

## JUDKINS

### TRACT INFORMATION

- Total Acres: 258 acres, according to tax maps
- Map and Lot:
  - Map 5, Lot 618, 112 acres
  - Map 5, Lot 752, 146 acres
- Conservation Status:
  - Book 1700, Page 495
  - Held by Town of Unity with SPNHF Executory Interest

### OWNERSHIP DESCRIPTION

#### Location:

- Tract located on both sides of Class IV portion Judkins Road, about ½ mile in on Class VI portion (+/- 1 mile from West Unity Road).
- Borders Claremont town line to the north, and bound of VI portion Britton Road to the south.
- Property abuts 1,110 acres of conservation land to the east, the Up on a Hill Conservation Area owned by the Upper Valley Land Trust. Many opportunities exist to partner with UVLT on meeting common land management goals, including exemplary forestry, wildlife habitat, recreation, education and scientific research.

#### General Description:

- The Judkins tract has a strong agricultural history, with almost 25 acres of maintained fields. Both fields, above and below Judkins Road, contain portions of prime agricultural soil. Maintaining the best farmlands is a land use goal in the Unity Master Plan.
- A cellar hole and well are located on the north side of Judkins Road and an old barn foundation is located on the south side.
- The forest is generally a mix of hardwoods, dominated by red oak, red maple and black birch, with scattered white pine and hemlock. Bitternut hickory is a significant component of the forest in the center of the property.
- There are also some enriched areas with a fair amount of sugar maple and white ash near the old homestead. Settlers typically located their homesteads on the richest sites.
- Some old fields abandoned in the mid 1900's have since grown up to white pine.
- A small area was planted to Christmas trees and abandoned west of the cellar hole.
- Sections of the forest near the homestead are young, hardwood poles that were open, agricultural land later than the surrounding forest.
- Some sections of steep slope, with shallow soil are dominated by hemlock.
- A bony ridge extends north through the center of the tract above Judkins Road. This ridge provides potential vista opportunities.

- A large wetland complex situated north and east of the tract extends into the ownership on the north side of Judkins Road.
- The tract hosts several 1<sup>st</sup> Order streams that feed into Sawyer Brook to the south and the Little Sugar River to the west.

#### Access:

- Despite being fairly remote, the tract has good access via Judkins Road. It is a class VI road here, but is well maintained and has a good, solid base.

#### Landing Sites:

- There are several opportunities for landing sites. Two sites have been used on the south side of Judkins road, and a third on the north side.

#### Operability:

- Generally good ground. Some areas shallow soil and rocky, and there are some sections of steep slope that need to be worked around.
- Need to layout work to avoid multiple wetlands and streams using Best Management Practices and Riparian Management Zones.

#### Harvest History:

- 2014 majority of tract was treated with the exception of the old field white pine, the young hardwood pole stands, and the hemlock dominated areas.

#### Wildlife:

- Tract provides a diversity of wildlife habitat:
  - Maintained fields and field edges.
  - Mixed interior forest (red oak, red maple, white pine, hemlock, white and black birch).
  - Shrub and forested wetland provide some soft mast.
  - Riparian zones.
  - Average to below-average amount snags, cavity trees and down logs.
  - Hard mast fairly abundant in oak and small tree seeds (maple, birch, pine, spruce)
  - Scattered apple trees near old homestead (might improve with release).
  - Abundant brambles (*Rubus* sp) resulting from recent harvesting provides good soft mast, but will decline as the forest regrows.

#### Wetland and Water Features:

- Large wetland system draining into the tract; alder, winterberry shrubs; and smaller riparian wetland both feeding streams into Sawyer Brook
  - 150' (variable) Special Management RMZ- follow recommendations in [GFGS](#)
- Multiple streams
  - Several 1<sup>st</sup> order streams associated with wetlands
    - 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 including Japanese barberry, multiflora rose etc.) fairly well established within wetlands, on field edges, along major trails/roads, and scattered in the interior forest.
- Existing 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.
- Scattered beech have moderate to severe beech bark disease.
- Deer browse moderate to heavy, especially on desirable species.

#### Cultural Features:

- Cellar hole and barn foundation on Judkins Road.
- Stonewalls are abundant here.

#### Recreation:

- Class VI portion of Judkins Road part of snowmobile trail system. Links to Class VI portion of Judkins Road. Maintained by Crescent Lake Snoriders snowmobile club.
- Small parking area in central portion of tract on Judkins Road.
- Potential to create foot trails throughout. Ridge provides possible vista opportunity.

#### Other:

- Potential for pollinator habitat in fields, and- may already serve this purpose.

### **TRACT LEVEL MANAGEMENT RECOMMENDATIONS**

#### FOREST HEALTH:

- ASAP: Focus on treatment of invasives on field edges and along major roads. Ideally, perform spot-treatment in interior forest, especially in relation to timber harvest activities.

#### RECREATION:

- AS OPPORTUNITY ARISES: Consider expanding trail system to incorporate ridge north of Judkins road with potential vista opportunities.

