



# Compartment Review Presentation

## Pigeon River Country Forest Management Unit

Compartment 53034

Entry Year 2024

Acreage: 1,905

County Otsego

Management Area: Pigeon River Country

---

**Stand Examiner:** Greg Rekowski

### Legal Description:

T32N - R01W Sections 7, 8, and 9

### Identified Planning Goals:

Maintain current species mix and apply appropriate management techniques to mature stands of timber that are in need of treatment.

### Soil and topography:

Flat to gently rolling terrain throughout most of the Compartment. Steeper slopes are present in stands adjacent to the Pigeon River. Sandy soils, such as Leelanau loamy sands and Lindquist sands, predominate except for a narrow band of organic soils located around the Pigeon River. Isolated leatherleaf peat bogs can be found in the Compartment.

### Ownership Patterns, Development, and Land Use in and Around the Compartment:

Entirely state-owned lands.

### Unique Natural Features:

Wood turtle, little brown bat, and Hill's thistle have the potential to occur in this Compartment. Ram's head lady's-slipper and northern goshawk have been documented in this Compartment.

### Archeological, Historical, and Cultural Features:

The Pigeon River Headquarters is located just outside the southern edge of Section 9. Additional structures in the proximity of the Headquarters are from the CCC era, including the Manager's Residence, which has now been converted into a museum open to the public and is known as the Discovery Center. The P.S. Lovejoy Monument can be found in stand 109 adjacent to the Shingle Mill Pathway.

### Special Management Designations or Considerations:

The Pigeon River is a state-designated Natural River.

### Watershed and Fisheries Considerations:

A portion of the Pigeon River flows through the southeast corner of the Compartment. Ford Lake is a sinkhole lake and has special restrictions in place for fishing.

### Wildlife Habitat Considerations:

A Wildlife Biologist will be available for comment at the Compartment Review.

### Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of coarse-textured glacial till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift is the Devonian Antrim Shale, quarried for clay/shale and cement products elsewhere in the State. The nearest gravel pit is one-half mile to the south, and potential is considered good on the upland areas. The Guelph (Niagaran) reef trend produces to the south and potential is minimal. There is oil and gas potential for known producing formations in this Compartment. However, the entire Compartment is in the Consent Order area and, as provided on page 33 of the Concept of Management, no new leases will be issued in this Area.

### Vehicle Access:

There is good access to most of the Compartment. Most of the interior forest roads have been closed to wheeled motorized vehicles with all of these closures still intact.

### Survey Needs:

None needed.

### Recreational Facilities and Opportunities:

The Pigeon River State Forest Campground is in the southeast corner of the Compartment. The Shingle Mill Pathway runs throughout Sections 8 and 9.

**Fire Protection:**

Access is generally good in case of any fire suppression efforts. Most closed roads are blocked with berms. Wildfire potential is high in this Compartment due to the large amount of pine.

**Additional Compartment Information:**

Garlic mustard and invasive honeysuckle can be found in stand 91 adjacent to the Pigeon River office complex.

**The following reports from the Inventory are attached:**

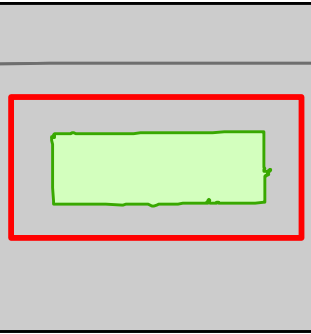
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

**The following information is displayed, where pertinent, on the attached compartment maps:**

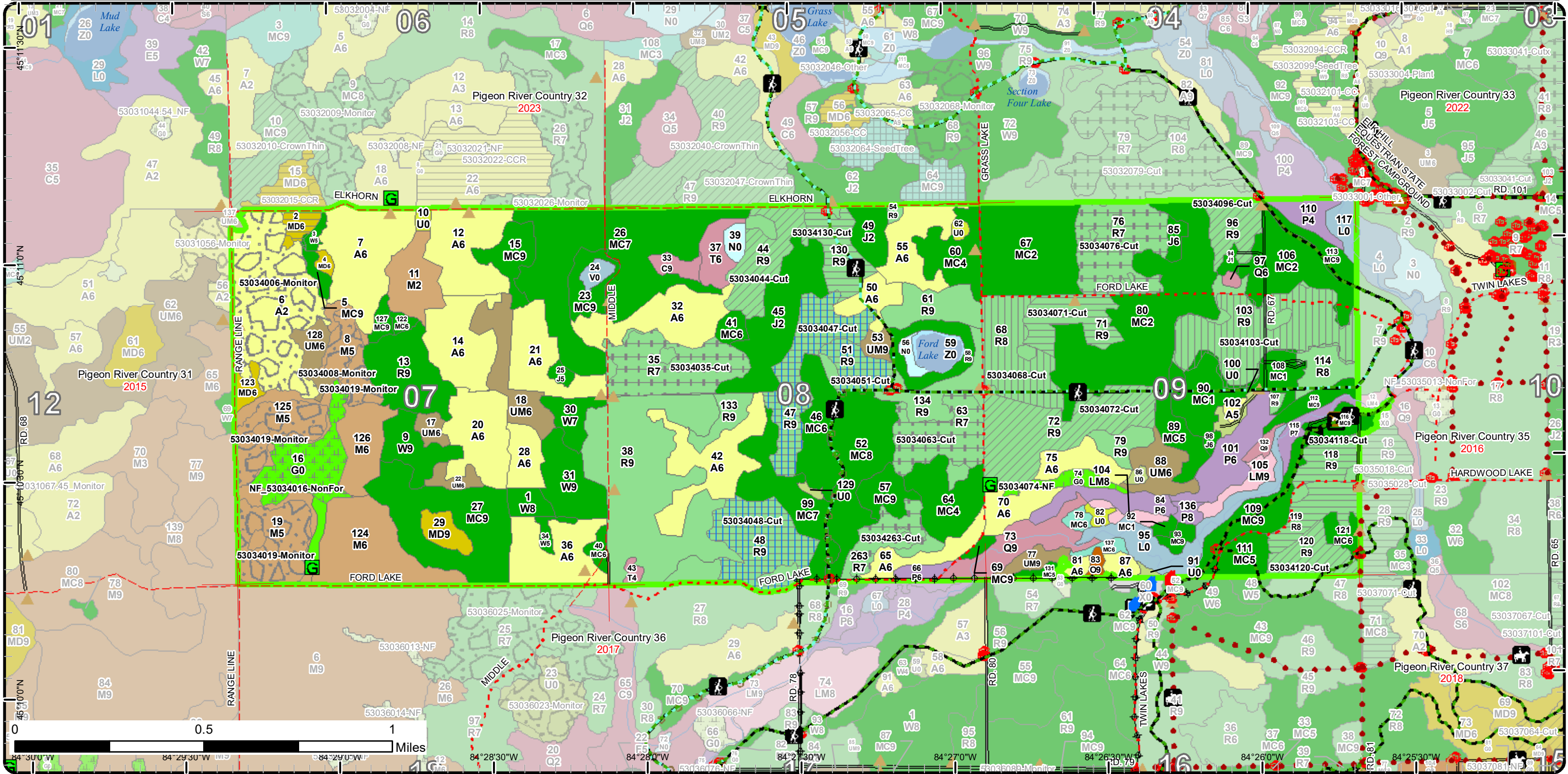
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 34  
 T32N, R01W, Sec: 07, 08, 09  
 County: Otsego  
 Unit: Pigeon River Country  
 Mgmt Area: Pigeon River Country  
 YOE: 2024  
 Acres: 1904.6 GIS Calculated  
 Examiner: Greg Rekowski  
 Map Revised: 6/15/2022  
 Map Phase: Web-Post



- Miris Corners
- Counties
- DNR - Secondary Forest Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Hiking Trails
- Bike Trails
- Horse Trails
- Ski Trails
- Designated Hiking Trails
- Designated Bicycle Trails
- Designated Equestrian Trails
- Designated Ski Trails
- Designated Snowshoe Trails
- Designated Multi-Use Trails
- Cabin
- House
- Toilet
- Berms
- Gate
- Campground
- Parking Lot
- Sign
- Tree (marking)
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Powerline
- Compartment Boundary
- Other Treatment - See Comments
- Clearcut (w/Reserves)
- Harvest, Overstory Removal
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Regeneration Survey
- Shelter Wood (w/Reserves)
- Opening Maintenance
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 211 - Cropland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



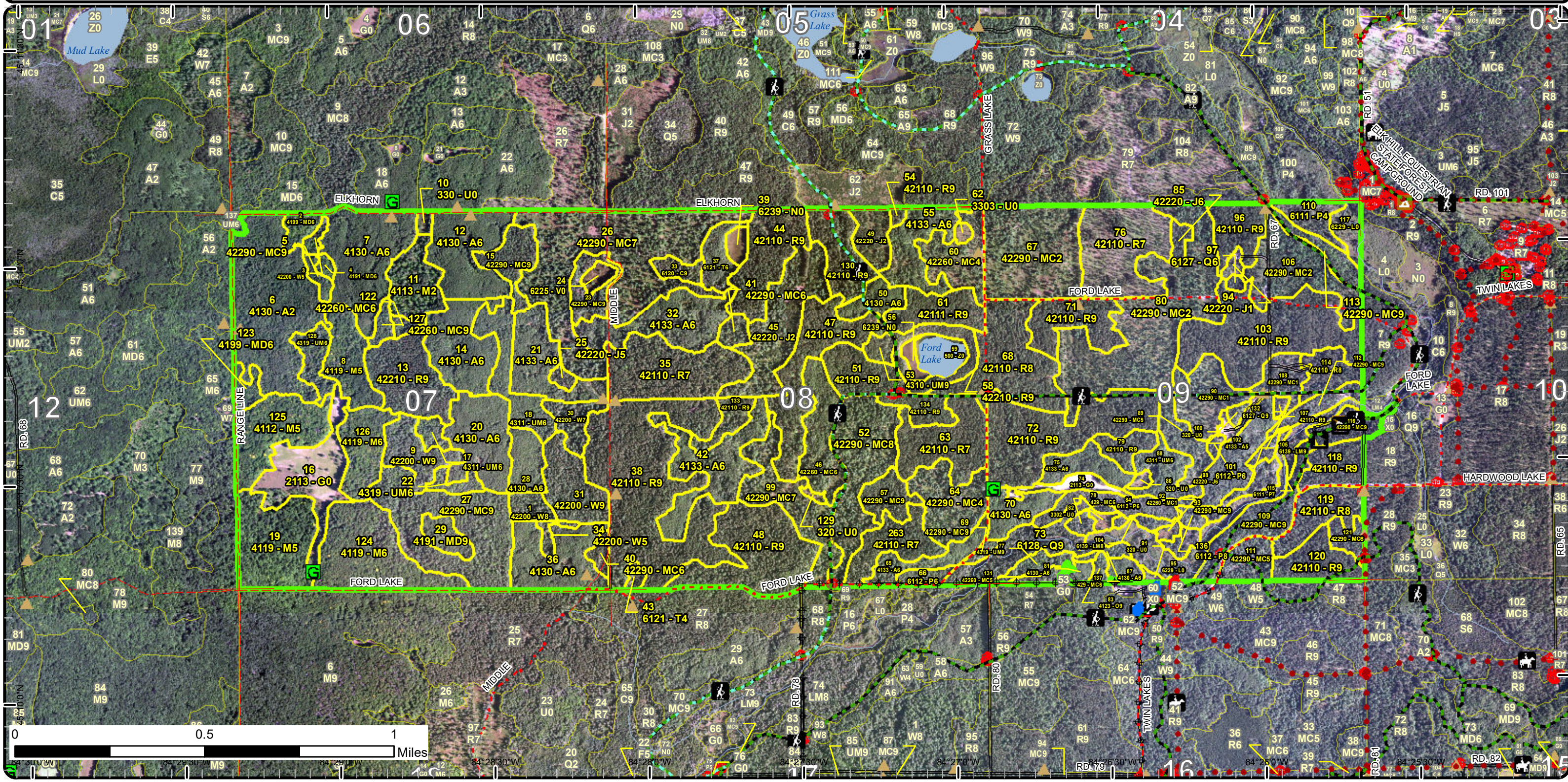
0 0.5 1 Miles

# Stand Boundary Map

Compartment: 34  
 T32N, R01W, Sec: 07, 08, 09  
 County: Otsego  
 Unit: Pigeon River Country  
 Mgmt Area: Pigeon River Country  
 YOE: 2024  
 Acres: 1904.6 GIS Calculated  
 Examiner: Greg Rekowski  
 Map Revised: 6/15/2022  
 Map Phase: Web-Post

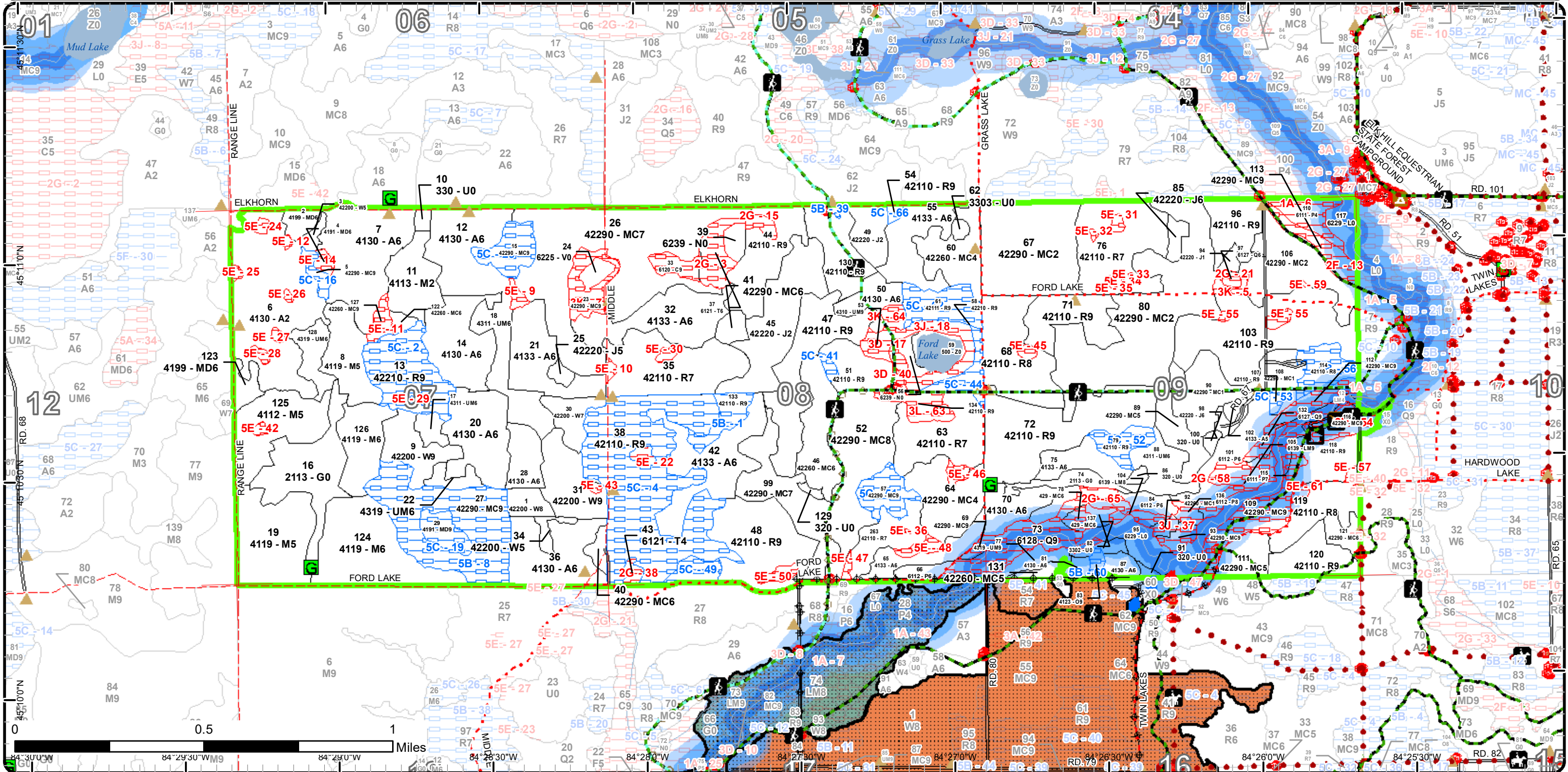


- Miris Corners
- Counties
- DNR - Secondary Forest Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Hiking Trails
- Bike Trails
- Horse Trails
- Ski Trails
- Designated Hiking Trails
- Designated Bicycle Trails
- Designated Equestrian Trails
- Designated Ski Trails
- Designated Snowshoe Trails
- Designated Multi-Use Trails
- Cabin
- House
- Toilet
- Berms
- Gate
- Campground
- Parking Lot
- Sign
- Tree (marking)
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Powerline
- Compartment Boundary
- Stand Boundaries
- 613 - Lowland Mixed Forest
- 211 - Cropland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest



# Special Conservation Areas

Compartment: 34  
 T32N, R01W, Sec: 07, 08, 09  
 County: Otsego  
 Unit: Pigeon River Country  
 Mgmt Area: Pigeon River Country  
 YOE: 2024  
 Acres: 1904.6 GIS Calculated  
 Examiner: Greg Rekowski  
 Map Revised: 6/15/2022  
 Map Phase: Web-Post



- |   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>— Miris Corners</li> <li>--- Counties</li> <li>— DNR - Secondary Forest Road</li> <li>-.-.- County - Gravel Road</li> <li>-.-.- County - Dirt Road (Seasonal)</li> <li>🚶 Hiking Trails</li> <li>🚲 Bike Trails</li> <li>🐎 Horse Trails</li> <li>🏂 Ski Trails</li> <li>— Designated Hiking Trails</li> <li>-.-.- Designated Bicycle Trails</li> <li>••• Designated Equestrian Trails</li> <li>— Designated Ski Trails</li> </ul> | <ul style="list-style-type: none"> <li>🏠 Cabin</li> <li>🚻 Toilet</li> <li>🏠 House</li> <li>🚪 Gate</li> <li>🏕 Campground</li> <li>🅑 Parking Lot</li> <li>🚧 Sign</li> <li>🌲 Tree (marking)</li> <li>— Lake/Pond</li> </ul> | <ul style="list-style-type: none"> <li>🌊 Perennial River</li> <li>🌊 Lakes and Rivers</li> <li>⚡ Powerline</li> <li>📏 Compartment Boundary</li> <li>📏 Available w/ Constraints</li> <li>5B: Maintain for regeneration purposes</li> <li>5C: Delay treatment for age/size class diversity or exceptional site quality</li> <li>🚫 Unavailable</li> <li>1A: Federal/State/Local Law</li> <li>2F: Too steep</li> <li>2G: Too wet (sensitive soils, does not include access issues)</li> <li>3D: Recreational / Scenic values</li> </ul> | <ul style="list-style-type: none"> <li>3J: Water quality / BMPs (stream, river, or lake)</li> <li>3K: Rare or unique landforms</li> <li>3L: Other wildlife concerns</li> <li>5E: Long-Term Retention</li> <li>📏 Stand Boundaries</li> <li>🗑 SCA Removal</li> <li>🌿 Natural Rivers Vegetative Buffer</li> <li>🌿 Natural Rivers Zoning District</li> <li>🌊 Cold Water Streams</li> <li>🌊 Cold Water Lakes</li> <li>🌊 High Priority Trout Stream Buffer</li> <li>🌊 Vernal Pool</li> <li>🏠 Other Habitat Area</li> </ul> |
|---|--|--|--|

Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	56	0	0	223	53	0	0	0	0	0	0	0	0	0	0	0	0	332
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Cropland	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Jack Pine	0	0	0	42	2	3	1	0	0	0	0	0	0	0	0	0	0	0	48
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Aspen/Balsam Poplar	0	0	0	0	4	27	6	11	0	0	0	0	0	0	0	0	0	0	47
Lowland Conifers	0	0	0	0	1	0	0	0	21	0	0	0	0	0	0	0	0	0	22
Lowland Mixed Forest	0	0	0	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	9
Lowland Shrub	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Marsh	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Mixed Upland Deciduous	0	0	0	0	0	0	9	0	0	0	8	0	0	0	0	0	0	0	16
Natural Mixed Pines	0	0	0	177	53	11	2	5	3	76	176	0	0	0	0	0	0	0	502
Northern Hardwood	0	0	0	0	0	16	0	0	0	16	107	0	0	0	0	0	0	0	139
Oak	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Red Pine	0	0	0	0	0	0	0	0	33	275	252	23	0	0	0	0	0	0	581
Tamarack	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
Upland Conifers	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4
Upland Mixed Forest	0	0	0	0	20	17	8	0	5	3	0	0	0	0	0	0	0	0	53
Upland Shrub	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	5	0	0	0	0	0	43	0	0	0	0	0	0	0	48
<b>Total</b>	<b>88</b>	<b>56</b>	<b>0</b>	<b>219</b>	<b>310</b>	<b>127</b>	<b>31</b>	<b>22</b>	<b>41</b>	<b>393</b>	<b>586</b>	<b>23</b>	<b>10</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1905</b>



## Report 2 – Treatment Summary

### Acres of Harvest

Commercial Harvest - 391  
Harvests with Site Condition - 0  
Next Step Harvest - 47  
Habitat Cut - 47

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Mixed Upland Deciduous	4	0	0	0	0	0	0	0	0	4
Red Pine	58	0	0	71	74	90	95	0	0	387
<b>Total</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>71</b>	<b>74</b>	<b>90</b>	<b>95</b>	<b>0</b>	<b>0</b>	<b>391</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	391	0	0	0	0	0	112	0	29	532
Next Step	47	119	72	0	0	0	373	0	0	611
<b>Total</b>	<b>439</b>	<b>119</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>485</b>	<b>0</b>	<b>29</b>	<b>1143</b>



S  
t  
a  
n  
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

**Proposed Treatments:**

<b>6</b>	<b>53034006-Monitor</b>	55.5	4130 - Aspen	Sapling Medium	4	Immature	Monitoring	Natural Regen (Intermediate)	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Continue to monitor regeneration success in this stand. Browse is currently having a significant impact on regeneration, especially at the south end of the stand. Prescribe an interplanting treatment if browse continues to eliminate regeneration in the stand.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Aspen that meets regeneration stocking guidelines with any additional mix of species being acceptable.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
<b>44</b>	<b>53034044-Cut</b>	20.6	42110 - Planted Red Pine	Sawtimber Well	98	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Thin to 110 square feet. Focus on removing suppressed poletimber and smaller sawtimber. Retain all large diameter natural red and white pine (20"+DBH). Do not cut any red oak. Stay a 1/2 to 1 chain away from the wetland edge to the west. Exclude the wet drainage area and buffer it by at least a 1/2 chain (already excluded in site conditions layer). Exclude the small foundation which is on the southwest side of the interior drainage area. If found, protect all stick nests with the appropriate buffer.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
<b>47</b>	<b>53034047-Cut</b>	29.4	42110 - Planted Red Pine	Sawtimber Well	85	81-110	Harvest	Seed Tree with Retention	42290 - Natural Mixed Pine	Even-Aged	No
<p><u>Prescription</u> Seed-tree leaving 10-20 square feet of the largest and best quality red and white pine. Do not cut oak (oak BAs should not be included in the 10-20 BA residual pine target). Leave all white pine over 20" DBH. If present, leave relict red pine over 20" DBH. Exclude a few small retention pockets in areas of dense pine along the west edge.</p> <p><u>Specs:</u></p> <p>Work with the TMS to monitor cone production each year for the red pine in the stand and only initiate the harvest when it is determined that there is a good seed crop. Limit harvesting and skidding to the late summer and early fall months (August-October sale contract) of that same year to maximize seed dispersal. Require chipping of tops with a grapple skidder. Require a tracked processor for felling operations and work with the operator to encourage as much ground scarification as possible with the processor.</p> <p><u>Next Step</u> Monitoring, Natural Regen (Intermediate)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Fully-stocked stand of red and white pine regeneration. Any additional mix of species is acceptable in the regeneration. If regeneration fails, initiate next steps to trench and plant the site to red pine.</p> <p><u>Other Comment:</u> Add oak wilt specs. Add trail specs. Add 2" spec to get all regeneration knocked down.</p> <p>Access should be via the closed road that intersects the stand along the west side.</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											





S  
t  
a  
n  
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

48	53034048-Cut	30.0	42110 - Planted Red Pine	Sawtimber Well	96	81-110	Harvest	Seed Tree with Retention	42260 - Natural Pine, Mixed Deciduous	Two-Aged	No
----	--------------	------	--------------------------	----------------	----	--------	---------	--------------------------	---------------------------------------	----------	----

Prescription Specs: Seed-tree leaving 10-20 square feet of the largest and best quality red and white pine. Do not cut oak (oak BAs should not be included in the 10-20 BA residual pine target). Leave all white pine over 20" DBH. If present, leave relict red pine over 20" DBH. An area of retention has already been excluded around the ridgeline and old borrow pit. Add additional small retention pockets around areas of good advanced pine regeneration.

Work with the TMS to monitor cone production each year for the red pine in the stand and only initiate the harvest when it is determined that there is a good seed crop. Limit harvesting and skidding to the late summer and early fall months (August-October sale contract) of that same year to maximize seed dispersal and ground scarification. Require chipping of tops with a grapple skidder. Require a tracked processor for felling operations and work with the operator to encourage as much ground scarification as possible with the processor.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Fully-stocked stand dominated by red and white pine with any additional mix of species being acceptable. If regeneration does not respond well then harvest the remaining seed trees and initiate next steps of trenching and then planting red pine.

Other Comment: The Shingle Mill Pathway is nearby to the east so add trail specs.

Add 2" spec to get all regeneration knocked down.

Site Condition

Proposed Start Date: 10/1 /2023

51	53034051-Cut	11.2	42110 - Planted Red Pine	Sawtimber Well	85	111-140	Harvest	Seed Tree	42290 - Natural Mixed Pine	Two-Aged	No
----	--------------	------	--------------------------	----------------	----	---------	---------	-----------	----------------------------	----------	----

Prescription Specs: Seed-tree leaving 10-20 square feet of the largest and best quality red and white pine. Do not cut oak (oak BAs should not be included in the 10-20 BA residual pine target). Leave all white pine over 20" DBH. If present, leave relict red pine over 20" DBH. Exclude the area east of the Shingle Mill Pathway at the east end of the stand, and the area of pure oak along the west edge (both already excluded in the treatments layer).

Work with the TMS to monitor cone production each year for the red pine in the stand and only initiate the harvest when it is determined that there is a good seed crop. Limit harvesting and skidding to the late summer and early fall months (August-October sale contract) of that same year to maximize seed dispersal. Require chipping of tops with a grapple skidder. Require a tracked processor for felling operations and work with the operator to encourage as much ground scarification as possible with the processor.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Fully-stocked stand of red and white pine regeneration. Any additional mix of species is acceptable in the regeneration. If regeneration fails, initiate next steps to trench and plant the site to red pine.

Other Comment: Add oak wilt specs. Add trail specs.

Cut together with adjacent stand 47. Access to this harvest should be from the closed road to the west which splits near the west side of stand 47.

Site Condition

Proposed Start Date: 10/1 /2023



S  
t  
a  
n  
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

68	53034068-Cut	26.7	42110 - Planted Red Pine	Sawtimber Medium	85	111-140	Harvest	Shelterwood with Retention	42260 - Natural Pine, Mixed Deciduous	Even-Aged	No
----	--------------	------	--------------------------	------------------	----	---------	---------	----------------------------	---------------------------------------	-----------	----

Prescription Leave 30 square feet of red oak, red pine, and white pine. Focus on leaving the best quality, large diameter trees. In the south half of the stand, oak and pine tend to be mixed together in small, dense clumps. Utilize small retention pockets to retain some of these clumps or mark to leave several trees in these areas. Residual BAs will obviously be higher in these areas. One retention pocket has already been excluded (see site conditions layer). A few small areas of good red pine regeneration could be excluded at the far northwest corner of the stand.

Specs:

Work with the TMS to monitor cone production each year for the red pine in the stand and only initiate the harvest when it is determined that there is a good seed crop. Limit harvesting and skidding to the late summer and early fall months (August-October sale contract) of that same year to maximize seed dispersal. Require chipping of tops with a grapple skidder. Require a tracked processor for felling operations

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Fully-stocked stand of red and white pine regeneration that meets stocking guidelines. Oak regeneration is desired as well but likely not realistic due to the current browse levels.

