

## STOWELL

### TRACT INFORMATION

- Total Acres: 98 acres, according to tax map
- Map and Lot:
  - Map 5, Lot 620, 98 acres
- Conservation Status:
  - Ownership by Sullivan County

### OWNERSHIP DESCRIPTION

#### Location:

- Stowell is located on the south side of Britton Road, about 1 mile from County Road.

#### General Description:

- Stowell is a small tract with an intensive agricultural use history, hosting red pine plantations on the old agricultural fields.
- An old double walled road forms a portion of the western boundary, extending in from Britton Road and entering the interior of the tract just below the old cellar hole near the complex of stone walls and red pine plantations. The road extends through the tract, leaving by the southeastern corner. Historically the road extended to West Unity Road.
- The forest elsewhere is a combination of white pine and hardwood on the better sites, and hemlock hardwood on the shallower soils.
- The pine dominated stands host large, poor to good quality pine that are mature or becoming over mature.
- One area of hemlock and pine, located along the eastern boundary just above the wetland exhibits features of old forests, with good CWD structure, providing an opportunity to create a small reserve area.

#### Access:

- Stowell has good access to Britton Road on a gated internal road that has been well-maintained.
- An old road runs along the western boundary, but it is unclear if this is part of the County ownership or not. It has not been maintained and is currently only passable on foot.

#### Landing Sites:

- The landing site is located about a ¼ mile in from Britton Road on the access road.

#### Operability:

- Generally good ground. Some areas shallow soil and rocky, but in general no steep or inoperable slopes.

- Need to layout work to avoid multiple wetlands and streams using Best Management Practices and Riparian Management Zones.

#### Harvest History:

- Portions of tract harvested around 2000, including thinning of red pine plantations.

#### Wildlife:

- Tract provides a diversity of wildlife habitat:
  - Wetland edge with quality perch trees.
  - Shrub and open wetland habitat.
  - Mixed interior forest (white pine, hemlock, red oak, red maple, white birch, aspen primary species).
  - Average to below-average amount snags, cavity trees and down logs.
  - Wetlands provide some soft mast.
  - Hard mast fairly abundant in oak and small tree seeds (maple, birch, white and red pine, spruce)

#### Wetland and Water Features:

- A large wetland complex is located along the southern boundary, forming part of the drainage to Chase Brook.
- A second smaller wetland is located near southwestern boundary.
  - 150' (variable) Special Management RMZ- follow recommendations in GFGS
- Multiple streams
  - 1<sup>st</sup> and 2<sup>nd</sup> order streams associated with wetland
    - All streams have recommended 25' No Harvest RMZ
    - Follow BA law
    - 1<sup>st</sup> and 2<sup>nd</sup> order streams have recommended 100' Special Management RMZ- follow recommendations in GFGS

#### Forest Health:

- Invasive exotics, primarily glossy buckthorn but also Japanese barberry and multiflora rose established at high levels in the red pine plantations and around wetland edges, and scattered throughout.
- Existing white pine shows sign of typical health issues including weevil damage, red rot and white pine blister rust. As of mid-summer, there was no significant sign of needle cast that is present in other areas.
- Deer browse moderate to heavy, especially on desirable timber species.

#### Cultural Features:

- Hosts large cellar hole and abundant stone walls.
- Double walled old road.

#### Recreation:

- Gated road provides access into central portion of the tract, then extends north and out through neighboring property. Potential to extend a hiking trail for foot traffic to wetland and around cultural features.

Other:

- An extensive camp/tent/target shooting area is being used by abutting neighbor in the northeast corner of the property. The abutter is also maintaining a motorized vehicle trail into Stowell from their home in defiance of signs and direct communication by the Natural Resources Department. Possible legal recourse may be needed to stop this encroachment.

## **TRACT LEVEL MANAGEMENT RECOMMENDATIONS**

### **FOREST HEALTH:**

- **ASAP:** Focus on treatment of invasives, especially mature berry-producing shrubs, on wetland edges and along roads. Reduce, and ideally eliminate glossy buckthorn from forested areas prior to initiating timber harvesting activities.

### **RECREATION:**

- **ANNUALLY:** Maintain road/trail system for access.

### **ACCESS/BOUNDARY:**

- **As Needed:** Paint boundary.
- **ANNUALLY:** Maintain gate and access road

### **OTHER:**

- Direct the removal and clean-up of camp/tent/shooting area being utilized by abutter, and shut off illegal ATV access.

