discontinued Bragdon Hill Road is used as a main snowmobile trail. A series of three hiking trails run easterly from a trailhead on North Raymond Road. Hunters use this land during the fall hunting season. Illegal use of ATVs has caused considerable damage to the hiking trails in the past.

ACCESS: There are approximately 700 feet of frontage on the North Raymond Road but only one small area where access for logging is practical due to the adverse slope and wet soil conditions. The primary access is from Bragdon Hill Road, which is a discontinued town road. This road can be used for logging in the winter months but needs considerable maintenance to be used year around. A former logging road runs westerly from Bragdon Hill Road through the center of the property.

LOGGING CONDITIONS: Until Bragdon Hill Road is improved only winter logging is practical on the area east of the gully. The area from North Raymond Road to the gully is suitable only for winter logging due to the poorly drained soils between the ridges. This area was last logged in 1966 with access being over land of the abutter where a house is now located.

BOUNDARIES: Portions of the northwesterly and southeasterly boundaries are defined by stone walls, as is the southerly portion of the line bordering Bragdon Hill Road. Other segments of lines are defined by blazed and painted trees. The portions of the boundaries that are not along stone walls were cleared, blazed, and painted in 2013.

#### STAND DESCRIPTIONS:

Stand A-15 acres Red oak and hemlock sawlogs, hemlock and hardwood pulpwood. Stand A is located in the southerly portion of the property near the North Raymond Road. It is a predominantly hardwood pulpwood stand with some small sawlog size red oak and hemlock.

Stand B - 49 acres Hemlock, white pine, and red oak sawlogs, hardwood, hemlock, and pine pulpwood. Stand B is located to the north and east of Stand A in the central portion of the property. The hemlock is mostly along the brook and the easterly portion of the stand, with the white pine and red oak being found on the better drained soils.

Stand C - 43 acres Red oak sawlog and hardwood pulpwood stand in the northerly portion of the property. Some sawlog size white pines are scattered through the stand. White pine sawlogs have been harvested in this stand releasing white pine regeneration and red oak pulpwood and small sawlog size trees.

Stand D - 9 acres White pine sawlog and pulpwood stand in the northerly portion of the lot. The white pine sawlog quality varies from fair to excellent.

#### **RECOMMENDATIONS:**

Stand A can be harvested at any point to remove pulpwood quality hardwood along with poorly formed trees of any species. The wet area in the stand will be skirted during the harvest and when laying out skid roads to Stand B.

Stand B contains hemlock and poplar that could be harvested when ground conditions and markets are favorable. Any harvest in this stand will be complicated by the presence of a perennial stream flowing through the stand and hiking trails passing through the stand. Access will have to be from the North Raymond Road with frozen ground conditions to prevent soil disturbance and water quality issues.

The red oak in Stand C should be allowed to develop to larger diameters to give the best financial return to the Town of Poland. The majority of the volume is currently small sawlog size. Allowing the stand to develop will place more of the volume in larger diameters with the potential for veneer stumpage.

Stand D should be examined for harvest when Stand C is ready to be cut.

## TIMBER INVENTORY Town Farm West Map 9- Lot 31

#### SAWTIMBER

White pine Hemlock Red oak Sugar maple White birch	10" DBH+ 12" DBH+ 12" DBH+ 12" DBH+ 12" DBH+	123,800 board feet 104,600 board feet 85,300 board feet 5,900 board feet 3,700 board feet
Hardwood pallet	12" DBH+	3,100 board feet
Total Sawlogs		326,400 board feet

#### **PULPWOOD**

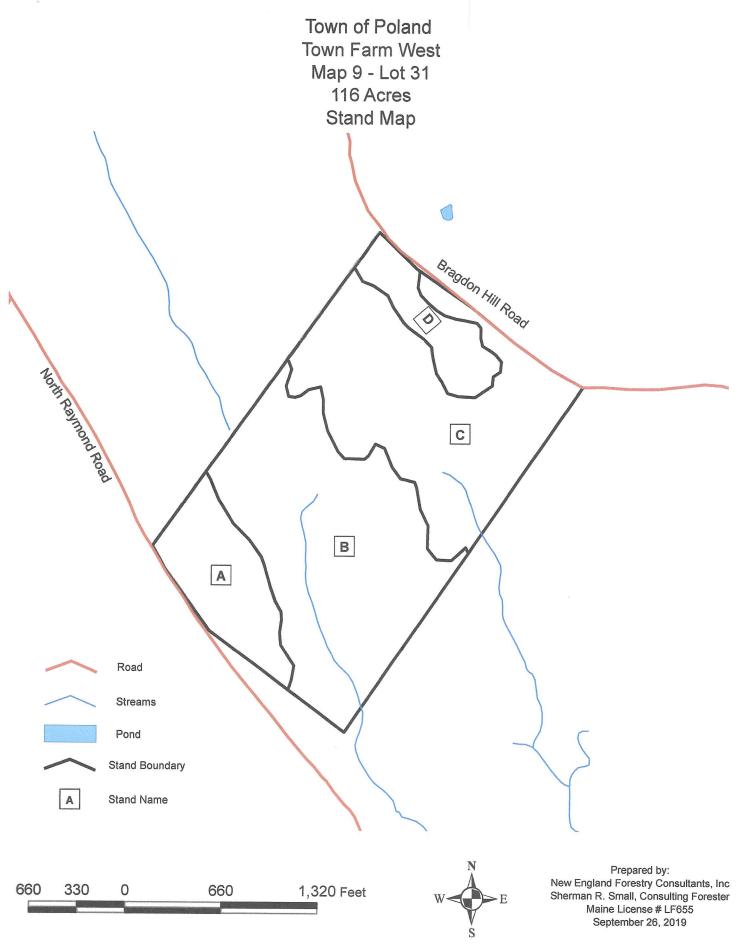
Pine	6" DBH+	164 cords
Hemlock	6" DBH+	477 cords
Poplar	6" DBH+	92 cords
Hardwood	6" DBH+	1,485 cords
Total Pulpwood		2.218 cords

#### Notes:

Pulpwood volumes include tops of sawlogs trees.