Other Comment: Add oak wilt spec, no exceptions. Add trail spec. Add 2" spec to get all regeneration knocked down.

Manage together with stand 71.

Site Condition

Proposed Start Date: 10/1 /2023

71	53034071-Cut	17.6	42110 - Planted Red Pine	Sawtimber Well	85	141-170	Harvest	Clearcut	42290 - Natural Mixed Pine	Two-Aged	No
----	--------------	------	--------------------------	----------------	----	---------	---------	----------	----------------------------	----------	----

Prescription Clearcut all species except do not cut oak. Leave all white pine over 20" DBH. If present, leave relict red pine over 20" DBH. No retention recommended unless a stick nest is found.

Specs:

Work with the TMS to monitor cone production each year for the red pine in the stand and only initiate the harvest when it is determined that there is a good seed crop. Limit harvesting and skidding to the late summer and early fall months (August-October sale contract) of that same year to maximize seed dispersal. Require chipping of tops with a grapple skidder. Require a tracked processor for felling operations and work with the operator to encourage as much ground scarification as possible with the processor.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Fully-stocked stand of red and white pine regeneration. Any additional mix of species is acceptable in the regeneration. If regeneration fails, initiate next steps to trench and plant the site to red pine.

Other Comment: Add oak wilt spec, no exceptions. Add 2" spec to get all regeneration knocked down.

Compare regeneration success in clearcut treatments versus seed-tree/shelterwood treatments throughout this Compartment.

Site Condition

Proposed Start Date: 10/1 /2023

72	53034072-Cut	43.0	42110 - Planted Red Pine	Sawtimber Well	85	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Uneven-Aged	No
----	--------------	------	--------------------------	----------------	----	---------	---------	----------------	-------------------------	-------------	----

Prescription Thin areas of higher BA down to 100-110 square feet and focus on removing suppressed red pine poletimber and smaller sawtimber trees. Do not mark in areas of lower BA and those areas with pockets of heavy regeneration. However, where possible, expand existing areas of regeneration by marking trees along the edges of old canopy gaps. Do not mark trees over 20 inches DBH. Do not cut any oak. Add specs to protect the advanced pine regen as much as possible. Watch out for stick nests and add appropriate buffer if found.

Next Step

Treatments:

Acceptable Regen:

Other Comment: Expect the treatment boundary to change, possibly significantly, in the east half of the stand. There are pockets of heavy regeneration that could be excluded from the treatment boundary, especially along the north/northeast line.

Site Condition

Proposed Start Date: 10/1 /2023



Standard

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

74	53034074-NF	5.7	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland	No
----	-------------	-----	---------------------	------------	--	-------------	--------------	---------------------------------	---------------------------	----

Prescription Maintain the non-forested condition of this stand either through burning, herbicide, or mechanical means.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

96	53034096-Cut	12.8	42110 - Planted Red Pine	Sawtimber Well	101	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
----	--------------	------	--------------------------	----------------	-----	---------	---------	----------------	-------------------------	-----------	----

Prescription Thin to 110-120 square feet. Focus on removing suppressed poletimber and smaller sawtimber. Retain all large diameter natural red pine (20"+DBH). Do not cut any red oak or white pine. Protect white pine regen as much as possible, particularly in the middle parts of the stand.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Add trail spec.

Comment:

Future management of this stand should be on a longer rotation with a goal of promoting big trees.

Site Condition

Proposed Start Date: 10/1 /2023

118	53034118-Cut	10.4	42110 - Planted Red Pine	Sawtimber Well	95	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	No
-----	--------------	------	--------------------------	----------------	----	--------	---------	-------------------------	-------------------------	-----------	----

Prescription Clearcut, trench, and replant. Reserve all oak, and any relict red and white pine over 20 inches DBH. Protect red oak and birch saplings if possible. Desired area of retention pocket already excluded and in site conditions layer. Winter only cut to avoid conflicts with recreational users.

Specs:

Next Step

SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable

Fully-stocked stand of planted red pine. Expect some volunteer white pine and red maple to be part of the mix.

Regen:

Other

Require chipping, low stumps, 2" spec.

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

119	53034119-Cut	14.0	42110 - Planted Red Pine	Sawtimber Medium	95	51-80	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	No
-----	--------------	------	--------------------------	------------------	----	-------	---------	-------------------------	-------------------------	-----------	----

Prescription Clearcut, trench, and replant. Reserve all oak, and any white pine over 20 inches DBH. Protect the handful of red and white oak saplings and poletimber if possible. Desired retention area has already been excluded and is in the site conditions layer. If present, add additional small retention pockets around areas of good red and white pine advanced regeneration.

Specs:

Next Step

SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable

Fully-stocked stand of planted red pine. Expect a component of volunteer white and jack pine as well.

Regen:

Other

Add horse trail specs. Add low stumps, chipping, and 2" specs.

Comment:

Site Condition

Proposed Start Date: 10/1 /2023



Standard

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

<b>120 53034120-Cut</b>	13.7	42110 - Planted Red Pine	Sawtimber Well	95	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
-------------------------	------	--------------------------	----------------	----	---------	---------	----------------	-------------------------	-----------	----

Prescription Crown thin to 110-120 square feet. Focus on removing suppressed red pine poletimber. Retain all white pine, oak, and birch. Retain all natural origin red pine over 18" DBH. Remove red maple and jack pine as necessary for operations but retain some trees for diversity purposes.

Next Step  
Treatments:

Acceptable  
Regen:

Other Add trail specs for the Towerman's Watch Pathway.  
Comment:

Site Condition

Proposed Start Date: 10/1 /2023

<b>130 53034130-Cut</b>	16.0	42110 - Planted Red Pine	Sawtimber Well	97	111-140	Harvest	Clearcut	42290 - Natural Mixed Pine	Two-Aged	No
-------------------------	------	--------------------------	----------------	----	---------	---------	----------	----------------------------	----------	----

Prescription Clearcut all trees except for oak. Exclude the area of good regen at the north end (already excluded and in the site condition layer).  
Specs:

Work with the TMS to monitor cone production each year for the red pine in the stand and only initiate the harvest when it is determined that there is a good seed crop. Limit harvesting and skidding to the late summer and early fall months (August-October sale contract) of that same year to maximize seed dispersal. Require chipping of tops with a grapple skidder. Require a tracked processor for felling operations and work with the operator to encourage as much ground scarification as possible with the processor.

Next Step Monitoring, Natural Regen (Intermediate)  
Treatments:

Acceptable Regeneration meeting stocking guidelines for either white pine, red pine, or jack pine, or a combination of all 3 (>600 TPA).  
Regen:

Other Reroute the Shingle Mill Pathway to stand 49 to the east.  
Comment:

Add 2" spec to get all regeneration knocked down.

Compare regeneration success between clearcut and seed tree treatments throughout the Compartment.

Site Condition

Proposed Start Date: 10/1 /2023

**Approved Treatments:**

<b>2 53034002-CCR</b>	4.2	4199 - Other Mixed Upland Deciduous	Poletimber Well	55	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	No
-----------------------	-----	-------------------------------------	-----------------	----	--------	---------	-------------------------	-------------------------------	-----------	----

Prescription Clearcut w/Retention

Specs:  
- Out-of-year of entry harvest. Set-up with Stand 15, 53032 during 2023 year-of-entry.  
- Boundary excluded retention identified in southwest. Captures an area heavy to white pine.  
- Leave incidental red oak. Leave red/white pine 18" and greater.  
- Include drumming log spec

Next Step Monitoring, Natural Regen (Re-Inventory)  
Treatments:

Acceptable Moderate or better stocking of aspen with components of soft/hard maple, birch, pine and fir.  
Regen:

Other  
Comment:

Site Condition

Proposed Start Date: 10/1 /2022



S  
t  
a  
n  
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
<b>8 53034008-Monitor</b>	7.8	4119 - Mixed Northern Hardwoods	Poletimber Medium	89	51-80	Monitoring	Natural Regen (Intermediate)	4119 - Mixed Northern Hardwoods	Uneven-Aged	No
<p><u>Prescription</u> Natural regen survey in canopy gaps.  <u>Specs:</u>  <u>Next Step</u>  <u>Treatments:</u>  <u>Acceptable</u> Northern hardwood species not dominated by beech or ironwood.  <u>Regen:</u>  <u>Other</u> Percent to Treat = 100%  <u>Comment:</u>  <u>Site Condition</u>  <u>Proposed Start Date:</u> 10/1 /2023</p>										
<b>19 53034019-Monitor</b>	48.3	4119 - Mixed Northern Hardwoods	Poletimber Medium	97	51-80	Monitoring	Natural Regen (Intermediate)	4119 - Mixed Northern Hardwoods	Uneven-Aged	No
<p><u>Prescription</u> Natural regen survey  <u>Specs:</u>  <u>Next Step</u>  <u>Treatments:</u>  <u>Acceptable</u> Northern hardwoods not dominated by beech and ironwood.  <u>Regen:</u>  <u>Other</u> Percent to Treat = 100%  <u>Comment:</u>  <u>Site Condition</u>  <u>Proposed Start Date:</u> 10/1 /2023</p>										
<b>35 53034035-Cut</b>	29.4	42110 - Planted Red Pine	Sawtimber Poor	84	1-50	Harvest	Overstory Removal	4221 - Natural Red Pine	Even-Aged	No
<p><u>Prescription</u> Remove all overstory red pine from within the sale area. Leave all white pine and oak. Roundwood harvest only during the winter when there is at least 1 foot of snow on the ground. The reasoning for this is to protect the abundant red pine seedlings that are present throughout the sale area.  <u>Specs:</u>  <u>Next Step</u> Monitoring, Natural Regen (Intermediate)  <u>Treatments:</u>  <u>Acceptable</u> Natural red pine.  <u>Regen:</u>  <u>Other</u> Refresh red lines and retention boundaries.  <u>Comment:</u> Do a regen survey one year after harvest to assess seedling survival following the harvest. If seedlings numbers have been reduced below acceptable stocking levels, then initiate a next step of handplanting red pine in the areas that need it.  <u>Site Condition</u>  <u>Proposed Start Date:</u> 5 /14/2021</p>										



S  
t  
a  
n  
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

<b>63</b>	<b>53034063-Cut</b>	22.7	42110 - Planted Red Pine	Sawtimber Poor	86	1-50	Harvest	Overstory Removal	4221 - Natural Red Pine	Even-Aged	No
-----------	---------------------	------	--------------------------	----------------	----	------	---------	-------------------	-------------------------	-----------	----

Prescription Remove all overstory red pine from within the sale area. Leave all white pine and oak. Roundwood harvest only during the winter when there is at least 1 foot of snow on the ground. The reasoning for this is to protect the abundant red pine seedlings that are present throughout the sale area. Add stringent damage specs to protect all regeneration, both new seedlings and advanced regeneration.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Natural red pine.

Regen:

Other If needed, refresh red lines and retention boundaries.

Comment:

Do a regen survey one year after harvest to assess seedling survival following the harvest. If seedlings numbers have been reduced below acceptable stocking levels, then initiate a next step of handplanting red pine in the areas that need it.

Site Condition

Proposed Start Date: 8 /5 /2021

<b>76</b>	<b>53034076-Cut</b>	30.4	42110 - Planted Red Pine	Sawtimber Poor	78	1-50	Harvest	Overstory Removal	4221 - Natural Red Pine	Even-Aged	No
-----------	---------------------	------	--------------------------	----------------	----	------	---------	-------------------	-------------------------	-----------	----

Prescription Remove all overstory red pine from within the sale area. Leave all white pine and oak. Roundwood harvest only during the winter when there is at least 1 foot of snow on the ground. The reasoning for this is to protect the abundant red pine seedlings that are present throughout the sale area. Add stringent damage specs to protect all regeneration, both new seedlings and advanced regeneration.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Natural red pine.

Regen:

Other Refresh red lines and retention boundaries.

Comment:

Do a regen survey one year after harvest to assess seedling survival following the harvest. If seedlings numbers have been reduced below acceptable stocking levels, then initiate a next step of handplanting red pine in the areas that need it.

Site Condition

Proposed Start Date: 5 /14/2021

<b>103</b>	<b>53034103-Cut</b>	47.3	42110 - Planted Red Pine	Sawtimber Well	94	81-110	Harvest	Shelterwood with Retention	4211 - Planted Red Pine	Even-Aged	No
------------	---------------------	------	--------------------------	----------------	----	--------	---------	----------------------------	-------------------------	-----------	----

Prescription Mark to leave 40 square feet of the best quality red pine. Leave any incidental oak and all white pine over 18" DBH. Recommended retention areas have already been excluded and are in the site conditions layer. If clumps of large diameter, relict red pine are found, utilize retention to protect these trees.

Next Step SitePrep, Other - Specify; Harvest, Clearcut with Retention; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Fully-stocked stand of planted red pine.

Regen:

Other Require low stumps and chipping of tops. Add 2" spec to get all regeneration knocked down.

Comment:

Site Condition

Proposed Start Date: 10/22/2021



S  
t  
a  
n  
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
<b>263 53034263-Cut</b>	12.0	42110 - Planted Red Pine	Sawtimber Poor	86	1-50	Harvest	Overstory Removal	4221 - Natural Red Pine	Even-Aged	No
<p><u>Prescription</u> Remove all overstory red pine from within the sale area. Leave all white pine and oak. In this stand, mark to leave a few of the old relic red pine that were intended to be left indefinitely. Some of these occur in clumps. Roundwood harvest only during the winter when there is at least 1 foot of snow on the ground. The reasoning for this is to protect the abundant red pine seedlings that are present throughout the sale area. Add stringent damage specs to protect all regeneration, both new seedlings and advanced regeneration.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Intermediate)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Natural red pine.</p> <p><u>Other Comment:</u> If needed, refresh red lines and retention boundaries.</p> <p>Do a regen survey one year after harvest to assess seedling survival following the harvest. If seedlings numbers have been reduced below acceptable stocking levels, then initiate a next step of handplanting red pine in the areas that need it.</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 5 /14/2021</p>										
<b>16 NF_53034016-NonFor</b>	23.6	2113 - Forage Crops Nonstocked				Unspec ified	NonForestMgt	Other - Specify	3105 - Mixed Upland Herbaceous	No
<p><u>Prescription</u> Maintain the non-forested condition of this stand either through burning, herbicide, or mechanical means.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 11/2 /2021</p>										

**Total Treatment Acreage Proposed: 532.3**

Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available		Dominant Site Conditions											
		With Condition				5B	5C	1A	2F	2G	3D	3J	3K	3L	5E		
332	328	0		3	Aspen					0							3
3	3	0		0	Bog												
4	0	0		4	Cedar					4							
33	33	0		0	Cropland												
48	48	0		0	Jack Pine												
5	5	0		0	Low-Density Trees												
47	24	0		23	Lowland Aspen/Balsam Poplar			8	0	7		8					
22	0	0		22	Lowland Conifers					1		21					
9	0	0		9	Lowland Mixed Forest							9					
27	27	0		0	Lowland Shrub			0	0								
6	6	0		0	Marsh												
17	8	6		2	Mixed Upland Deciduous		6										2
501	378	64		59	Natural Mixed Pines	43	21	0	7	0	8	31	8				5
139	138	0		1	Northern Hardwood												1
2	0	2		0	Oak	2											
553	359	151		43	Red Pine	17	134			2	1	11	4	7			18
10	0	0		10	Tamarack					10							
5	2	0		2	Upland Conifers							2					
53	49	0		3	Upland Mixed Forest						3						
6	6	0		0	Upland Shrub												
8	8	0		0	Water												
48	48	0		0	White Pine												0
1,876	1,471	223		182	Total Forested Acres	62	162	8	7	24	12	82	13	7			29
	78%	12%		10%	Relative Percent												

\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5B: Maintain for regeneration purposes	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



## Report 4 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

2	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	24	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
3	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	12	3J: Water quality / BMPs (stream, river, or lake)	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified
<b>Comments:</b> Very wet stands with standing water in many places.							
4	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	77	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Manage this stand on a longer rotation with big tree management as a goal. See stand comments. Thin next entry.							
5	<b>Unavailable</b>	<b>3K: Rare or unique landforms</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Steep slopes, buffer for adjacent pothole bog.							
6	<b>Unavailable</b>	<b>1A: Federal/State/Local Law</b>	8	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> A large portion of this stand lies within the Pigeon River influence zone. A steep slope separates this lowland stand from upland stands and would make harvesting impractical.							
7	<b>Unavailable</b>	<b>3K: Rare or unique landforms</b>	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Bog buffer							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

8	Available	5B: Maintain for regeneration purposes	43	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Allow the second age class to mature before treating. Manage using uneven-aged techniques.							
9	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> L.T.R for the proposed harvest in this stand. Captures an area heavy to white pine.							
13	Unavailable	2F: Too steep	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
14	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

15	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
17	Unavailable	3D: Recreational / Scenic values	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand sits on a knob overlooking Ford Lake. No management recommended.							
18	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	2F: Too steep	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Ring of natural pine that borders Ford Lake, some areas are on steep slopes.							
19	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
21	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Forested sinkhole that is wet with steep slopes around the sides.							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

**Compartment: 34**

Greg Rekowski : Examiner

**Year of Entry: 2024**

22	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
23	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
24	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
25	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
26	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
27	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
28	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
29	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

30	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
31	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
32	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
33	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
34	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
35	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
36	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
37	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	72	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
This site condition covers several upland and lowland stands that border the Pigeon River and will not be managed. None of these stand have been managed in the past due to their proximity to the Pigeon River. Some of the stands are very wet lowlands, others lie on steep slopes.							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

38	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
39	Available	5B: Maintain for regeneration purposes	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Regen pocket to exclude from the harvest of stand 130.							
40	Unavailable	3D: Recreational / Scenic values	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Trail influence and very close to Ford Lake.							
41	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
42	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
43	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Goshawk nest buffer							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

44	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Manage on a longer rotation due to proximity to Ford Lake. Treat when BAs are high enough to warrant a thinning. Favor leaving large diameter trees.							
45	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
46	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
47	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
48	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
49	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
50	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

51	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Manage with adjacent pine stands when they are ready to harvest.							
52	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
53	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
54	Unavailable	3D: Recreational / Scenic values	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Pigeon River State Forest Campground							
55	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
56	Available	5B: Maintain for regeneration purposes	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

57	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
58	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
59	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
60	Available	5B: Maintain for regeneration purposes	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
61	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
62	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
63	Unavailable	3L: Other wildlife concerns	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
Two stick nests in this stand, close to the lake as well.							

**Report 4 – Site Conditions**

Pigeon River Country Mgt. Unit

Compartment: 34

Greg Rekowski : Examiner

Year of Entry: 2024

64	Unavailable	<b>3K: Rare or unique landforms</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Small, wet sinkhole with steep slopes around the sides.							
65	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
66	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



**Report 5 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS**

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
<b>Pigeon River Corridor SCA</b>	Spring Wetlands Riparian Area	Spring Seep	<b>SCA</b>	425
<b>Comments</b> Examiner Approved 9/12/2013				



**Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area  
 HCVA = High Conservation Value Area  
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
1	42200 - Natural White Pine	Sawtimber Medium	5.1	92	51-80	N/A	This stand had a species removal in 1995 in the sale Ford Lake Pine Block (#53-015-94), bought by Georgia Pacific. Everything was cut except for red pine, white pine, and oak. As a result of that harvest, the residual is scattered irregularly throughout the stand, often in clumps. The residual white pine is a variety of sizes. Regeneration came back well throughout the stand and is dense in areas. The aspen component is mostly at the northwest side of the stand. Heavy browse has kept a lot of the red maple saplings below 6 feet tall. Average ba/acre from 4 plots = 78 square feet. Trace of sawlog-sized sugar maple and red maple.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		63	Log/Pole/XLog	13	92	Bigtooth Aspen		Low	>20 feet	Sapling	
Red Pine		30	Log/XLog	14		Red Pine		Trace	Variable	Sapling	
Red Oak		4	Log/XLog	15		Red Maple		Medium	Variable	Sapling	
Bigtooth Aspen		3	Pole/Sapling	5		Beech		Low	Variable	Sapling	
						White Pine		High	Variable	Sapling	
						White Pine		Low	>20 feet	Pole	
						Bigtooth Aspen		Low	>20 feet	Pole	
2	4199 - Other Mixed Upland Deciduous	Poletimber Well	4.5	55	81-110	N/A	-Two-aged stand with quite a bit of diversity. Other species that were present but rare included; red pine, balsam fir, paper birch, and red oak. -Pockets of mostly pine along the NE and SW corners of the stand and along the stand's east edge. -Prescribed for a harvest with stand 15 in Comp 32 in the 2023 YOE.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		6	Log/Pole	12	77	Ironwood		Low	Variable	Sapling	
Bigtooth Aspen		38	Pole/Log	9	55	White Pine		Low	Variable	Sapling	
Sugar Maple		17	Pole/Sapling	7		Red Maple		Low	10 - 20 feet	Sapling	
Red Maple		37	Pole/Sapling	7							
Beech		2	Pole	8							
3	42200 - Natural White Pine	Poletimber Medium	2.1	36	51-80	N/A	This stand was clearcut in 1986 at the same time as adjacent stand 7 to the east, but regeneration here came back mostly to white pine and red maple. The middle of the stand is very open and basically non-forested, the remainder of the stand has a few nice pockets of white pine. Average ba/acre from 3 plots = 77 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		67	Pole/Sap/Log	7	36	White Pine		Low	5 - 10 feet	Sapling	
Red Pine		3	Pole	8		Black Cherry		Low	Variable	Tall Shrub	
Balsam Fir		1	Pole	6							
Red Maple		24	Pole/Sapling	5							
Bigtooth Aspen		5	Pole	7							
4	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	1.6	95	111-140	N/A	Stand of small diameter hardwoods, and good quality oak and pine which both display the best growth out of all the species present. Some but not all of the beech has BBD. Average ba/acre from 3 plots = 123 square feet. Leave unmanaged due to its small size. It serves well as a retention stand.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Beech		9	Pole/Log	8		White Pine		Medium	Variable	Sapling	
Paper Birch		2	Pole/Log	9		Beech		Low	Variable	Sapling	
Bigtooth Aspen		7	Log/Pole	10		Red Maple		Low	>20 feet	Sapling	
Red Pine		6	Log	13		Sugar Maple		Trace	>20 feet	Sapling	
Sugar Maple		3	Pole	8							
White Pine		15	Log/Pole/XLog	12							
Red Maple		41	Pole	8	95						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
5	42290 - Natural Mixed Pine	Sawtimber Well	2.8	92	141-170	N/A	Red pine is mostly in the north half of the stand, while white pine is dominant in the south half. High quality white pine with some large diameter trees present. The aspen is small at the north end but becomes larger (8-11" DBH) the further south you go. Average ba/acre from 4 plots = 150 square feet. Do not manage due to the small acreage. This stand serves well as a retention stand.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		30	Log/XLog	14		Sugar Maple		Trace	>20 feet	Sapling	
Red Maple		4	Pole	6		Red Oak		Trace	>20 feet	Sapling	
Red Oak		2	Log/XLog	16		Bigtooth Aspen		Trace	>20 feet	Sapling	
White Pine		45	Log/XLog/Pole	14	92	Red Maple		High	>20 feet	Sapling	
Bigtooth Aspen		19	Pole/Log	8							
6	4130 - Aspen	Sapling Medium	55.5	4	Immature	N/A	This stand was cut in the summer of 2017 as part of Rangeline Aspen, #53-013-14-01, bought by Precision, cut by a roundwood crew. All oak and pine were left. All 4 size classes of oak are present in this stand, including a large percentage of oak saplings and poletimber in the southern 2/3rds of the stand. Some damage did occur but the producers did a pretty good job of protecting the majority of it during harvest operations. Retention pockets in the south half were also placed around areas heavy to younger oak.  Aspen sprouted back well in most areas but is being hammered by browse, particularly the east edge and the southeast 1/4 of the stand, which has essentially been converted to a non-forested condition except for some patches of beech. In general, quaking aspen is more numerous in the north half while the south half is mostly bigtooth aspen. Red maple stump sprouts have been hit hard by browse and only a few look like they will make it past the browse level. Beech has sprouted back in areas but it too is being browsed. It's unclear how much of the aspen will survive. Check the regen again in 3 years and possibly prescribe interplanting (white pine, spruce?) in areas that have been converted to a non-forested condition. Hopefully some pine will seed in over the years.				
Canopy Species		% Cover	Size Class	DBH	Age						
Beech		3	Sapling	1							
Red Pine		1	Log/Pole	12							
Red Maple		3	Sapling	1							
Red Oak		15	Pole/Log/Sap	8							
Quaking Aspen		30	Sapling	1							
Bigtooth Aspen		44	Sapling	1	4						
White Pine		4	Log/Pole/XLog	12							
7	4130 - Aspen	Poletimber Well	33.4	35	81-110	N/A	This stand was clearcut in 1987 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. Aspen regenerated well and is dominant throughout the entire stand. There are a few scattered pockets that are heavier to pine. A small amount of oak regenerated, most are in the 8-12" diameter range. Aspen diameters vary throughout, some areas are just approaching merchantability while others average in the 6-8" diameter range. Average ba/acre from 9 plots = 100 square feet. In some areas elk are stripping the bark off of red maple saplings, causing a lot of damage. Mostly flat terrain except for some slopes at the northwest side. This stand will likely be ready for a harvest in 10 years. Manage with stand 18 to the north in Compartment 32 as they are functionally the same stand.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		10	Pole/Sap/Log	7		Red Maple		Medium	>20 feet	Sapling	
Red Pine		2	Pole	7		Sugar Maple		Trace	>20 feet	Sapling	
Red Oak		2	Pole/Log	8		Black Cherry		Trace	5 - 10 feet	Tall Shrub	
Red Maple		8	Pole/Sapling	5		White Pine		Low	Variable	Sapling	
Bigtooth Aspen		78	Pole/Sapling	6	35						
8	4119 - Mixed Northern Hardwoods	Poletimber Medium	16.2	89	51-80	N/A	2021 Update - Stand thinned in the winter of 2020-21 in the sale Tanager Hardwoods (#53-014-14-01), bought by Jeff Brasseur, cut by Roland Rieger. Mostly good job on the sale, a few high stumps were left, residual damage not too bad. All beech was cut out of the stand except for a few stems. Some large canopy gaps created along the west side of the stand. Oak is good quality. Other species that were present but rare included hemlock, basswood, paper birch, and yellow birch. Massive white pine stump found in this stand. The remnants of it measured 47 inches in diameter.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Oak		23	Log/XLog	16		Beech		Medium	Variable	Sapling	
Bigtooth Aspen		5	Log/XLog	14		White Pine		Low	Variable	Sapling	
White Pine		7	Log	14							
Sugar Maple		26	Pole/Log	9							
Red Maple		37	Pole/Log	8	89						
Beech		2	Log/Pole	10							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																	
9	42200 - Natural White Pine	Sawtimber Well	13.2	92	111-140	N/A	High quality white pine stand. A variety of diameters are present including some legacy trees. Similar to stand 27 to the south however this stand did not have a species removal and thus has retained some species diversity in the overstory. Some very large aspen are scattered throughout, serving well as wildlife trees. Trace of sugar maple. Average ba/acre from 7 plots = 140 square feet. One of the only stands in the Compartment with no past harvest history. Leave alone for this entry and consider treating with stand 27 to the south next entry, using uneven-aged management techniques.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Paper Birch</td><td>1</td><td>Pole/Log</td><td>9</td><td></td></tr> <tr><td>Beech</td><td>1</td><td>Pole</td><td>6</td><td></td></tr> <tr><td>Quaking Aspen</td><td>7</td><td>Log/XLog/Pole</td><td>14</td><td></td></tr> <tr><td>Red Pine</td><td>13</td><td>Log/Pole/XLog</td><td>13</td><td></td></tr> <tr><td>Red Oak</td><td>2</td><td>Log/XLog</td><td>16</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>5</td><td>Log/XLog</td><td>13</td><td></td></tr> <tr><td>White Pine</td><td>60</td><td>Log/XLog/Pole</td><td>14</td><td>92</td></tr> <tr><td>Red Maple</td><td>11</td><td>Pole/Log</td><td>8</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Paper Birch	1	Pole/Log	9		Beech	1	Pole	6		Quaking Aspen	7	Log/XLog/Pole	14		Red Pine	13	Log/Pole/XLog	13		Red Oak	2	Log/XLog	16		Bigtooth Aspen	5	Log/XLog	13		White Pine	60	Log/XLog/Pole	14	92	Red Maple	11	Pole/Log	8		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Beech</td><td>High</td><td>5 - 10 feet</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Ironwood</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Maple</td><td>Low</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>Striped Maple</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Beech	High	5 - 10 feet	Sapling	White Pine	Low	Variable	Sapling	Ironwood	Low	Variable	Sapling	Red Maple	Low	>20 feet	Sapling	Striped Maple	Trace	Variable
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Paper Birch	1	Pole/Log	9																																																																					
Beech	1	Pole	6																																																																					
Quaking Aspen	7	Log/XLog/Pole	14																																																																					
Red Pine	13	Log/Pole/XLog	13																																																																					
Red Oak	2	Log/XLog	16																																																																					
Bigtooth Aspen	5	Log/XLog	13																																																																					
White Pine	60	Log/XLog/Pole	14	92																																																																				
Red Maple	11	Pole/Log	8																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Beech	High	5 - 10 feet	Sapling																																																																					
White Pine	Low	Variable	Sapling																																																																					
Ironwood	Low	Variable	Sapling																																																																					
Red Maple	Low	>20 feet	Sapling																																																																					
Striped Maple	Trace	Variable	Sapling																																																																					
10	330 - Low-Density Trees	Nonstocked	1.6		Unspecified	No	This was formerly a mixed aspen/pine stand that was clearcut in 2007 when stand 11 was also cut, and it looks like it was also used as a landing for that harvest. It did not regenerate well other than some scattered pine saplings. One massive red oak in the middle of the stand.																																																																	
<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Pine</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Pine</td><td>Trace</td><td>&gt;20 feet</td><td>Log</td></tr> <tr><td>Jack Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Maple</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Oak</td><td>Trace</td><td>&gt;20 feet</td><td>Log</td></tr> <tr><td>Bigtooth Aspen</td><td>Low</td><td>&gt;20 feet</td><td>Pole</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Pine		Medium	Variable	Sapling	White Pine	Medium	Variable	Sapling	Red Pine	Trace	>20 feet	Log	Jack Pine	Low	Variable	Sapling	Red Maple	Low	Variable	Sapling	Red Oak	Trace	>20 feet	Log	Bigtooth Aspen	Low	>20 feet	Pole																																						
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Red Pine	Medium	Variable	Sapling																																																																					
White Pine	Medium	Variable	Sapling																																																																					
Red Pine	Trace	>20 feet	Log																																																																					
Jack Pine	Low	Variable	Sapling																																																																					
Red Maple	Low	Variable	Sapling																																																																					
Red Oak	Trace	>20 feet	Log																																																																					
Bigtooth Aspen	Low	>20 feet	Pole																																																																					
11	4113 - R.Maple, Conifer	Sapling Medium	15.5	45	51-80	N/A	This was formerly a fully-stocked natural red pine stand that had a species removal harvest in 1977 where everything was cut except red pine, white pine, and oak. Then in 2007 the majority of the red and white pine overstory was removed in the sale Yellow Feathered Pine (#53-018-04), bought by Bisballe. A difficult stand to type out as there are several different age classes. The red maple regeneration that originated after the species removal in 1977 is the most dominant (ranges from 3-6" DBH) and occurs in clumps throughout the stand. Old skid trails from the recent overstory removal are trying to fill in with red maple but they are being heavily browsed, most are below 6 feet tall. Younger white pine saplings and poletimber are present but can't be represented in MiFI due to the multiple size class restrictions, I'd estimate white pine saplings around 5%. A small clump of aspen poletimber is present in the middle of the stand and then there is another small clump of sawtimber-sized trees near the north end. The supercanopy of red and white pine averages around 25 square feet per acre. Elk have damaged the boles of nearly all red maple over 3-4 inches in diameter by stripping the bark off of the first couple of feet. The trees appear to be surviving but will likely have significant amounts of heart rot in the future.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Pine</td><td>14</td><td>Log/XLog</td><td>16</td><td>93</td></tr> <tr><td>Beech</td><td>4</td><td>Pole/Sapling</td><td>5</td><td></td></tr> <tr><td>Quaking Aspen</td><td>8</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>Red Maple</td><td>56</td><td>Sapling/Pole</td><td>4</td><td>45</td></tr> <tr><td>Bigtooth Aspen</td><td>3</td><td>Pole</td><td>8</td><td></td></tr> <tr><td>Red Oak</td><td>2</td><td>Pole/Sapling</td><td>6</td><td></td></tr> <tr><td>White Pine</td><td>12</td><td>Log/Pole/XLog</td><td>14</td><td></td></tr> <tr><td>Red Pine</td><td>1</td><td>Sapling</td><td>1</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Pine	14	Log/XLog	16	93	Beech	4	Pole/Sapling	5		Quaking Aspen	8	Pole/Log	8		Red Maple	56	Sapling/Pole	4	45	Bigtooth Aspen	3	Pole	8		Red Oak	2	Pole/Sapling	6		White Pine	12	Log/Pole/XLog	14		Red Pine	1	Sapling	1																										
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Red Pine	14	Log/XLog	16	93																																																																				
Beech	4	Pole/Sapling	5																																																																					
Quaking Aspen	8	Pole/Log	8																																																																					
Red Maple	56	Sapling/Pole	4	45																																																																				
Bigtooth Aspen	3	Pole	8																																																																					
Red Oak	2	Pole/Sapling	6																																																																					
White Pine	12	Log/Pole/XLog	14																																																																					
Red Pine	1	Sapling	1																																																																					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>12</b>	4130 - Aspen	Poletimber Well	26.2	36	81-110	N/A	This stand was clearcut in 1986 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. The stand regenerated well to almost pure aspen in the overstory. Hardly any tree species diversity in the stand. Diameters on the aspen tend to vary, being larger in the north half of the stand (6-9"), while areas of the south half are just reaching merchantability (4-6"). Trace of jack pine and red oak in the overstory. Average ba/acre from 8 plots = 84 square feet. This stand may be ready for a harvest next entry but do not cut on its own. Manage as part of a larger clump with stands 21, 28, 14, and 20 which may help reduce browse damage.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		87	Pole/Sapling	6	36	White Pine		Low	Variable	Sapling	
White Pine		4	Pole	6		Black Cherry		Low	Variable	Tall Shrub	
Red Pine		1	Pole	7		Red Pine		Trace	Variable	Sapling	
Red Maple		8	Pole/Sapling	5		Red Maple		Medium	Variable	Sapling	
<b>13</b>	42210 - Natural Red Pine	Sawtimber Well	24.1	85	111-140	N/A	Very high quality pine stand. Legacy size white pine are scattered throughout and in a clump along the southeast side. A few very old red pine are also close to legacy tree size. No planting records exist for this stand so I'll assume it's natural. This stand initially had a species removal harvest in 1977, cutting everything except red pine, white pine, and oak. In the fall of 2014 it was thinned as part of the Mighty Fine Pine sale (#53-003-14-01), bought by Biewer and cut by a Timerblin roundwood crew (Bill Axford). Minimal damage to the residual. A retention pocket was used in the south half of the stand to protect a stick nest. Trace of bigtooth aspen, paper birch, and red oak in the overstory. Average ba/acre from 20 plots = 120 square feet. Natural red pine stands are very rare on the landscape so maintain this stand as is, and manage for big trees and old-growth like conditions. The well-developed red maple understory will have to be dealt with at some point if we want to keep pine on this site.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		73	Log/XLog	15	85	Beech		Medium	Variable	Sapling	
White Pine		24	Log/Pole/XLog	14		Striped Maple		Trace	Variable	Sapling	
Red Maple		3	Pole	6		White Pine		Low	Variable	Sapling	
						Red Maple		High	>20 feet	Sapling	
<b>14</b>	4130 - Aspen	Poletimber Well	23.1	45	111-140	N/A	High quality aspen stand that was last clearcut in 1977 by Champion. Site quality appears to be much better in this stand as compared to the adjacent aspen stands. Diameter growth on the bigtooth aspen is good with most stems in the 7-10" diameter range. The quaking aspen is smaller and lower quality. White pine is scattered throughout infrequently, although there is a patch of nearly pure white pine in the middle of the stand that may have been an old landing. The hardwood influence, including some nice stems of younger sugar maple and red oak, is most prevalent in the middle and western parts of the stand. A trace amount of sugar maple and red maple sawlog-sized trees is present (1 or 2 of each). Red pine and black cherry poletimber is present but rare. Average ba/acre from 8 plots = 123 square feet. Rolling terrain with some steep, but operable, slopes. This stand could be cut now but on its own it would not likely result in successful regeneration due to the browse pressure in the area. Wait ten years and manage as part of a larger patch with stands 12, 20, 21, and 28, which will hopefully help reduce the browse damage.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		12	Pole/Sapling	6		Red Maple		Medium	>20 feet	Sapling	
White Pine		4	Pole/Log	8		Sugar Maple		Trace	>20 feet	Sapling	
Bigtooth Aspen		67	Pole	8	45	White Pine		Low	Variable	Sapling	
Quaking Aspen		15	Pole	6		Red Oak		Trace	>20 feet	Sapling	
Red Oak		1	Pole	8		Beech		Trace	Variable	Sapling	
Sugar Maple		1	Pole/Sapling	5		Witch Hazel		Trace	5 - 10 feet	Tall Shrub	





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

<b>15</b>	42290 - Natural Mixed Pine	Sawtimber Well	11.0	95	111-140	N/A	Nice pine stand that still has some deciduous species diversity mixed in. The red pine was planted but the stand does not resemble a plantation in most areas. There is also a small amount of relict natural red pine in the stand. The stand was thinned in 2015 as part of the Mighty Fine Pine timber sale (#53-003-14-01), bought by Biewer, cut by a Timberline roundwood crew (Bill Axford). Very nice job on the sale with minimal damage to the residual. The south finger of this stand was not included in the thinning and was left as retention. Average residual ba/acre = 116 square feet. Retain this stand on a longer rotation. Look at thinning again next entry.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		10	Log/Pole	11		White Pine		Medium	Variable	Sapling	
Paper Birch		1	Pole	8							
White Pine		22	Log/Pole	12							
Jack Pine		1	Pole	9							
Red Pine		58	Log/Pole/XLog	13	95						
Red Maple		6	Pole	7							
Red Oak		2	Log/XLog	14							

<b>16</b>	2113 - Forage Crops	Nonstocked	26.9		Unspecified	Managed Opening	-The majority of this stand is a managed wildlife opening, with the exception of the long narrow portion to the south.
Sub-Canopy Species		Density	Avg. Height	Size			
White Pine		Trace		Sapling			
Black Cherry		Low		Pole			
Beech		Trace		Pole			
White Pine		Trace		Seeding			
Sugar Maple		Trace		Pole			
Mixed Grasses		Full		Non-Wood			
Red Pine		Trace		Seeding			
Beech		Trace		Seeding			
White Pine		Trace		Pole			
Black Cherry		Trace		Sapling			
Ironwood		Trace		Pole			
Bracken Fern		Trace		Non-Wood			

<b>17</b>	4311 - Pine, Aspen Mix	Poletimber Well	3.6	36	51-80	N/A	This stand was clearcut in 1986 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. Unlike stand 20 to the east, which was cut at the same time, this stand came back to a mix of species with not as much aspen. Past inventory notes indicate elk browse was high in this stand. Most of the red maple is barely merchantable, there are also a lot of red maple saplings in the understory of the southeast part of the stand. Average ba/acre from 4 plots 73 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Quaking Aspen		6	Pole	6		Red Maple		Medium	Variable	Sapling	
Red Pine		6	Pole	7		White Pine		Low	Variable	Sapling	
White Pine		39	Pole/Sap/Log	6	36	Beech		Trace	Variable	Sapling	
Red Maple		29	Pole/Sapling	5		Witch Hazel		Trace	5 - 10 feet	Tall Shrub	
Bigtooth Aspen		20	Pole	7							

<b>18</b>	4311 - Pine, Aspen Mix	Poletimber Well	17.0	45	111-140	N/A	This stand was clearcut in 1977 by Champion (#53-027-74) and regenerated well to a mix of pine and aspen. Some areas are heavier to aspen, others heavier to white pine. Decent quality white pine. Trace of jack pine. Average ba/acre from 10 plots = 117 square feet. Most of the stand sits on a gradual slope that grades down to the east. Let grown and manage for white pine.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		46	Pole/Log	8	45	Witch Hazel		Low	5 - 10 feet	Tall Shrub	
Quaking Aspen		4	Pole	6		White Pine		Low	Variable	Sapling	
Red Pine		5	Pole/Log	8		Red Maple		Medium	>20 feet	Sapling	
Bigtooth Aspen		40	Pole	7							
Red Maple		5	Pole/Sapling	5							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																				
19	4119 - Mixed Northern Hardwoods	Poletimber Medium	30.5	97	51-80	N/A	2021 Update - Stand thinned in the winter of 2020-21 in the sale Tanager Hardwoods (#53-014-14-01), bought by Jeff Brasseur, cut by Roland Rieger. Mostly good job on the sale, a few high stumps were left, residual damage not too bad. All beech was cut out of the stand except for a few stems that displayed resistance along with some good wildlife trees. Some large canopy gaps were made, mostly in the southern part of the stand near the road. Areas of lower stocking were excluded from the harvest, mostly along the edges, but also an area in the interior.																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Sugar Maple</td><td>57</td><td>Pole/Log</td><td>9</td><td>97</td></tr> <tr><td>Basswood</td><td>18</td><td>Log</td><td>12</td><td></td></tr> <tr><td>Beech</td><td>2</td><td>Pole/Log</td><td>9</td><td></td></tr> <tr><td>Red Oak</td><td>1</td><td>Log/XLog</td><td>14</td><td>100</td></tr> <tr><td>Bigtooth Aspen</td><td>4</td><td>Log/XLog</td><td>15</td><td></td></tr> <tr><td>Ironwood</td><td>2</td><td>Pole</td><td>6</td><td></td></tr> <tr><td>Red Maple</td><td>16</td><td>Pole/Log</td><td>9</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Sugar Maple	57	Pole/Log	9	97	Basswood	18	Log	12		Beech	2	Pole/Log	9		Red Oak	1	Log/XLog	14	100	Bigtooth Aspen	4	Log/XLog	15		Ironwood	2	Pole	6		Red Maple	16	Pole/Log	9		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Ironwood</td><td>Medium</td><td>5 - 10 feet</td><td>Sapling</td></tr> <tr><td>Beech</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Ironwood	Medium	5 - 10 feet	Sapling	Beech	Medium	Variable	Sapling			
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Sugar Maple	57	Pole/Log	9	97																																																							
Basswood	18	Log	12																																																								
Beech	2	Pole/Log	9																																																								
Red Oak	1	Log/XLog	14	100																																																							
Bigtooth Aspen	4	Log/XLog	15																																																								
Ironwood	2	Pole	6																																																								
Red Maple	16	Pole/Log	9																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Ironwood	Medium	5 - 10 feet	Sapling																																																								
Beech	Medium	Variable	Sapling																																																								
20	4130 - Aspen	Poletimber Well	23.2	35	81-110	N/A	This stand was clearcut in 1987 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. It regenerated well and is almost pure aspen. No overstory species diversity other than a few white pine and red maple. There are also trace amounts of red oak and red pine. Other species that were present but rare included; red oak and red pine. Small opening at the south end of the stand which looks like the old landing. Average ba/acre from 9 plots = 91 square feet. Mostly flat in the south half but the north half slopes down to the east. This stand needs at least another ten years of growth. Do not cut on its own. Manage as part of a larger clump with stands 21, 28, 14, and 12 which may help reduce browse damage.																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>3</td><td>Pole/Sapling</td><td>5</td><td></td></tr> <tr><td>White Pine</td><td>4</td><td>Pole/Sapling</td><td>5</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>93</td><td>Pole/Sapling</td><td>6</td><td>35</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	3	Pole/Sapling	5		White Pine	4	Pole/Sapling	5		Bigtooth Aspen	93	Pole/Sapling	6	35	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Beech</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Witch Hazel</td><td>Trace</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Red Maple</td><td>Medium</td><td>&gt;20 feet</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Beech	Trace	Variable	Sapling	White Pine	Medium	Variable	Sapling	Witch Hazel	Trace	5 - 10 feet	Tall Shrub	Red Maple	Medium	>20 feet	Sapling															
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Red Maple	3	Pole/Sapling	5																																																								
White Pine	4	Pole/Sapling	5																																																								
Bigtooth Aspen	93	Pole/Sapling	6	35																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Beech	Trace	Variable	Sapling																																																								
White Pine	Medium	Variable	Sapling																																																								
Witch Hazel	Trace	5 - 10 feet	Tall Shrub																																																								
Red Maple	Medium	>20 feet	Sapling																																																								
21	4133 - Aspen, Mixed Pine	Poletimber Well	20.8	35	51-80	N/A	This stand was clearcut in 1987 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. It regenerated well to aspen with a good mix of natural pine, however diameters are quite small for its age. It is just reaching merchantability at this time. Average ba/acre from 7 plots = 66 square feet. A small clump of large diameter aspen is in the southwest part of the stand. The stand gradually slopes down to the east. This stand likely won't be ready for a harvest for two more entries but do not cut on its own. Manage as part of a larger clump with stands 20, 28, 14, and 12 which may help reduce browse damage.																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Quaking Aspen</td><td>10</td><td>Pole/Sapling</td><td>5</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>62</td><td>Pole/Sapling</td><td>5</td><td>35</td></tr> <tr><td>Red Pine</td><td>7</td><td>Pole</td><td>7</td><td></td></tr> <tr><td>White Pine</td><td>10</td><td>Pole/Sap/Log</td><td>6</td><td></td></tr> <tr><td>Jack Pine</td><td>9</td><td>Pole</td><td>5</td><td></td></tr> <tr><td>Red Maple</td><td>2</td><td>Pole/Sapling</td><td>5</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Quaking Aspen	10	Pole/Sapling	5		Bigtooth Aspen	62	Pole/Sapling	5	35	Red Pine	7	Pole	7		White Pine	10	Pole/Sap/Log	6		Jack Pine	9	Pole	5		Red Maple	2	Pole/Sapling	5		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Maple</td><td>Low</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Trace</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>White Pine</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Pine	Low	Variable	Sapling	Red Maple	Low	>20 feet	Sapling	Black Cherry	Trace	Variable	Tall Shrub	White Pine	Medium	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Quaking Aspen	10	Pole/Sapling	5																																																								
Bigtooth Aspen	62	Pole/Sapling	5	35																																																							
Red Pine	7	Pole	7																																																								
White Pine	10	Pole/Sap/Log	6																																																								
Jack Pine	9	Pole	5																																																								
Red Maple	2	Pole/Sapling	5																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Red Pine	Low	Variable	Sapling																																																								
Red Maple	Low	>20 feet	Sapling																																																								
Black Cherry	Trace	Variable	Tall Shrub																																																								
White Pine	Medium	Variable	Sapling																																																								
22	4319 - Mixed Upland Forest	Poletimber Well	3.9	36	51-80	N/A	This stand was clearcut in 1986 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. This stand was cut at the same time as adjacent stand 20 but came back to primarily red maple and white pine, with not much aspen. Most red maple stems have signs of past girdling damage from elk. Average ba/acre from 4 plots = 80 square feet. Still a lot of small stems, it will be several entries before this is ready for a harvest again.																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>34</td><td>Pole/Sapling</td><td>5</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>15</td><td>Pole</td><td>7</td><td></td></tr> <tr><td>Quaking Aspen</td><td>3</td><td>Pole/Sapling</td><td>6</td><td></td></tr> <tr><td>Red Pine</td><td>4</td><td>Pole</td><td>8</td><td></td></tr> <tr><td>White Pine</td><td>44</td><td>Pole/Sap/Log</td><td>7</td><td>36</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	34	Pole/Sapling	5		Bigtooth Aspen	15	Pole	7		Quaking Aspen	3	Pole/Sapling	6		Red Pine	4	Pole	8		White Pine	44	Pole/Sap/Log	7	36	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>White Pine</td><td>Low</td><td>5 - 10 feet</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Low	5 - 10 feet	Sapling																	
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Red Maple	34	Pole/Sapling	5																																																								
Bigtooth Aspen	15	Pole	7																																																								
Quaking Aspen	3	Pole/Sapling	6																																																								
Red Pine	4	Pole	8																																																								
White Pine	44	Pole/Sap/Log	7	36																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
White Pine	Low	5 - 10 feet	Sapling																																																								
23	42290 - Natural Mixed Pine	Sawtimber Well	8.5	96	111-140	N/A	Natural pine stand that serves as a buffer around the adjacent leatherleaf bog. There is also a small bog at the far southern end. A variety of diameters are present including some legacy size pine. Average ba/acre from 5 plots = 134 square feet. Transitional ground, becoming wetter as you get closer to the bog. Leatherleaf is present in some areas. Do not manage.																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Pine</td><td>55</td><td>Log/XLog</td><td>15</td><td>96</td></tr> <tr><td>White Pine</td><td>43</td><td>Log/Pole/XLog</td><td>13</td><td></td></tr> <tr><td>Jack Pine</td><td>2</td><td>Pole</td><td>8</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Pine	55	Log/XLog	15	96	White Pine	43	Log/Pole/XLog	13		Jack Pine	2	Pole	8		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Bigtooth Aspen</td><td>Trace</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>Beech</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>White Pine</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	Variable	Sapling	Bigtooth Aspen	Trace	>20 feet	Sapling	Beech	Trace	Variable	Sapling	Black Cherry	Low	Variable	Tall Shrub	White Pine	Medium	Variable	Sapling											
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Red Pine	55	Log/XLog	15	96																																																							
White Pine	43	Log/Pole/XLog	13																																																								
Jack Pine	2	Pole	8																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Red Maple	Low	Variable	Sapling																																																								
Bigtooth Aspen	Trace	>20 feet	Sapling																																																								
Beech	Trace	Variable	Sapling																																																								
Black Cherry	Low	Variable	Tall Shrub																																																								
White Pine	Medium	Variable	Sapling																																																								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

**24**      6225 - Bog      Nonstocked      3.0      Unspecified      No

Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	Trace	>20 feet	Log
Sedges	Low	Unspecified	Non-Wood
Leatherleaf	High	< 5 feet	Tall Shrub
Jack Pine	Trace	< 5 feet	Seeding
White Pine	Trace	>20 feet	Pole
Sphagnum Moss	High	Unspecified	Non-Wood
White Pine	Trace	>20 feet	Log
Jack Pine	Trace	>20 feet	Pole
White Pine	Trace	Variable	Sapling

**25**      42220 - Natural Jack Pine      Poletimber Medium      1.9      35      51-80      N/A

Canopy Species	% Cover	Size Class	DBH	Age
White Pine	5	Pole	6	
Red Pine	8	Pole/Log	8	
Jack Pine	73	Pole/Sapling	7	35
Quaking Aspen	14	Pole	6	

Sub-Canopy Species	Density	Avg. Height	Size
Black Cherry	Trace	Variable	Tall Shrub
White Pine	Low	Variable	Sapling

This stand was clearcut in 1987 along with adjacent stand 21 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. Unlike stand 21, aspen did not come back well here and is instead dominated by jack pine. Not great quality and not well-stocked in all places. Red pine is mostly along the edges. Average ba/acre from 2 plots = 60 square feet.

**26**      42290 - Natural Mixed Pine      Sawtimber Poor      74.7      96      1-50      N/A

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	2	Pole/Sapling	5	
Red Pine	43	Log/XLog	14	
Jack Pine	5	Pole/Sapling	5	
Red Oak	3	Log/XLog	15	
White Pine	47	Log/Pole/XLog	13	96

Sub-Canopy Species	Density	Avg. Height	Size
White Spruce	Trace	Variable	Sapling
Red Maple	Low	>20 feet	Seeding
Red Pine	High	Variable	Sapling
Bigtooth Aspen	Trace	>20 feet	Sapling
Black Cherry	Medium	5 - 10 feet	Tall Shrub
Balsam Fir	Trace	Variable	Sapling
Jack Pine	High	Variable	Sapling
White Pine	High	Variable	Sapling

