Ashley Community Forest Stewardship Plan 2023-2032

Towns of Sharon Vermont (149.7 acres) and Strafford Vermont (106.7 acres)

Prepared by the Ashley Community Forest Board

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Ashley Community Forest Location:
Towns of Sharon Vermont (149.7 acres) and Strafford Vermont (106.7 acres)

Parcel Boundaries and Acreage: The boundaries of this parcel and total acreage, was determined by a boundary retracement survey, completed in August 2020 by Holt Gilmore Survey Associates, LLC of Woodstock Vermont. Copies of the survey map are on file in each of the towns of Sharon and Strafford, and a copy of the survey map is attached to this document as Appendix 1.

Location: North of Clifford Farm Road in Sharon, and west of Nutting Road in Strafford.

SPAN: 576-181-10020 Sharon; 624-196-10518 Strafford.

Biophysical Region: Southern Vermont Piedmont

Land acknowledgement

We acknowledge that the land of the Ashley Community Forest is the homeland of the Abenaki people of the Black Ash trees, the Indigenous people of Vermont.

We reflect upon the fact that the Ashley Community Forest, located in present-day Sharon and Strafford, Vermont, sits on land which has served as a site of sustenance, community, meeting, and exchange among Indigenous peoples since time immemorial.

The Western Abenaki are the traditional stewards of these forests, lands, and waters, which they call N'dakinna, or "homeland." We respect their spiritual and lived connections to this region and remember the hardships they've endured - both past and present, including violence and forced displacement at the hands of colonizing peoples.

We give thanks for the opportunity to share in the joys of this place and to protect it. We welcome all opportunities for Abenaki citizens and other Indigenous people to connect with their relations - including water, soil, plants, and animals - across Ashley Community Forest grounds.

We further recognize and celebrate the Indigenous Nations whose homeland makes up Vermont, the Elnu Abenaki Tribe, the Nulhegan Band of the Coosuk Abenaki Nation, the St Francis-Sokoki Band of the Abenaki Nation of Missisquoi, the Abenaki First Nation of Odanak, and the Stockbridge-Munsee Band of Mohican Indians.

We strengthen and celebrate our relationship with N'dakinna by honoring its past and finding our place. We offer our respect and gratitude to the traditional caretakers for their stewardship by seeking to uplift indigenous peoples, cultures, and arts as we share narratives of the land and enjoy the forest as a community.

Introduction

History and Acquisition

The Ashley Community Forest has been entirely forested for nearly all of the previous 8-10,000 years, since the last glacier retreated. Though the species mix of the forest has changed over that period, as native tree species slowly found their way back to the new forest, the land remained forested for thousands of years. During the latter part of this period, the land was settled by the Abenaki people of the Black Ash trees, the indigenous people of Vermont. The land of the Ashley Community Forest was part of the larger Abenaki homeland, and remains so today.

In 1795, this parcel was purchased by Edward Preston and clearing for farming continued. In all likelihood, the initial clearing was limited to one or two subsistence farms. Sometime around 1820 raising sheep for wool became profitable in Vermont and land was rapidly cleared to accommodate larger flocks. Some of the forest would have remained in place as a source of necessary fencing, building materials, maple sugar, and firewood, but most would have been cleared to maximize pasture for sheep. Land clearing would certainly have been accompanied by significant loss of organic material, soil disturbance, and erosion. This is the period when the stonewalls were built, at least in part to fence sheep.

The land was actively farmed until about 1920 when it was purchased by Harold Clifton Ashley as a retreat after he returned from service in World War I in 1919. At that time a farm house with a large porch remained on the property and portions of the tri-level barn may have also still been standing. The land was used by Harold recreationally. Subsequently, he brought up his young family from time to time. The property fell into disrepair circa 1945 when Harold passed at age 50. Shortly before his passing he was again called to serve, this time in WWII. (His widow; Alice (née Little); served as a neighborhood air-raid warden near Boston.) She and her two daughters; Carol and Rosamond (known as Jean and later Ros); continued regular visits. Ros later settled on the Vermont property with a partner in the late 1960s and built a new log cabin. Shortly thereafter, the cabin and the old farmhouse were lost to fire. Ros ended her partnership and remained on the land with her purebred Samoyed and worked at Dartmouth College until the early 1980's. Ros lived in a small trailer with a fenced in garden and was known for driving her carmel-colored 1973, V8 Camaro up the unpaved roads even in winter. During that time, the land was only lightly logged to build the cabin and several pastures remained on the property and were periodically used by Robinson's dairy cattle while the rest of the forest was allowed to mature.

