

Forest Management Plan Amendment

Rogers Lot

Danville Town Forest

February 3, 2020


Duly Authorized Agent
Town of Danville

2/3/2020
Date

Prepared by:


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Caledonia & Essex County Forester
License # 148.0121958

2.3.20
Date



STAND 6

Acres: 1

Current Forest Type: Red Pine/White Pine Plantation

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II

Soils: Buckland

Stand Description: Stand 6 is a red pine plantation planted during the late 1950's. The stand has not yet been thinned and many crowns have less than optimal live crown ratios necessary to take full advantage of thinning operations. Once thinned this stand will be combined with stand 5.

Silvicultural Information:

Cruise Intensity: (2) 10-factor var. radius plots

Age Class Distribution: Even-aged (@50 years)

Regeneration: None

Total Basal Area per Acre: 190

Acceptable Basal Area per Acre: 130

Trees per Acre: 288 trees per acre

Quadratic Mean Stand Diameter: 11"

Volume Information:

Sawtimber Volume: 18.144 mbf

Cordwood Volume: 12.19 cords

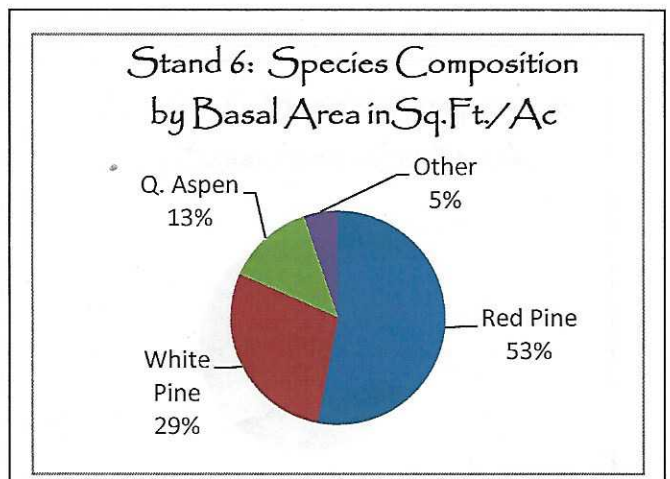
Silvicultural Plan:

Stand Health: Some red pine gall is starting to appear in the stand. Red pine gall levels should be monitored to determine the long-term viability of the stand.

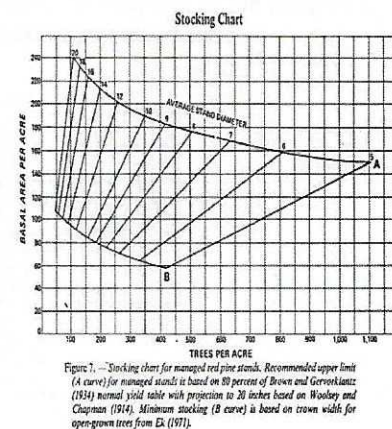
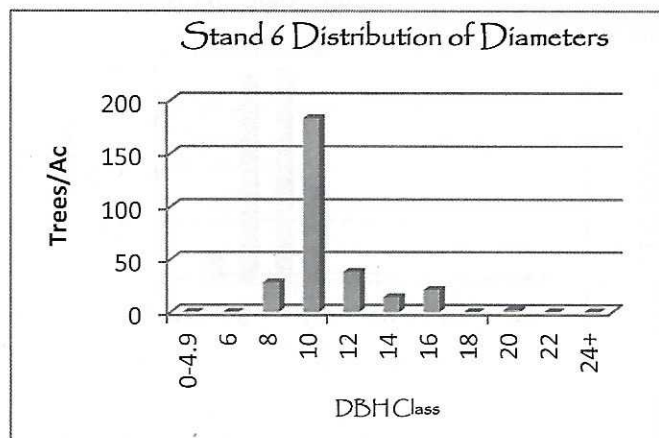
Access/Operability: Access to the stand is readily available via existing landings and skid roads.