Multi-aged pine stand due to several harvests in the past 30 years. The first harvest was a species removal in 1996 in the sale Ford Lake Pine Block (#53-015-94, bought by Georgia Pacific) where everything was cut except red pine, white pine, and oak. A subsequent roundwood harvest in 2005 removed a large proportion of the overstory red pine. The initial species removal was a whole-tree harvest and must have created a lot of ground scarification as there is excellent mixed pine regeneration throughout many areas of the stand, although there are still some localized areas lacking regeneration. There is a several acre patch of jack pine that is approaching poletimber size in the middle part of the stand, just west of Middle Trail. This could be typed out as a separate stand next entry. The residual trees are highly variable both in their size and occurrence throughout the stand, with many areas having scattered clumps of trees. BAs for the overstory trees ranged anywhere from 0 to 170 square feet with an average of 48 square feet per acre. A small, wet draw is present near the west end of the adjacent cedar stand (stand #33). Next entry the younger age class should be approaching merchantability and should be featured in the overstory. Heavy deer and elk use throughout the stand.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>27</b>	42290 - Natural Mixed Pine	Sawtimber Well	42.9	92	111-140	N/A	Moderate to high quality stand dominated by natural white pine. Variable density due to a species removal harvest in 1976 (#53-027-74, bought by Champion) where everything except red oak, red pine, and white pine were cut, although some larger red maple were missed. Areas heavy to white pine poletimber can be found west and south of stand 29. Younger aspen is primarily along the eastern edge. Younger red maple can be found scattered throughout. Scattered pockets of dense pine sawtimber where minimal trees were removed can also be found throughout the stand. An older age class of legacy size white pine is present, including some trees over 30" DBH. The multiple size and age classes give the stand an uneven-aged appearance in some places. Trace of basswood and white spruce. Average ba/acre from 14 plots = 132 square feet. Retain as mature forest cover and manage for an uneven-aged white pine/mixed deciduous stand. If the second age class is large enough next entry, then prescribe a selection harvest with scattered canopy gaps. Protect all large diameter trees.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		19	Log/XLog/Pole	13		Ironwood		Low	Variable	Sapling	
Bigtooth Aspen		6	Pole	7	46	White Pine		Medium	Variable	Sapling	
Paper Birch		1	Pole	8		Red Oak		Trace	>20 feet	Sapling	
Sugar Maple		1	Pole/Log	8		Beech		Low	Variable	Sapling	
Quaking Aspen		1	Pole	7		Red Maple		Medium	>20 feet	Sapling	
Red Maple		12	Pole/Log	8		Striped Maple		Trace	Variable	Sapling	
Red Oak		5	Log/XLog	14							
White Pine		55	Log/XLog/Pole	14	92						
<b>28</b>	4130 - Aspen	Poletimber Well	9.3	45	81-110	N/A	This stand was clearcut by Champion in 1977 and regenerated well to aspen. A few patches of white pine are present, mostly along the east and west edges. Trace of red oak. Average ba/acre from 5 plots = 97 square feet. This stand sits on a gradual slope that grades down to the east. Still a lot of small diameters despite its age. Hold ten years but do not cut on its own. Manage as part of a larger clump with stands 21, 20, 14, and 12 which may help reduce browse damage.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		1	Pole/Log	8		White Pine		Low	Variable	Sapling	
Red Maple		8	Pole/Sapling	6		Red Maple		Low	>20 feet	Sapling	
Bigtooth Aspen		71	Pole	7	45						
Quaking Aspen		6	Pole	6							
<b>29</b>	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	6.4	93	81-110	N/A	Mixed species stand with moderate to high quality oak and pine with some large diameter trees . A few legacy size white pine are present. This stand had a species removal harvest in 1976 (#53-027-74, bought by Champion), removing everything except oak, red pine, and white pine, although it looks like several red maple were missed. Average ba/acre from 5 plots = 106 square feet. Rolling terrain. Manage with the surrounding white pine stand, with the high browse pressure in the area even-aged techniques should not be used.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Oak		44	Log/XLog	15	93	White Pine		Medium	Variable	Sapling	
Red Pine		8	Log/XLog	14		Striped Maple		Low	Variable	Sapling	
Bigtooth Aspen		4	Pole	8	46	Ironwood		Low	Variable	Sapling	
Quaking Aspen		2	Pole	7		Red Maple		Medium	>20 feet	Sapling	
White Pine		21	Log/XLog/Pole	15		Beech		Low	Variable	Sapling	
Beech		3	Pole/Log	9							
Red Maple		15	Pole/Log	8							
<b>30</b>	42200 - Natural White Pine	Sawtimber Poor	8.0	92	51-80	N/A	All species except red and white pine were cut out of this stand in 1997 in the sale Ford Lake Pine Block (#53-015-94), bought by Georgia Pacific. This was a whole-tree harvest and resulted in ground scarification which allowed jack pine to regenerate well, mostly in the central part of the stand. The white pine and red pine residual is scattered throughout and includes some very large diameter white pine (30"+ DBH). Average ba/acre from 6 plots = 70 square feet. Allow the understory pine to mature before making a management decision.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		70	Log/XLog/Pole	14	92	White Pine		Medium	Variable	Sapling	
Red Pine		20	Log/XLog	15		Jack Pine		Medium	>20 feet	Sapling	
Jack Pine		10	Pole/Sapling	5	25	Black Cherry		Low	Variable	Tall Shrub	
						Red Pine		Low	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>31</b>	42200 - Natural White Pine	Sawtimber Well	17.2	92	81-110	N/A	Nice white pine stand with a variety of sizes, including some legacy trees that are much older than the listed stand age. The northwest part of the stand has a higher percentage of red pine. Thinned in the fall of 2017 as part of the sale Prehistoric Pine, #53-015-14-01, bought by Precision. A portion of the southwest part of the stand was excluded from the harvest due to lower BAs. Red maple seedlings are abundant in places but being heavily browsed. Average ba/acre from 14 plots = 90 square feet. Dry site with the following understory species; wintergreen, bracken fern, and moss. As you move towards the west, site quality becomes a little better; this is where the red maple begins to increase in the understory. Manage this stand in the future using uneven-aged techniques and reserve large diameter trees. A known goshawk nest is present in the southeast part of the stand, closer to the road, and was protected with a retention pocket.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		64	Log/Pole/XLog	13	92	Red Maple		Low	Variable	Sapling	
Red Pine		36	Log/XLog	14		White Pine		Low	Variable	Sapling	
						Red Maple		Medium	< 5 feet	Seeding	
						Beech		Low	5 - 10 feet	Sapling	
<b>32</b>	4133 - Aspen, Mixed Pine	Poletimber Well	25.3	35	81-110	N/A	This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84), bought by K&R Logging. Aspen regenerated well although there are a few areas where it did not and in those areas mixed pine regeneration is present, including a nice representation of natural red pine. Aspen diameters vary considerably throughout the stand with several areas still being non-merchantable. The best quality and biggest diameters seem to be in the middle part of the stand. A couple of the oak are very large diameter. Trace of balsam fir and white spruce poletimber. Average ba/acre from 9 plots = 90 square feet. The far west end of the stand is lowland. This stand may need another 2 entries before being ready for a final harvest.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		24	Pole/Sapling	6		Black Cherry		Low	5 - 10 feet	Sapling	
Red Pine		6	Pole/Sap/Log	6		White Pine		Low	Variable	Sapling	
White Pine		13	Pole/Log/Sap	7							
Quaking Aspen		48	Pole/Sapling	5	35						
Balsam Poplar		2	Pole/Sapling	6							
Jack Pine		4	Pole/Sapling	5							
Red Maple		1	Pole/Sapling	5							
Red Oak		2	Log/XLog	15							
<b>33</b>	6120 - Lowland Cedar	Sawtimber Well	4.2	134	111-140	N/A	Cedar stand of varying quality. Lots of blowdown in the middle of the stand with this area of the stand being very wet. A few nice patches of cedar along the north edge. The far northeastern part of the stand has most of the red maple. Some nice white spruce, mostly along the perimeter of the stand. Trace of quaking aspen and paper birch in the overstory. Average ba/acre from 4 plots = 135 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Spruce		10	Log/Pole	12		White Spruce		Low	Variable	Sapling	
Northern White Cedar		72	Log/Pole	10	134	Tag Alder		Medium	10 - 20 feet	Tall Shrub	
Balsam Fir		4	Pole	7		Balsam Fir		Medium	Variable	Sapling	
Tamarack		2	Log/Pole	10							
White Pine		3	Log/XLog	16							
Red Maple		9	Log/Pole	10							
<b>34</b>	42200 - Natural White Pine	Poletimber Medium	2.5	35	1-50	N/A	This stand was clearcut in 1987, along with stands 36 and 40, in the sale Section 7-2 Sale (#53-015-84), bought by Champion. It regenerated only moderately well and mostly to mixed pine. In areas of less dense stocking the white pine is short and stubby from past weevil damage. A nice representation of natural red pine is present. Trace of red maple saplings. Average ba/acre from 3 plots = 37 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		64	Pole/Sapling	6	35	White Pine		Low	Variable	Sapling	
Quaking Aspen		5	Pole/Sapling	6		Black Cherry		Low	5 - 10 feet	Tall Shrub	
Red Pine		15	Pole	7		Red Pine		Trace	5 - 10 feet	Sapling	
Bigtooth Aspen		3	Pole	6							
Jack Pine		13	Pole	6	35						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>35</b>	42110 - Planted Red Pine	Sawtimber Poor	32.6	84	1-50	N/A	Stand harvested in fall of 2017 in the sale Ford Lake Red Pine, #53-004-14-01, bought by Precision. Roundwood harvest, decided not to chip this unit to facilitate the follow-up prescribed burn. Average residual ba/acre = 25 square feet. 2021 - Prescribed burn never took place. A regen survey indicated good natural pine regen and the decision was made to remove the overstory red pine due to Diploidia concerns. Chapter 7 variance approved. Regen survey results (avg height in parentheses): red pine 1075 TPA (3"), white pine 367 TPA (6"), red maple 450 TPA (1').				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Oak		6	Log	12		White Pine		Low	Variable	Sapling	
White Pine		11	Log/Pole	11		Red Pine					
Red Pine		83	Log	13	84						
<b>36</b>	4130 - Aspen	Poletimber Well	24.5	35	81-110	N/A	This stand was clearcut in 1987, along with adjacent stands 34 and 40, in the sale Section 7-2 Sale (#53-015-84), bought by Champion. Aspen regenerated well but diameters seem to be small for its age, some areas are barely merchantable. A few scattered clumps heavier to pine are present throughout the stand. Site quality becomes better in the west half of the stand and the red maple understory becomes thick in areas. A small clump of larger aspen (5 trees), and 1 XL red pine and 1 sawlog red maple, are present in the southwest part of the stand. Average ba/acre from 10 plots = 84 square feet. Rolling terrain. This stand needs at least another 10 years of growth before considering management, possibly 20.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Jack Pine		3	Pole	6		Red Pine		Low	Variable	Sapling	
Red Pine		3	Pole	6		White Pine		Medium	Variable	Sapling	
Quaking Aspen		10	Pole/Sapling	6		Black Cherry		Low	5 - 10 feet	Sapling	
White Pine		9	Pole/Sapling	6							
Bigtooth Aspen		74	Pole/Sapling	6	35						
Red Maple		1	Pole/Sapling	5							
<b>37</b>	6121 - Tamarack	Poletimber Well	8.0	113	81-110	N/A	Tamarack dominated stand of varying quality. The south half of the stand has diameters that are barely merchantable in areas. The north half has larger diameters and is where most of the cedar is located. The pine, fir, and maple is mostly along the north/northwest edge of the stand. Very wet stand with a mix of standing water and mossy hummocks. Trace of paper birch and spruce. Average ba/acre from 4 plots = 90 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Northern White Cedar		10	Log/Pole	10		Tag Alder		High	10 - 20 feet	Tall Shrub	
Tamarack		84	Pole/Sap/Log	7	113	Balsam Fir		Low	Variable	Sapling	
Red Maple		2	Pole/Log	8							
White Pine		1	Log	14							
Balsam Fir		3	Pole	5							
<b>38</b>	42110 - Planted Red Pine	Sawtimber Well	78.5	96	81-110	N/A	High quality pine stand. A large component of older natural red pine is present throughout, both individually and in pockets. Legacy size white pine are scattered throughout as well. Stand was thinned in the fall of 2017 as part of the sale Prehistoric Pine, #53-015-14-01, bought by Precision. A stick nest was found and buffered with retention. Areas of lower stocking along some of the edges were excluded. Most of the large natural pine were retained. Trace of paper birch, balsam fir, white spruce, red maple, and aspen in the overstory. Average ba/acre from 56 residual BA plots = 108 square feet. A small bog is present on the west side of the stand near Middle Trail. Rolling terrain. Manage this stand on an older rotation using uneven-aged techniques to promote big trees and old growth-like conditions, similar to what is being done in the Lovejoy Pines SCA closer to the PRC Headquarters. Thin next entry and create a few canopy gaps, retain all large diameter pine (20"+ DBH).				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		10	Log/Pole/XLog	12	118	Beech		Trace	Variable	Sapling	
Red Oak		2	Log/Pole	13		Black Cherry		Trace	Variable	Tall Shrub	
Red Pine		88	Log/XLog/Pole	13	96	Red Pine		Trace	Variable	Sapling	
						Witch Hazel		Trace	5 - 10 feet	Tall Shrub	
						Red Maple		Trace	>20 feet	Sapling	
						Balsam Fir		Trace	Variable	Sapling	
						White Pine		Medium	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
39	6239 - Mixed Emergent Wetland	Nonstocked	3.2		Unspecified	No	This wetland appears to periodically flood and overflow into stand 44 (see imagery).
40	42290 - Natural Mixed Pine	Poletimber Well	3.0	35	51-80	N/A	This stand was clearcut in 1987 in the sale Section 7-2 Sale (#53-015-84), bought by Champion. Unlike adjacent stand 36 to the west which was cut at the same time, aspen did not regenerate well here, instead a mix of pine did. Pine quality is decent but there are still a lot of small diameters. A nice representation of natural origin red pine. Average ba/acre from 4 plots = 73 square feet.
41	42290 - Natural Mixed Pine	Poletimber Well	3.8	35	51-80	N/A	This stand was clearcut, along with stand 32, in 1987 in the sale Ford Lake Aspen (#53-016-84), bought by K&R Logging. This stand regenerated well to mixed pine, including a very impressive amount of natural red pine. Stocking is low in several areas however. A variety of white pine sizes are present. Some of the oak residual is large diameter and pretty good quality, surprising for this site. Average ba/acre from 4 plots = 78 square feet.
42	4133 - Aspen, Mixed Pine	Poletimber Well	26.5	35	81-110	N/A	Moderate quality aspen stand that has just reached merchantability in most places. Mixed pine regeneration is abundant in some areas, including the northwest finger which is nearly pure pine and can probably be split out as a separate stand next entry. This stand was last clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84), bought by K&R Logging. Average ba/acre from 11 plots = 82 square feet. Rolling terrain. This stand will likely need another 2 entries of growth before ready for a harvest.
43	6121 - Tamarack	Poletimber Poor	1.8	114	1-50	N/A	This is a bog-like stand with leatherleaf dominating the more open areas. A significant amount of the red and white pine in the stand is now dead or dying as it looks like the water table in the stand has been raised and is flooding the site. No sign of beaver activity so I'm not sure of the reasoning for the water level increase. A few tamarack have died as well but most appear healthy at this time. Average ba/acre from 2 plots = 40 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

**44** 42110 - Planted Red Pine Sawtimber Well 22.6 98 141-170 N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Pine	79	Log/Pole/XLog	14	98
Red Oak	3	Log/XLog	14	
White Pine	18	Log/Pole/XLog	11	

Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	Trace	Variable	Sapling
Black Cherry	Low	Variable	Tall Shrub
Red Maple	Medium	Variable	Sapling
Bigtooth Aspen	Trace	10 - 20 feet	Sapling
Beech	Trace	Variable	Sapling
Red Pine	Trace	Variable	Sapling

High quality pine stand with a component of large diameter, natural origin red and white pine. Several legacy size white pine. The northern tier of the stand sits on a moderately steep south facing slope and diameters tend to be much smaller in this area. The red pine in this stand is planted but the stand overall does not resemble a plantation. The most recent harvest was a species removal in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific) where everything was cut except for oak, red pine, and white pine. Due to that harvest BAs tend to vary with some pockets of very high BAs, especially the closer you get to the lowlands along the west edge. Average ba/acre from 11 plots = 152 square feet. Terrain is flat except for the aforementioned slopes at the north end. There is a wet area in the northwest part of the stand that appears to be connected to the adjacent wetland (stand 39) and periodically floods (see leaf off imagery). Just south of this flooded area, and closer to the western stand boundary, is what appears to be an old foundation. Old OFS record for a stick nest in the south end of the stand. A popular dispersed camping site is present at the northeast corner adjacent to the road. Manage this stand on a longer rotation and maintain large diameter trees. Using uneven-aged or two-aged approaches to regenerate the stand naturally.

**45** 42220 - Natural Jack Pine Sapling Medium 30.7 25 Immature N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Pine	10	Sapling	3	
Bigtooth Aspen	1	Sapling	3	
Jack Pine	60	Sapling/Pole	3	25
Red Oak	2	Log/XLog	15	
Red Pine	10	Log/XLog	15	98
White Pine	13	Log/Pole/Sap	12	
Quaking Aspen	4	Sapling	3	

Sub-Canopy Species	Density	Avg. Height	Size
Black Cherry	Low	Variable	Tall Shrub

This stand had a species removal harvest in 1997 in the sale Ford Lake Pine Block (#53-015-94), bought by Georgia Pacific. Everything was cut except for red pine, white pine, and oak. The residual averages around 25 square feet per acre but is highly variable and clumpy. Higher residual BAs can be found at the south end and particularly along the west side, adjacent to stands 41 and 44, this area could potentially be typed out as a W7 next entry is desired. Red oak is primarily at the far south end of the stand. A narrow finger of mature red pine is present at the far north end. Jack pine regenerated well in many areas, especially in the central part of the stand closer to the landing, but there are still spots lacking much regeneration. A few areas have a nice representation of red pine regeneration. All size classes of white pine are present. The landing was in the middle part of the stand (see 98DOQ imagery) and is still somewhat open, apparently this was an old Tordon opening. Flat terrain.

**46** 42260 - Natural Pine, Mixed Deciduous Poletimber Well 18.5 35 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	7	Sapling/Pole	4	
Red Pine	49	Pole/Sap/Log	6	35
White Pine	11	Pole/Sap/Log	7	
Quaking Aspen	2	Sapling	3	
Bigtooth Aspen	24	Sapling/Pole	4	
Jack Pine	5	Pole/Sapling	5	
Red Oak	2	Pole/Sapling	6	

Sub-Canopy Species	Density	Avg. Height	Size
Witch Hazel	Low	5 - 10 feet	Tall Shrub
Black Cherry	Low	Variable	Tall Shrub

This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84, K&R Logging) and regenerated very well to natural red pine, with a mix of other species including a few oak. The southern 1/3rd of the stand is the only area that did not regenerate well as there are scattered areas of U with little to no regeneration. The aspen regeneration throughout the stand is mostly smaller than the pine of the same age, which is strange, although I'm guessing browse knocked the aspen back enough to allow the pine to get a head start. Scattered residual red maple, oak, aspen, and red pine are present, mostly in the southern half of the stand. The witch hazel component is mostly at the northern end of the stand. Average ba/acre of the stand from 8 plots = 103 square feet. Most of the stand sits on a slight east-facing slope. The Shingle Mill Pathway travels along the eastern boundary of the stand.





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
47	42110 - Planted Red Pine	Sawtimber Well	29.4	85	81-110	N/A	Planted red pine stand with a component of oak. The most recent harvest in the stand was a species removal in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific), where everything was cut except for oak, red pine, and white pine. As a result, stocking varies significantly, ranging anywhere from 20 to 150 square feet, with a few small pockets of dense red pine that resemble un-thinned plantations. The majority of the stand, however, does not resemble a typical plantation. There are a few small areas of nice natural red pine regeneration where BAs are lower, however these areas are rare throughout the stand. The oak component occurs both individually and in small clumps, with a few XL-sized trees mixed in. The oak is of moderate quality and appears healthy. Average ba/acre of the stand from 10 plots = 106 square feet. Rolling terrain to the north while the south-running finger of the stand lies on a slight north/south ridgeline.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	78	Log/Pole	13	85	White Pine	Medium		Variable	Sapling
Red Oak	12	Log/Pole	13		Red Pine	Low		< 5 feet	Seeding
White Pine	10	Log/Pole	12		Red Pine	Trace		Variable	Sapling
					Red Maple	Low	>20 feet	Sapling	
48	42110 - Planted Red Pine	Sawtimber Well	37.1	96	81-110	N/A	Moderate quality red pine stand with highly variable stocking due to a species removal harvest in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific) where everything was cut except for red pine, white pine, and oak. Regeneration came back well to white pine in many areas. The red oak residual is almost all in the southwest part of the stand, there is a popular camping spot in this area too. In the southeast part of the stand there is a small ridgeline running SW to NE which was not harvested in the species removal and still has some aspen, birch, and red maple. Just west of this ridgeline is an old pit. Unsure what the purpose was as the pit is quite deep. A second age class of older natural red pine is scattered throughout. There are a few white pine legacy trees as well. Trace of paper birch, white spruce, and balsam fir. Average ba/acre from 17 plots = 97 square feet.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	83	Log/XLog/Pole	13	96	Balsam Fir	Trace		Variable	Sapling
Red Maple	1	Pole	7		Beech	Trace		Variable	Sapling
Bigtooth Aspen	1	Pole/Log	9		White Pine	High		Variable	Sapling
Red Oak	4	Log/Pole/XLog	13		Red Pine	Trace		Variable	Sapling
White Pine	11	Log/Pole/XLog	11		Bigtooth Aspen	Low		>20 feet	Sapling
					Red Maple	Medium		>20 feet	Sapling
					Witch Hazel	Trace		5 - 10 feet	Tall Shrub
					Jack Pine	Trace		Variable	Sapling
					Black Cherry	Trace	Variable	Tall Shrub	
49	42220 - Natural Jack Pine	Sapling Medium	8.9	25	Immature	N/A	This stand originated following a species removal harvest in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific), where everything was cut except for oak, red pine, and white pine. The red pine overstory was then removed in 2005 in the sale Intersection Pine (#53-002-04), bought by Hydrolake. Jack pine and red pine regenerated well following the initial harvest in 1997. However, there are some scattered areas lacking regeneration, likely a result of the recent overstory removal. Trace of white pine sawlog-sized trees throughout. Trace of balsam fir and white spruce saplings along the northern edge.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	9	Pole/Sap/Log	5		Red Pine	Low		5 - 10 feet	Sapling
Red Pine	23	Sapling	2		Black Cherry	Trace		Variable	Tall Shrub
Jack Pine	65	Sapling/Pole	4	25					
Red Oak	2	Log/Pole	12						
Bigtooth Aspen	1	Sapling	3						
50	4130 - Aspen	Poletimber Well	8.5	35	81-110	N/A	This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84), bought by K&R Logging, along with adjacent stands 55 and 60 to the north. It came back well to aspen but diameters seem to be a bit smaller as compared to stand 55 to the north. However site quality seems better here as there are trace amounts of sugar maple and ironwood saplings. Perhaps the shading influence from red pine stands to the west stunted the growth a little? There are a few areas with a lot of red pine saplings in the understory, but overtopped by aspen. Other species that were present but rare included red oak and beech. Average ba/acre from 5 plots = 104 square feet.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	7	Pole/Sapling	5		Black Cherry	Low		5 - 10 feet	Tall Shrub
Bigtooth Aspen	74	Pole/Sapling	5	35	White Pine	Low		Variable	Sapling
Red Pine	4	Pole/Sapling	6		Red Pine	Low		Variable	Sapling
Jack Pine	1	Pole	6		Witch Hazel	Trace		5 - 10 feet	Tall Shrub
White Pine	4	Pole/Sapling	6		Red Maple	Medium		>20 feet	Sapling
Quaking Aspen	10	Pole/Sapling	5						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
51	42110 - Planted Red Pine	Sawtimber Well	13.7	85	111-140	N/A	Moderate to high quality red pine stand. Variable stocking due to a species removal harvest in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific), where everything was cut except for red pine, white pine, and oak. As a result this stand does not resemble a standard red pine plantation. Several areas of dense stocking that could be thinned, while there are other areas of much lower stocking. Red oak is mostly in a single pocket on the western edge of the stand. Trace of XL-sized red and white pine. Old fire charred stumps scattered throughout. Average ba/acre from 5 plots = 137 square feet. Rolling terrain. The Shingle Mill Pathway follows the entire southern edge of the stand, and another spur of the trail heads north through the east end of the stand. Due to its proximity to Ford Lake and trail influence, this stand should be managed on a longer rotation.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	80	Log/Pole	13	85	Red Maple	Low		>20 feet	Sapling
Red Oak	8	Log/Pole	13		White Pine	Low		Variable	Sapling
White Pine	12	Log/Pole	11		Bigtooth Aspen	Trace		>20 feet	Sapling
52	42290 - Natural Mixed Pine	Sawtimber Medium	33.2	84	81-110	N/A	Mixed red and white pine overstory of varying stocking and diameters. This is largely a result of a species removal harvest in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific) where everything was cut except for red pine, white pine, and oak. Much of the remaining red pine was then removed in an overstory removal harvest in 2006 (Skull and No Bones Red Pine, #53-016-04, Bisballe), however there still remains quite a bit of red pine, including a few dense clumps. Overall, white pine tends to be dominant in the overstory and includes some areas where poletimber is abundant. Red oak becomes common in the overstory in the north half of the stand. Regeneration came back moderately well after the initial species removal harvest with a few areas of nice mixed pine regen on the more heavily scarified skid trails. Trace of white spruce and balsam fir poletimber at the south end. Average ba/acre from 9 plots = 102 square feet. Gently rolling terrain. The Shingle Mill Pathway borders much of the western side of the stand. Allow the white pine overstory to grow more before considering a harvest.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	38	Log/Pole/XLog	13		White Pine	Medium		Variable	Sapling
White Pine	53	Log/Pole/XLog	10	84	Red Pine	Low		Variable	Sapling
Red Oak	8	Log/XLog	16		Jack Pine	Medium		Variable	Sapling
Red Maple	1	Pole	7		Red Maple	Trace		>20 feet	Sapling
					White Spruce	Trace		Variable	Sapling
					Bigtooth Aspen	Trace		>20 feet	Sapling
					Black Cherry	Low		Variable	Tall Shrub
53	4310 - Pine, Oak Mix	Sawtimber Well	3.3	84	111-140	N/A		Small stand of oak and pine. The west half sits on an elevated knob overlooking Ford Lake, with slopes running down to the east. This stand apparently had a species removal harvest in 1997 along with the adjacent stand to the west (#47), removing everything except red pine, white pine, and oak. The oak ranges from moderate to poor quality. Trace of quaking aspen and bigtooth aspen along the east side. Average ba/acre from 3 plots = 130 square feet.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height		Size
Red Oak	44	Log/Pole	12		White Pine	Low	Variable		Sapling
White Pine	7	Log/Pole	11		Red Maple	Low	>20 feet		Sapling
54	42110 - Planted Red Pine	Sawtimber Well	1.1	85	141-170	N/A	Small stand of nice quality, planted red pine. Only records of a past harvest are a species removal in 1997, where everything was cut except for oak, red pine, and white pine, although they missed about 3 aspen stems along the east edge of the stand. Average ba/acre from 2 plots = 170 square feet. A little bit of jack pine, red pine, and spruce regen at the northern edge of the stand. This stand is very small for management. It could be left as retention for the surrounding landscape.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	1	Log/Pole	10		Jack Pine	Trace		Variable	Sapling
Red Pine	97	Log/Pole	13	85	White Spruce	Trace		10 - 20 feet	Sapling
Bigtooth Aspen	1	Pole/Log	9		Red Pine	Trace		Variable	Sapling
Red Oak	1	Log/Pole	13		White Pine	Low	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
55	4133 - Aspen, Mixed Pine	Poletimber Well	17.4	35	51-80	N/A	This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84), bought by K&R Logging. Regeneration came back well to aspen except for some scattered pockets which filled in with pine, including a nice representation of natural red pine. Size and stocking of aspen increase as you move northward in the stand. Most red maple stems have been badly damaged by elk girdling the stems. Trace of balsam fir, white spruce, and red oak poletimber. Average ba/acre from 6 plots = 78 square feet. Flat terrain.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	11	Pole/Sap/Log	6		White Pine	Low		Variable	Sapling
Bigtooth Aspen	60	Pole/Sapling	6	35	Serviceberry (Juneberry)	Trace		Variable	Tall Shrub
White Pine	4	Pole/Sapling	6		Red Pine	Low		Variable	Sapling
Jack Pine	5	Pole/Sapling	6		Red Maple	Low		>20 feet	Sapling
Quaking Aspen	13	Pole/Sapling	6		Black Cherry	Medium		Variable	Tall Shrub
Red Maple	7	Pole/Sapling	5						
56	6239 - Mixed Emergent Wetland	Nonstocked	2.5		Unspecified	No			
Sub-Canopy Species	Density	Avg. Height	Size						
Sedges	Full		Non-Wood						
Red Pine	Trace		Seeding						
Willow spp.	Trace		Tall Shrub						
Jack Pine	Low		Seeding						
Jack Pine	Trace		Sapling						
57	42290 - Natural Mixed Pine	Sawtimber Well	9.0	85	141-170	N/A	Mixed pine stand of good quality, although diameters on the white pine tend to be small in places. Dense stocking throughout most of the stand. The red pine component is planted while the white pine appears natural. The west/northwest half of the stand is dominated by white pine while red pine becomes more dominant in the other. Legacy white pine are scattered throughout as are a few 20"+ natural red pine. The aspen component is starting to senesce. Trace of jack pine and red maple. Average ba/acre from 6 plots = 155 square feet.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	43	Log/Pole/XLog	13		White Pine	Medium		Variable	Sapling
White Pine	52	Pole/Log/XLog	9	85					
Quaking Aspen	5	Log	11						
58	42210 - Natural Red Pine	Sawtimber Well	10.7	85	141-170	N/A	This stand serves as a buffer around Ford Lake. Most of the stand sits on relatively steep slopes. Do not manage.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	60	Log/Pole	14	85	White Pine	Low	Variable	Sapling	
Jack Pine	14	Pole/Log	8						
Red Oak	3	Log/Pole	11						
Paper Birch	3	Log/Pole	10						
Bigtooth Aspen	7	Pole/Log	8						
White Pine	11	Log/Pole	12						
Red Maple	2	Pole	8						
59	500 - Water	Nonstocked	7.8		Unspecified	No	Ford Lake		
Sub-Canopy Species	Density	Avg. Height	Size						
Sedges	Trace		Non-Wood						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
60	42260 - Natural Pine, Mixed Deciduous	Poletimber Poor	15.6	35	1-50	N/A	This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84), bought by K&R Logging. Regeneration did not come back well and this is now a poorly-stocked stand with a lot of low quality, multi-forked jack pine and white pine. A few small aspen clones are scattered throughout. The quaking aspen appears very unhealthy in some areas, with dying tops and hypoxylon canker. A small amount of younger pine has seeded in which may help fill in the stand over time. Average ba/acre from 6 plots = 43 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		12	Pole/Sap/Log	6		White Pine		Low	Variable	Sapling	
Jack Pine		25	Pole/Sapling	5		Red Pine		Low	< 5 feet	Sapling	
Red Pine		29	Pole/Sap/Log	5	35	Black Cherry		Medium	5 - 10 feet	Tall Shrub	
Red Maple		2	Sapling	3		Jack Pine		Low	< 5 feet	Sapling	
Bigtooth Aspen		20	Pole/Sapling	6							
Quaking Aspen		12	Pole/Sapling	6							
61	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	14.4	85	111-140	N/A	Planted red pine stand with a significant component of oak. It does not have the appearance of a red pine plantation. The last harvest was a species removal in 1997 where everything was cut except for red pine, white pine, and oak. The oak is poor to moderate quality. Suppressed red pine poletimber can be found throughout as this stand hasn't had a typical thinning before. Average ba/acre of the stand from 8 plots = 126 square feet. A small sinkhole with steep slopes around the edges is present at the far western end of the stand. This area was not previously included in the species removal harvest and still retains some aspen, maple, jack pine, and birch. The sinkhole is wet with predominantly cattails growing in it. This stand is in close proximity to Ford Lake so a two-aged or uneven-aged approach should be used for visual purposes.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		60	Log/Pole	12	85	Red Maple		Low	10 - 20 feet	Sapling	
Jack Pine		1	Pole/Log	9		White Pine		Low	Variable	Sapling	
Red Maple		1	Pole	6							
Red Oak		33	Log/Pole	12							
White Pine		3	Log/Pole	10							
Bigtooth Aspen		2	Log/Pole	11							
62	3303 - Mixed Low Density Trees	Nonstocked	1.3		Unspecified	No	This stand was clearcut in 1987 along with adjacent stands 55 and 60 but did not regenerate other than some scrubby pine and a lot of cherry. A lot of the larger cherry stems are dead for some reason, perhaps past browse damage?				
Sub-Canopy Species		Density	Avg. Height	Size							
Jack Pine		Trace	< 5 feet	Seeding							
White Pine		Low	Variable	Sapling							
Wintergreen		Low	< 5 feet	Tall Shrub							
Bracken Fern		Medium	Unspecified	Non-Wood							
Cladonia (Reindeer moss)		Medium	Unspecified	Non-Wood							
Jack Pine		Low	Variable	Sapling							
Jack Pine		Trace	>20 feet	Pole							
Red Pine		Trace	>20 feet	Pole							
Mixed Grasses		High	Unspecified	Non-Wood							
White Pine		Trace	>20 feet	Pole							
Black Cherry		High	Variable	Tall Shrub							
Red Pine		Trace	Variable	Sapling							
63	42110 - Planted Red Pine	Sawtimber Poor	24.5	86	1-50	N/A	Stand was cut in the fall/early winter of 2017 in the sale Ford Lake Red Pine, #53-004-14-01, bought by Precision. Roundwood harvest followed up by chipping of the tops. Quite a bit of ground scarification took place here which will hopefully allow for some natural red pine regeneration. Average residual ba/acre = 21 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age						
Red Oak		2	Log	11							
White Pine		8	Pole/Log	9							
Red Pine		90	Log	13	86						
2021 - Regen survey indicated excellent natural pine regen and the decision was made to remove the overstory red pine due to Diploidia concerns. Chapter 7 variance approved. Regen survey results (avg height in parentheses): red pine 1815 TPA (6"), white pine 223 TPA (6").											