Volumes based on 32 one-fifth acres plots.

Cruised by: Sherman R. Small, Maine License # LF655 December 2009 2009 volumes were adjusted for estimated growth to arrive at an estimated 2019 inventory.



Town of Poland
Town Farm West
Map 9 - Lot 31
116 Acres
2018 Aerial Photo







Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

Town of Poland Hewey Lot Whittier Lot Town Farm East Town Farm West Soils Map



ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrB Hollis fine sandy loam, 0 to 8 percent slopes

HrC Hollis fine sandy loam, 8 to 15 percent slopes
HrD Hollis fine sandy loam, 15 to 45 percent slopes

HsC Hollis very rocky fine sandy loam, 8 to 15 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes





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September 24, 2019

## Soils Map Legend Woodland Characteristics

## Property of: Town of Poland, Hewey Lot, Whittier Lot, Town Farm East and Town Farm West Poland, Androscoggin County, Maine

	Soil Symbols						
Characteristic	ChC	HrB	HrC	HrD	HsC	Le	SyB
Erosion Hazard	moderate	slight	slight	moderate	severe	severe	slight
Equipment Limitation	slight	slight	slight	moderate	severe	moderate	slight
Seedling Mortality	slight	severe	severe	severe	severe	severe	moderate
Windthrow Hazard	slight	moderate	moderate	moderate	severe	severe	slight
Drainage *1	wd	wd	wd	wd	wd	pd	mwd
Common Tree	white pine	white pine	northern hwd	white pine	white pine	northern hwd	northern hwd

\*1 Drainage abbreviations:

ed: excessively drained

mwd: moderately well drained

pd: poorly drained

sed: somewhat excessively drained

spd: somewhat poorly drained wpd: very poorly drained

wd: well drained

REFERENCE: Soil Survey of Androscoggin & Sagadahoc Counties, Maine - issued November 1970 USDA, Soil Conservation Service

#### TOWN OF POLAND Hewey Lot Map 9- Lot 40 42.2 Acres

This Forest Management and Harvest Plan is based on the 2009 plan prepared by Fred A. Huntress, Jr., LF #157 with updates to reflect current conditions.

LOCATION: This property is located on the westerly side of Bragdon Hill Road, approximately 250 feet southerly of White Oak Hill Road.

OWNER'S OBJECTIVES: This land is to be managed for the long-term financial benefit of the residents of Poland through the sale of commercial forest products. Other uses will include recreational trails for hiking skiing and snowmobiling. Since this land is at the headwaters of the Tripp Lake watershed the maintenance of a healthy forest is important.

GENERAL CONDITION OF THE WOODLAND: This lot is well stocked with pulpwood size and sawlog size white pine, red oak, and hemlock. The quality of the timber ranges from good to excellent. Regeneration is largely shade tolerant hardwood such as beech, red maple, and red oak with white pine in the larger openings. The growth rate varies with soil conditions with slower growth in the soils that have a seasonal high water table, and faster growth rates on the well drained soils and in stands that have been thinned.

HISTORY: This property was acquired in 1977 from Ellery Hewey for unpaid taxes. It was formerly owned by Luther Perkins and known as the Gerry lot. The town sold stumpage on this lot in 1996 and 2014.

TERRAIN: The land rises from a low elevation of about 380 feet at the southwesterly corner to a high elevation of about 520 feet at the northeasterly corner at Bragdon Hill Road. There are no steep slopes.

SOILS: Soils have been mapped by the Soil Conservation Service, U.S.D.A. as:

ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrC Hollis fine sandy loam, 8 to 15 percent slopes

HrD Hollis fine sandy loam, 15 to 45 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes

The location of these soils and some of their woodland characteristics are shown on the attached Soils Map and Soils Map Legend.

WILDLIFE: While many species of birds and animals may inhabit this land at various seasons it is not exceptional habitat for any particular species. The dense softwoods may be used for a deer wintering area (deer yard). There is no mapped deer wintering area on the property.

RECREATION: The land is not being used for recreation except by hunters. There are no existing trails which could be used for hiking etc.

WATER: A brook flows northerly across the westerly portion of the property and into Tripp Lake. A portion of the brook has a protection zone based on the Statewide Standards for Timber Harvesting in Shoreland Areas regulations. Timber harvesting will be limited in the protection zone.

The "Best Management Practices for Forestry" handbook produced by the Maine Forest Service should be used for guidance during timber harvesting operations near any water or wetland feature to prevent erosion and water quality problems.

ACCESS: This property has 1,340 feet of frontage on the discontinued Bragdon Hill Road. This road has been repaired for use by logging trucks during timber sales, but has not had any other maintenance and degrades over time from public use and the lack of ditches to carry runoff.

LOGGING CONDITIONS: Logging conditions are good at all seasons except spring and early summer or seasons of heavy rainfall. A bridge will be needed to access the few acres west of the brook.

BOUNDARIES: Boundaries are partially defined by stone walls. The land was surveyed in 1983 and all lines not defined by stone wall were blazed and painted. The boundaries not defined by stonewall or road frontage were cleared, blazed, and painted in 2013.

#### STAND DESCRIPTIONS:

Stand A - 14 acres; White pine sawlogs stand with a mixture of hardwood and softwood pulpwood. Stand A is in the northerly portion of the lot along the Bragdon Hill Road. The stand was thinned during the winter of 2013 - 2014 removing poorly formed, diseased, and mature trees.

Stand B - 13 acres; Red oak sawlog and mixed hardwood pulpwood stand in the central portion of the lot. There are some scattered large white pine sawlog trees in the stand. A portion of the stand was thinned during the winter of 2013 - 2014 removing poorly formed, diseased, and mature trees to release the better quality red oak.