Long Range Goals: The long range goal for this stand is to eventually return the species composition to native tree species better suited to the site conditions. This goal will be accomplished over the long term though the next several entries will focus on growing and managing the red pine component.

Planned Management Practices: (2015) Conduct a low-thinning reducing the basal area to 120-130 sq.ft./ac. Removals should focus on stems in the 8-10" diameter class as well as poor quality stems with visible defects.



2019 Amendment: The red pine here is in decline at this time. Red pine decline and mortality is increasing across the state. In some stands in Washington and Rutland Counties mortality is reaching 100%. The Department of Forest, Parks and Recreation continues to investigate the cause of the mortality, but a clear causal agent has not been identified. Although red pine scale remains a possible suspect, research and observations to date have not been able to confirm this hypothesis. Stand six will be treated with a 1.0 acre clearcut to remove the declining red pine and the low-live crown ratio of the small percentage of white pine. All healthy white pine with live crown ratio's greater than 50% will be retained for structure and seed source.



STAND 16

Acres: 2

Current Forest Type: Red Pine Plantation

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II

Soils: Buckland

Stand Description: Stand 16 is a small red pine plantation planted in the late 1950's. The stand has not been thinned therefore is considered overstocked with many stems having low live crown ratios. The red pine here however is well suited to the soils and is growing very well.



Stand 16: 2010

Silvicultural Information:

Cruise Intensity: (2) 10-factor var. radius plots

Age Class Distribution: Even-aged (@50 years)

Regeneration: None

Total Basal Area per Acre: 245

Acceptable Basal Area per Acre: 245

Trees per Acre: 491 trees per acre

Quadratic Mean Stand Diameter: 9.6"

Volume Information:

Sawtimber Volume: 30.273 mbf/acre

Cordwood Volume: 1.24 cords/acre

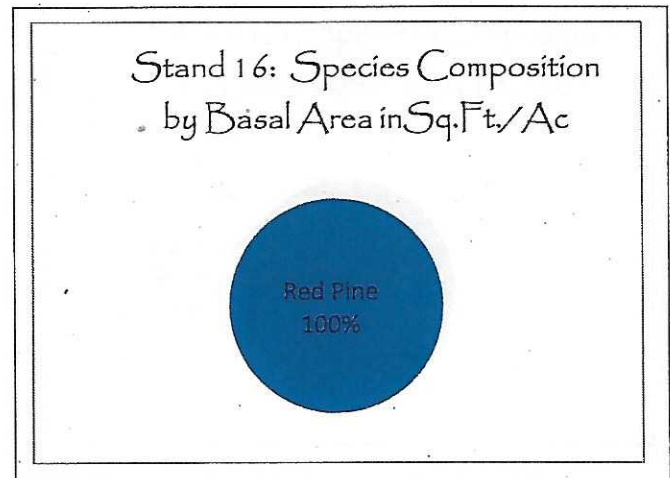
Silvicultural Plan:

Stand Health: Evidence of red pine gall was not found in this stand however its presence should be monitored.

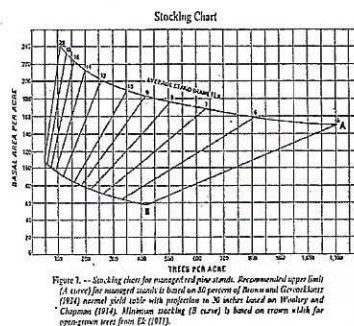
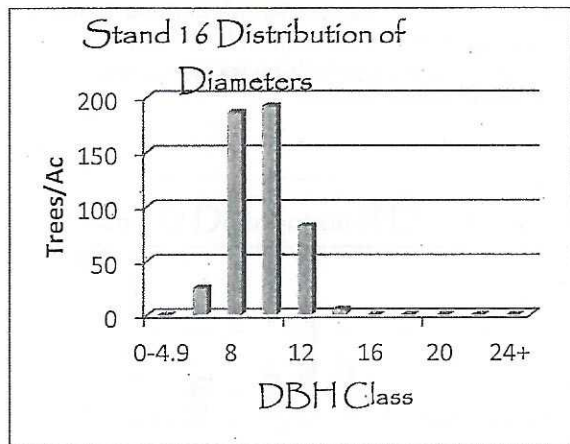
Access/Operability: Access to the stand is readily available as the stand is adjacent to an existing landing.