#### ACCESS/BOUNDARY:

- As Needed: Paint boundary.
- ANNUALLY: Maintain class VI access to tract

OTHER:

- On north field, manage field edges and tree islands to reduce aerial predation. Cut field edges back about 30 feet, leaving quality mast producing shrubs and small trees such as choke cherry, service berry, Viburnums, apple trees etc. Within field, remove trees from tree islands, enhancing growth of quality mast producing trees/shrubs.
- EVERY THREE YEARS: Mow fields
  - 13.9-acre field north of road
  - 10.8-acre field south of road
- ASAP:
  - bring back .5-acre opening south side of road near old barn foundation
  - maintain .7-acre opening (old landing) north side of road near old farmstead

## STAND DESCRIPTIONS AND MANAGEMENT RECOMMENDATIONS

**Stand Number:** J1

**Stand Type:** Hemlock-red maple-red oak-black birch-white pine 3 B/C

**Stand Acres:** 123.9

**Soils:** Mix of IA (high quality hardwoods), IIA (shallow and rocky), some IIB (best for spruce-fir), and a small amount of IB (best for oak and white birch)

**Site:** Fair amount of good soils, but generally shallow. Upper slopes have shallower, rocky soils, and lower areas associated with wetlands and drainages better suited for spruce-fir. Site supports a good mix of hardwoods and hemlock, with some slightly enriched areas that support sugar maple and white ash growth.

**Forest Composition:** Entire stand was harvested fairly intensively within last 5 years. Patchy overstory dominated by a mix of red maple, red oak, black birch and hemlock.

**Regeneration:** Open areas regenerated largely to black birch, with a patchy *Rubus* sp. component.

**Natural Communities:** Hemlock-Spruce-Northern Hardwood with a small area along eastern boundary of Semi Rich Red Oak-Sugar Maple

**Forest Health:** No serious issues noted.

**Stocking:** Basal area variable, averages about 80-100

**Timber Quality:** Fair. Some good quality red oak residual in the stand, and some good quality sugar maple coming along. Hemlock and red maple average.

**Wildlife Habitat:** Patchy mixed, interior forest with pockets of dense understory growth.

**Water and Wetland Features:** Stand hosts small interior wetland and borders larger open/shrub wetland along town road. Also includes associated 1<sup>st</sup> order streams.

**Invasives:** Scattered to moderate levels of buckthorn.

**Past Management:** Fairly intensive, patchy harvest within last 5 years.

**Management Objectives:** This stand will be managed for interior forest wildlife habitat and timber over time. For now, it will be left to grow. Treat invasives.

### Recommended Management:

Year	Treatment	Priority
--	Leave to grow.	--
ASAP	Treat invasives.	High

**Stand Number:** J2

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

**Stand Acres:** 32.0 (Four disjunct stands all on the eastern side of the property, ranging in size from 2.6 to 15 acres)

**Soils:** IIA (shallow and rocky)

**Site:** Shallow soils, occupying steep to moderate slopes.

**Forest Composition:** Mixed forest dominated by pine and hemlock, with some red maple, red oak and other hardwoods.

**Regeneration:** Scattered, with hemlock, black birch, beech, white pine and red oak. Other areas of denser overstory with sparse regeneration.

**Natural Communities:** Hemlock-Spruce-Northern Hardwood

**Forest Health:** No serious issues noted.

**Stocking:** Basal area variable, averages about 120-140

**Timber Quality:** Mixed. Hemlock, fair quality. Some good quality white pine and red oak mixed in with hemlock.

**Wildlife Habitat:** Softwood dominated, interior forest. Variable understory, but generally not dense.

**Water and Wetland Features:** None in stand, but stand borders or includes wetland RMZs.

**Invasives:** Scattered buckthorn.

**Past Management:** No recent management. Sections of this stand border areas treated within last 5 years.

**Management Objectives:** This stand will be managed for interior forest wildlife habitat and timber over time. Because it borders the large area recently harvested, it provides a diversity of forest structure with denser overstory and open understory adjacent to more open forest with dense understory. Leave to develop naturally during this planning period. Treat invasives.

**Recommended Management:**

Year	Treatment	Priority
--	Leave to grow.	--
ASAP	Treat invasives.	High

**Stand Number:** J3

**Stand Type:** White pine 3/4 A

**Stand Acres:** 5.2 (Two disjunct stands, both old fields near the former homestead)

**Soils:** Primarily IA (high quality hardwoods), with some IIB (best for spruce-fir)

**Site:** These are good sites, old fields that were abandoned and allowed to reforest. Stones have been cleared.

**Forest Composition:** Old-field Pine forest, about 60 to 70 years old.

**Regeneration:** Fairly dense, with mostly beech saplings with some striped maple and hemlock.

**Natural Communities:** Hemlock-Spruce-Northern Hardwood

**Forest Health:** Likely some red rot and/or white pine blister rust within stand, but not noted.

**Stocking:** Basal area variable, averages about 200

**Timber Quality:** Variable, from poor to good.

**Wildlife Habitat:** Old field pine with dense hardwood understory, interior forest.

**Water and Wetland Features:** Eastern section borders 1st order stream with RMZ.

**Invasives:** Moderate to scattered buckthorn.

**Past Management:** No recent management.

**Management Objectives:** These stands should be managed to restore to the natural forest type by clearing the pine overstory. Existing hardwood understory will provide early successional habitat. Important to treat invasives prior to and after harvest