Stand C - 17 acres; Mixed hemlock and red oak sawlog stand with a minor volume of white pine sawlogs along with mixed hardwood, hemlock, and pine pulpwood. Stand C covers the southerly portion of the lot. A portion of the stand was thinned during the winter of 2013 - 2014.

### RECOMMENDATIONS:

Stands B and C should be examined in ten years to see if they are ready for another harvest.

#### TIMBER INVENTORY Hewey Lot Map 9- Lot 40

#### **SAWTIMBER**

White pine	10" DBH+	15,600 board feet
Hemlock	12" DBH+	35,600 board feet
Red oak	12" DBH+	52,800 board feet
Red maple	12" DBH+	1,800 board feet
Hardwood pallet	12" DBH+	2,400 board feet
Total Sawlogs		108,200 board feet

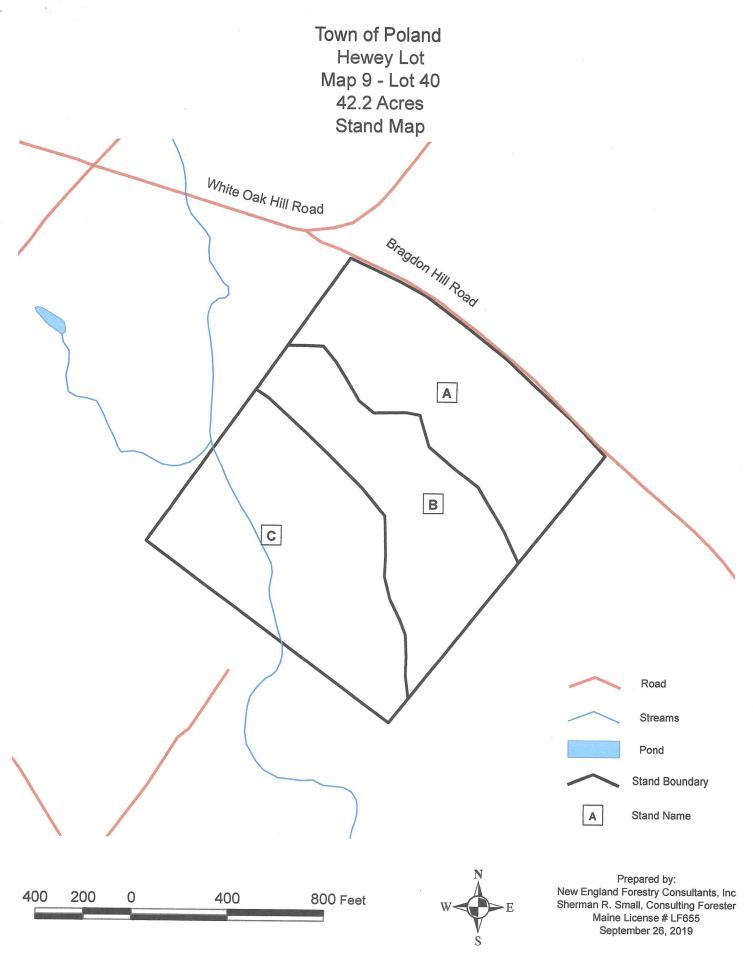
#### **PULPWOOD**

Pine	6" DBH+	78 cords
Hemlock	6" DBH+	145 cords
Poplar	6" DBH+	57 cords
Hardwood	6" DBH+	550 cords
Total Pulpwood		830 cords

#### Notes:

Pulpwood volumes include tops of sawlogs trees.

Volumes based on 12 one-fifth acres plots.
Cruised by: Sherman R. Small, Maine License # LF655 in November 2009. 2009 volumes were adjusted for estimated growth and harvested volumes to arrive at an estimated 2019 inventory.



Town of Poland Hewey Lot Map 9 - Lot 40 42.2 Acres 2018 Aerial Photo

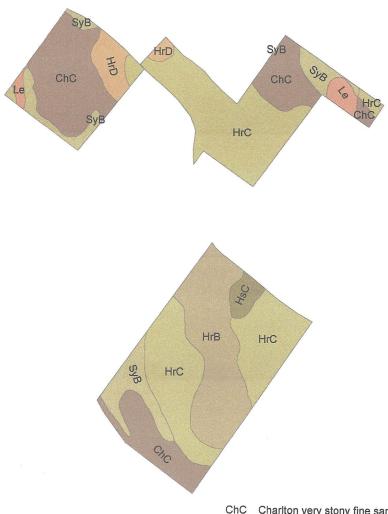






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Maine License # LF655
September 26, 2019

Town of Poland Hewey Lot Whittier Lot Town Farm East Town Farm West Soils Map



Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrB Hollis fine sandy loam, 0 to 8 percent slopes HrC

Hollis fine sandy loam, 8 to 15 percent slopes Hollis fine sandy loam, 15 to 45 percent slopes

HsC Hollis very rocky fine sandy loam, 8 to 15 percent slopes

Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes





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## Soils Map Legend Woodland Characteristics

## Property of: Town of Poland, Hewey Lot, Whittier Lot, Town Farm East and Town Farm West Poland, Androscoggin County, Maine

	Soil Symbols							
Characteristic	ChC	HrB	HrC	HrD	HsC	Le	SyB	
Erosion Hazard	moderate	slight	slight	moderate	severe	severe	slight	
Equipment Limitation	slight	slight	slight	moderate	severe	moderate	slight	
Seedling Mortality	slight	severe	severe	severe	severe	severe	moderate	
Windthrow Hazard	slight	moderate	moderate	moderate	severe	severe	slight	
Drainage *1	wd	wd	wd	wd	wd	pd	mwd	
Common Tree	white pine	white pine	northern hwd	white pine	white pine	northern hwd	northern hwd	

\*1 Drainage abbreviations:

ed: excessively drained mwd: moderately well drained

pd: poorly drained

sed: somewhat excessively drained spd: somewhat poorly drained

vpd: very poorly drained

wd: well drained

REFERENCE: Soil Survey of Androscoggin & Sagadahoc Counties, Maine - issued November 1970 USDA, Soil Conservation Service

# TOWN OF POLAND Mingo lots Map 17- Lots 47 & 47A 66.5 acres

This Forest Management and Harvest Plan is based on the 2009 plan prepared by Fred A. Huntress, Jr., LF #157 with updates to reflect current conditions.