The Preston ownership appears to be made up of two historically separate farms, one in the northeastern part of the parcel in Strafford, and one in the southwestern portion of the parcel in Sharon. Little is known about the Sharon farm at this time, but in Strafford there is a large, excavated foundation that was likely for a substantial house with a large barn foundation nearby. There is a small foundation associated with the farm that is believed to have been a sugarhouse. At the northeastern edge of the Strafford open land, there is a small, stone foundation, that is believed to be for the first house built on the land. There is a stone culvert that crosses the stream just below the house that leads to a small barn foundation. This northern farm was settled by Edward and Thankful Preston in 1795 and remained in the Preston family for several generations. Tyler Robinson, who grew up at the Robinson farm down the hill at the junction of

Brook Road and Robinson Road, remembers the main 2-story house and sugarhouse still standing in the 1940s.

The Ashley family owned the entire parcel for approximately 101 years before it was sold to the non-profit Alliance for Vermont Communities (AVC) in June, 2018. In January of 2022, the land was donated to the towns of Sharon and Strafford by AVC, along with a management fund totaling $37,100.

The forest has been logged at least three times in the past 54 years. All of these harvests were unregulated and unsupervised by a forester.

An extensive harvest in the Sharon portion of the forest was accessed from Clifford Farm Road. The objective of this harvest appears to have been removal of the best white pines along with a fair number of hardwood saw logs and firewood. A similar harvest occurred in the northern portion of the forest that focused mostly on removal of hardwood saw logs and firewood in what was likely the oldest forest on the parcel. A third, more recent and smaller harvest in the vicinity of the Preston farmstead focused on white ash removal.

An offer was made to purchase the property in January 2018 by David Hall, representing the NewVistas Foundation. The NewVistas project was proposing a 20,000 person development in the area including the Ashley parcel. Knowing that the land was a critical piece of the development plan for NewVistas, and seeing that it had the potential to be a valuable educational resource and public recreation area, the Alliance for Vermont Communities discussed possible purchase of the parcel with Rosamond Ashley's niece, Holly Smit Kicklighter, an ecologist and environmental planner who was her elderly aunt's legal guardian.

After finding the land had been logged without her family's consent and that it could not be easily subdivided, if at all; Holly hoped the land could be conserved and/or sustainably managed, She declined David Hall's offer. Holly however needed to sell the property to help pay for her aunt's medical care. AVC reached out to Holly and after some starts and stops, a purchase and sale agreement was signed by AVC and Holly for her infirmed aunt.

The fledgling non-profit began in earnest to raise the necessary funds only having a window of three months to raise the $375,000 asking price. During this time AVC had begun conversations with the Vermont Land Trust (VLT). AVC successfully raised $290,000 in the three month period from generous donors large and small and VLT assisted with a bridge loan to secure the final funding before the closing. The land purchase price was $375,000, but the total project cost was $523,100 and included costs for a land survey, taxes paid to the towns, a Phase 1 Environmental Assessment, an initial $20,000 stewardship fund,(increased to $37,100 in December 2022) outreach, and VLT staff time.

The Alliance for Vermont Communities and the Vermont Land Trust worked cooperatively as partners to secure additional funding from the Vermont Housing and Conservation Board in the amount of $150,000 with the condition that a municipality or municipalities would eventually take ownership of the land as a community forest open to the public. AVC, VLT, and the Vermont Housing and Conservation Board believed that this land would be a great educational, recreational, wildlife and natural resource for not only the residents of Strafford and Sharon but other residents and visitors as well. At the time of the transfer from AVC to the towns of Sharon and Strafford, a conservation easement was placed on the 256.4-acre Ashley Community Forest,

with VLT and VHCB holding the conservation easement jointly, with VLT as the principal contact.

The Ashley Community Forest straddles the town line separating Strafford and Sharon and is one of the largest, undeveloped forest parcels located within the four-town region of Royalton, Sharon, Strafford and Tunbridge. It provides opportunities for sustainable forest management and diverse associated benefits such as wildlife habitat improvement, water quality, carbon storage, outdoor recreation, education and ecological protection. The forest is adjacent to the recently conserved Manning and Robinson Farms with the area historically being known as the Robinson District. Ownership of the Ashley Community Forest by the two towns will advance town goals to promote forest protection, preserve rural character, help to maintain Vermont's working land tradition and expand recreational opportunities, including hunting, natural history interpretation and education, photography and other artforms, hiking, cycling, cross country skiing and horseback riding along multi-use trails.

Mission

Our mission, and the primary objective of AVC is the conservation of the land to protect the land's natural areas, natural communities, undeveloped character, historic artifacts, and scenic open space and to provide opportunities for low-impact, public outdoor recreation and ecological and historic education, as well as for modest and sustainable timber management that perpetuates a healthy forest with complex structure.