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

<b>64</b>	42290 - Natural Mixed Pine	Poletimber Poor	19.5	25	1-50	N/A	<p>A difficult stand to type due to multiple size classes of both red and white pine. However, white pine saplings and poletimber tend to be dominant throughout. The past harvest history of this stand consists of a species removal in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific) where everything was cut except for red pine, white pine, and oak. The next harvest was in 2005 in the sale Skull and No Bones Red Pine (#53-016-04, Bisballe) where most of the overstory red pine were removed. Scattered red pine seed trees were left, most in the 13-14" DBH range, but there are also scattered poletimber residual trees as well as a few very large diameter red pine (20"+). The white pine residual is not nearly as numerous, although there are a few log-size trees scattered throughout, including a handful of legacy size trees. White pine regenerated moderately well after the first species removal harvest, and there are a few areas with jack and red pine regeneration mixed in. However, it looks like a lot of the existing regeneration was destroyed in the 2005 removal harvest as there are scattered open areas with minimal regeneration mixed in throughout the stand. I would expect white pine to continue to fill in these open areas but it will be many years before this stand has the potential for timber management. Average ba/acre from 7 plots = 47 square feet. Flat terrain.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	58	Pole/Sap/Log	6	25	Red Maple	Trace		>20 feet	Sapling
Jack Pine	4	Pole/Sapling	5		White Pine	Medium		Variable	Sapling
Red Oak	1	Log/XLog	16		Black Cherry	Medium		Variable	Tall Shrub
Red Maple	2	Pole	6		Witch Hazel	Trace		5 - 10 feet	Tall Shrub
Red Pine	35	Log/XLog/Pole	14	96	Red Pine	Low		Variable	Sapling
					Jack Pine	Low		Variable	Sapling

<b>65</b>	4133 - Aspen, Mixed Pine	Poletimber Well	10.6	35	81-110	N/A	<p>This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84, K&amp;R Logging). Aspen regenerated well in many areas but so did white pine, particularly in the west half of the stand where it is dominant in places. Old inventory notes indicate that browse was a problem in this stand. Other species that are present but rare included; paper birch, balsam fir, and red oak. Average ba/acre from 5 plots = 86 square feet. A large portion of this stand sits on a moderately steep east/southeast facing slope.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	28	Pole/Sap/Log	6		Black Cherry	Medium		Variable	Tall Shrub
Jack Pine	3	Pole	6		Red Maple	Medium		Variable	Sapling
White Spruce	1	Pole	7		Red Pine	Low		Variable	Sapling
Red Pine	2	Pole/Sapling	7		White Pine	Medium		Variable	Sapling
Red Maple	2	Sapling/Pole	4						
Bigtooth Aspen	59	Pole/Sapling	5	35					
Quaking Aspen	5	Pole/Sapling	5						

<b>66</b>	6112 - Lowland Aspen	Poletimber Well	3.6	35	81-110	N/A	<p>This stand was clearcut in 1987 in the sale Ford Lake Aspen (#53-016-84, K&amp;R Logging). Aspen regenerated well as did conifers, which can be found mostly along a strip on the southern edge adjacent to the road. Diameters on the aspen vary considerably, a few areas having stems approaching sawlog-size, while other areas are just over minimum merchantability standards. Thick alder in the understory in some place. Trace of paper birch in the overstory. Found one 4" white oak adjacent to the road. Average ba/acre from 4 plots = 88 square feet.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	7	Pole/Sap/Log	7		Black Cherry	Medium		Variable	Tall Shrub
Balsam Fir	1	Pole	7		Balsam Poplar	Low		Variable	Sapling
Balsam Poplar	5	Pole/Sapling	6		White Spruce	Trace		Variable	Sapling
Red Pine	1	Pole	7		Tag Alder	High		10 - 20 feet	Tall Shrub
Quaking Aspen	77	Pole/Sapling	7	35	Red Maple	Trace		Variable	Sapling
White Spruce	9	Pole/Sapling	7		Serviceberry (Juneberry)	Trace		Variable	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>67</b>	42290 - Natural Mixed Pine	Sapling Medium	40.3	27	1-50	N/A	<p>This stand had a jack pine/aspens/maple species removal harvest in 1995 in the sale Section 9 Pine Block (#53-013-94), bought by Georgia Pacific. This harvest led to a lot of scarification and good red pine regeneration. An overstory removal harvest was then completed in 2007 in the sale Whip-poor-will Red Pine (#53-017-04, bought by Bisballe), removing a large part of the remaining red pine overstory trees except for some scattered seed trees. It looks like all merchantable white pine and oak were left as well. The residual BA is highest in the NW corner of the stand. A difficult stand to type as all size classes of red and white pine are present in the stand, however red pine saplings are the dominant size class. Supercanopy red pine are mostly in the large log to xlog size diameter range (14-18 inch DBH) but there are a few scattered poletimber trees and smaller sawlog trees. Red pine saplings are abundant, however they tend to be prevalent in clumps and are not uniform throughout. This is likely a result of the past whole-tree harvest where scarification is usually best in skid trails and is not uniform. A few small aspen clumps are present, mostly in the north half of the stand or near the road. Overall, this is impressive natural red pine regeneration and will result in at least a moderately stocked stand in the future. Trace of white spruce poletimber. Rolling terrain.</p>				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		12	Log/XLog	14	96	Black Cherry		Medium	5 - 10 feet	Tall Shrub	
Red Pine		46	Sapling	2	27						
Red Maple		1	Pole	7							
Red Oak		4	Log/Pole	12							
White Pine		7	Sapling	2							
Jack Pine		13	Sapling/Pole	4							
Bigtooth Aspen		10	Sapling/Pole	3							
White Pine		7	Log	12							
<b>68</b>	42110 - Planted Red Pine	Sawtimber Medium	34.0	85	111-140	N/A	<p>Planted red pine with a large component of red oak and white pine. A past jack pine/aspens/maple species removal in 1995 in the sale Section 9 Pine Block (#53-013-94, Georgia Pacific) resulted in highly variable stocking. The overstory tends to be clumpy, alternating between dense clumps and areas with lower BAs. Most areas of the stand do not resemble a plantation. Red oak quality is generally poor although some of the larger stems are good quality. The white pine overstory component is highest at the north end of the stand. Although rare, a second age class of large diameter, older natural red pine is scattered throughout the stand. Trace of XL-sized white pine. Average ba/acre from 9 plots = 118 square feet. Gently rolling terrain. The portion of the stand west of the road should not be managed with even-aged techniques due to its proximity to Ford Lake. The Shingle Mill Pathway runs east-west through the southern part of the stand. The red pine in this stand was planted in 1924 but had to be re-planted in 1937 after the initial planting failed.</p>				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		12	Log/Pole	12		Black Cherry		Medium	5 - 10 feet	Tall Shrub	
Red Maple		1	Pole	7		Witch Hazel		Trace	5 - 10 feet	Tall Shrub	
Red Pine		69	Log/Pole/XLog	13	85	Bigtooth Aspen		Trace	Variable	Sapling	
Red Oak		18	Log/Pole/XLog	12		White Pine		High	Variable	Sapling	
						Beech		Trace	Variable	Sapling	
						Red Maple		Trace	>20 feet	Sapling	
						Red Pine		Trace	Variable	Sapling	
						Jack Pine		Trace	Variable	Sapling	
<b>69</b>	42290 - Natural Mixed Pine	Sawtimber Well	1.8	85	81-110	N/A	<p>Small mixed pine stand sitting on a slight ridge that overlooks the Pigeon River. A popular camping area is at the north end of the stand. A few very large red and white pine are present (20"+). Average ba/acre from 3 plots = 107 square feet.</p>				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		50	Log/XLog/Pole	13	85	White Pine		Medium	Variable	Sapling	
Paper Birch		2	Pole/Log	9		Black Cherry		Low	Variable	Tall Shrub	
Bigtooth Aspen		13	Log	12		Red Maple		Low	Variable	Sapling	
Red Maple		9	Pole/Log	8		Beech		Trace	Variable	Sapling	
Red Oak		1	Log/Pole	11							
White Pine		20	Log/Pole	12							
White Spruce		1	Pole/Log	8							
Quaking Aspen		4	Log	12							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
<b>70</b>	4130 - Aspen	Poletimber Well	10.5	44	81-110	N/A	This stand was clearcut in 1978 by Champion and regenerated well to aspen. A few sawlog-sized red and white pine are mixed in at the far northwest corner, and there is also one large red oak in this area as well. Trace of pole/log white spruce, pole/sap red oak, and pole/sap balsam fir. Average ba/acre from 6 plots = 110 square feet. Portions of this stand sit on a east/southeast facing slope. Aspen diameters are close to being large enough to be harvested but would benefit from one more entry of growth.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	2	Pole/Log	9		Red Maple	Medium		Variable	Sapling
Quaking Aspen	20	Pole	7		White Pine	Medium		Variable	Sapling
Red Maple	6	Pole/Sapling	5		White Spruce	Trace		Variable	Sapling
Bigtooth Aspen	59	Pole/Sapling	7	44	Serviceberry (Juneberry)	Low		Variable	Tall Shrub
White Pine	13	Pole/Sap/Log	6		Balsam Fir	Trace	Variable	Sapling	
					Black Cherry	Medium	Variable	Tall Shrub	
<b>71</b>	42110 - Planted Red Pine	Sawtimber Well	17.6	85	141-170	N/A	High-quality planted red pine that had a jack pine/aspen/maple species removal harvest in 1995 in the sale Section 9 Pine Block (#53-013-94, Georgia Pacific), which resulted in BAs that vary significantly. Portions of the southwest part of the stand were not cut and are basically un-thinned plantations. Gaps created from that harvest are filling in with white pine and some red pine regeneration. A second age class of large diameter, older natural red pine is common throughout the stand. Trace of XL-sized white pine. Average ba/acre from 8 plots = 158 square feet. Initially planted in 1924 but that was a failure and was re-planted in 1937.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Oak	3	Log/Pole	12		Red Maple	Trace		Variable	Sapling
White Pine	8	Log/Pole	12		White Pine	Medium		Variable	Sapling
Red Maple	1	Pole	7		Beech	Trace		Variable	Sapling
Red Pine	88	Log/Pole/XLog	13	85	Witch Hazel	Trace		5 - 10 feet	Tall Shrub
					Red Pine	Trace		Variable	Sapling
					Jack Pine	Trace		Variable	Sapling
					Black Cherry	Low	Variable	Tall Shrub	
<b>72</b>	42110 - Planted Red Pine	Sawtimber Well	43.0	85	111-140	N/A	Somewhat unique planted red pine stand that has a second component of large diameter, old natural red pine as well as numerous legacy size white pine. Highly variable stocking due to a past jack pine/aspen/maple species removal harvest in 1995 (Section 9 Pine Block, #53-013-94, Georgia Pacific). Many areas of lower stocking are scattered throughout the stand as a result of that harvest and they have filled in well with white pine, very dense in many places. On the other hand, there are also areas of higher stocking that resemble a typical red pine plantation. Three distinct age classes in this stand; planted pine, XL-sized natural pine, and sapling sized natural pine regen. A lot of large snags are present. Other species that were present but rare include white spruce and bigtooth aspen. Average ba/acre from 15 plots = 120 square feet. Rolling terrain. Per the Concept of Management, this stand should be managed with big-tree silviculture in mind and using uneven-aged techniques to promote a stand of large trees and diverse vertical structure.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	1	Pole	7		Jack Pine	Trace		Variable	Sapling
Red Oak	2	Log/Pole	13		Red Maple	Trace		Variable	Sapling
Red Pine	83	Log/Pole/XLog	13	85	Beech	Trace		Variable	Sapling
White Pine	14	Log/Pole/XLog	12	131	Red Pine	Trace		>20 feet	Sapling
					White Pine	High		Variable	Sapling
					Witch Hazel	Trace		5 - 10 feet	Tall Shrub
					Black Cherry	Low	5 - 10 feet	Tall Shrub	
<b>73</b>	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	18.5	83	81-110	N/A	Diverse stand of varying composition with the Pigeon River flowing through the entire length of the stand. North of the river tends to have mostly spruce, fir, and lowland popple. The spruce is generally high quality and healthy. South of the river has some of these same characteristics but there is also a steep ridgeline south of the river that is dominated by red and white pine. Cedar tends to be found directly adjacent to the riverbank, with some large diameter trees present (one I measured was 27" DBH). Some areas of blowdown and lower stocking throughout the stand. Trace of willow and red oak in the overstory. Average ba/acre from 9 plots = 95 square feet. No management due to proximity to the Pigeon River.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	15	Log/Pole/XLog	11		Balsam Fir	Low		Variable	Sapling
Red Maple	2	Log/Pole	10		White Spruce	Medium		Variable	Sapling
Quaking Aspen	21	Log/Pole	14		Black Cherry	Low		Variable	Tall Shrub
Paper Birch	1	Pole/Log	8		Tag Alder	Medium		Variable	Tall Shrub
Red Pine	7	Log/Pole/XLog	12						
Balsam Poplar	4	Pole/Log	9						
Northern White Cedar	5	Log/Pole	12						
White Spruce	36	Log/Pole/XLog	10	83					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																																		
74	2113 - Forage Crops	Nonstocked	5.7		Unspecified	Managed Opening	Maintained wildlife opening. Some areas along the edge that aren't planted.																																																																																		
				<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Jack Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Spruce</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Trace</td> <td>&lt; 5 feet</td> <td>Seeding</td> </tr> <tr> <td>Alder</td> <td>Trace</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>White Spruce</td> <td>Trace</td> <td>&lt; 5 feet</td> <td>Seeding</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>&lt; 5 feet</td> <td>Seeding</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Jack Pine	Trace	Variable	Sapling	Black Cherry	Trace	Variable	Tall Shrub	White Spruce	Trace	Variable	Sapling	Red Pine	Trace	< 5 feet	Seeding	Alder	Trace	10 - 20 feet	Tall Shrub	White Spruce	Trace	< 5 feet	Seeding	White Pine	Trace	< 5 feet	Seeding																																																				
Sub-Canopy Species	Density	Avg. Height	Size																																																																																						
Jack Pine	Trace	Variable	Sapling																																																																																						
Black Cherry	Trace	Variable	Tall Shrub																																																																																						
White Spruce	Trace	Variable	Sapling																																																																																						
Red Pine	Trace	< 5 feet	Seeding																																																																																						
Alder	Trace	10 - 20 feet	Tall Shrub																																																																																						
White Spruce	Trace	< 5 feet	Seeding																																																																																						
White Pine	Trace	< 5 feet	Seeding																																																																																						
75	4133 - Aspen, Mixed Pine	Poletimber Well	10.2	44	81-110	N/A	This stand was clearcut in 1978 by Champion. Aspen regenerated well along with a significant component of pine. The white pine tends to be more numerous along the northern edge of the stand. Quaking aspen is more common in the west half, while bigtooth is dominant in the east half. Aspen quality is not great and diameters are quite small for its age. Red pine and jack pine are mostly in the far west/northwest part of the stand. Red oak regenerated following the harvest, and like the white pine, is more prevalent along the northern stand edge. Average ba/acre from 8 plots = 105 square feet. The east half of the stand is on a southwest facing slope. This stand needs at least another 10 years before it is ready for a harvest.																																																																																		
				<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Bigtooth Aspen</td> <td>35</td> <td>Pole</td> <td>7</td> <td>44</td> </tr> <tr> <td>Quaking Aspen</td> <td>25</td> <td>Pole/Sapling</td> <td>6</td> <td></td> </tr> <tr> <td>White Pine</td> <td>23</td> <td>Pole</td> <td>7</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>7</td> <td>Pole</td> <td>8</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>3</td> <td>Pole</td> <td>7</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>3</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> <tr> <td>White Spruce</td> <td>1</td> <td>Pole</td> <td>6</td> <td></td> </tr> <tr> <td>Red Maple</td> <td>2</td> <td>Sapling/Pole</td> <td>4</td> <td></td> </tr> <tr> <td>Balsam Fir</td> <td>1</td> <td>Pole</td> <td>5</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Bigtooth Aspen	35	Pole	7	44	Quaking Aspen	25	Pole/Sapling	6		White Pine	23	Pole	7		Red Pine	7	Pole	8		Jack Pine	3	Pole	7		Red Oak	3	Pole/Log	8		White Spruce	1	Pole	6		Red Maple	2	Sapling/Pole	4		Balsam Fir	1	Pole	5		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Ironwood</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Medium</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Red Maple</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Sapling</td> </tr> <tr> <td>Balsam Fir</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Spruce</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Ironwood	Trace	Variable	Sapling	Serviceberry (Juneberry)	Trace	Variable	Tall Shrub	White Pine	Medium	Variable	Sapling	Black Cherry	Medium	Variable	Tall Shrub	Red Maple	Trace	>20 feet	Sapling	Balsam Fir	Trace	Variable	Sapling	White Spruce	Trace	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																																																					
Bigtooth Aspen	35	Pole	7	44																																																																																					
Quaking Aspen	25	Pole/Sapling	6																																																																																						
White Pine	23	Pole	7																																																																																						
Red Pine	7	Pole	8																																																																																						
Jack Pine	3	Pole	7																																																																																						
Red Oak	3	Pole/Log	8																																																																																						
White Spruce	1	Pole	6																																																																																						
Red Maple	2	Sapling/Pole	4																																																																																						
Balsam Fir	1	Pole	5																																																																																						
Sub-Canopy Species	Density	Avg. Height	Size																																																																																						
Ironwood	Trace	Variable	Sapling																																																																																						
Serviceberry (Juneberry)	Trace	Variable	Tall Shrub																																																																																						
White Pine	Medium	Variable	Sapling																																																																																						
Black Cherry	Medium	Variable	Tall Shrub																																																																																						
Red Maple	Trace	>20 feet	Sapling																																																																																						
Balsam Fir	Trace	Variable	Sapling																																																																																						
White Spruce	Trace	Variable	Sapling																																																																																						
76	42110 - Planted Red Pine	Sawtimber Poor	32.5	78	1-50	N/A	08/17/2015 - Shelterwood harvest completed in fall of 2014. Red Line Nightmare, bought by Biewer, #53-009-13-01. Whole-tree skidding didn't take place but tops were skidded with grapple skidders. Not sure if this resulted in sufficient scarification though. Res ba/acre = 30 sq ft. 2021 - Regen survey indicated good natural pine regen, although not as good as other seed trees in the area, and the decision was made to remove the overstory red pine due to Diploidia concerns. Chapter 7 variance approved. Regen survey results (avg height in parentheses): red pine 731 TPA (6"), white pine 269 TPA (1'), black cherry 177 TPA (2'), jack pine 8 TPA (2'), beech 8 TPA (3').																																																																																		
				<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Pine</td> <td>96</td> <td>Log/Pole</td> <td>12</td> <td>78</td> </tr> <tr> <td>White Pine</td> <td>2</td> <td>Pole/Log</td> <td>9</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>2</td> <td>Pole/Log</td> <td>9</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Pine	96	Log/Pole	12	78	White Pine	2	Pole/Log	9		Red Oak	2	Pole/Log	9		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Red Pine</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Seeding</td> </tr> <tr> <td>Jack Pine</td> <td>Low</td> <td>10 - 20 feet</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Pine	Low	< 5 feet	Seeding	Jack Pine	Low	10 - 20 feet	Sapling	Red Pine	Low	< 5 feet	Sapling	White Pine	Low	Variable	Sapling																																										
Canopy Species	% Cover	Size Class	DBH	Age																																																																																					
Red Pine	96	Log/Pole	12	78																																																																																					
White Pine	2	Pole/Log	9																																																																																						
Red Oak	2	Pole/Log	9																																																																																						
Sub-Canopy Species	Density	Avg. Height	Size																																																																																						
Red Pine	Low	< 5 feet	Seeding																																																																																						
Jack Pine	Low	10 - 20 feet	Sapling																																																																																						
Red Pine	Low	< 5 feet	Sapling																																																																																						
White Pine	Low	Variable	Sapling																																																																																						
77	4319 - Mixed Upland Forest	Sawtimber Well	5.2	78	81-110	N/A	Mixed species stand of moderate quality. The east half of the stand has most of the oak, which is open grown and has some very large diameter trees. A nice pine understory can be found in areas underneath the oak. The west half of the stand has more of the red maple along with scattered clumps of pine. A couple of small clones of quaking aspen are present but not common throughout. A few white pine legacy trees are present. Average ba/acre from 5 plots = 102 square feet. Most of this stand slopes down to the north and west.																																																																																		
				<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Spruce</td> <td>3</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> <tr> <td>Balsam Fir</td> <td>1</td> <td>Pole</td> <td>6</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>2</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> <tr> <td>White Pine</td> <td>25</td> <td>Log/Pole/XLog</td> <td>11</td> <td>78</td> </tr> <tr> <td>Red Oak</td> <td>13</td> <td>Log/XLog</td> <td>15</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>12</td> <td>Pole</td> <td>8</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>21</td> <td>Log/XLog/Pole</td> <td>14</td> <td>101</td> </tr> <tr> <td>Red Maple</td> <td>23</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	White Spruce	3	Pole/Log	8		Balsam Fir	1	Pole	6		Bigtooth Aspen	2	Pole/Log	8		White Pine	25	Log/Pole/XLog	11	78	Red Oak	13	Log/XLog	15		Quaking Aspen	12	Pole	8		Red Pine	21	Log/XLog/Pole	14	101	Red Maple	23	Pole/Log	8		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Balsam Fir</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Spruce</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Maple</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Balsam Fir	Low	Variable	Sapling	Black Cherry	Low	Variable	Tall Shrub	Serviceberry (Juneberry)	Trace	Variable	Tall Shrub	White Spruce	Trace	Variable	Sapling	Red Maple	Low	Variable	Sapling	White Pine	Medium	Variable	Sapling									
Canopy Species	% Cover	Size Class	DBH	Age																																																																																					
White Spruce	3	Pole/Log	8																																																																																						
Balsam Fir	1	Pole	6																																																																																						
Bigtooth Aspen	2	Pole/Log	8																																																																																						
White Pine	25	Log/Pole/XLog	11	78																																																																																					
Red Oak	13	Log/XLog	15																																																																																						
Quaking Aspen	12	Pole	8																																																																																						
Red Pine	21	Log/XLog/Pole	14	101																																																																																					
Red Maple	23	Pole/Log	8																																																																																						
Sub-Canopy Species	Density	Avg. Height	Size																																																																																						
Balsam Fir	Low	Variable	Sapling																																																																																						
Black Cherry	Low	Variable	Tall Shrub																																																																																						
Serviceberry (Juneberry)	Trace	Variable	Tall Shrub																																																																																						
White Spruce	Trace	Variable	Sapling																																																																																						
Red Maple	Low	Variable	Sapling																																																																																						
White Pine	Medium	Variable	Sapling																																																																																						