LOCATION: These two lots are located on either side of the discontinued Tiger Hill Road, approximately 1,400 feet southwesterly of the current Tiger Hill Road.

OWNER'S OBJECTIVES: This land is to be managed for the long-term financial benefit of the residents of Poland through the sale of commercial forest products. Other uses will include recreational trails for hiking, skiing and snowmobiling and watershed protection.

GENERAL CONDITION OF THE WOODLAND: This lot is well stocked with pulpwood size and sawlog size white pine and hemlock. The quality of the timber ranges from good to excellent. Regeneration is largely shade tolerant hardwood such as beech and red maple, and shade tolerant softwoods such as hemlock, red spruce, and balsam fir with white pine in the larger openings. The growth rate is slow due to a seasonal high water table over the majority of the property.

HISTORY: These lots were acquired about 1948 for unpaid taxes. A small triangular parcel on the westerly side of the road was acquired from H. Vance Smith in 1997 to settle a boundary dispute and add to the road frontage of the parcel westerly of the old road. The town has harvested timber from these lots four times from 1967 to 2009. Trees were planted by the town forester in 1969 on a small opening by the site of a former house.

TERRAIN: This land is nearly flat. The topographic map shows less than ten feet of elevation change from the lowest to highest points. The average elevation above sea level is about 350 feet.

SOILS: Soils have been mapped by the Soil Conservation Service, U.S.D.A. as:

ChB Charlton very stony fine sandy loam, 0 to 8 percent slopes

ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes

Wa Walpole fine sandy loam

The location of these soils and some of their woodland characteristics are shown on the attached Soils Map and Soils Map Legend.

WILDLIFE: This land should provide good habitat for white-tailed deer due the abundance of browse following timber harvests and the adjacent softwoods stands for cover. It also may used by moose, which travel through this area between Meadow Brook and a large swamp in Oxford. The Maine Department of Inland Fisheries and Wildlife has mapped two "Significant Wildlife Habitats" on the Mingo lots. An Inland Wading Bird and Waterfowl Habitat is mapped along the small brook that forms the westerly boundary of the portion east of the road. A Deer Wintering Area (DWA) is mapped for all of the property east of the road and the easterly end of the property west of the road. This DWA has an "Indeterminate" rating which means it was probably mapped from aerial photos with no investigation on the ground to confirm the DWA. An indeterminate rating means there are no harvesting restrictions in the DWA.

WATER: A small intermittent brook flows southerly across the land west of the road and forms the westerly boundary of the land east of the road. This brook is the headwaters of Meadow Brook which flows into Tripp Lake. The Statewide Standards for Timber Harvesting in Shoreland Areas regulations have mapped a protection zone along the brook. This protection zone only impacts the land east of the road. Timber harvesting is limited in the protection zone.

The "Best Management Practices for Forestry" handbook produced by the Maine Forest Service should be used for guidance during timber harvesting operations near any water or wetland feature to prevent erosion and water quality problems.

RECREATION: There is a snowmobile trail which runs westerly across the land west of the old road. Both of these lots are used by hunters in the fall hunting season.

ACCESS: These lots are accessible from the discontinued road which was rebuilt by a developer who owns land between these lots and Tiger Hill Road.

LOGGING CONDITIONS: Logging conditions are good only in the winter months when the ground is frozen due to the high water table soils and the small brook. All of the timber is within yarding distance of landings on each lot.

BOUNDARIES: The land west of the old road was surveyed in 1983. All boundary lines not defined by stone walls were blazed and painted at that time but no maintenance had been done since. The two lines on the parcel east of the road that are not defined by the road and a brook had been blazed and painted. All the boundaries of the Mingo lots have been cleared, blazed, and painted in 2019.

#### STAND DESCRIPTIONS:

Stand A - 33 acres Mixed softwood sawlog, hardwood and softwood pulpwood stand. Stand A is located in the westerly portion of the property. The softwood sawlog volume is comprised of white pine, hemlock, spruce, and fir. The majority of Stand A has poorly drained soils. There has not been any recent cutting in Stand A. Much of the white pine is showing decline in the tops which is probably due to repeated years of white pine needle blight. The tops are very thin in many of the white pine trees.

Stand B - 17 acres White pine sawlog stand in the central portion of the lot west of the discontinued road. This stand was thinned ten to fifteen years ago to remove diseased, poorly formed, and mature individual trees. The residual stand is well spaced with high quality white pine sawlogs trees along with smaller volumes of hardwood and softwood pulpwood. Much of the white pine is showing decline in the tops which is probably due to repeated years of white pine needle blight. The tops are very thin in many of the white pine trees.

Stand C-16 acres White pine sawlog stand east of the discontinued road that was harvested approximately ten years ago. The harvest removed the majority of the white pine sawlogs to release white pine regeneration. The residual stand has scattered white pine sawlog trees. The white pine regeneration has responded well to being released and is healthy and growing at a good rate.

Stand D - 1 acre; Wetland along brook, south of Stand C. Stand D has no commercial timber volume.

#### RECOMMENDATIONS:

Stand A is well stocked and should be harvested to remove diseased, poorly formed, and mature trees. A hard look will be given to the white pine to be sure those with poor tops are removed.

Stands B should be harvested to remove the white pines with poor and declining tops. In portions of the stand the cutting will be a seed trees cut with healthy topped trees left to provide seed and weak topped trees being removed.

Stand C will not need any harvesting until the white pine regeneration develops to a stage where it is ready to be thinned.