**Recommended Management:**

Year	Treatment	Priority
2024	Overstory removal of pine.	High
ASAP	Treat invasives.	High

**Stand Number:** J4

**Stand Type:** White pine-hemlock 4 A

**Stand Acres:** 5.2

**Soils:** IA (high quality hardwoods)

**Site:** This site has some enrichment, with good soils.

**Forest Composition:** Mix of large sawtimber size white pine and hemlock, with some black birch mixed in.

**Regeneration:** Somewhat sparse, with beech, black birch, and sugar maple.

**Natural Communities:** Hemlock-Spruce-Northern Hardwood

**Forest Health:** Likely some red rot and/or white pine blister rust within stand, but not noted.

**Stocking:** Basal area variable, averages about 180

**Timber Quality:** Variable, with some good quality white pine and hemlock.

**Wildlife Habitat:** Dense, closed canopy stand dominated by maturing softwoods. Relatively open understory. Adjacent to open, maintained field.

**Water and Wetland Features:** Stand bordered by 1st order stream with RMZ.

**Invasives:** Moderate to scattered buckthorn.

**Past Management:** No recent management. Some old stumps (>20 years).

**Management Objectives:** Because of the quality of the site, and the relatively intensive management that has occurred elsewhere on this tract, this stand should be left to develop naturally, providing dense, closed canopy softwood dominated forest.

**Recommended Management:**

Year	Treatment	Priority
--	Leave to develop naturally.	--
ASAP	Treat invasives.	High

**Stand Number:** J5

**Stand Type:** Sugar maple-red oak-white ash-black birch-red maple-aspen-hemlock 23 A

**Stand Acres:** 41.1

**Soils:** Mix of IA (high quality hardwoods), IB (best for oak and white birch), IIA (shallow and rocky), and some IIB (best for spruce-fir)

**Site:** This site has a fair amount of enrichment, with good, moderately well-drained soils. Some poorly drained areas associated with riparian systems.

**Forest Composition:** Generally, a large pole-sized hardwood stand with a diversity of species associated with good sites. Sugar maple is common, with some white ash and red oak mixed in, as well as red maple, black birch, aspen and scattered black cherry. Some bitternut hickory exists in northern section of stand and on adjacent field edge.

**Regeneration:** Somewhat sparse, with beech, black birch, and sugar maple.

**Natural Communities:** Semi Rich Red oak-Sugar Maple / Hemlock-Spruce-Northern Hardwood

**Forest Health:** No serious problems noted.

**Stocking:** Basal area averages 100.

**Timber Quality:** Good quality pole stocking. Good potential in the sugar maple, oak and black birch.

**Wildlife Habitat:** Dense, hardwood stand about 40 years old.

**Water and Wetland Features:** Stand bisected by 1st order stream with RMZ.

**Invasives:** Moderate to scattered buckthorn.

**Past Management:** No recent management.

**Other:** Remains of small Christmas tree plantation on north side of road across from old barn foundation

**Management Objectives:** Hardwood pole-size stands of this size are a relatively uncommon forest type. It will transition over time to an older stand, but for now it provides diversity not only in species composition, but also in forest structure. Because of the good site and stocking it will be managed primarily for timber objectives, but not to the exclusion of wildlife habitat. No silvicultural treatment is necessary this planning period.

**Recommended Management:**

Year	Treatment	Priority
--	Leave to develop naturally.	--
ASAP	Treat invasives.	High

**Stand Number:** J6

**Stand Type:** Hemlock-red oak-red maple 3/B

**Stand Acres:** 11.5 (Two disjunct stands north of Judkins Road)

**Soils:** IIA (shallow and rocky)

**Site:** Bony site on heights of land and ridges, with some exposed ledge and large rocks.

**Forest Composition:** Somewhat open mix of small sawtimber size hemlock, red oak and red maple. Patchy in composition.

**Regeneration:** Patchy, Rubus sp, black birch and hemlock.

**Natural Communities:** Hemlock-Spruce-Northern Hardwood

**Forest Health:** Likely hemlock shake due to poor site conditions.

**Stocking:** Basal area variable, averages 80-120.

**Timber Quality:** Generally poor quality.

**Wildlife Habitat:** Somewhat open, mixed forest on bony ground. Some shrubby understory and blueberry.

**Water and Wetland Features:** None.

**Invasives:** None noted, but likely scattered buckthorn.

**Past Management:** Portions of stand were part of intensive harvest that occurred within the last 5 years.

**Other:** Potential for vista opportunity on ridge

**Management Objectives:** This stand will be managed for interior forest wildlife habitat primarily, enhancing berry producing shrubs, and large woody structure when possible. It also provides potential vista opportunities, should a trail system be built to incorporate this section of the ownership. Leave to develop naturally during this planning period. Treat invasives.

**Recommended Management:**

Year	Treatment	Priority
--	Leave to develop naturally.	--
ASAP	Treat invasives.	High