The project also advances town goals to preserve wildlife corridors and contiguous native, open space areas. Sharon's town plan directly recognizes these values: "Sharon contains large tracts of contiguous woodlands that adjoin woodlands in neighboring towns. These forested tracts act as wildlife corridors, bedding down areas and breeding grounds; allowing animals unrestricted movement not possible in more developed areas. The undeveloped acreage extending from conserved lands…north to the Strafford town line is part of a regionally significant wildlife corridor spanning multiple Vermont counties."

Our goal is to manage the Ashley Community Forest for the long-term. In order to do that, our management actions must be sustainable, both ecologically and economically. The towns are not obligated to fund activities at the Ashley Community Forest, and both towns have expressed the intention that the Forest should be a self-funding entity. While we expect to harvest some timber value from the forest over time, the plan is to do so in a sustainable manner. We endeavor to use forest management as a tool to progress the region's climate resiliency, carbon sequestration, and greenhouse gas/global climate change response. We wish to move the forest to a greater natural species mix, with a healthy canopy, understory trees and with a complexity of structure, and allow it to grow beyond levels previously obtained between harvests. We want more standing dead trees and more dead wood (coarse woody material) on the forest floor. This will allow for denser stocking, taller trees, and trees with larger diameter, supporting additional wildlife niches and increasing carbon sequestration/storage. We want more standing dead trees and more dead wood (coarse woody material) on the forest floor. We want to replenish stores of organic material (carbon) and microorganism diversity in the soil. We also want to utilize natural methods of management to support native species, clean water, and clean air - via good bio-hygiene, best management practices, and nature based, organic, and compatible mechanical methods over harmful chemical and material use (i.e using organic and natural methods for weeds and invasive species; using water bars, brush, and other methods to control access,

erosion, dust from recreational trails and access roads). In summary, we want to lead the land into a climate smart and resilient future with thriving biodiversity, while serving the public's heart and mind with beauty and relevant educational programs which support our evolving stewardship.

Governance

The Ashley Community Forest is a volunteer driven endeavor. A five-member Board of Directors, comprised of dedicated local citizens, creates policy and strategic planning to oversee the recreational uses, long-term management and day-to-day use of the Forest. The Ashley Community Forest Board and volunteers manage the day-to-day operations. All uses of the forest must be in compliance with the terms of the conservation easement held by the Vermont Land Trust and the Vermont Housing and Conservation Board.

Forest Stewardship Plan

This Forest Stewardship plan has been developed with input from the public and local experts and is intended to describe and inform the management of the property for the next ten years, at which time the plan will be revised and updated. This Forest Stewardship plan is intended to describe and explain long-term management intentions and clearly inform partner organizations, including the Vermont Land Trust and the Vermont Housing and Conservation Board, about those management decisions. While the Forest Stewardship plan has been developed for a 10-year period, it should be considered a fluid document that can be revised and updated as necessary, at any time. All updates and revisions of the Forest Stewardship plan are subject to review and approval by the Vermont Land Trust.

Public Input Process

As part of the planning process, the Ashley Community Forest Board offered open public meetings to assess current public use, invite ideas and feedback about possible improvements, and to develop lasting networks. We advocate for public involvement that is transparent and welcoming, during the Forest Stewardship plan development process and at all other appropriate times. Feedback is welcomed at any time.

Friends of the Ashley Community Forest

We imagine a practical management structure that is organized and driven by the 5-person Ashley Community Forest Board, with the active involvement of a group of "friends" of the forest. Friends are non-voting community volunteers that attend meetings, communicate what is working and what is not, offer constructive suggestions, help to gather information, organize events, work to treat invasive plants, collect rubbish, build trails, make signs, help with building projects, mow the open areas or make donations. Without this dedicated group of community supporters it would be difficult to convert our plans into effective action.

Long-Term Funding

Due to the generosity of the Alliance for Vermont Communities, we are privileged to have a substantial management fund as we begin our ownership journey. But we recognize that we cannot just draw water from that well indefinitely, without replenishment. To that end, we must

manage our resources carefully and establish a system of fundraising, grant writing, and annual appeals for donations, that is augmented with periodic, modest timber revenue from forest management activities.

General Description of This Land

The Ashley Community Forest parcel in Strafford and Sharon is mostly forested, with a small area of wetland and two open meadows near its eastern side along Nutting Road. The parcel's 256.4-acres include a ridge running north-south, with the western slope dropping steeply down to a south-flowing tributary of Fay Brook. Nutting Road in Strafford, ends at, or near, the ACF parking area. From there an old farm road leads to a cellar hole of a historic farmhouse, as well as other stone foundations, stone walls, rows of large old trees that once lined farm roads and legacy white cedars, black locust and red oak. Elevations range from a high point of about 1600' on a hilltop in the center of the property, down to a low point of about 1180' where the stream flows off the southern boundary.