## TIMBER INVENTORY Mingo lots Map 17- Lots 47 & 47A

#### SAWTIMBER

White pine Hemlock Spruce & fir Red oak Total Sawlogs  PULPWOOD	10" DBH+ 12" DBH+ 10" DBH+ 12" DBH+	240,100 board feet 10,100 board feet 3,200 board feet 7,600 board feet 261,000 board feet
Pine	6" DBH+	239 cords

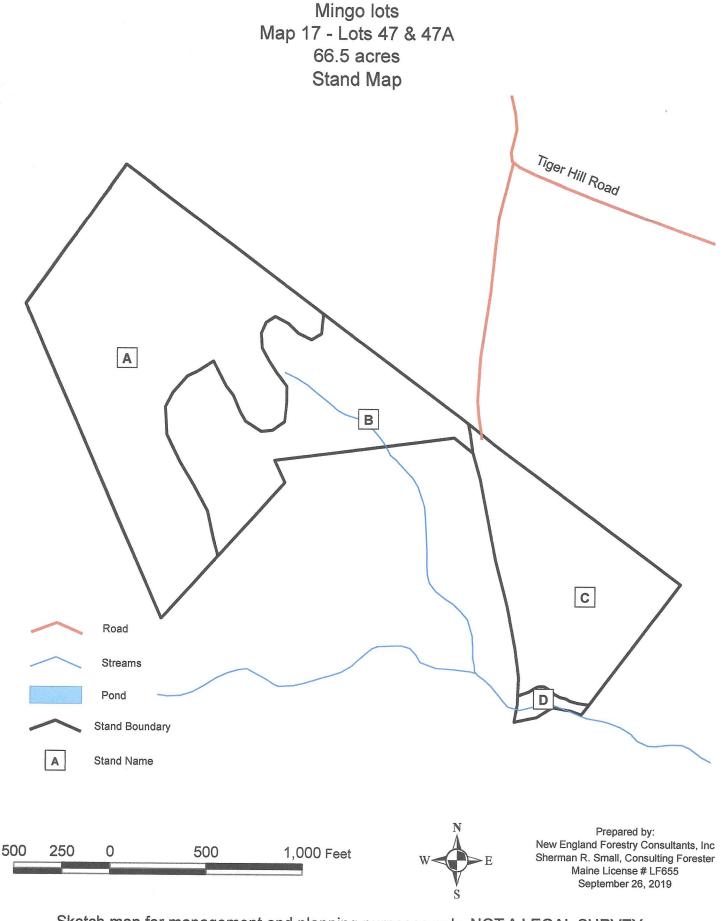
FILLE	o DBH+	239 cords
Hemlock	6" DBH+	184 cords
Spruce & fir	6" DBH+	52 cords
Poplar	6" DBH+	58 cords
<u>Hardwood</u>	6" DBH+	343 cords
Total Pulpwood		876 cords

#### Notes:

Pulpwood volumes include tops of sawlogs trees.

Volumes based on 22 one-fifth acres plots.

Cruised by: Sherman R. Small, Maine License # LF655 December 2009 2009 volumes were adjusted for estimated growth to arrive at an estimated 2019 inventory.



Town of Poland

Town of Poland
Mingo lots
Map 17 - Lots 47 & 47A
66.5 acres
2018 Aerial Photo

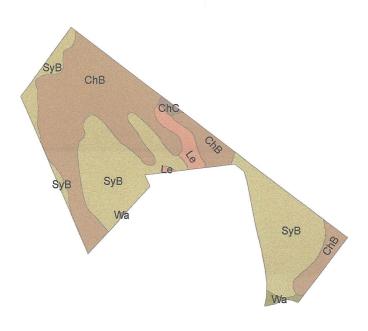






Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

#### Town of Poland Mingo Lots Soils Map

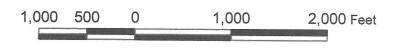


ChB Charlton very stony fine sandy loam, 0 to 8 percent slopes ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes

Wa Walpole fine sandy loam





Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

# Soils Map Legend Woodland Characteristics Property of: Town of Poland, Mingo Lots Poland, Androscoggin County, Maine

Soil Symbols

Characteristic	ChB	ChC	Le	SyB	SyC	Wa
Erosion Hazard	slight	moderate	severe	slight	slight	severe
<b>Equipment Limitation</b>	slight	slight	moderate	slight	slight	moderate
Seedling Mortality	slight	slight	severe	moderate	moderate	severe
Windthrow Hazard	slight	slight	severe	slight	slight	severe
Drainage *1	wd	wd	pd	mwd	mwd	pd
Common Tree	white pine	white pine	northern hwd	white pine	northern hwd	northern hwd

#### \*1 Drainage abbreviations:

ed: excessively drained

mwd: moderately well drained

pd: poorly drained

sed: somewhat excessively drained

spd: somewhat poorly drained

vpd: very poorly drained

wd: well drained

REFERENCE: Soil Survey of Androscoggin & Sagadahoc Counties, Maine - issued November 1970 USDA, Soil Conservation Service

#### TOWN OF POLAND Transfer Station Lot Map 15- Lot 1B 49 forested acres

This Forest Management and Harvest Plan is based on the 2009 plan prepared by Fred A. Huntress, Jr., LF #157 with updates to reflect current conditions.

LOCATION: This lot is located on the southerly side of Tripp Lake Road, approximately 1,500 feet westerly of Route 26.

OWNER'S OBJECTIVES: This land is to be managed for the long- term financial benefit of the residents of Poland through the sale of commercial products. Other uses will include recreational trails for hiking, skiing and snowmobiling.

GENERAL CONDITION OF THE WOODLAND: This land is well stocked with pulpwood size and small sawlog size white pine, red oak, and hemlock. Most of the volume on the lot is in pulpwood size trees due to cutting by former owners. The quality of the timber ranges from good to excellent. Regeneration is largely shade tolerant hardwood such as beech and red maple with limited amounts of white pine. The growth rate is good over the majority of the property due to the young age of the stands.