## STAND DESCRIPTIONS AND MANAGEMENT RECOMMENDATIONS

**Stand Number:** S1

**Stand Type:** Hemlock-hardwood-white pine 3/4 A/B

**Stand Acres:** 59.3 (2 non-contiguous areas)

**Soils:** Primarily IB (best for oak and white birch), small amount of IA (best for high quality hardwood) and small amount IC (best for pine)

**Site:** Well drained, relatively shallow soils. Good oak-pine-hemlock site.

**Forest Composition:** Variable structure, with the overstory dominated by a mix of hemlock, white pine, and hardwoods including red oak, red maple, sugar maple, aspen, black birch, and scattered black cherry. A mix of large and small sawtimber size, with some areas dominated by pole size hardwood. Generally closed canopy.

**Regeneration:** Variable, some areas sparse with hemlock, other areas have pockets of black birch, elsewhere light mix of sugar maple, hemlock, pine, red maple, and balsam fir.

**Natural Communities:** Hemlock-Beech-Oak-Pine / Hemlock-Beech-Northern Hardwood Forest

**Forest Health:** No serious problems noted outside of typical pine problems including white pine blister rust, some red rot and weevil damage.

**Stocking:** Basal area averages around 120, adequately stocked.

**Timber Quality:** Variable, generally average. White pine tends to be large and dominant, and is becoming overmature.

**Wildlife Habitat:** Dense, mixed interior forest habitat. Provides decent winter cover, good amount hard mast, and some variability in structure. Browse is variable. Large wetland at the southern end of the property is an important wildlife component for this property.

**Water and Wetland Features:** There is a small wetland in the southeast corner of this stand.

**Invasives:** Invasives are a serious problem here. Glossy buckthorn is present, as well as autumn olive, Japanese barberry and Asian honeysuckles.

**Past Management:** No recent management with the exception of a portion of the stand east of the red pine plantations cut heavily around 20 years ago when the red pine was thinned. Some old stumps (>25 years) are also found throughout the stand indicating an earlier harvest.

Other notes:

- This stand includes 2 non-contiguous sections
- Camp/shooting area maintained and used by neighbor within stand on eastern boundary.

**Management Objectives:** Relative to the entire County ownership, management of this stand could go two ways. Silviculturally, it would benefit from a combination of group selection and improvement thinning focused on areas of low quality, poor health and/or vigor to release existing regeneration or establish new regeneration. But given the fair to poor timber quality and high level of invasives present, it might be better to leave the stand as is to develop and continue providing interior mixed forest wildlife habitat. Other stands on the Stowell tract are a higher priority for active management, which provides another alternative treatment involving treating portions of this stand bordering adjacent stands during active management. Ultimately, this stand should be managed for a combination of interior forest wildlife habitat and timber.

**Recommended Management:**

Year	Treatment	Priority
2024	<ul style="list-style-type: none"> <li>• Consider group selection in areas of low quality, health and/or vigor to release existing regeneration or to establish new regeneration.</li> <li>• Improvement thinning between groups.</li> </ul>	Low
ASAP	Spot treat invasives, especially prior to and after active management. Target large, berry producing plants.	High

**Stand Number:** S2

**Stand Type:** White pine-hardwood-hemlock 3/4 A/B

**Stand Acres:** 7.2

**Soils:** IB (best for oak and white birch)

**Site:** Well drained soils, old agricultural site.

**Forest Composition:** Similar to Stand 1, but with dominated by larger, mature and over-mature pine.

**Regeneration:** Variable, some areas sparse with hemlock, other areas have pockets of black birch, elsewhere light mix of sugar maple, hemlock, pine, red maple, and balsam fir.

**Natural Communities:** Hemlock-Beech-Oak-Pine / Hemlock-Beech-Northern Hardwood Forest

**Forest Health:** No serious problems noted outside of typical pine problems including white pine blister rust, some red rot and weevil damage.

**Stocking:** Basal area averages around 160, which is fully to overstocked for this stand type.

**Timber Quality:** White pine tends to be large, dominant trees and is overmature or becoming overmature. Hardwoods and hemlock average.

**Wildlife Habitat:** Dense, pine dominated forest.

**Water and Wetland Features:** None.

**Invasives:** Buckthorn widely present interior forest.

**Past Management:** No recent management. Some old stumps (>25 years).

**Management Objectives:** This stand should be managed for a mix of timber and wildlife habitat, with a focus on timber given the slightly better site conditions here versus in adjacent Stand 1. The large pine is a high priority for removal, though quality will likely be variable. Silviculture is a modified overstory removal focusing on removing pine overstory, with improvement thinning on the residual stand where necessary.