The land has established trails and logging roads that lead through a variety of forest types. The trails were established for agricultural or logging use and do not always connect in ways that maximize their use for recreation. In addition to the existing trails, there is significant opportunity for additional trail development for hiking, cross-country skiing, or other non-motorized uses.

The current forest is an interesting and complex mix of multiple species, hardwood and softwood, old and young, with intermixed areas of healthy, well-formed trees and areas of mature, unhealthy or poorly formed trees. The combination of intense, past agricultural use, soil disturbance, uneven agricultural abandonment, and then unregulated and unsupervised logging of the newly regenerated forest, has created significant structural complexity, with multiple unique forest stands, but also low current timber value. Most of the upland portions of the forest are destined to be composed of a mix of northern hardwood species. Areas with deep, rich soil are expected to be dominated by sugar maple, while other areas, with thinner, drier, or more nutrient poor soils are expected to be dominated by beech. Those areas along and near the main streams are likely to remain a mix of hardwoods and softwoods with hemlock being the dominant softwood species. The current forest, while quite diverse, has certain consistent characteristics throughout. Northern hardwoods are part of the understory and overstory in all locations. Large, mostly rough white pine, with heavy white pine weevil damage and significant crown loss due to needle cast disease, is common in the overstory. Large diameter aspen and paper birch, along with scattered very large individual sugar maple, ash, yellow birch and white pines are common in a matrix of younger, smaller hardwoods. The regeneration throughout is generally a mix of northern hardwood seedlings, under well-established beech saplings and poles. Invasive plants are well established at light to moderate levels throughout the parcel with densest populations on wet soils in Sharon. Japanese Barberry is the most common and well-distributed species, with shrub Honeysuckle, Common Buckthorn, and Autumn Olive also noted.

MANAGEMENT GOALS

The principal management goal of the two towns is to maintain a healthy, diverse, and resilient forest that can be used to achieve multiple public benefits, such as carbon sequestration, carbon storage, clean air, clean water, ecological integrity, natural resource education, natural beauty,

the sustainable production of forest products and the maintenance and improvement of wildlife habitat. Forest management is a tool that can be used to achieve these goals but is not a principal goal in itself.

During this 10-year planning cycle, priority will be given to the following goals.

- Increase public access and use of the Ashley Community Forest.
- Education through demonstration.
- Establishment of ecological reserve areas that include riparian protection zones.
- Increase climate change resiliency by managing for warmer climate adapted species

CLIMATE CHANGE EFFECTS

Climate change is affecting this forest in several ways. Rather than rain coming in mostly gentle events spread throughout the growing season, it now comes in fewer, more violent storms. Often these storms are accompanied by damaging winds. Less extreme cold, less snow and more ice constitute the new pattern in Winter weather. In total, we now receive more precipitation than we have historically, but due to the nature of the storms that bring the rain, much of the additional rainfall runs off rapidly as streamflow and is not available for tree growth. That is, there is more water moving into and out of the forest, but less water available for plant growth. Less snow and warmer winter temperatures often lead to early snowmelt and near drought conditions when trees break bud in the Spring and must rehydrate after winter dormancy. Less available water in the Spring and during the growing season leads to less photosynthesis, often resulting in less growth, even in the presence of an extended growing season. The warm season available for growth may be extended, but if available water is not present in sufficient quantities, the effective growth period may be shorter in our new climate, not longer. Some species of trees adapt better than others to these changes in temperature and moisture, and that results in a shift of competitive advantage between species, which leads to a gradual shift in the species composition of the forest over time. When someone says something like “The range of sugar maple will move north over the next century”, this is what they are referring to. Sugar maple is expected to be less competitive in the new climate and so will be present in lesser proportions in the future forest.

PUBLIC ACCESS

There are two access points north of the switchback of Clifford Farm Road in Sharon. Both pass through the land of others to reach the Ashley Community Forest and both have been used in the recent past, under previous ownership, to access the southern half of the parcel for logging. The lower access enters the parcel, but no landing is evident. The upper access has a landing at the road, on the land of others. It appears that this access is used only by permission of the landowner that owns the road frontage. There is evidence of a deeded right-of-way for logging on the lower access road from Clifford Farm Road across land currently owned by Debra Fisk. The legal status and extent of the right-of-way will need to be determined in the future to determine if it is, in fact, a legal right-of-way, and if so whether that right of access includes recreational use.

The main access to the forest is from Nutting Road in Strafford. The town road ends within the parcel at or near the ACF parking area, which comfortably accommodates several cars, or a school bus. This access is suitable for forest management and there is a separate, established

landing area just beyond and uphill from the parking area with a much smaller second landing further uphill. Much of the northern portion of the parcel can be accessed from Nutting Road and the lower landing. The lower landing could also be used for overflow parking for events held at the forest. The small landing further up the hill is likely not practical for future forest management use. A small expansion of the east side of the parking area will be considered when construction equipment is on site for trail construction or repair elsewhere on the parcel.