HISTORY: This property consists of three parcels of land which were acquired by the town from 1968 to 1993. The first parcel was a donation by Hiram Ricker and Son on June 17, 1968, to be used as a town dump. The largest parcel was acquired from Laurent G. Dupuis in 1993. This last deed included two small lots on Tripp Lake Road which Dupuis had acquired from Michael Belskis. The timber on the Curless lot had been cut very hard before the town acquired the land. A small amount of timber was harvested by the town on the Ricker lot when the land was being cleared for the new dump. A small timber sale in 2009 harvested mature white pine and red oak on the southerly portion of the Ricker lot.

TERRAIN: The land rises from a low elevation of about 310 feet where the brook crosses Tripp Lake Road to a high elevation of about 490 feet at the most southerly corner with an average slope of six percent.

WATER: A small brook, which drains a swamp south of this property, flows northerly across the easterly portion of the property and into Garland Swamp and Winter Brook. The property is high enough in the watershed that no protection zone is mapped by the Statewide Standards for Timber Harvesting in Shoreland Areas regulations. The brook and any associated wetland should be buffered during any timber harvest to protect water quality.

The "Best Management Practices for Forestry" handbook produced by the Maine Forest Service should be used for guidance during timber harvesting operations near any water or wetland feature to prevent erosion and water quality problems.

SOILS: Soils have been mapped by the Soil Conservation Service, U.S.D.A. as:

ChB Charlton very stony fine sandy loam, 0 to 8 percent slopes

ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

ChD Charlton very stony fine sandy loam, 15 to 25 percent slopes

HkB Hinckley gravelly sandy loam, 0 to 8 percent slopes

HkC Hinckley gravelly sandy loam, 8 to 15 percent slopes

So Scarboro fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes

The location of these soils and some of their woodland characteristics are shown on the attached Soils Map and Soils Map Legend.

WILDLIFE: While many species of birds and animals may inhabit this forest land during the various seasons, it is not exceptional habitat for any particular species. The red oak trees should produce acorns which area food source for deer, bear, turkeys, squirrels, bluejays and other wildlife.

RECREATION: The property is used for hunting and has a hiking trail system that connects with additional Town land to the south. A trailhead has been constructed on the Tripp Lake Road near the transfer station road.

ACCESS: This property is easily accessible from the frontage on Tripp Lake Road and the road leading to the transfer station.

LOGGING CONDITIONS: Logging conditions are good at all seasons except spring and early summer or during a time of heavy rainfall. Most of the timber can be yarded to a landing at the upper level of the transfer station.

BOUNDARIES: Boundary lines on the Curless lot were surveyed, blazed and painted in 1976. The boundaries that were not public road were cleared, blazed, and painted in 2013.

### STAND DESCRIPTIONS:

Stand A - 28 acres Mixed hardwood pulpwood stand with small sawlog size red oak and white pine trees scattered through the stand. Stand A covers the majority of the southerly portion of the property.

Stand B – 16 acres Mixed hardwood pulpwood stand in the central portion of the property south of the transfer station. Stand B appears to have been cut after Stand A.

Stand C-5 acres Mixed species hardwood, hemlock, and white pine stand in the northerly portion of the property east of the transfer station. This stand was harvested in 2009 to remove mature and poorly formed white pine and red oak. Regeneration established since the harvest is predominantly hardwood as would be expected given the overstory and soils conditions.

Note: Portions of the Transfer Station Lot are also covered by the Forest Management Plan for the Heart of Poland Conservation Easement Area.

### RECOMMENDATIONS:

Due to the cutting by previous owners and the 2009 harvest in Stand C, no harvesting will be needed for approximately 10 to 15 years.

## TIMBER INVENTORY Transfer Station Lot Map 15- Lot 1B

### SAWTIMBER

White pine	10" DBH+	15,600 board feet
Hemlock	12" DBH+	7,200 board feet
Red oak	12" DBH+	13,100 board feet
Total Sawlogs		35,900 board feet

### **PULPWOOD**

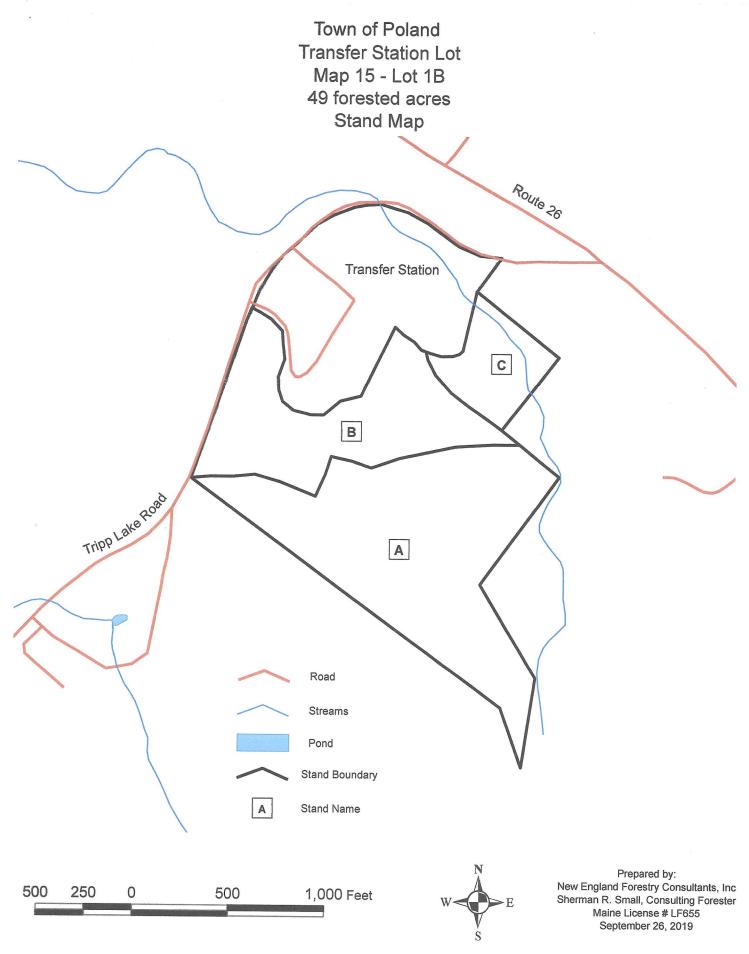
Pine	6" DBH+	53 cords
Hemlock	6" DBH+	38 cords
Hardwood	6" DBH+	353 cords
Total Pulpwood		444 cords

### Notes:

Pulpwood volumes include tops of sawlogs trees.