Long Range Goals: The long range goal for this stand is to eventually return the species composition to native tree species. This goal will be accomplished over the long term though the next several entries will focus on growing and managing the red pine component.

Planned Management Practices: (2015) Conduct a low-thinning reducing the basal area to 120-130 sq.ft./ac. Removals should focus on stems in the 6-8" diameter class as well as poor quality stems with visible defects.



2019 Amendment: Stand is in decline at this time. Red pine decline and mortality is increasing across the state. In some stands in Washington and Rutland Counties mortality is reaching 100%. The Department of Forest, Parks and Recreation continues to investigate the cause of the mortality but a clear causal agent has not been identified. Although red pine scale remains a possible suspect, research and observations to date have not been able to confirm this hypothesis. The ongoing thinning of the crowns and dieback in stand 16 have created ideal conditions for the establishment of sugar maple, white ash and balsam fir regeneration. An overstory removal of the red pine in 2020 will release the established regeneration here.



STAND 17

Acres: 2

Current Forest Type: Red/White Pine Plantation

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II

Soils: Buckland

Stand Description: Stand 17 is predominantly a red pine plantation with a small component of white pine. The stand appears to have been thinned as a well-established layer of sugar maple and white ash regeneration is present.



Stand 17: 2010

Silvicultural Information:

Cruise Intensity: (2) 10-factor variable radius plots

Age Class Distribution: Even-aged (@50 years)

Regeneration: Well-established sugar maple and white ash .5-1" diameter.

Total Basal Area per Acre: 140

Acceptable Basal Area per Acre: 135

Trees per Acre: 177 trees per acre

Quadratic Mean Stand Diameter: 12.8"

Volume Information:

Sawtimber Volume: 20.784 mbf/ac

Cordwood Volume: 0 cords

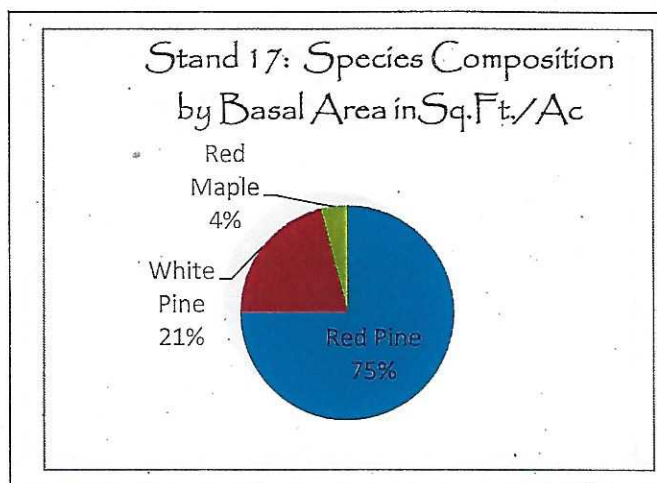
Silvicultural Plan:

Stand Health: Evidence of red pine gall was not found in this stand however its presence should be monitored. White pine blister rust is present with some mortality occurring.

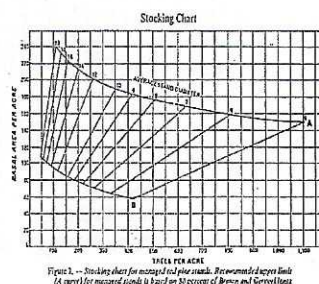
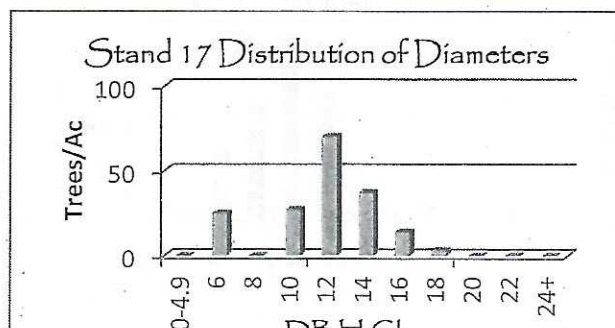
Access/Operability: Access to the stand is readily available as the stand is adjacent to an existing landing.