Internal logging trails are found in the Sharon portion of the parcel, but are overgrown, and have not been well maintained. There is a need to install water control structures on all trails, and to remove debris from the stream and properly close out a stream crossing in Sharon that was left in place by loggers many years ago. Once the former stream crossing is closed out, the spur road leading to this crossing should be waterbarred and discontinued.

Following any future forest management activity, such as the treatments recommended in this document, all main trails will be cleared of large debris, smoothed and waterbars will be installed in full compliance with Vermont water quality standards as outlined in **Vermont Water Quality, Acceptable Management Practices**, dated 2019.

The trail system is more well-developed on the northern portion of the parcel, with a main loop trail and 2-3 spur trails. The town road leading into the property has minor erosion that needs repair when an excavator is next on site. To restrict unauthorized motorized access, a gate may be installed just beyond the parking area.

Additional recreational trails will be constructed or cleared to extend and connect spur trails into a single, comprehensive trails system with multiple loop trails. Some of these new trails will be footpaths and one will be a tractor-accessible trail. The footpaths will be constructed by volunteers using hand tools over the next year or two, while the tractor-accessible trail will require some tree clearing and stumping and grading with construction equipment. This one section of new trail will be built in association with the forest management activities planned in stands 1 and 2 (please refer to the forest stand map that accompanies this plan) during 2024 and 2025.

RECREATION AND AESTHETICS

There are local trails being developed on two conserved, neighboring parcels that would complement the trail system on the Ashley Community Forest. While the trails on the neighboring parcels do not currently connect to the trails on the Ashley Community Forest, that is a possibility in the future.

In 2020, prior to town ownership, the Alliance for Vermont Communities and a group of community volunteers cleaned up an abandoned camper trailer and a tire dump nearby from the Sharon portion of the open land.

Both open areas were brush hogged after August 1st, in 2020, 2021 and 2022. It is recommended that both areas be mowed annually in the future to maintain them as open, both for aesthetic value and for the wildlife habitat options they provide. The openings are intended to be maintained primarily as pollinator habitat. Vermont Fish & Wildlife recommends mowing

annually after the growing season, but we also have trails that pass through both openings and we have concerns about visitors picking up ticks as they pass through unmowed open areas. As a compromise, we will mow trails through both openings annually in July, and mow one of the openings entirely at the same time. Following an annual mowing rotation, the other opening will not be mowed that same year, but will be mowed the next year, while the first area rests.

SIGNS AND VISITOR COMFORT

We intend to install a kiosk near the parking area in either 2023 or 2024. We also plan to install simple signs along our trail system, once trails are fully in place. A composting toilet is also expected to replace the rented porta-potty that is currently on site. If possible, we intend to use local lumber and local contractors for both signs and toilet building.

CULTURAL/HISTORICAL RESOURCES

There are at least three excavated house foundations, and three barn foundations, along with other foundations from unknown structures, two stone wells, a stone culvert and the remains of a farm orchard. Stonewalls are common along the boundaries of the parcel and internally, some are of remarkable craftsmanship. It will be very important during any forest management activities to protect all stonewalls and historic features.

RARE, THREATENED AND ENDANGERED SPECIES

There are no known significant natural communities, or rare, threatened and endangered species on this parcel.

WILDLIFE HABITAT

This parcel is quite diverse in species composition, age and structure. It is the intent of the two towns to maintain and enhance this forest complexity to provide quality wildlife habitat and to promote full ecological function. Open land adds to the ecological diversity and structural complexity, and it is expected that the two small open areas will be maintained through periodic mowing for pollinators, butterflies, songbird breeding habitat and as a food source for larger mammals.

Mast is defined as fruits or nuts that are valuable to wildlife. Throughout the forest there are mast bearing trees, such as red oak, beech, ironwood and black cherry. Mast bearing trees provide an important food source for birds and mammals. Maintaining a variety of mast bearing trees will increase the amount of wildlife on the property that rely on this food source. In this forest the most common mast bearing trees are beech, though many are not healthy due to Beech Bark Disease. More information below.

There are several large, old trees on the property. Many of these older trees have holes and cracks. These cavity trees are very important to different species of birds and mammals. Northern Long-Eared Bat, a federally listed threatened species relies on trees with cracks and cavities for Summer roosting sites. Trees like this should be preserved and promoted as much as possible.

Interior forest songbirds can be heard throughout the spring and summer. They are often neotropical migrants that rely on larger, diverse forest blocks in Vermont for their breeding habitat. Oven birds, red eyed vireos, scarlet tanagers and both black-throated green and black-throated blue warblers are just some of the birds that use interior forest habitats in the Town Forest. Some of Vermont's forest songbird populations are declining due to development in their Caribbean and Central and South American winter habitats. Making sure their summer breeding habitat is the best it can be is an important way to help these species. Improvements to forest structure, including keeping tall older trees, providing mid-story and understory layers of vegetation, and even creating patches of dense young trees are all activities that provide habitats for these often-very habitat-specific forest birds. Removing invasive plants and reducing forest fragmentation are also important ways to help our forest songbirds. More information on forest songbirds can be found at Vermont Audubon.