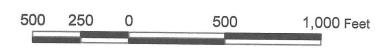
Volumes based on 19 one-fifth acres plots.

Cruised by: Sherman R. Small, Maine License # LF655 December 2009 2009 volumes were adjusted for estimated growth to arrive at an estimated 2019 inventory.



Town of Poland
Transfer Station Lot
Map 15 - Lot 1B
49 forested acres
2018 Aerial Photo

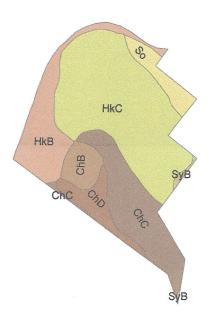






Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

### Town of Poland Transfer Station Lot Soils Map



ChB Charlton very stony fine sandy loam, 0 to 8 percent slopes
ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes
ChD Charlton very stony fine sandy loam, 15 to 25 percent slopes
HKB Hinckley gravelly sandy loam, 0 to 8 percent slopes
Hinckley gravelly sandy loam, 8 to 15 percent slopes
So Scarboro fine sandy loam
SyB Sutton very stony loam, 0 to 8 percent slopes





Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

## Soils Map Legend Woodland Characteristics Property of: Town of Poland, Transfer Station Lot

Poland,	Androscoggin	County,	Maine
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				Soil Symbols			
Characteristic	ChB	ChC	ChD	HkB	HkC	So	SyB
Erosion Hazard	slight	moderate	severe	slight	slight	slight	slight
Equipment Limitation	slight	slight	slight	slight	slight	severe	slight
Seedling Mortality	slight	slight	slight	moderate	moderate	severe	moderate
Windthrow Hazard	slight	slight	slight	slight	slight	severe	slight
Drainage *1	wd	wd	wd	ed	ed	vpd	mwd
Common Tree	white pine	northern hwd	northern hwd	white pine	white pine	balsam fir	northern hwd

\*1 Drainage abbreviations:

ed: excessively drained

mwd: moderately well drained

pd: poorly drained

sed: somewhat excessively drained

spd: somewhat poorly drained

vpd: very poorly drained

wd: well drained

REFERENCE: Soil Survey of Androscoggin & Sagadahoc Counties, Maine - issued November 1970 USDA, Soil Conservation Service

# TOWN OF POLAND Whittier Lot Map 9- Lot 41 25 Acres +/-

This Forest Management and Harvest Plan is based on the 2010 plan prepared by Fred A. Huntress, Jr., LF #157 with updates to reflect current conditions.

LOCATION: This property is located on the easterly side of Bragdon Hill Road, approximately 2,000 feet southerly of White Oak Hill Road.

OWNER'S OBJECTIVES: This land is to be managed for the long-term financial benefit of the residents of Poland through the sale of commercial forest products. Other uses will include recreational trails for hiking, skiing, and snowmobiling. Since this land is at the headwaters of the Tripp Lake watershed the maintenance of a forest cover is important to the water quality of the lake.

GENERAL CONDITION OF THE WOODLAND: The forest on this land has been cut hard over the last 30-35 years; the most recent cutting being in the winter of 2009-2010. Portions of the land which were logged the longest ago are well stocked with sapling sized (2"-6") hardwoods and white pines along with scattered pole sized (6"-10") white pines and hardwoods. The predominant hardwoods are red oak, white oak, red maple, and white birch. The immediate area around the old cellar hole is densely covered with oriental bittersweet, which is a very invasive plant which can smother hardwoods over time.

HISTORY: This property is a portion of the original Bragdon farm for which the hill is named. The buildings and about 25 acres were set off from the original farm in 1926. The buildings were either burned or torn down about fifty years ago.

TERRAIN: The land rises from a low elevation of about 490 feet at the most northerly corner to a high elevation of about 560 feet at the most southerly corner on Bragdon Hill Road. There are no steep slopes on the property.

SOILS: Soils have been mapped by the Soil Conservation Service, U.S.D.A., as Hollis fine sandy loam (HrC and HrD), which are well drained soils suitable for growing good quality white pine and oak. All of this land appears to have been cleared for field and pasture when the farm was active. The location of these soils and some of their woodland characteristics are shown on the attached Soils Map and Soils Map Legend.

WILDLIFE: The dense growth of hardwood sprouts on the most recently logged area will provide browse for deer for several years. The dense stands of sapling-size trees will provide a good nesting site for several species of

songbirds. The dense growth of bittersweet is a good source of winter seeds for birds.

RECREATION: This land is not currently used for public recreation except by hunters. The skidder road which leads from the landing on Bragdon Hill Road to Town Farm East could be used as a hiking trail with some maintenance.

WATER: There are no mapped water features on the Whittier Lot.

ACCESS: This land borders Bragdon Hill Road for about 1,400 feet. Bragdon Hill Road is a discontinued gravel road which is used by the public.

LOGGING CONDITIONS: Logging conditions are excellent on this entire lot at all seasons except early spring.

BOUNDARIES: The northwesterly and northeasterly boundaries are well defined by stone walls except for the southerly portion of the latter boundary which is defined by blazed and painted trees. The southeasterly boundary is a common boundary with Town Farm East except for about 80 feet from the westerly corner at a stone monument on Bragdon Hill Road. The stone monument on the Bragdon Hill road was removed during the summer of 2019 by an unknown person. The boundary line was repainted from the Bragdon Hill Road to the Town Farm East corner by Fred A. Huntress when the missing stone monument was discovered. A 2-inch iron pipe and stones mark the most easterly comer of this lot.