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																								
<b>78</b>	429 - Mixed Upland Conifers	Poletimber Well	2.3	55	81-110	N/A	Mixed species stand with a variety of sizes present, although poletimber stems are most common. Stocking is somewhat erratic as there are a few open areas in the middle of the stand. A few open grown legacy size white pine. Areas of dense spruce and fir in the understory. Mostly an upland stand although the stand transitions to wetter ground to the north, west, and south. Average ba/acre from 5 plots = 104 square feet.																																																								
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>27</td> <td>Pole/Log/XLog</td> <td>9</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>3</td> <td>Pole</td> <td>7</td> <td></td> </tr> <tr> <td>Balsam Fir</td> <td>9</td> <td>Pole</td> <td>6</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>1</td> <td>Log</td> <td>13</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>29</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> <tr> <td>White Spruce</td> <td>31</td> <td>Pole/Log</td> <td>8</td> <td>55</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		White Pine	27	Pole/Log/XLog	9		Jack Pine	3	Pole	7		Balsam Fir	9	Pole	6		Red Pine	1	Log	13		Quaking Aspen	29	Pole/Log	8		White Spruce	31	Pole/Log	8	55	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Balsam Fir</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Spruce</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Balsam Fir	Low	Variable	Sapling	Black Cherry	Low	Variable	Tall Shrub	Serviceberry (Juneberry)	Trace	Variable	Tall Shrub	White Pine	Medium	Variable	Sapling	White Spruce	Medium	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																											
White Pine	27	Pole/Log/XLog	9																																																												
Jack Pine	3	Pole	7																																																												
Balsam Fir	9	Pole	6																																																												
Red Pine	1	Log	13																																																												
Quaking Aspen	29	Pole/Log	8																																																												
White Spruce	31	Pole/Log	8	55																																																											
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Balsam Fir	Low	Variable	Sapling																																																												
Black Cherry	Low	Variable	Tall Shrub																																																												
Serviceberry (Juneberry)	Trace	Variable	Tall Shrub																																																												
White Pine	Medium	Variable	Sapling																																																												
White Spruce	Medium	Variable	Sapling																																																												
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>8</td> <td>Log/Pole/XLog</td> <td>10</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>73</td> <td>Log/XLog/Pole</td> <td>14</td> <td>85</td> </tr> <tr> <td>Red Oak</td> <td>19</td> <td>Log/Pole/XLog</td> <td>12</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	White Pine	8	Log/Pole/XLog	10		Red Pine	73	Log/XLog/Pole	14	85	Red Oak	19	Log/Pole/XLog	12		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Beech</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Full</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Beech	Trace	Variable	Sapling	White Pine	Full	Variable	Sapling	Red Pine	Trace	>20 feet	Sapling	Black Cherry	Low	5 - 10 feet	Tall Shrub																				
Canopy Species	% Cover	Size Class	DBH	Age																																																											
White Pine	8	Log/Pole/XLog	10																																																												
Red Pine	73	Log/XLog/Pole	14	85																																																											
Red Oak	19	Log/Pole/XLog	12																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Beech	Trace	Variable	Sapling																																																												
White Pine	Full	Variable	Sapling																																																												
Red Pine	Trace	>20 feet	Sapling																																																												
Black Cherry	Low	5 - 10 feet	Tall Shrub																																																												
<b>79</b>	42110 - Planted Red Pine	Sawtimber Well	6.6	85	111-140	N/A	Moderate to high quality red pine stand with some large diameter stems and a significant component of oak. Highly variable stocking due to a past species removal harvest in 1995 which took out all jack pine, aspen, and maple. As a result of that harvest and with the large component of oak mixed in, this stand does not resemble a plantation. The oak is moderate to poor quality although several of the larger stems have better quality. There are a few large diameter, old natural red pine mixed in. A couple legacy size white pine are present as well. Average ba/acre from 5 plots = 128 square feet. Per the Concept of Management, this stand should be managed with big-tree silviculture in mind and using uneven-aged techniques to promote a stand of large trees and diverse vertical structure.																																																								
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Pine</td> <td>16</td> <td>Sapling</td> <td>3</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>47</td> <td>Sapling/Pole</td> <td>4</td> <td>27</td> </tr> <tr> <td>Red Pine</td> <td>10</td> <td>Log/XLog</td> <td>14</td> <td>101</td> </tr> <tr> <td>White Pine</td> <td>25</td> <td>Sapling/Pole/Log</td> <td>4</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>1</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>1</td> <td>Sapling/Pole</td> <td>4</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Pine	16	Sapling	3		Jack Pine	47	Sapling/Pole	4	27	Red Pine	10	Log/XLog	14	101	White Pine	25	Sapling/Pole/Log	4		Red Oak	1	Log/Pole	12		Bigtooth Aspen	1	Sapling/Pole	4		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Trace	Variable	Tall Shrub																
Canopy Species	% Cover	Size Class	DBH	Age																																																											
Red Pine	16	Sapling	3																																																												
Jack Pine	47	Sapling/Pole	4	27																																																											
Red Pine	10	Log/XLog	14	101																																																											
White Pine	25	Sapling/Pole/Log	4																																																												
Red Oak	1	Log/Pole	12																																																												
Bigtooth Aspen	1	Sapling/Pole	4																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Black Cherry	Trace	Variable	Tall Shrub																																																												
<b>80</b>	42290 - Natural Mixed Pine	Sapling Medium	65.0	27	Immature	N/A	This stand was initially harvested in 1995 in the sale Section 9 Block (#53-013-94, Georgia Pacific), where everything was cut except for red pine, white pine, and oak. The majority of overstory red pine were then removed in 2007 in the sale Whip-poor-will Red Pine (#53-017-04, Bisballe). Mixed pine regenerated very well following the initial species removal harvest in 1995, typical of Georgia Pacific sales which were whole-tree operations that created a lot of ground scarification. Jack pine is the dominant species that regenerated, although pockets heavier to white pine and/or red pine are also present throughout the stand. However, there are also numerous open areas lacking in regeneration, which appear to be a result of equipment operations from the overstory removal in 2007. Residual red and white pine are scattered throughout the stand and present in all size classes (pole/log/xlog), which makes typing this stand out somewhat difficult. Trace of red maple poletimber. The dominant age class of younger saplings should be approaching merchantability by next entry which will allow for BA swings to be taken and will give a more accurate representation of the species mix.																																																								
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Pine</td> <td>16</td> <td>Sapling</td> <td>3</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>47</td> <td>Sapling/Pole</td> <td>4</td> <td>27</td> </tr> <tr> <td>Red Pine</td> <td>10</td> <td>Log/XLog</td> <td>14</td> <td>101</td> </tr> <tr> <td>White Pine</td> <td>25</td> <td>Sapling/Pole/Log</td> <td>4</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>1</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>1</td> <td>Sapling/Pole</td> <td>4</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Pine	16	Sapling	3		Jack Pine	47	Sapling/Pole	4	27	Red Pine	10	Log/XLog	14	101	White Pine	25	Sapling/Pole/Log	4		Red Oak	1	Log/Pole	12		Bigtooth Aspen	1	Sapling/Pole	4		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Trace	Variable	Tall Shrub																
Canopy Species	% Cover	Size Class	DBH	Age																																																											
Red Pine	16	Sapling	3																																																												
Jack Pine	47	Sapling/Pole	4	27																																																											
Red Pine	10	Log/XLog	14	101																																																											
White Pine	25	Sapling/Pole/Log	4																																																												
Red Oak	1	Log/Pole	12																																																												
Bigtooth Aspen	1	Sapling/Pole	4																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Black Cherry	Trace	Variable	Tall Shrub																																																												



**Stand**      **Level 4 Cover Type**      **Size Density**      **Acres**      **Stand Age**      **BA Range**      **Managed Site**      **General Comments**

**81**      4130 - Aspen      Poletimber Well      2.1      37      51-80      N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	71	Pole/Sapling	6	37	Black Cherry	Medium	Variable	Tall Shrub
Bigtooth Aspen	7	Pole	7		White Spruce	Trace	Variable	Sapling
White Pine	11	Pole/Log	8		White Pine	Medium	Variable	Sapling
Jack Pine	3	Pole	8		Balsam Fir	Trace	Variable	Sapling
Red Pine	1	Log/XLog	15		Serviceberry (Juneberry)	Low	Variable	Tall Shrub
Red Maple	4	Pole/Sapling	5		Hawthorn (spp.)	Trace	5 - 10 feet	Tall Shrub
Balsam Fir	2	Pole	6		Red Maple	Low	Variable	Sapling
White Spruce	1	Pole	6					

Developing aspen stand that was clearcut in 1987 by K&R Logging. Diameters are still quite small in most areas of the stand. The far southwest corner of the stand is a clump of larger jack pine that is mostly dead. A thin strip dominated by white pine is present along the south edge adjacent to the powerline. Trace of red oak poletimber. Average ba/acre from 4 plots = 68 square feet. This stand will need at least another 10 years of growth before a treatment can be prescribed.

**82**      3302 - Low Density Conifer Trees      Nonstocked      1.8      Unspecified      No

Sub-Canopy Species	Density	Avg. Height	Size
Black Cherry	Medium	Variable	Tall Shrub
Serviceberry (Juneberry)	Trace	Variable	Tall Shrub
Red Pine	Trace	>20 feet	Pole
White Spruce	Trace	>20 feet	Pole
Red Pine	Trace	Variable	Sapling
Cladonia (Reindeer moss)	Trace	Unspecified	Non-Wood
Mixed Grasses	Full	Unspecified	Non-Wood
White Pine	Medium	Variable	Sapling
White Spruce	Medium	Variable	Sapling
White Pine	Trace	>20 feet	Pole
Jack Pine	Trace	Variable	Sapling

Open stand that is filling in with conifers. Not sure of the history of this stand but this almost looks like a previous maintained opening. Mostly all dry ground.

**83**      4123 - Red Oak      Sawtimber Well      2.0      84      51-80      N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	15	Pole/Sap/Log	8		Bigtooth Aspen	Low	>20 feet	Sapling
Bigtooth Aspen	6	Pole/Sapling	5		White Pine	High	Variable	Sapling
Red Pine	5	Log/Pole	10		Balsam Fir	Trace	Variable	Sapling
Quaking Aspen	2	Pole/Sapling	5		Witch Hazel	Trace	5 - 10 feet	Tall Shrub
Red Oak	72	Log/XLog	16	84	White Spruce	Trace	Variable	Sapling
					White Pine	Low	>20 feet	Pole
					Black Cherry	Trace	Variable	Tall Shrub
					Red Maple	Medium	>20 feet	Sapling
					Bigtooth Aspen	Trace	>20 feet	Pole
					Red Maple	Trace	>20 feet	Pole
					Serviceberry (Juneberry)	Trace	Variable	Tall Shrub
					Quaking Aspen	Trace	>20 feet	Pole
					Quaking Aspen	Low	>20 feet	Sapling

Supercanopy of massive red oak with a dense understory of mostly white pine and red maple, with smaller amounts of aspen. The oak is generally open-grown and poor quality, but has many trees over 20" DBH. A couple of log-sized red and white pine are present. This stand was cut at the same time as adjacent stands 81, 87, and 137. Trace of balsam fir and jack pine poletimber in the overstory. Average ba/acre from 3 plots = 87 square feet. This stand sits on an elevated knob and slopes down along the east and west edges. Let the white pine continue to grow and manage for that in the future.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
<b>84</b>	6112 - Lowland Aspen	Poletimber Well	10.3	44	51-80	N/A	Lowland stand dominated by quaking aspen. Clearcut in 1978 by Champion. The eastern 2/3rds of the stand is nearly 100% aspen and BAM, with an area of very wet ground in the middle that extends east and forms a drainage flowing southeast out of the stand (see site conditions layer) that eventually joins with the Pigeon River. The western 1/3rd of the stand is slightly drier ground and has spruce and fir mixed in. Diameters on the aspen vary considerably throughout the stand, wetter areas tend to have larger diameters. A diverse shrub layer is present in many places. Trace of white pine and elm, although most elm appear to be dead. Average ba/acre from 7 plots = 73 square feet. The western portion of the stand is operable ground but the remainder of the stand, particularly the drainage area, should be excluded from any harvest.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Fir	2	Pole	6		Black Cherry	Medium		Variable	Tall Shrub
Balsam Poplar	5	Pole	7		Nannyberry	Low		10 - 20 feet	Tall Shrub
White Spruce	5	Pole/Log	8		White Spruce	Trace		Variable	Sapling
Quaking Aspen	88	Pole/Sap/Log	7	44	Serviceberry (Juneberry)	Trace		Variable	Tall Shrub
					Hawthorn (spp.)	Trace		5 - 10 feet	Tall Shrub
					Tag Alder	High	10 - 20 feet	Tall Shrub	
<b>85</b>	42220 - Natural Jack Pine	Poletimber Well	3.1	40	51-80	N/A	Small stand of decent quality jack pine. Red pine is mostly along the edges. There has been small amounts of blowdown in the middle of the stand. Average ba/acre from 4 plots = 63 square feet. Still a lot of small stems.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	6	Pole	7		Red Pine	Trace		Variable	Sapling
Jack Pine	87	Pole/Sapling	6	40	White Pine	Low		Variable	Sapling
Red Pine	7	Log/Pole	13		Black Cherry	Trace	Variable	Tall Shrub	
<b>86</b>	320 - Upland Shrub	Nonstocked	1.3		Unspecified	No	This stand sits in a bowl surrounded by moderately steep slopes on all sides. Previous inventory notes indicate this was an old Tordon opening. Possible frost pocket as well.		
Sub-Canopy Species	Density	Avg. Height	Size						
Jack Pine	Low	Variable	Sapling						
Mixed Grasses	High	Unspecified	Non-Wood						
Sweet Fern	Medium	< 5 feet	Tall Shrub						
Red Pine	Trace	>20 feet	Pole						
Black Cherry	Medium	Variable	Tall Shrub						
Jack Pine	Low	>20 feet	Pole						
Bracken Fern	Medium	Unspecified	Non-Wood						
Cladonia (Reindeer moss)	Medium	Unspecified	Non-Wood						
White Pine	Trace	Variable	Sapling						
White Pine	Low	>20 feet	Pole						
<b>87</b>	4130 - Aspen	Poletimber Well	3.5	37	81-110	N/A	Nice developing aspen stand that is adjacent to the PRC office complex. Clearcut in 1987 by K&R Logging. A couple of residual pine and fir stems were left but not many. A thin strip of larger trees is present along the east edge. Some areas of the stand with a nice serviceberry component in the understory. Average ba/acre from 5 plots = 104 square feet. The stand sits on a slight east facing slope. This stand will be ready for a final harvest in 10 years.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Fir	11	Pole/Log	8		Balsam Fir	Low		Variable	Sapling
White Spruce	2	Pole	8		Black Cherry	Medium		Variable	Tall Shrub
Red Maple	8	Pole/Sapling	5		White Spruce	Trace		Variable	Sapling
Quaking Aspen	73	Pole/Sapling	7	37	Serviceberry (Juneberry)	Low		Variable	Tall Shrub
Red Oak	1	Log	11		Red Maple	Medium		>20 feet	Sapling
Red Pine	1	Log	14		White Pine	Trace		Variable	Sapling
White Pine	4	Pole/Log	9						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																								
<b>88</b>	4311 - Pine, Aspen Mix	Poletimber Well	11.5	35	111-140	N/A	A 2-aged mix of aspen and pine. This stand was clearcut in 1987 (Ford Lake Aspen, K&R Logging, #53-016-84) but it looks like pockets of advanced pine regeneration were protected during the harvest. Steeper slopes bordering the opening (stand 86) as well as along the southern stand edge were not harvested either and also contain mostly pine. The white pine is pretty good quality but still mostly small diameter. The aspen is just approaching merchantability in most places. Trace of red oak and white spruce in the overstory. Average ba/acre from 7 plots = 129 square feet. Manage for white pine when the stand is ready for a treatment.																																																								
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Jack Pine</td> <td>5</td> <td>Pole/Sapling</td> <td>6</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>4</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>13</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>39</td> <td>Pole/Sapling</td> <td>5</td> <td>35</td> </tr> <tr> <td>White Pine</td> <td>38</td> <td>Pole/Sap/Log</td> <td>7</td> <td>57</td> </tr> <tr> <td>Red Maple</td> <td>1</td> <td>Pole/Sapling</td> <td>6</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Jack Pine	5	Pole/Sapling	6		Quaking Aspen	4	Pole/Sapling	5		Red Pine	13	Log/Pole	12		Bigtooth Aspen	39	Pole/Sapling	5	35	White Pine	38	Pole/Sap/Log	7	57	Red Maple	1	Pole/Sapling	6		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Low	Variable	Sapling																
Canopy Species	% Cover	Size Class	DBH	Age																																																											
Jack Pine	5	Pole/Sapling	6																																																												
Quaking Aspen	4	Pole/Sapling	5																																																												
Red Pine	13	Log/Pole	12																																																												
Bigtooth Aspen	39	Pole/Sapling	5	35																																																											
White Pine	38	Pole/Sap/Log	7	57																																																											
Red Maple	1	Pole/Sapling	6																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Black Cherry	Low	Variable	Sapling																																																												
<b>89</b>	42290 - Natural Mixed Pine	Poletimber Medium	11.7	35	51-80	N/A	This stand was clearcut in 1987 in the sale Ford Lake Aspen (K&R Logging, #53-016-84). Old inventory notes state that aspen initially regenerated well but elk browse was severe and eliminated a large proportion of it. All 3 species of pine have regenerated in the stand, albeit not well-stocked in all places, with white pine being the most abundant. Some residual pine of various sizes were left, both individually and in clumps, with the greatest amount being in the large poletimber/small sawlog size classes. The far southern end of the stand did not regenerate well other than some bushy pine and unhealthy quaking aspen, and resembles more of a U type. Trace of red oak in the stand. Average ba/acre from 8 plots = 56 square feet. Manage for pine, although it will be many years before this stand is ready for a treatment.																																																								
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Jack Pine</td> <td>20</td> <td>Pole/Sap/Log</td> <td>6</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>2</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>19</td> <td>Log/Pole/Sap</td> <td>10</td> <td></td> </tr> <tr> <td>Red Maple</td> <td>2</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> <tr> <td>White Pine</td> <td>36</td> <td>Pole/Sap/Log</td> <td>5</td> <td>35</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>21</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Jack Pine	20	Pole/Sap/Log	6		Quaking Aspen	2	Pole/Sapling	5		Red Pine	19	Log/Pole/Sap	10		Red Maple	2	Pole/Sapling	5		White Pine	36	Pole/Sap/Log	5	35	Bigtooth Aspen	21	Pole/Sapling	5		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Medium</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Jack Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Maple</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Medium	Variable	Tall Shrub	Jack Pine	Low	Variable	Sapling	Red Maple	Trace	>20 feet	Sapling	White Pine	Medium	Variable	Sapling	Red Pine	Low	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																											
Jack Pine	20	Pole/Sap/Log	6																																																												
Quaking Aspen	2	Pole/Sapling	5																																																												
Red Pine	19	Log/Pole/Sap	10																																																												
Red Maple	2	Pole/Sapling	5																																																												
White Pine	36	Pole/Sap/Log	5	35																																																											
Bigtooth Aspen	21	Pole/Sapling	5																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Black Cherry	Medium	Variable	Tall Shrub																																																												
Jack Pine	Low	Variable	Sapling																																																												
Red Maple	Trace	>20 feet	Sapling																																																												
White Pine	Medium	Variable	Sapling																																																												
Red Pine	Low	Variable	Sapling																																																												
<b>90</b>	42290 - Natural Mixed Pine	Sapling Poor	15.5	27	51-80	N/A	This stand had a species removal in 1995 in the sale Section 9 Pine Block (Georgia Pacific, #53-013-94) where everything was cut except for red pine, white pine, and oak. Jack pine regenerated moderately well from that harvest so an overstory removal was prescribed the next entry and cut in 2007 in the sale Whip-poor-will Red Pine (Bisballe, #53-017-04). Quite a few red pine were marked to leave during the overstory removal, averaging about 20 square feet per acre, although they tend to occur in clumps of 2-4 trees. It looks to me like a lot of the jack pine regeneration was destroyed during the overstory removal as there are "skid lanes" throughout with minimal or no regeneration. The follow-up treatment after the overstory removal was to scarify the stand but it doesn't appear that happened based on the jack pine regen that is still standing. Trace of bigtooth aspen and red maple saplings. The Shingle Mill Pathway runs east-west through the middle of the stand. No treatment will be possible in this stand until the jack pine matures. Consider clearcutting the entire stand next entry and re-planting back to red pine.																																																								
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Pine</td> <td>21</td> <td>Log/XLog</td> <td>15</td> <td>101</td> </tr> <tr> <td>Red Pine</td> <td>5</td> <td>Sapling</td> <td>3</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>56</td> <td>Sapling/Pole</td> <td>4</td> <td>27</td> </tr> <tr> <td>White Pine</td> <td>18</td> <td>Pole/Log/Sap</td> <td>7</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Pine	21	Log/XLog	15	101	Red Pine	5	Sapling	3		Jack Pine	56	Sapling/Pole	4	27	White Pine	18	Pole/Log/Sap	7		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Low	Variable	Tall Shrub																										
Canopy Species	% Cover	Size Class	DBH	Age																																																											
Red Pine	21	Log/XLog	15	101																																																											
Red Pine	5	Sapling	3																																																												
Jack Pine	56	Sapling/Pole	4	27																																																											
White Pine	18	Pole/Log/Sap	7																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																												
Black Cherry	Low	Variable	Tall Shrub																																																												



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
91	320 - Upland Shrub	Nonstocked	1.2		Unspecified	No	This is essentially the backyard of the Pigeon River Field Office. Clumps of invasive honeysuckle can be found throughout this stand as well as a clump of garlic mustard in the middle part of the stand near the slope that leads down to the Pigeon River. The garlic mustard has been pulled a few times but the honeysuckle has not been treated.	
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>		
		Balsam Poplar		Trace	Variable	Sapling		
		Jack Pine		Trace	>20 feet	Pole		
		White Pine		Trace	>20 feet	Log		
		Garlic Mustard		Trace	Unspecified	Non-Wood		
		Serviceberry (Juneberry)		Trace	Variable	Tall Shrub		
		Black Cherry		Low	Variable	Tall Shrub		
		Smooth Tartarian Honeysuckle		Medium	Variable	Tall Shrub		
		Paper Birch		Trace	>20 feet	Pole		
		Balsam Fir		Trace	>20 feet	Pole		
		Sweet Fern		Low	< 5 feet	Tall Shrub		
		Mixed Grasses		Full	Unspecified	Non-Wood		
		White Pine		Low	Variable	Sapling		
		Red Pine		Trace	>20 feet	Log		
		Quaking Aspen		Low	>20 feet	Pole		
92	42260 - Natural Pine, Mixed Deciduous	Sapling Poor	1.6	25	1-50	N/A	Former non-forested stand that is filling in with trees. BAM is filling in along the north/northwest edge, while jack pine is filling in the northeast part of the stand. The southwest part of the stand is still non-forested but conifers are seeding in. Not sure of the past history of this stand, perhaps it was a small maintained opening long ago.	
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>		<b>Age</b>
		Red Pine		5	Pole/Sapling	6		
		Balsam Poplar		35	Sapling/Pole	4		
		Jack Pine		45	Pole/Sapling	5		25
		White Pine		15	Sapling/Pole	4		
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>		
		White Spruce		Low	< 5 feet	Seeding		
		Black Cherry		Medium	Variable	Tall Shrub		
		White Pine		Low	< 5 feet	Seeding		
		Red Pine		Low	< 5 feet	Seeding		
		Balsam Poplar		Low	5 - 10 feet	Sapling		
93	42290 - Natural Mixed Pine	Sawtimber Well	3.2	71	51-80	N/A	Jack pine dominated stand that borders the Pigeon River and sits on ground that appears mostly dry. A few areas of wet ground are present along the edges. The jack pine is decent quality but somewhat open-grown. Quite a bit of jack pine mortality in the north half of the stand. Not sure of the history of this stand but I have to believe that the jack pine were planted here long ago? Trace of BAM in the overstory. Average ba/acre from 6 plots = 70 square feet. There are two small carved out "channels" that pass north/northwest through the stand. There are signs of old beaver damage throughout the stand so I'm guessing these channels were created by the beavers. No management due to the proximity to the Pigeon River.	
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>		<b>Age</b>
		White Spruce		8	Log/Pole	11		
		Red Pine		4	Log/XLog	15		
		Black Cherry		2	Pole	8		
		Jack Pine		55	Log/Pole	10		71
		White Pine		14	Pole/Log/XLog	8		
		Quaking Aspen		17	Log/Pole	10		
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>		
		Hawthorn (spp.)		Trace	5 - 10 feet	Tall Shrub		
		Balsam Poplar		Low	Variable	Sapling		
		White Spruce		Low	Variable	Sapling		
		White Pine		Low	Variable	Sapling		
		Serviceberry (Juneberry)		Medium	Variable	Tall Shrub		
		Tag Alder		Trace	Variable	Tall Shrub		
		Black Cherry		Medium	Variable	Tall Shrub		
94	42220 - Natural Jack Pine	Sapling Poor	1.8	28	1-50	N/A	This stand was used as a landing when adjacent stands had a species removal harvest in 1994. It has since filled in with pine except for the north half which is non-forested and a popular camping spot. Steep slopes as you head to the south end of the stand.	
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>		<b>Age</b>
		Red Pine		25	Sapling/Pole	3		
		Jack Pine		60	Sapling/Pole	4		28
		White Pine		15	Pole/Sapling	6		
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>		
		Black Cherry		Medium	Variable	Tall Shrub		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

**95**      6229 - Mixed lowland shrub      Nonstocked      21.2           Unspecified      No      The Pigeon River flows through this stand.

Sub-Canopy Species	Density	Avg. Height	Size
Ninebark	High	5 - 10 feet	Tall Shrub
Mixed Grasses	High	Unspecified	Non-Wood
Willow spp.	Trace	Variable	Tall Shrub
Balsam Poplar	Trace	>20 feet	Log
Sedges	High	Unspecified	Non-Wood
Willow spp.	Trace	>20 feet	Log
Balsam Fir	Trace	>20 feet	Pole
Balsam Poplar	Low	Variable	Sapling
American Highbush Cranberry	Trace	Variable	Tall Shrub
Black Cherry	Low	Variable	Tall Shrub
Balsam Poplar	Low	>20 feet	Pole
Balsam Fir	Trace	Variable	Sapling
Red Osier Dogwood	Trace	< 5 feet	Tall Shrub
White Spruce	Trace	>20 feet	Log
Tag Alder	High	10 - 20 feet	Tall Shrub
Northern White Cedar	Trace	>20 feet	Log
Nannyberry	Low	Variable	Tall Shrub

**96**      42110 - Planted Red Pine      Sawtimber Well      12.8      101      111-140      N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Pine	93	Log/Pole/XLog	13	101
Red Maple	1	Pole	7	
White Pine	4	Log/XLog/Pole	17	
Red Oak	2	Log/Pole	14	

Sub-Canopy Species	Density	Avg. Height	Size
White Pine	High	Variable	Sapling
Beech	Low	Variable	Sapling
Red Maple	Trace	>20 feet	Sapling
Red Oak	Trace	>20 feet	Sapling
Black Cherry	Trace	Variable	Tall Shrub

High quality red pine stand with some large diameter trees. The only harvest in the stand was a species removal harvest in 1994 (Section 9 Pine Block, #53-013-94, Georgia Pacific), where everything was cut except for red pine, white pine, or red oak. There must not have been many other species in the stand as most areas look like a standard red pine plantation. The exception is the middle part of the stand where BAs are lower and gaps created from the harvest have filled in with dense white pine regeneration. Some very large legacy white pine are scattered throughout the stand. There are also a few clumps of white pine poletimber. There is one red maple sawlog-sized tree in the southwest part of the stand. Flat terrain. Average ba/acre from 9 plots = 140 square feet.