There are large black locust trees near the old house foundation. Black locust is an invasive tree species and will generally be discriminated against in forest management activities, but some of the larger trees near the foundation will be retained as legacies. These trees were planted for pollinator habitat, for their fragrant flowers and for fence posts, due to the rot resistance of the wood.

STREAMS AND WETLANDS

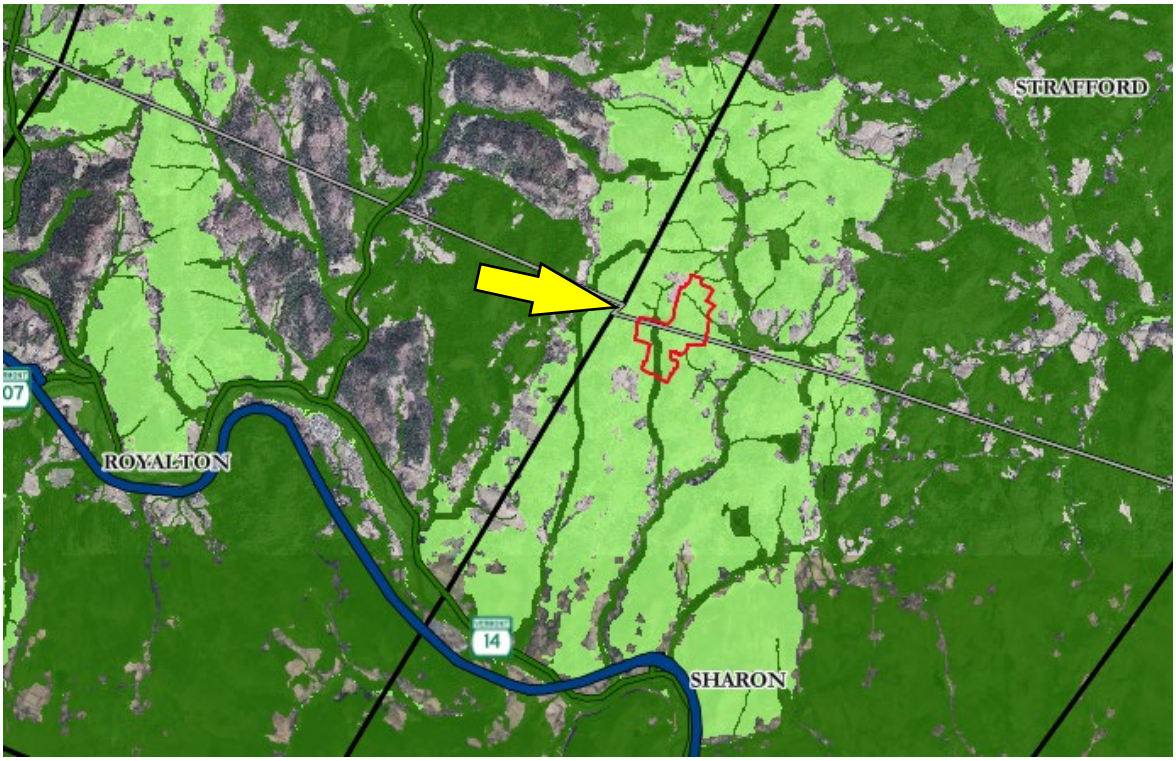
There is a small stream that passes through the northern part of the parcel, from west to east, and exits the forest near the end of Nutting Road. This stream continues east to Fay Brook near the Strafford/Sharon town line which eventually flows into the White River in Sharon. A second, larger stream that bisects the southwestern portion of the parcel flows south, leaving the forest near the switchback in the Clifford Farm Road. From there it follows Clifford Farm Road and joins Fay Brook in Sharon. Both streams deserve respectful buffers during any forest management activities. The number of stream crossings will be minimized and any temporary crossings that may be deemed necessary will be installed in full conformance with State of Vermont stream alteration rules.

There are many small seeps on the southern portion of the parcel that are generally associated with the main stream and its smaller side drainages. There are two larger wetlands, one of which is along the Fetter boundary in Sharon, at the southeastern end of Stand 2. Most of this wetland is on the adjoining Fetter land, but a portion is on the Ashley Community Forest parcel. The other wetland is north of the maintained open land in Strafford. Neither of these wetlands has yet been formally classified, but both are ecologically significant on the parcel and will be respectfully buffered from all forest management activities. It is likely that invasive plant treatment will be needed in both wetlands, and that some open-grown white pines might be removed from the northern wetland to create growing space for native wetland plants.