### STAND DESCRIPTIONS:

STAND 1- 6 Acres Cut very hard for firewood approximately ten years ago. Regeneration is hardwoods, white pine, and bittersweet

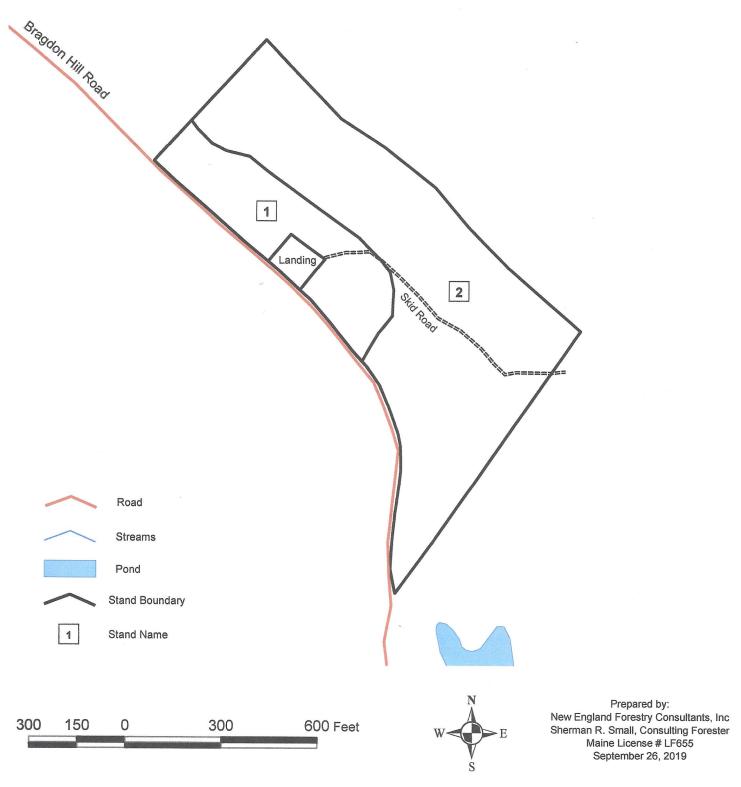
STAND 2-19 Acres Scattered white pine, red oak and red maple, (6"-12") and dense stand of sapling-size (2"-4") red oak, white oak, white pine, red maple, and white birch. The larger overstory trees will be available for harvest in 20-25 years. The dense stand of sapling-size trees will be of pulpwood-size in 20-25 years or sooner if weeded and thinned in the next 5-10 years.

#### RECOMMENDATIONS:

There will be no timber available for a commercial harvest for the next 15-20 years.

STAND 2 should be weeded and thinned to release the more valuable white pines and oaks for future growth. This work can be done with a chainsaw to release the future crop trees. Selected good quality white pines, 6-10 inches DBH, could also be pruned to produce high quality sawlogs in the future.

Town of Poland Whittier Lot Map 9 - Lot 41 25 Acres Stand Map



Town of Poland
Whittier Lot
Map 9 - Lot 41
25 Acres
2018 Aerial Photo

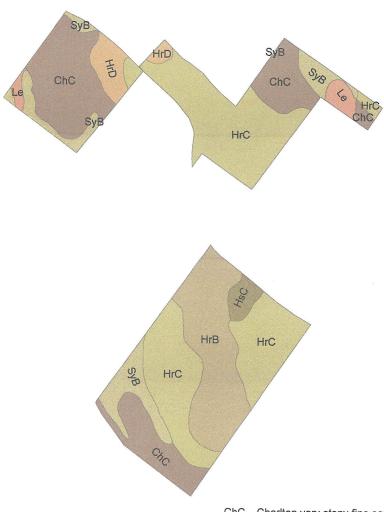






Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 26, 2019

Town of Poland
Hewey Lot
Whittier Lot
Town Farm East
Town Farm West
Soils Map



ChC Charlton very stony fine sandy loam, 8 to 15 percent slopes

HrB Hollis fine sandy loam, 0 to 8 percent slopes

HrC Hollis fine sandy loam, 8 to 15 percent slopes

HrD Hollis fine sandy loam, 15 to 45 percent slopes

HsC Hollis very rocky fine sandy loam, 8 to 15 percent slopes

Le Leicester very stony fine sandy loam

SyB Sutton very stony loam, 0 to 8 percent slopes





Prepared by:
New England Forestry Consultants, Inc
Sherman R. Small, Consulting Forester
Maine License # LF655
September 24, 2019

### Soils Map Legend Woodland Characteristics

### Property of: Town of Poland, Hewey Lot, Whittier Lot, Town Farm East and Town Farm West Poland, Androscoggin County, Maine

				Soil Symbols			
Characteristic	ChC	HrB	HrC	HrD	HsC	Le	SyB
Erosion Hazard	moderate	slight	slight	moderate	severe	severe	slight
Equipment Limitation	slight	slight	slight	moderate	severe	moderate	THE RESIDENCE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.
Seedling Mortality	slight	severe	severe	severe			slight
Windthrow Hazard	slight	moderate	moderate	moderate	severe	severe	moderate
Drainage *1	wd	wd			severe	severe	slight
Common Tree			wd	wd	wd	pd	mwd
Common free	white pine	white pine	northern hwd	white pine	white pine	northern hwd	northern hwd

\*1 Drainage abbreviations:

ed: excessively drained

mwd: moderately well drained

pd: poorly drained

sed: somewhat excessively drained

spd: somewhat poorly drained

vpd: very poorly drained

wd: well drained

REFERENCE: Soil Survey of Androscoggin & Sagadahoc Counties, Maine - issued November 1970 USDA, Soil Conservation Service