**97**      6127 - Lowland Pine      Poletimber Well      1.1      30      81-110      N/A

Canopy Species	% Cover	Size Class	DBH	Age
Paper Birch	1	Pole	6	
Red Pine	15	Pole/Log	8	
White Pine	82	Pole/Sap/Log	6	30
Jack Pine	2	Pole	7	

Sub-Canopy Species	Density	Avg. Height	Size
White Pine	Medium	Variable	Sapling
Leatherleaf	High	< 5 feet	Tall Shrub

This stand is a forested leatherleaf bog in a sinkhole-like depression. There used to be a lot more jack pine in the stand but most has now died. Trace of red maple. Average ba/acre from 3 plots = 90 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																											
<b>98</b>	42220 - Natural Jack Pine	Poletimber Well	1.3	56	51-80	N/A	Small stand of decent quality jack pine. Trace of white spruce poletimber. Average ba/acre from 3 plots = 57 square feet. Some trees have been cut down at the north end, presumably used as firewood for the adjacent dispersed camping site.																																																											
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>2</td> <td>Pole</td> <td>8</td> <td></td> </tr> <tr> <td>White Pine</td> <td>12</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>10</td> <td>Log</td> <td>14</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>76</td> <td>Pole/Log</td> <td>8</td> <td>56</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Quaking Aspen	2	Pole	8		White Pine	12	Pole/Log	8		Red Pine	10	Log	14		Jack Pine	76	Pole/Log	8	56	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Trace	Variable	Tall Shrub	White Pine	Low	Variable	Sapling																									
Canopy Species	% Cover	Size Class	DBH	Age																																																														
Quaking Aspen	2	Pole	8																																																															
White Pine	12	Pole/Log	8																																																															
Red Pine	10	Log	14																																																															
Jack Pine	76	Pole/Log	8	56																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Black Cherry	Trace	Variable	Tall Shrub																																																															
White Pine	Low	Variable	Sapling																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>47</td> <td>Log/Pole</td> <td>12</td> <td>84</td> </tr> <tr> <td>Red Pine</td> <td>41</td> <td>Log/XLog/Pole</td> <td>14</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>10</td> <td>Pole/Sapling</td> <td>5</td> <td>25</td> </tr> <tr> <td>Red Oak</td> <td>2</td> <td>XLog/Log</td> <td>20</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	White Pine	47	Log/Pole	12	84	Red Pine	41	Log/XLog/Pole	14		Jack Pine	10	Pole/Sapling	5	25	Red Oak	2	XLog/Log	20		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Bigtooth Aspen</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Jack Pine</td> <td>High</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Bigtooth Aspen	Trace	>20 feet	Sapling	Black Cherry	Low	Variable	Tall Shrub	White Pine	Medium	Variable	Sapling	Jack Pine	High	Variable	Sapling	Red Pine	Medium	Variable	Sapling														
Canopy Species	% Cover	Size Class	DBH	Age																																																														
White Pine	47	Log/Pole	12	84																																																														
Red Pine	41	Log/XLog/Pole	14																																																															
Jack Pine	10	Pole/Sapling	5	25																																																														
Red Oak	2	XLog/Log	20																																																															
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Bigtooth Aspen	Trace	>20 feet	Sapling																																																															
Black Cherry	Low	Variable	Tall Shrub																																																															
White Pine	Medium	Variable	Sapling																																																															
Jack Pine	High	Variable	Sapling																																																															
Red Pine	Medium	Variable	Sapling																																																															
<b>99</b>	42290 - Natural Mixed Pine	Sawtimber Poor	24.5	84	1-50	N/A	Mixed red and white pine overstory of varying stocking and diameters. This is largely a result of a species removal harvest in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific) where everything was cut except for red pine, white pine, and oak. Much of the remaining red pine was then removed in an overstory removal harvest in 2006 (Skull and No Bones Red Pine, #53-016-04, Bisballe), however there still remains about 15 square feet of red pine residual, usually occurring in clumps of 2-3 trees. Regeneration came back well to jack pine in the initial overstory removal but there are also some areas with a good red pine component. Some areas of the jack pine regen, particularly in the central part of the stand, are approaching merchantability. A few small clumps of bigtooth aspen are present at the south end. There are a few massive red oak at the north end of the stand, including a 43" tree. Average ba/acre of the stand from 8 plots = 44 square feet. Retain the overstory and do not manage until the younger regeneration has matured. The younger age class can probably be featured in the overstory next entry, making this a J5 or MC5.																																																											
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>47</td> <td>Log/Pole</td> <td>12</td> <td>84</td> </tr> <tr> <td>Red Pine</td> <td>41</td> <td>Log/XLog/Pole</td> <td>14</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>10</td> <td>Pole/Sapling</td> <td>5</td> <td>25</td> </tr> <tr> <td>Red Oak</td> <td>2</td> <td>XLog/Log</td> <td>20</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		White Pine	47	Log/Pole	12	84	Red Pine	41	Log/XLog/Pole	14		Jack Pine	10	Pole/Sapling	5	25	Red Oak	2	XLog/Log	20		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Bigtooth Aspen</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Jack Pine</td> <td>High</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Bigtooth Aspen	Trace	>20 feet	Sapling	Black Cherry	Low	Variable	Tall Shrub	White Pine	Medium	Variable	Sapling	Jack Pine	High	Variable	Sapling	Red Pine	Medium	Variable	Sapling													
Canopy Species	% Cover	Size Class	DBH	Age																																																														
White Pine	47	Log/Pole	12	84																																																														
Red Pine	41	Log/XLog/Pole	14																																																															
Jack Pine	10	Pole/Sapling	5	25																																																														
Red Oak	2	XLog/Log	20																																																															
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Bigtooth Aspen	Trace	>20 feet	Sapling																																																															
Black Cherry	Low	Variable	Tall Shrub																																																															
White Pine	Medium	Variable	Sapling																																																															
Jack Pine	High	Variable	Sapling																																																															
Red Pine	Medium	Variable	Sapling																																																															
<b>100</b>	320 - Upland Shrub	Nonstocked	2.8		Unspecified	No	The southwest end of this stand is a popular dispersed camping area. The previous stand examiner called this site the "Infamous Clark Oliver Camp", not sure what that refers to.																																																											
<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>High</td> <td></td> <td>Sapling</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Jack Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Jack Pine</td> <td>Low</td> <td>&gt;20 feet</td> <td>Pole</td> </tr> <tr> <td>White Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Medium</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Quaking Aspen</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Pole</td> </tr> <tr> <td>Bracken Fern</td> <td>Medium</td> <td>Unspecified</td> <td>Non-Wood</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Pole</td> </tr> <tr> <td>Spotted Knapweed</td> <td>Trace</td> <td>Unspecified</td> <td>Non-Wood</td> </tr> <tr> <td>Red Oak</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Pole</td> </tr> <tr> <td>Mixed Grasses</td> <td>Full</td> <td>Unspecified</td> <td>Non-Wood</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Pole</td> </tr> <tr> <td>Sweet Fern</td> <td>High</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Red Oak</td> <td>Trace</td> <td>&gt;20 feet</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry		High		Sapling	Serviceberry (Juneberry)	Trace	Variable	Tall Shrub	Jack Pine	Low	Variable	Sapling	Jack Pine	Low	>20 feet	Pole	White Pine	Low	Variable	Sapling	Black Cherry	Medium	Variable	Tall Shrub	Quaking Aspen	Trace	>20 feet	Pole	Bracken Fern	Medium	Unspecified	Non-Wood	White Pine	Trace	>20 feet	Pole	Spotted Knapweed	Trace	Unspecified	Non-Wood	Red Oak	Trace	>20 feet	Pole	Mixed Grasses	Full	Unspecified	Non-Wood	Bigtooth Aspen	Trace	>20 feet	Pole	Sweet Fern	High	< 5 feet	Tall Shrub	Red Oak	Trace	>20 feet	Sapling
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Black Cherry	High		Sapling																																																															
Serviceberry (Juneberry)	Trace	Variable	Tall Shrub																																																															
Jack Pine	Low	Variable	Sapling																																																															
Jack Pine	Low	>20 feet	Pole																																																															
White Pine	Low	Variable	Sapling																																																															
Black Cherry	Medium	Variable	Tall Shrub																																																															
Quaking Aspen	Trace	>20 feet	Pole																																																															
Bracken Fern	Medium	Unspecified	Non-Wood																																																															
White Pine	Trace	>20 feet	Pole																																																															
Spotted Knapweed	Trace	Unspecified	Non-Wood																																																															
Red Oak	Trace	>20 feet	Pole																																																															
Mixed Grasses	Full	Unspecified	Non-Wood																																																															
Bigtooth Aspen	Trace	>20 feet	Pole																																																															
Sweet Fern	High	< 5 feet	Tall Shrub																																																															
Red Oak	Trace	>20 feet	Sapling																																																															



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
<b>101</b>	6112 - Lowland Aspen	Poletimber Well	17.1	44	81-110	N/A	Moderate quality aspen stand that is primarily lowland but has some upland ground in the northern 1/3rd of the stand. It was last clearcut in 1978 by Champion. Most of the stand regenerated to aspen although stocking is not very high in many places. Diameters on the aspen tend to vary quite a bit, with some areas barely over merchantability. A few areas are heavier to fir and spruce, mostly on the west edge and at the south end. The central part of the stand becomes very wet, with heavily browsed red osier dogwood at the ground level. A diverse shrub layer is present throughout much of the stand. Old rutting damage is still evident in some places. Browse noted on fir and white pine saplings at the south end of the stand. Average ba/acre from 9 plots = 84 square feet. This stand would benefit from ten more years of growth before harvesting as there are still a lot of small diameter trees in the stand.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Jack Pine		2	Pole	7		Red Maple		
White Spruce		4	Pole/Sapling	6		White Spruce		
Balsam Fir		3	Pole/Sapling	5		Tag Alder		
Quaking Aspen		77	Pole/Sapling	7	44	Hawthorn (spp.)		
Bigtooth Aspen		8	Pole/Sapling	7		Serviceberry (Juneberry)		
Red Pine		1	Log	14		White Pine		
Red Maple		2	Pole/Sapling	5		Nannyberry		
White Pine		3	Pole/Sap/Log	6		Jack Pine		
						Black Cherry		
						Balsam Fir		
<b>102</b>	4133 - Aspen, Mixed Pine	Poletimber Medium	1.4	35	51-80	N/A	Poor quality aspen stand that is not well-stocked. Various sizes of aspen and jack pine are present, but poletimber and saplings are most prevalent. Most of the merchantable aspen looks unhealthy. Not sure of the harvest history of this stand, neither was the previous stand examiner. This was likely just a poorly-stocked stand that filled in with additional trees over time. Clump of red maple sawlog trees at the north end. Average ba/acre from 2 plots = 66 square feet. Heavy shrub understory that is mostly cherry although there is a nice component of serviceberry in some places.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Red Oak		1	Log	14		Jack Pine		
White Pine		20	Pole/Sapling	6		Serviceberry (Juneberry)		
Red Pine		3	Log/Pole	12		Black Cherry		
Jack Pine		15	Pole/Sapling	6		White Pine		
Quaking Aspen		61	Pole/Sap/Log	7	35			
<b>103</b>	42110 - Planted Red Pine	Sawtimber Well	49.8	94	81-110	N/A	-Highly variable stocking throughout this stand. Previous harvest removed all jack pine, red maple, and aspen. Gaps created through previous harvest are filling in nicely with all three species of native pine. -A few natural XL-sized red pine are scattered throughout, measured some in the 24-27" DBH range. -Other species that were present but rare included jack pine and red oak. Understory species primarily included wintergreen, moss, and blueberry. Sweetfern, beech, and witch hazel were rare in the understory. -20 basal area plots were taken with an average of 86 sq. ft. per acre.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
White Pine		2	Log/XLog	15		Red Pine		
Red Pine		98	Log/Pole	12	94	Jack Pine		
						White Pine		
						Red Maple		
						Red Pine		
<b>104</b>	6139 - Mixed Lowland Forest	Sawtimber Medium	3.3	55	51-80	N/A	A hodgepodge stand of varying composition that was not harvested when adjacent stand 84 to the north was cut, due to its proximity to the Pigeon River. The western "bubble" of the stand is mostly good quality white spruce, both poletimber and sawtimber. The middle part of the stand is mostly aspen, while the eastern bubble of the stand is a mix of spruce, aspen, and some open grown white pine. Stocking is lower in the eastern part, with some patches of regen mixed in. The ground throughout the stand is a mix of upland and lowland, it tends to be wetter in the northern parts of the stand and becomes drier as you get to the south edges of the stand. Overall, I would say it's slightly more lowland than upland. Excellent shrub diversity in the eastern 2/3rds of the stand. Average ba/acre from 5 plots = 68 square feet. No management due to the proximity to the Pigeon River.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Quaking Aspen		42	Log/Pole	10	55	Balsam Fir		
Balsam Poplar		1	Pole	7		Serviceberry (Juneberry)		
White Spruce		41	Pole/Log	8		Black Cherry		
White Pine		10	Log/Pole	11		Tag Alder		
Balsam Fir		3	Pole	6		Nannyberry		
Red Pine		3	Log	13		White Spruce		
						White Pine		





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>105</b>	6139 - Mixed Lowland Forest	Sawtimber Well	6.0	68	81-110	N/A	Mixed species stand that tends to alternate between aspen and clumps of conifers. This stand is lowland from a landscape perspective as it borders the Pigeon River, however the ground does not appear to be overly wet in all places. Old beaver sign in the middle part of the stand, newer beaver sign from this year at the north end of the stand. Scattered blowdown throughout. Found 1 white oak sapling. Nice shrub diversity in the stand. Average ba/acre from 4 plots = 97 square feet. No management due to proximity to the Pigeon River.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		18	Log/XLog	14		Hawthorn (spp.)		Trace	5 - 10 feet	Tall Shrub	
Jack Pine		5	Pole/Log	8		Balsam Fir		Trace	Variable	Sapling	
White Spruce		1	Pole/Log	8		White Pine		Trace	Variable	Sapling	
Balsam Fir		1	Pole	6		Black Cherry		Medium	Variable	Tall Shrub	
Balsam Poplar		12	Log/Pole	12		Serviceberry (Juneberry)		Low	Variable	Tall Shrub	
White Pine		18	Log/Pole	12		Balsam Poplar		Medium	Variable	Sapling	
Quaking Aspen		45	Log	13	68	Tag Alder		Medium	10 - 20 feet	Tall Shrub	
<b>106</b>	42290 - Natural Mixed Pine	Sapling Medium	25.6	27	Immature	N/A	This stand had a species removal harvest in 1995 in the sale Section 9 Pine Block (#53-013-94), bought by Georgia Pacific. Everything was cut except for white pine, red pine, and oak. A subsequent red pine overstory removal harvest was completed in 2007 in the sale Whip-poor-will Red Pine (#53-017-04), bought by Bisballe. The initial species removal was a whole-tree harvest and resulted in a lot of ground scarification which allowed for very successful mixed pine regeneration throughout most of the stand. The only areas that did not regenerate very well are the far eastern end and the portion that is west of the north-south running open road. Some of the skid trails from the overstory removal are still lacking regeneration too. White pine tends to be the dominant regeneration, jack pine is most common in the middle part of the stand which looks like an old landing. All sizes of white pine are present including some clumps of poletimber and sawtimber that look like residual stems. Some scattered large diameter red pine were left.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		11	Log/XLog	15	96	Black Cherry		Low	>20 feet	Tall Shrub	
Red Pine		8	Sapling	3							
Jack Pine		24	Sapling/Pole	3							
White Pine		54	Sapling/Pole	3	27						
Red Maple		2	Sapling	2							
Red Oak		1	Log/XLog	15							
<b>107</b>	42110 - Planted Red Pine	Sawtimber Well	1.1	101	111-140	N/A	Small stand of good quality red pine. Average ba/acre from 2 plots = 125 square feet. Found 2 white oak in the stand, 1 a sapling and 1 a poletimber stem. A wildfire ran through this stand sometime in the early 2000's, along with a portion of stand 108. Despite the scorch marks, all trees appear healthy and were not negatively impacted by the burn. A lot of cherry and serviceberry under 2 feet tall are being browsed heavily.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		86	Log/Pole	14	101	Black Cherry		High	5 - 10 feet	Tall Shrub	
White Pine		12	XLog/Log/Pole	18							
Red Maple		1	Pole	6							
White Oak		1	Pole	8							
<b>108</b>	42290 - Natural Mixed Pine	Sapling Poor	8.7	27	1-50	N/A	This stand had a species removal harvest in 1995 (Section 9 Pine Block, Georgia Pacific, #53-013-94) where everything was cut except red pine, white pine, and oak. This resulted in basically a clearcut as there are minimal amounts of those three species in this stand. Large diameter red pine are scattered throughout but only average roughly 18 square feet of basal area. Regeneration was largely unsuccessful in the stand with the exception of some scattered clumps of jack and white pine, which are now approaching merchantability. The remainder of the stand has large amounts of shrubby black cherry. The Shingle Mill Pathway passes east-west through the southern end of the stand. South of the pathway appears to have been burned in a wildfire, along with adjacent stand 107.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		25	Log/XLog	15	101	Red Pine		Trace	< 5 feet	Seeding	
Red Oak		1	Log/XLog	16		Serviceberry (Juneberry)		Low	Variable	Tall Shrub	
Jack Pine		48	Sapling/Pole	4	27	Black Cherry		High	Variable	Tall Shrub	
Red Pine		3	Sapling	2		Jack Pine		Trace	< 5 feet	Seeding	
Quaking Aspen		3	Pole/Sapling	5							
White Pine		20	Sapling/Pole/Log	4							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
<b>109</b>	42290 - Natural Mixed Pine	Sawtimber Well	17.4	96	81-110	N/A	Pine dominant stand that borders the Pigeon River and sits on moderately steep slopes. Species composition tends to vary slightly as there are some areas with a higher component of aspen and red maple mixed in. Jack pine used to be a larger component, particularly in the southern 1/3rd of the stand, but the majority of it has died and has succeeded to white pine. The base of the slope adjacent to the river becomes lowland with some spruce, fir, and trace amounts of cedar mixed in. Average ba/acre of the stand from 9 plots = 107 square feet. The Shingle Mill Pathway travels through the entire length of this stand and the Lovejoy Monument is located near the south end. No management due to the proximity to the river as well as the recreation influence.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	30	Log/Pole/XLog	12		Red Maple	Trace		Variable	Sapling
Red Pine	36	Log/Pole/XLog	13	96	Serviceberry (Juneberry)	Trace		Variable	Tall Shrub
White Spruce	1	Pole/Log	8		Balsam Fir	Trace		Variable	Sapling
Red Oak	1	Log	15		White Spruce	Trace		Variable	Sapling
Red Maple	8	Pole/Log	8		Witch Hazel	Trace		5 - 10 feet	Tall Shrub
Quaking Aspen	2	Log	12		White Pine	Medium		Variable	Sapling
Paper Birch	3	Log/Pole	10		Red Oak	Trace		>20 feet	Sapling
Jack Pine	6	Pole/Log	9		Black Cherry	Low		Variable	Tall Shrub
Bigtooth Aspen	12	Log	12		Beech	Low		Variable	Sapling
Balsam Fir	1	Pole	6						
<b>110</b>	6111 - Lowland Balsam Poplar	Poletimber Poor	7.8	62	1-50	N/A		-Other species that were present but rare included; red maple, paper birch, white spruce, and willow. -Good amount of large CWD in the stand due to ongoing windthrow.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height		Size
Quaking Aspen	60	Pole/Log	9	62	Nannyberry	Medium	Variable		Tall Shrub
Balsam Poplar	40	Pole/Log/Sap	9		Black Cherry	Low	Variable		Sapling
					Tag Alder	High	>20 feet		Tall Shrub
<b>111</b>	42290 - Natural Mixed Pine	Poletimber Medium	9.0	42	51-80	N/A	Mostly a stand of poor-quality, open grown timber. Stocking is variable and clumpy in nature with open areas mixed in throughout. A small strip of trees adjacent to Twin Lakes Road was left uncut and has better stocking. No previous harvest records were found for this stand however old inventory records note that this stand was treated with Tordon in an effort to convert it to an opening. A diverse shrub component is present in places, including some nice clumps of hawthorn and serviceberry. Some of the black cherry is large (>5" DBH) but not merchantable quality. Average ba/acre from 5 plots = 76 square feet. Flat terrain. The Towerman's Watch Pathway travels through this stand. Although timber quality is low, this stand provides good wildlife habitat due to the mix of non-forested and forested areas, as well as the diverse shrub component. Leave unmanaged for now.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	14	Log/XLog/Pole	15		Red Pine	Trace		Variable	Sapling
Jack Pine	33	Pole/Log	8		Red Maple	Trace		>20 feet	Sapling
Quaking Aspen	4	Pole	8		Serviceberry (Juneberry)	Low		Variable	Tall Shrub
Red Oak	3	Log/XLog	15		Hawthorn (spp.)	Trace		5 - 10 feet	Tall Shrub
Red Maple	8	Pole/Log	8		Black Cherry	Medium		Variable	Tall Shrub
Bigtooth Aspen	1	Log/Pole	12		Jack Pine	Trace		Variable	Sapling
White Pine	37	Pole/Log/XLog	8	42	White Pine	Medium	Variable	Sapling	
<b>112</b>	42290 - Natural Mixed Pine	Sawtimber Well	6.8	84	81-110	N/A	Mixed species stand, with the majority of it lying on a steep slope overlooking the Pigeon River. Jack pine used to be a large component of the stand but much of it has died, with red maple and white pine filling in underneath. Legacy size white pine are scattered throughout. A sliver of lowland is present at the bottom of the slope and is where the fir and spruce component is located. A few younger red oak stems scattered throughout the stand. Average ba/acre from 4 plots = 83 square feet. The Shingle Mill Pathway runs east-west through the eastern part of the stand. No management due to the steep slopes and proximity to the Pigeon River.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Spruce	1	Log/Pole	11		Black Cherry	Medium		Variable	Tall Shrub
Balsam Fir	1	Pole	6		White Pine	Medium		Variable	Sapling
Bigtooth Aspen	4	Pole	8		Beech	Trace		Variable	Sapling
Paper Birch	2	Pole	7		White Spruce	Trace		Variable	Sapling
Beech	1	Pole	6		Balsam Fir	Trace		Variable	Sapling
Red Oak	5	Pole/Log	8		Tag Alder	Low		10 - 20 feet	Tall Shrub
White Pine	19	Log/Pole/XLog	12		Red Maple	Low		Variable	Sapling
Red Maple	8	Pole	6						
Jack Pine	18	Log/Pole	12						
Red Pine	41	Log/XLog	14	84					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																																					
113	42290 - Natural Mixed Pine	Sawtimber Well	7.1	93	81-110	N/A	-Stand lies on a steep ridge overlooking the Pigeon River. -High Country Pathway passes through a portion of this stand.																																																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Oak</td><td>3</td><td>Log/Pole</td><td>11</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>9</td><td>Log/Pole</td><td>12</td><td></td></tr> <tr><td>White Pine</td><td>18</td><td>XLog/Log</td><td>18</td><td></td></tr> <tr><td>Paper Birch</td><td>6</td><td>Pole/Log</td><td>9</td><td></td></tr> <tr><td>Red Maple</td><td>8</td><td>Pole</td><td>7</td><td></td></tr> <tr><td>Jack Pine</td><td>13</td><td>Pole/Log</td><td>9</td><td></td></tr> <tr><td>Red Pine</td><td>43</td><td>Log/XLog/Pole</td><td>14</td><td>93</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Oak	3	Log/Pole	11		Bigtooth Aspen	9	Log/Pole	12		White Pine	18	XLog/Log	18		Paper Birch	6	Pole/Log	9		Red Maple	8	Pole	7		Jack Pine	13	Pole/Log	9		Red Pine	43	Log/XLog/Pole	14	93	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Round Leaved Dogwood</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>White Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Round Leaved Dogwood	Low	Variable	Tall Shrub	White Pine	Low	Variable	Sapling	Black Cherry	Low	5 - 10 feet	Tall Shrub																																	
Canopy Species	% Cover	Size Class	DBH	Age																																																																																								
Red Oak	3	Log/Pole	11																																																																																									
Bigtooth Aspen	9	Log/Pole	12																																																																																									
White Pine	18	XLog/Log	18																																																																																									
Paper Birch	6	Pole/Log	9																																																																																									
Red Maple	8	Pole	7																																																																																									
Jack Pine	13	Pole/Log	9																																																																																									
Red Pine	43	Log/XLog/Pole	14	93																																																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																																																									
Round Leaved Dogwood	Low	Variable	Tall Shrub																																																																																									
White Pine	Low	Variable	Sapling																																																																																									
Black Cherry	Low	5 - 10 feet	Tall Shrub																																																																																									
114	42110 - Planted Red Pine	Sawtimber Medium	9.4	101	51-80	N/A	Large diameter, good quality red pine. The stand had a species removal harvest in 1995, removing everything except red pine, white pine, and oak, which resulted in variable stocking of the overstory. Regeneration came back well in some areas to a mix of species but is lacking in those areas with a higher BA of red pine. In general, there is more pine regeneration to the north and more deciduous regeneration along the south stand edge. Some of the old skid trails have red and jack pine regeneration. Nice diversity of mast-producing shrubs in some areas of the understory with hawthorn, serviceberry, and witch hazel all present, although these species are rare in the stand. Trace of red oak and white oak saplings and poletimber, closer to the trail at the south end. Trace of XL-sized white pine. Average ba/acre of the stand from 5 plots = 76 square feet.																																																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Jack Pine</td><td>5</td><td>Pole</td><td>5</td><td></td></tr> <tr><td>White Pine</td><td>12</td><td>Log/Pole</td><td>12</td><td></td></tr> <tr><td>Red Pine</td><td>83</td><td>Log/XLog</td><td>14</td><td>101</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Jack Pine	5	Pole	5		White Pine	12	Log/Pole	12		Red Pine	83	Log/XLog	14	101	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Jack Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Beech</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Bigtooth Aspen</td><td>Low</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>High</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Pine</td><td>Low</td><td>10 - 20 feet</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Medium</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>Red Maple</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Jack Pine	Low	Variable	Sapling	Beech	Trace	Variable	Sapling	Bigtooth Aspen	Low	>20 feet	Sapling	White Pine	High	Variable	Sapling	Red Pine	Low	10 - 20 feet	Sapling	Black Cherry	Medium	Variable	Tall Shrub	Red Maple	Trace	Variable	Sapling																																					
Canopy Species	% Cover	Size Class	DBH	Age																																																																																								
Jack Pine	5	Pole	5																																																																																									
White Pine	12	Log/Pole	12																																																																																									
Red Pine	83	Log/XLog	14	101																																																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																																																									
Jack Pine	Low	Variable	Sapling																																																																																									
Beech	Trace	Variable	Sapling																																																																																									
Bigtooth Aspen	Low	>20 feet	Sapling																																																																																									
White Pine	High	Variable	Sapling																																																																																									
Red Pine	Low	10 - 20 feet	Sapling																																																																																									
Black Cherry	Medium	Variable	Tall Shrub																																																																																									
Red Maple	Trace	Variable	Sapling																																																																																									
115	6111 - Lowland Balsam Poplar	Sawtimber Poor	5.6	58	1-50	N/A	-Pigeon River runs through this stand.-Other species that were present but rare included; red pine, white pine, balsam fir, and white spruce.																																																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Balsam Poplar</td><td>90</td><td>Log/Pole</td><td>10</td><td>58</td></tr> <tr><td>Quaking Aspen</td><td>10</td><td>Log/Pole</td><td>11</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Balsam Poplar	90	Log/Pole	10	58	Quaking Aspen	10	Log/Pole	11		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Balsam Poplar</td><td>Low</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>Tag Alder</td><td>High</td><td>10 - 20 feet</td><td>Tall Shrub</td></tr> <tr><td>Nannyberry</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>Ninebark</td><td>High</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Balsam Poplar	Low	>20 feet	Sapling	Tag Alder	High	10 - 20 feet	Tall Shrub	Nannyberry	Low	Variable	Tall Shrub	Ninebark	High	5 - 10 feet	Tall Shrub																																																						
Canopy Species	% Cover	Size Class	DBH	Age																																																																																								
Balsam Poplar	90	Log/Pole	10	58																																																																																								
Quaking Aspen	10	Log/Pole	11																																																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																																																									
Balsam Poplar	Low	>20 feet	Sapling																																																																																									
Tag Alder	High	10 - 20 feet	Tall Shrub																																																																																									
Nannyberry	Low	Variable	Tall Shrub																																																																																									
Ninebark	High	5 - 10 feet	Tall Shrub																																																																																									
116	42290 - Natural Mixed Pine	Sawtimber Well	8.4	96	81-110	N/A	This stand encompasses most of the Pigeon River State Forest Campground and the Shingle Mill Pathway passes through as well. Nice pine throughout the stand. Records show the red pine was planted but not the white pine. Trace amounts of red oak and paper birch in the overstory. Average ba/acre from 3 plots = 103 square feet. I found a few crabapple trees in the stand which is noted by "Apple (spp.)" in the understory data. A type of rose is present throughout the understory, possibly multiflora rose.																																																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>White Pine</td><td>35</td><td>Log/Pole/XLog</td><td>12</td><td></td></tr> <tr><td>Quaking Aspen</td><td>5</td><td>Log/Pole</td><td>11</td><td></td></tr> <tr><td>Jack Pine</td><td>6</td><td>Log/Pole</td><td>10</td><td></td></tr> <tr><td>Balsam Fir</td><td>1</td><td>Pole</td><td>6</td><td></td></tr> <tr><td>Balsam Poplar</td><td>2</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>White Spruce</td><td>3</td><td>Log/Pole</td><td>10</td><td></td></tr> <tr><td>Red Pine</td><td>46</td><td>Log/XLog/Pole</td><td>13</td><td>96</td></tr> <tr><td>Red Maple</td><td>2</td><td>Pole</td><td>7</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	White Pine	35	Log/Pole/XLog	12		Quaking Aspen	5	Log/Pole	11		Jack Pine	6	Log/Pole	10		Balsam Fir	1	Pole	6		Balsam Poplar	2	Pole/Log	8		White Spruce	3	Log/Pole	10		Red Pine	46	Log/XLog/Pole	13	96	Red Maple	2	Pole	7		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Oak</td><td>Low</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>Beech</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>White Spruce</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Balsam Fir</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Medium</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>Apple (spp.)</td><td>Trace</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>Red Maple</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>White Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Ninebark</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Oak	Low	>20 feet	Sapling	Beech	Low	Variable	Sapling	White Spruce	Low	Variable	Sapling	Balsam Fir	Low	Variable	Sapling	Black Cherry	Medium	Variable	Tall Shrub	Apple (spp.)	Trace	Variable	Tall Shrub	Red Maple	Low	Variable	Sapling	Serviceberry (Juneberry)	Low	Variable	Tall Shrub	White Pine	Low	Variable	Sapling	Ninebark	Low	5 - 10 feet	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																																																																								
White Pine	35	Log/Pole/XLog	12																																																																																									
Quaking Aspen	5	Log/Pole	11																																																																																									
Jack Pine	6	Log/Pole	10																																																																																									
Balsam Fir	1	Pole	6																																																																																									
Balsam Poplar	2	Pole/Log	8																																																																																									
White Spruce	3	Log/Pole	10																																																																																									
Red Pine	46	Log/XLog/Pole	13	96																																																																																								
Red Maple	2	Pole	7																																																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																																																									
Red Oak	Low	>20 feet	Sapling																																																																																									
Beech	Low	Variable	Sapling																																																																																									
White Spruce	Low	Variable	Sapling																																																																																									
Balsam Fir	Low	Variable	Sapling																																																																																									
Black Cherry	Medium	Variable	Tall Shrub																																																																																									
Apple (spp.)	Trace	Variable	Tall Shrub																																																																																									
Red Maple	Low	Variable	Sapling																																																																																									
Serviceberry (Juneberry)	Low	Variable	Tall Shrub																																																																																									
White Pine	Low	Variable	Sapling																																																																																									
Ninebark	Low	5 - 10 feet	Tall Shrub																																																																																									



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

<b>117</b>	6229 - Mixed lowland shrub	Nonstocked	6.0		Unspecified	No		
					<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
					Black Cherry	Low		Sapling
					White Spruce	Trace		Log
					Blackberry/Raspberry	Low		Tall Shrub
					Currant	Medium		Tall Shrub
					Balsam Poplar	Trace		Seeding
					Willow spp.	Low		Tall Shrub
					Balsam Poplar	Trace		Log
					Mixed Grasses	High		Non-Wood
					White Spruce	Trace		Pole
					Alder	High		Tall Shrub
					Ninebark	Low		Tall Shrub
					Sedges	Medium		Non-Wood
					White Spruce	Trace		Sapling

-Pigeon River flows through this stand.  
-Some relatively recent beaver activity on the larger balsam poplar.  
-There is a small upland inclusion (~.5 acres) of red and jack pine in the NE corner of the stand. This area is adjacent to Elk Hill Campground.