FOREST BLOCK

The Ashley Community Forest is part of a roughly 3,355-acre forest block. This forest block is mapped in VT BioFinder, a biological diversity tool, as providing Interior Forest Habitat, Connectivity and Landscape Diversity. An interior forest habitat block provides suitable conditions to support a variety of native plant and animal species. Animals with large ranges depend on these interior forest blocks and it is important to keep these large blocks

unfragmented. Human development splits these forest blocks up into smaller and smaller pieces. The smaller a block gets, the less beneficial they are to wildlife. Every parcel in the forest block matters. The Ashley Community Forest is an important piece of a larger forest block.



Map of forest blocks in Sharon, Strafford, and surrounding towns. Light green blocks are priority blocks, dark green blocks are high priority according to Vermont Biofinder

RESOURCE CONCERNS

The principal resource concern on this parcel is the presence of well-established populations of invasive plants. In order to maintain the ecological integrity of the forest and associated wetlands, it will be necessary to treat these plants to keep their populations from expanding and ultimately controlling the site. Our preferred method of invasive plant treatment is mechanical. That is, hand pulling of small plants and digging of larger plants. It is our belief that with an active cadre of volunteers, we can attain adequate control by this method. The practice of treating invasive plants is not intended to eradicate them, as this is recognized to be impractical. Instead, by treating invasive plants, we reduce the amount of available growing space they occupy and thereby maintain available growing space for native plant species, for the habitats that native plant communities create and for the native birds, animals, amphibians, insects and microbes that depend upon these native plant communities for their existence.

FOREST HEALTH

Overall, the Ashley Community Forest is healthy. Forest health issues are commonly divided into three groups: invasive plants, insects and disease. Invasive plants are well-established in areas of the forest and present a long-term threat to the ecological function of this forest. There

are numerous native or naturalized forest health issues that commonly occur throughout Vermont found in the forest. Some level of insect and disease damage is normal in any forest. Insects and forest disease currently present at Ashley Community Forest occur at natural levels and are not considered serious forest health concerns at this time.

Invasive Plants

Barberry is established in small patches on wetter soils throughout the southern portion of the forest and in scattered places throughout the remainder of the forest. Other plants, including Common Buckthorn, Autumn Olive and shrub Honeysuckle are also present. These plants have the potential to dominate openings in the forest and restrict the establishment of native trees and understory plants. This change in the plant community affects habitat for all species that live in the forest.

Beech Bark Disease

Beech Bark Disease is unfortunately a common occurrence in the forests of Vermont. It was introduced in Nova Scotia in the early 1900's from Europe. It has worked its way west from there. The pathogen affects the vigor of beech and will eventually lead to mortality. Beech Bark Disease is an attack of a beech scale insect and a fungus in the *nectria* genus. Beech trees infected with Beech Bark Disease will have cankers on the bark. Some beech trees are resistant to this disease and should be protected and managed for. Genetic resistance is the best way to manage for this disease.

Red Rot

Red rot is a fungal disease caused by *Phellinus pini.* Red rot is a common disease in temperate forests, affecting softwood trees. This disease leads to decay within the stem of a tree. The fungus is introduced through wounds or dead stems. It can greatly affect the quality of trees when they are sold for lumber. Highly stocked stands are more susceptible due to competition for resources. Reducing the density of softwood stands is one way to manage this pathogen.

Sugar Maple Borer

Sugar Maple Borer damage is caused by the larva of long-horned wood boring beetle, *Glycobius speciosus.* This beetle is 25mm in length and has yellow and black coloring, with a distinctive "W" design on the wing cover. Sugar Maple Borer is a native beetle. It rarely causes mortality on its own. The damage is done by the larvae of the beetle once the eggs hatch. The larva bores through the cambium layer and tunnels along the outer layer of wood. This reduces the economic value of the tree, and often compromises structural integrity such that the tree is prone to future breakage at the site of the damage.

White Pine Needle Cast

White pine needle cast is a relatively new pathogen. This disease was first noticed throughout the northeast in 2010 and has been affecting white pines year after year since. This is a fungal pathogen caused by three different fungi. These fungi affect the second-year needles of pine, which turn the needles brown in June, then these needles are dropped. This leaves the infected trees with only one set of needles. A healthy white pine tree has 3 years' worth of needles. This decreases the growth and vigor of trees affected.

White Pine Weevil

White pine weevil is an insect, *Pissodes strobi* that attacks the top leaders of conifers. It lays eggs in the previous year's leader. Once the eggs hatch the grubs tunnel inwards towards the center of the leader, feeding on the cambium. The leader is eventually girdled by the feeding and killed. The response of the tree is to develop multiple leaders to replace the dead leader. A weevil infestation rarely results in mortality, but infestation ruins the form and quality of the tree and often gives it a bush-like appearance. White Pine, Norway spruce, Colorado blue spruce, jack pine, red pine, Scotch pine and mugho pine are susceptible to white pine weevil.