**Recommended Management:**

Year	Treatment	Priority
2024	<ul style="list-style-type: none"><li>Modified overstory removal of pine.</li><li>Improvement thinning on residual stand where necessary.</li></ul>	High
ASAP	Treat invasives, especially prior to and after active management.	High

**Stand Number:** S3

**Stand Type:** Red pine 3/4 B

**Stand Acres:** 6.6 (2 non-contiguous areas)

**Soils:** IB (best for oak and white birch)

**Site:** Well drained soils, old agriculture site.

**Forest Composition:** Red pine plantation, approximately 60-70 years old.

**Regeneration:** Mix of red maple, beech, striped maple, hemlock, white pine, sugar maple, ash and balsam fir with a heavy presence of buckthorn and some autumn olive and honeysuckle.

**Natural Community:** Hemlock-Beech-Oak-Pine / Hemlock-Beech-Northern Hardwood Forest

**Forest Health:** Red pine appears stagnant, and losing vigor.

**Stocking:** Basal area averages around 80, which is understocked for growth.

**Timber Quality:** Red pine average quality.

**Wildlife Habitat:** Red pine plantation with dense understory development.

**Water and Wetland Features:** None.

**Invasives:** High level of buckthorn present, with autumn olive and honeysuckle. Large berry producing shrubs common.

**Past Management:** Plantation thinned about 20 years ago.

**Management Objectives:** Managing invasives in this stand is paramount to successful silvicultural treatment. This stand should be allowed to transition to a mixed forest similar to the residual tract. Because the pine did not appear to respond well to the thinning 20 years ago, it is recommended to remove it to release the established understory. But, the high level of invasives need to be treated prior to the harvest to reduce their spread. At 6.6 acres in size, this stand provides an opportunity for testing out intensive invasive treatment. It is recommended the County have an invasives treatment plan developed, likely using cut-stem and back pack sprayer herbicide treatment.

**Recommended Management:**

Year	Treatment	Priority
2024	Remove red pine to release understory.	Medium
ASAP	Treat invasives, especially prior to and after active management.	High

**Stand Number:** S4

**Stand Type:** Natural Area

**Stand Acres:** 16.6 (2 non-contiguous areas associated with wetland and drainage)

**General Description:**

**Soils:** IB (best for oak and white birch)

**Site:** Generally well drained, relatively shallow soils.

**Forest Composition:** Similar to Stand 1, but with larger hemlock and pine and a more open understory. Hemlock dominated, influenced by riparian system. Some components of an older forest system.

**Regeneration:** Variable, some areas sparse with hemlock and beech.

**Natural Communities:** Hemlock-Beech-Oak-Pine / Hemlock-Beech-Northern Hardwood Forest

**Forest Health:** No serious problems noted outside of typical pine problems including white pine blister rust, some red rot and weevil damage.

**Stocking:** Basal area averages around 140, which is becoming fully stocked to overstocked for growth.

**Timber Quality:** Variable, generally average. White pine tends to be large, dominant trees and is becoming overmature.

**Wildlife Habitat:** Dense, pine and hemlock dominated forest.

**Water and Wetland Features:** Stand borders large wetland system in the southern section of the ownership. Stand associated with 1<sup>st</sup> order stream on northern end of ownership that feeds into the wetlands, and the 2<sup>nd</sup> order stream that drains out of the wetland at the south end of the tract.

**Invasives:** Buckthorn present interior forest.

**Past Management:** No recent management. Some old stumps (>25 years).

**Other Notes:**

- This stand has features of older forest, with good snags, coarse woody debris, large, older trees, as well as bordering a large wetland and inclusive of associated riparian systems, providing an excellent opportunity for a Reserve Area left to develop naturally.

**Management Objectives:** This stand is best managed to retain old forest character serving as wildlife habitat of dense, hemlock dominated forest associated with riparian habitat. When working in adjacent stands, consider using single tree or small groups to enhance wildlife components, such as increased browse, diversity in structure, and while maintaining cover along the streams. Especially focus on retaining and enhancing old forest characteristics.



**Recommended Management:**

Year	Treatment	Priority
--	Designate as natural area.	--
2024	Consider group selection and single tree selection to enhance wildlife habitat when working in adjacent stands.	Low
ASAP	Spot treat invasives, especially prior to and after active management.	High