<b>118</b>	42110 - Planted Red Pine	Sawtimber Well	11.4	95	81-110	N/A			
					<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>
					White Pine	11	Log/Pole/XLog	11	
					Red Pine	86	Log/Pole/XLog	13	95
					Red Oak	2	Log/XLog	15	
					Red Maple	1	Pole	6	
					<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
					Red Oak	Trace	>20 feet	Sapling	
					Red Pine	Trace	Variable	Sapling	
					Serviceberry (Juneberry)	Trace	Variable	Tall Shrub	
					Jack Pine	Low	Variable	Sapling	
					Black Cherry	Medium	Variable	Tall Shrub	
					White Pine	Medium	Variable	Sapling	
					Beech	Trace	Variable	Sapling	
					Red Maple	Medium	>20 feet	Sapling	
					Paper Birch	Trace	>20 feet	Sapling	

Moderate quality red pine stand with a younger age class of regeneration from a species removal harvest in 1997, where everything was cut except for red pine, white pine, and oak. Red maple regeneration is primarily in the northeast part of the stand. A few areas of lower BA have some clumps of good quality white pine poletimber. White pine legacy trees are scattered throughout as are a small amount of XL-sized natural origin red pine. Trace of paper birch, red oak, and beech poletimber. Average ba/acre from 6 plots = 117 square feet. The central part of this stand burned in a wildfire in the early 2000's, and the plow line is still evident. No health issues on the pine, all appear to be healthy. Terrain is mostly flat except for the northern end of the stand which slopes down to the north.

<b>119</b>	42110 - Planted Red Pine	Sawtimber Medium	15.0	95	51-80	N/A			
					<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>
					Balsam Fir	1	Pole	6	
					White Pine	30	Pole/Log	8	
					Red Pine	67	Log/XLog	15	95
					Red Maple	2	Pole	6	
					<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
					Witch Hazel	Trace	5 - 10 feet	Tall Shrub	
					White Pine	Medium	Variable	Sapling	
					Beech	Trace	Variable	Sapling	
					Serviceberry (Juneberry)	Trace	Variable	Tall Shrub	
					Black Cherry	Medium	Variable	Tall Shrub	
					Red Pine	Trace	Variable	Sapling	
					Jack Pine	Low	Variable	Sapling	

A red pine/white pine stand that resembles somewhat of a heavy shelterwood. The red pine was originally planted and is generally good quality with some large diameters, and is more numerous along the southern stand boundary. The white pine is present in various sizes, with a few XL-sized trees, and tends to occur in clumps. The most recent harvest was from 2007, where all the jack pine, maple, and aspen were cut, along with some marked red and white pine (Mason Jar Pine, #53-015-04, Bisballe). Regeneration has not responded well other than a few patches of white pine, and some small areas of jack and red pine saplings near the old landing in the middle of the stand (there is also a small crabapple tree in this area). Found two small white oak in the stand, a small sapling and a 8" tree near the northeast corner. Red oak is present in the overstory but only in trace amounts. White spruce, paper birch, and bigtooth aspen can be found in trace amounts adjacent to Twin Lakes Road. Average ba/acre of the stand from 8 plots = 80 square feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>120</b>	42110 - Planted Red Pine	Sawtimber Well	13.7	95	141-170	N/A	Moderate quality red pine stand that is quite small for its age. The only harvest record is from the 1997 where mostly jack pine and larger red maple were removed. Although the red pine is planted, this stand doesn't resemble a plantation in many areas due to the white pine and deciduous component. The deciduous component is most numerous at the far western end of the stand. A few legacy size white pine are scattered throughout as well as a couple of natural origin, XL-sized red pine. Both older and younger red oak are present in the stand. Average ba/acre from 7 plots = 154 square feet. Terrain gently slopes down to the north/northeast.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		1	Log/Pole	10		White Pine		Medium	Variable	Sapling	
White Pine		11	Log/Pole/XLog	12		Witch Hazel		Trace	5 - 10 feet	Tall Shrub	
Red Pine		77	Log/Pole	12	95	Black Cherry		Low	Variable	Tall Shrub	
Red Maple		5	Pole	7		Beech		Trace	Variable	Sapling	
Jack Pine		3	Pole	8		Red Maple		Trace	>20 feet	Sapling	
Red Oak		3	Log/Pole	11							
<b>121</b>	42290 - Natural Mixed Pine	Poletimber Well	5.1	64	81-110	N/A	Mixed conifer poletimber stand with a supercanopy of older red and white pine. A few white pine that are near legacy tree size. Jack pine used to be a larger component of the stand but a lot of it has died, the majority that is left is in the northwest part of the stand. Average ba/acre from 5 plots = 104 square feet. Flat terrain. The Towerman's Watch Pathway cuts through the far southern end of the stand. Let grow and manage for white pine.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
White Pine		51	Pole/Sap/Log	7	64	White Pine		Low	Variable	Sapling	
Jack Pine		25	Pole	7							
Quaking Aspen		2	Pole	8							
Red Pine		22	Log/XLog/Pole	14	94						
<b>122</b>	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	1.8	47	81-110	N/A	Young white pine/red maple stand. A scattered supercanopy of large diameter red pine is present mostly along the edges. There are a few younger red pine poletimber trees. A couple of larger aspen stems are mixed in as well. A couple of younger red oak stems that are somewhat free to grow. Only took one BA plot which came out to 100 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		27	Pole/Sapling	5		Red Maple		High	>20 feet	Sapling	
Bigtooth Aspen		6	Pole	6		White Pine		Low	Variable	Sapling	
Red Oak		3	Pole	7		Red Oak		Trace	>20 feet	Sapling	
Red Pine		16	Log/XLog/Pole	14	93	Beech		Low	Variable	Sapling	
White Pine		48	Pole/Sap/Log	7	47						
<b>123</b>	4199 - Other Mixed Upland Deciduous	Poletimber Well	4.4	56	81-110	N/A	This stand was originally a part of stand 6 to the north but was excluded from the harvest because there is a significant amount of younger oak and hardwoods in this stand. Most of the beech has BBD. A few larger diameter hardwoods are present, mostly along the edges. A few XL-sized oak are present in the two fingers that extend north. White pine is mostly concentrated in a single clump at the south end. Average ba/acre from 6 plots = 93 square feet.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		16	Pole	8		White Pine		Low	Variable	Sapling	
Quaking Aspen		4	Pole	8		Red Maple		Medium	>20 feet	Sapling	
Red Oak		29	Pole/Sap/Log	7	56	Beech		Medium	>20 feet	Sapling	
Red Maple		26	Pole/Sapling	5		Sugar Maple		Trace	>20 feet	Sapling	
White Pine		14	Pole/Log	8							
Beech		9	Pole/Sap/Log	6							
Sugar Maple		2	Pole	6							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																													
<b>124</b>	4119 - Mixed Northern Hardwoods	Poletimber Well	35.7	97	81-110	N/A	Moderate to high quality hardwood stand that was last thinned in 2006 in the sale The Rock Hardwoods (#53-003-04), bought by AJD. Quality is best in the north and southwest parts of the stand. Pine can be found mostly along the east and north edges. Some very large diameter oak are present. BBD on most beech, trace of XL-sized beech. Heavy understory of undesirable ironwood and beech saplings. Average ba/acre from 12 plots = 109 square feet. Most of the stand sits on a gradual east-facing slope. Not quite ready for a thinning yet but it will be next entry.																																																													
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Ironwood</td><td>1</td><td>Pole</td><td>5</td><td></td></tr> <tr><td>Red Pine</td><td>7</td><td>Log/XLog</td><td>15</td><td></td></tr> <tr><td>Sugar Maple</td><td>52</td><td>Pole/Log</td><td>8</td><td>97</td></tr> <tr><td>Basswood</td><td>22</td><td>Log/Pole</td><td>12</td><td></td></tr> <tr><td>Red Oak</td><td>5</td><td>Log/XLog</td><td>16</td><td></td></tr> <tr><td>Red Maple</td><td>5</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>Beech</td><td>4</td><td>Log/Pole</td><td>10</td><td></td></tr> <tr><td>White Pine</td><td>4</td><td>Log/XLog</td><td>16</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Ironwood	1	Pole	5		Red Pine	7	Log/XLog	15		Sugar Maple	52	Pole/Log	8	97	Basswood	22	Log/Pole	12		Red Oak	5	Log/XLog	16		Red Maple	5	Pole/Log	8		Beech	4	Log/Pole	10		White Pine	4	Log/XLog	16		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Ironwood</td><td>High</td><td>Variable</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Ironwood</td><td>Medium</td><td>&lt; 5 feet</td><td>Seeding</td></tr> <tr><td>Beech</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Ironwood	High	Variable	Sapling	White Pine	Trace	Variable	Sapling	Ironwood	Medium	< 5 feet	Seeding	Beech	Medium	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																																
Ironwood	1	Pole	5																																																																	
Red Pine	7	Log/XLog	15																																																																	
Sugar Maple	52	Pole/Log	8	97																																																																
Basswood	22	Log/Pole	12																																																																	
Red Oak	5	Log/XLog	16																																																																	
Red Maple	5	Pole/Log	8																																																																	
Beech	4	Log/Pole	10																																																																	
White Pine	4	Log/XLog	16																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																	
Ironwood	High	Variable	Sapling																																																																	
White Pine	Trace	Variable	Sapling																																																																	
Ironwood	Medium	< 5 feet	Seeding																																																																	
Beech	Medium	Variable	Sapling																																																																	
<b>125</b>	4112 - Maple, Beech, Cherry Association	Poletimber Medium	24.8	97	51-80	N/A	2021 Update - In general, a moderate to low quality hardwood stand. The stand was thinned in the winter of 2020-21 in the sale Tanager Hardwoods (#53-014-14-01), bought by Jeff Brasseur, cut by Roland Rieger. Mostly good job on the sale, a few high stumps were left, residual damage not too bad. All beech was cut out of the stand except for a few stems that displayed resistance along with some good wildlife trees. Small retention area left in the middle to see what happens when we just let the beech die instead of salvaging it. Northern edge of the stand was excluded as this part transitions to a lot of very small poletimber stems.																																																													
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Bigtooth Aspen</td><td>4</td><td>Log/XLog</td><td>15</td><td></td></tr> <tr><td>Sugar Maple</td><td>50</td><td>Pole/Log</td><td>9</td><td>97</td></tr> <tr><td>Red Maple</td><td>28</td><td>Pole/Log</td><td>9</td><td></td></tr> <tr><td>Ironwood</td><td>1</td><td>Pole</td><td>6</td><td></td></tr> <tr><td>Basswood</td><td>11</td><td>Log</td><td>12</td><td></td></tr> <tr><td>Red Oak</td><td>3</td><td>Log</td><td>14</td><td>100</td></tr> <tr><td>Beech</td><td>3</td><td>Pole/Log</td><td>9</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Bigtooth Aspen	4	Log/XLog	15		Sugar Maple	50	Pole/Log	9	97	Red Maple	28	Pole/Log	9		Ironwood	1	Pole	6		Basswood	11	Log	12		Red Oak	3	Log	14	100	Beech	3	Pole/Log	9		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Beech</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Ironwood</td><td>Medium</td><td>5 - 10 feet</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Beech	Medium	Variable	Sapling	Ironwood	Medium	5 - 10 feet	Sapling													
Canopy Species	% Cover	Size Class	DBH	Age																																																																
Bigtooth Aspen	4	Log/XLog	15																																																																	
Sugar Maple	50	Pole/Log	9	97																																																																
Red Maple	28	Pole/Log	9																																																																	
Ironwood	1	Pole	6																																																																	
Basswood	11	Log	12																																																																	
Red Oak	3	Log	14	100																																																																
Beech	3	Pole/Log	9																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																	
Beech	Medium	Variable	Sapling																																																																	
Ironwood	Medium	5 - 10 feet	Sapling																																																																	
<b>126</b>	4119 - Mixed Northern Hardwoods	Poletimber Well	15.8	97	81-110	N/A	Hardwood stand of varying quality and composition. The north half of the stand has more of the beech, red maple, and oak component, while the south half transitions to more sugar maple and basswood. The oak in the stand is high quality. Beech is abundant in a few areas, with all having BBD and being close to death. White pine tends to be in clumps along the east and west edges. Trace of paper birch and white spruce in the overstory. Average ba/acre from 7 plots = 104 square feet. This stand was originally prescribed for a beech salvage/selection harvest last entry, with adjacent stands 8, 19, and 125, however this stand was excluded because an active red-shouldered nest was found in the stand during sale prep. No treatment needed at this time.																																																													
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Oak</td><td>16</td><td>Log/XLog</td><td>15</td><td></td></tr> <tr><td>Beech</td><td>11</td><td>Pole/Log</td><td>9</td><td></td></tr> <tr><td>Ironwood</td><td>1</td><td>Pole</td><td>6</td><td></td></tr> <tr><td>Sugar Maple</td><td>37</td><td>Pole/Log</td><td>8</td><td>97</td></tr> <tr><td>Red Pine</td><td>1</td><td>Log</td><td>14</td><td></td></tr> <tr><td>Red Maple</td><td>23</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>Basswood</td><td>5</td><td>Log/XLog/Pole</td><td>14</td><td></td></tr> <tr><td>White Pine</td><td>6</td><td>Log/XLog/Pole</td><td>15</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Oak	16	Log/XLog	15		Beech	11	Pole/Log	9		Ironwood	1	Pole	6		Sugar Maple	37	Pole/Log	8	97	Red Pine	1	Log	14		Red Maple	23	Pole/Log	8		Basswood	5	Log/XLog/Pole	14		White Pine	6	Log/XLog/Pole	15		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Ironwood</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Beech</td><td>High</td><td>5 - 10 feet</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Ironwood	Low	Variable	Sapling	Beech	High	5 - 10 feet	Sapling	White Pine	Low	Variable	Sapling				
Canopy Species	% Cover	Size Class	DBH	Age																																																																
Red Oak	16	Log/XLog	15																																																																	
Beech	11	Pole/Log	9																																																																	
Ironwood	1	Pole	6																																																																	
Sugar Maple	37	Pole/Log	8	97																																																																
Red Pine	1	Log	14																																																																	
Red Maple	23	Pole/Log	8																																																																	
Basswood	5	Log/XLog/Pole	14																																																																	
White Pine	6	Log/XLog/Pole	15																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																	
Ironwood	Low	Variable	Sapling																																																																	
Beech	High	5 - 10 feet	Sapling																																																																	
White Pine	Low	Variable	Sapling																																																																	
<b>127</b>	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	3.1	93	141-170	N/A	Small stand of nice quality pine. Large diameter trees (18"+) of aspen, oak, and pine are present throughout and also a few white pine legacy trees. This stand did not have a species removal harvest years ago like so many other pine stands did in this Compartment. Average ba/acre from 4 plots = 148. Leave unmanaged for now and let the aspen continue to die out. It's possible this was left as retention when stand 11 to the northeast was cut?																																																													
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>12</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>White Pine</td><td>45</td><td>Log/Pole/XLog</td><td>13</td><td>93</td></tr> <tr><td>Red Pine</td><td>17</td><td>Log</td><td>14</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>22</td><td>Log/XLog</td><td>14</td><td></td></tr> <tr><td>Red Oak</td><td>4</td><td>Log/XLog</td><td>15</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	12	Pole/Log	8		White Pine	45	Log/Pole/XLog	13	93	Red Pine	17	Log	14		Bigtooth Aspen	22	Log/XLog	14		Red Oak	4	Log/XLog	15		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Striped Maple</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Beech</td><td>Medium</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Red Maple</td><td>Trace</td><td>&gt;20 feet</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Striped Maple	Trace	Variable	Sapling	Beech	Medium	Variable	Sapling	Red Maple	Trace	>20 feet	Sapling	White Pine	Low	Variable	Sapling															
Canopy Species	% Cover	Size Class	DBH	Age																																																																
Red Maple	12	Pole/Log	8																																																																	
White Pine	45	Log/Pole/XLog	13	93																																																																
Red Pine	17	Log	14																																																																	
Bigtooth Aspen	22	Log/XLog	14																																																																	
Red Oak	4	Log/XLog	15																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																	
Striped Maple	Trace	Variable	Sapling																																																																	
Beech	Medium	Variable	Sapling																																																																	
Red Maple	Trace	>20 feet	Sapling																																																																	
White Pine	Low	Variable	Sapling																																																																	



**Stand**      **Level 4 Cover Type**      **Size Density**      **Acres**      **Stand Age**      **BA Range**      **Managed Site**      **General Comments**

**128**      4319 - Mixed Upland Forest      Poletimber Well      8.0      58      51-80      N/A

Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	19	Pole/Log	8	
White Pine	40	Pole/Log/XLog	8	58
Sugar Maple	6	Pole/Log/XLog	8	
Red Oak	6	Log/XLog/Pole	14	
Red Pine	2	Log/Pole	14	
Beech	8	Pole/Log	9	
Red Maple	14	Pole/Log	8	
Bigtooth Aspen	5	Log/Pole	12	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Trace	>20 feet	Sapling
Red Maple	Low	>20 feet	Sapling
Beech	High	Variable	Sapling
White Pine	Medium	Variable	Sapling
Black Cherry	Trace	>20 feet	Tall Shrub
Red Oak	Trace	>20 feet	Sapling

This stand is a mixed bag of everything. White pine is dominant but tends to occur in scattered clumps. The quaking aspen component is mostly at the northwest corner. The far north/northeast end of the stand has some younger maple and oak mixed in. Small oak poletimber is rare but can be found throughout. Beech tends to be mostly along the east stand edge and all of it has BBD and is close to death. A few large diameter, wolfy sugar maple are scattered throughout. Trace of paper birch and jack pine in the overstory. Average ba/acre from 6 plots = 80 square feet. No sale records for this stand but I'm guessing it had a partial harvest long ago. Let the white pine continue to mature and manage for that species in the future.

**129**      320 - Upland Shrub      Nonstocked      0.9      Unspecified      No

Sub-Canopy Species	Density	Avg. Height	Size
White Pine	Trace	>20 feet	Pole
Black Cherry	Medium	Variable	Tall Shrub
Jack Pine	Trace	>20 feet	Pole
Cladonia (Reindeer moss)	Low	Unspecified	Non-Wood
Bracken Fern	High	Unspecified	Non-Wood
Jack Pine	Low	Variable	Sapling
Mixed Grasses	High	Unspecified	Non-Wood
White Pine	Trace	Variable	Sapling
Red Pine	Trace	Variable	Sapling
Sweet Fern	Low	< 5 feet	Tall Shrub

Small area that did not regenerate well when the surrounding stands were cut. The west half of the stand looks like it was used as a landing.

**130**      42110 - Planted Red Pine      Sawtimber Well      16.5      97      111-140      N/A

Canopy Species	% Cover	Size Class	DBH	Age
Red Oak	3	Log	14	
White Pine	6	Log/Pole	10	
Red Pine	91	Log/XLog/Pole	14	97

Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	Trace	Variable	Sapling
Black Cherry	Low	Variable	Tall Shrub
Bigtooth Aspen	Low	>20 feet	Sapling
Jack Pine	Trace	>20 feet	Pole
Jack Pine	Medium	10 - 20 feet	Sapling
Red Pine	Low	< 5 feet	Seeding
Beech	Trace	Variable	Sapling
Red Pine	Trace	Variable	Sapling
White Pine	Medium	Variable	Sapling
Bigtooth Aspen	Trace	>20 feet	Pole

Moderate quality red pine stand with some big diameters. Stocking varies significantly as a result of a species removal harvest in 1997 (Ford Lake Pine Block, #53-015-94, Georgia Pacific), where everything was cut except for red pine, white pine, and oak. BAs in the stand range anywhere from 30 to 170 square feet. Some of the lower stocked areas have regenerated well to jack pine, especially a linear north-south running area in the northeast part of the stand. A few pockets of aspen and red pine have regenerated as well. The overstory oak component is mostly at the far southern end. Trace of balsam fir and white spruce saplings. Average ba/acre of the stand from 7 plots = 120 square feet. Terrain gradually slopes up to the north. The Shingle Mill Pathway runs north-south through the length of the stand.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
131	42260 - Natural Pine, Mixed Deciduous	Poletimber Medium	2.4	52	51-80	N/A	<p>Poor quality stand with many areas of low stocking that have filled in with either red maple or white pine saplings. Jack pine used to be a larger component of the stand but most of it has died which is the reason for the areas of lower stocking. A few clumps of very large serviceberry along the south edge (3-5" DBH). Average ba/acre of the stand from 3 plots = 67 square feet. Let the understory continue to fill in and manage when mature.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	12	Log/Pole/XLog	13		Serviceberry (Juneberry)	Low		Variable	Tall Shrub
Jack Pine	10	Pole/Log	9		White Pine	Medium		Variable	Sapling
Bigtooth Aspen	20	Pole	8		Black Cherry	Low		Variable	Tall Shrub
Quaking Aspen	3	Pole	7		Red Maple	High		Variable	Sapling
Red Maple	10	Pole/Sap/Log	7						
Red Oak	1	XLog/Log	18						
White Spruce	2	Pole/Log	8						
White Pine	42	Pole/Log	9	52					
132	6127 - Lowland Pine	Sawtimber Well	2.3	84	51-80	N/A	<p>Mixed species stand that is lowland from a landscape perspective, however the ground is not overly wet. Jack pine used to be a larger component but many have died. Found 1 ash poletimber stem that is alive. Average ba/acre from 2 plots = 70 square feet. No management due to proximity to the Pigeon River.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Balsam Poplar	2	Pole	8		Red Maple	Low		Variable	Sapling
Red Pine	40	Log	13	84	White Pine	Low		Variable	Sapling
Jack Pine	15	Pole/Log	8		Black Cherry	Medium		Variable	Sapling
White Spruce	3	Pole/Log	8						
Quaking Aspen	19	Log/Pole	11						
Balsam Fir	1	Pole	6						
White Pine	20	Log/Pole	12						
133	42110 - Planted Red Pine	Sawtimber Well	6.8	96	81-110	N/A	<p>This stand had a species removal harvest in 1997 in the sale Ford Lake Pine Block (#53-015-94, Georgia Pacific), cutting everything except red pine, white pine, and oak. As a result, the residual stocking is highly variable and tends to alternate between dense clumps and more open areas with BAs under 50 square feet. The northwest corner of the stand has a pocket of jack pine and white pine poletimber. Trace of red maple poletimber. Heavy browse on the red maple seedlings and almost all red maple saplings have been girdled by elk stripping off the bark of the lower bole. Average ba/acre from 6 plots = 98 square feet.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	71	Log/Pole/XLog	13	96	Red Pine	Trace		Variable	Sapling
White Pine	22	Log/Pole/XLog	12		Red Maple	Medium		< 5 feet	Seeding
Jack Pine	3	Pole	6		Red Maple	Trace		>20 feet	Sapling
Red Oak	4	Log/XLog	15		White Pine	Medium		Variable	Sapling
					Jack Pine	Trace		Variable	Sapling
134	42110 - Planted Red Pine	Sawtimber Well	7.0	85	141-170	N/A	<p>Planted red pine stand with a nice component of natural white pine. This stand did not have a species removal like almost every other pine stand in the Compartment so there are still some deciduous species left in the stand, particularly the western finger of the stand, which has a small amount of aspen. Red oak is primarily in this western area as well. The quality of the pine is good although diameters are small due to no previous thinnings. Scattered XL-sized red and white pine are mixed in, including some legacy trees. Trace of paper birch and jack pine in the overstory. Average ba/acre from 6 plots = 147 square feet. A small stick nest was found in the eastern side of the stand. Old fire charred pine stumps are present throughout. Terrain is flat except for the western finger which is on a north facing downslope. The Shingle Mill Pathway follows the entire length of the northern boundary of this stand. Due to its proximity to Ford Lake, this stand should either be left unmanaged or managed on a longer rotation to promote big trees.</p>		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Oak	6	Log/Pole	11		Red Maple	Trace		>20 feet	Sapling
White Pine	29	Pole/Log	9		White Pine	Low		Variable	Sapling
Bigtooth Aspen	4	Log/Pole	11		Beech	Trace		Variable	Sapling
Red Maple	1	Pole	6						
Red Pine	60	Log/Pole	12	85					





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
<b>136</b>	6112 - Lowland Aspen	Sawtimber Medium	2.5	68	51-80	N/A	Lowland popple stand that does not appear to have been harvested when adjacent stands 84 and 101 were clearcut. This stand is very close to the Pigeon River, and the east half of the stand is very wet, both of which may be reasons it wasn't harvested. A few areas of drier ground on the north edge of the stand. Stocking is light in areas of the stand. Average ba/acre from 4 plots = 58 square feet. No management due to wet ground and proximity to the Pigeon River.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Paper Birch		3	Pole	7		Tag Alder		
Balsam Poplar		13	Pole	7		Nannyberry		
Jack Pine		1	Pole	7		White Spruce		
White Spruce		2	Pole/Log	8		Balsam Poplar		
Red Pine		2	Log	14		Serviceberry (Juneberry)		
Quaking Aspen		79	Log/Pole	11	68	Hawthorn (spp.)		
						Black Cherry		
<b>137</b>	429 - Mixed Upland Conifers	Poletimber Well	2.3	37	81-110	N/A	This stand was clearcut in 1985 along with adjacent stands 81 and 87 but had most of the aspen removed by beavers. Spruce, fir, and white pine have since filled in very well and are densely stocked in some areas, particularly the east half of the stand. Average ba/acre from 5 plots = 94 square feet. Most of the stand sits on a slope that overlooks the Pigeon River, the far east end of the stand dips down to the base of the slope and is wetter ground. Manage for pine. Do not clearcut again due to the proximity to the Pigeon River.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Red Maple		12	Pole/Sapling	5		White Pine		
Red Oak		1	Log/XLog	16		White Spruce		
Quaking Aspen		3	Pole/Sapling	5		Red Maple		
White Spruce		13	Pole/Sapling	7		Balsam Fir		
Red Pine		1	Log/Pole	11				
Balsam Fir		30	Pole/Sapling	7				
White Pine		40	Pole/Log	8	37			
<b>263</b>	42110 - Planted Red Pine	Sawtimber Poor	15.8	86	1-50	N/A	Stand was cut in the fall/early winter of 2017 in the sale Ford Lake Red Pine, #53-004-14-01, bought by Precision. Roundwood harvest followed up by chipping of the tops. Quite a bit of ground scarification took place here which will hopefully allow for some natural red pine regeneration. Average residual ba/acre = 21 square feet.  2021 - Regen survey indicated excellent natural pine regen and the decision was made to remove the overstory red pine due to Diploidia concerns. Chapter 7 variance approved. Regen survey results (avg height in parentheses): red pine 1225 TPA (6"), white pine 600 TPA (6"), black cherry 50 TPA (5").	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>			
White Pine		10	Log	12				
Red Oak		1	Log	12				
Red Pine		89	Log	13	86			