Long Range Goals: The long range goal for this stand is to eventually return the species composition to native tree species. This goal will be accomplished over the long term though the next several entries will focus on growing and managing the red pine component as well as encouraging the well established northern hardwood regeneration.

Planned Management Practices: (2015) Conduct a low-thinning reducing the basal area to 120 sq.ft./ac. Removals should focus on stems in the 6-10" diameter class as well as poor quality stems with visible defects (blister rust). Expand the gaps of regeneration by removing groups of overtopping stems.



2019 Amendment: Red Pine component of the stand is in decline at this time. Red pine decline and mortality is increasing across the state. In some stands in Washington and Rutland Counties mortality is reaching 100%. The Department of Forest, Parks and Recreation continues to investigate the cause of the mortality but a clear causal agent has not been identified. Although red pine scale remains a possible suspect, research and observations to date have not been able to confirm this hypothesis. The ongoing thinning of the crowns and dieback in stand 17 have created ideal conditions for the establishment of sugar maple and white ash regeneration. An overstory removal of the red pine in 2020 will release the established regeneration here.



STAND 19

Acres: 2

Current Forest Type: Red Pine/White Pine Plantation

Natural Community: Red Spruce-Northern Hardwood Forest

Site Class: II

Soils: Buckland

Stand Description: Stand 19 is a mixed bag plantation of red and white pine likely planted in the late 1950s. It is located on good well-drained soils and is in need of a low thinning to maintain acceptable live crown ratios to maximize growth.

Silvicultural Information:

Cruise Intensity: (2) 10-factor var. radius plots

Age Class Distribution: Even-aged (@50 years)

Regeneration: Edges of stand have regenerated to tolerant northern hardwood species.

Total Basal Area per Acre: 175

Acceptable Basal Area per Acre: 165

Trees per Acre: 217 trees per acre

Quadratic Mean Stand Diameter: 12.1"

Volume Information:

Sawtimber Volume: 26.356 mbf/acre

Cordwood Volume: 3.58 cords/acre

Silvicultural Plan:

Stand Health: Small amount of white pine blister rust was observed though levels certainly not alarming.

Access/Operability: Access to the stand is readily available as the stand is adjacent to an existing landing. Summer or winter operations feasible given soil conditions.

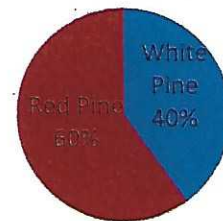
Long Range Goals: The long range goal for this stand is to eventually return the species composition to native tree species. This goal will be accomplished over the long term though the next several entries will focus on growing and managing the red and white pine component as well as encouraging the well established northern hardwood regeneration found along the edge of the stand

Planned Management Practices: (2013) Conduct a low-thinning reducing the basal area to 120 sq.ft./ac. Removals should focus on stems in the 8-10" diameter class as well as poor quality stems with visible defects. Trees located along the margin of the stand that are overtopping well-established regeneration can be removed at this time as well.



Stand 19: 2010

Stand 19: Species Composition by Basal Area in Sq.Ft./Ac



2019 Amendment: Red pine component of the stand is in decline at this time. Red pine decline and mortality is increasing across the state. In some stands in Washington and Rutland Counties mortality is reaching 100%. The Department of Forest, Parks and Recreation continues to investigate the cause of the mortality but a clear causal agent has not been identified. Although red pine scale remains a possible suspect, research and observations to date have not been able to confirm this hypothesis. The ongoing thinning of the crowns and dieback in stand 19 have created ideal conditions for the establishment of sugar maple, white ash and balsam fir regeneration. An overstory removal of the red pine in 2020 will release the established regeneration here. This overstory removal will be limited to a 1 acre area in the southeaster portion of the stand.