REGIONAL FOREST HEALTH CONCERNS

The following forest health issues are currently found in Vermont or in neighboring states but were **not** found in the Ashley Community Forest. These are significant issues that should be monitored. If found their impact will be significant.

Emerald Ash Borer

Emerald ash borer (EAB) is a beetle native to northern Asia. This insect was first discovered in Detroit in 2002. It has spread rapidly east since then, mostly being moved by humans. EAB will kill infected ash trees by effectively girdling the tree. The larvae of EAB feed over the winter in the cambium layer of ash trees. Infested trees will normally die within 5 years. EAB kills 95-99% of the trees it infects. Native ash trees have very little resistance. EAB was found in Vermont in February of 2018 in the town of Orange. Since then, it has been found in more and more towns in Vermont. The closet EAB infestation is 9 miles away in Pomfret.

Oak Wilt

Oak Wilt is a fungal pathogen caused by *Bretziella fagacearum.* This fungus grows in the sap wood of an infected tree. This causes a reaction from the infected tree which clogs conductive tissue further. Eventually the tree can no longer translocate water which causes the tree to wilt. This pathogen often leads to mortality. For a tree to become infected the stem must first become damage. Something as simple as a small saw cut or axe graze is enough for the fungus to enter the tree. Oak Wilt has become a major pest in the central and eastern United States. No known occurrence has been found in Vermont or New England, the closest infestation is in New York state.

Hemlock Wooly Adelgid

Hemlock Wooly Adelgid (HWA) is an introduced insect from Asia. It was first found in the Pacific Northwest in the 1920's, then found in northern Virginia in the 1950's. It is currently in southern Vermont, slowly spreading north. HWA can be identified by the cotton-like frass at the bottom of hemlock needles. HWA feeds on young twigs causing needles to dry out and fall off the tree prematurely. If infested, a hemlock tree can die within 4 to 6 years. Some trees can survive but have reduced live crowns making the tree less valuable to wildlife that depend on hemlock.

TIMBER RESOURCE

The current timber resource on this parcel is modest. A 2016 timber assessment done by consulting forester, Paul Harwood, placed the total timber value at approximately $36,675 for what was estimated at that time to be a 217.8 acre parcel. (A land survey in 2020 found the parcel to be 256.4 acres) This amounts to approximately $168/acre. No timber valuation was included in the sampling for this Forest Stewardship Plan, but it is agreed that the current timber

value is relatively low for the forest types present. It is however expected that through conservative, long-term forest management designed to improve species composition and to reduce the proportion of trees with low vigor and low value, that the economic value of the forest will increase substantially over time. Generally, healthy trees of species that are well-adapted to the site, will have more value than unhealthy specimens of species that are poorly adapted to the site. We intend to adjust species composition through management activities and in most cases, to favor healthy trees. Having some potential to generate modest revenue from future timber harvest is important because this forest is expected to be a self-sustaining economic entity that is not reliant on direct funding from either town.

MANAGEMENT APPROACH

In order to fully understand the recommendations for forest management in this plan, it is important to first understand the overarching management philosophy and desired future conditions. With the following recommendations, we are attempting to adjust species composition to more finely match soil and site conditions. We know that much of the white pine that is present in this forest is a relic of agricultural abandonment and that it will naturally decrease in proportion over time. By reducing the proportion of white pine sooner, we create growing space for mid-tolerant and shade tolerant species of hardwoods which are better adapted to the specific environment. The aspen and paper birch are early successional species and are over-represented in this forest due to open conditions that followed agricultural abandonment and also because of openings created with heavy, unregulated logging. When there are large concentrations of unhealthy white pine, and mature aspen and birch, the size of the concentration will dictate the size of the openings created by their removal. Openings are not expected to be numerous. Most will be 1-3 acres and under no circumstance will openings be larger than 5 acres. It is our goal to encourage all species of native hardwoods and softwoods while retaining some large white pine, hemlock, aspen and paper birch as legacies, snags and recruitment for coarse woody material.

Most hardwood stands in Orange and Windsor County have the potential to grow to full, natural stocking density in the range of 120-130 sq.ft./acre of basal area. Basal area is a measure of crowding or what foresters refer to as “stocking”. Most actively managed hardwood stands have a cutting cycle of 15-20 years, with harvesting occurring when basal area reaches 90-110 sq.ft./acre. Typically, forest management will reduce stocking in hardwood stands to 60-70 sq.ft./acre of residual basal area at each entry. This implies a harvest of 30-40 sq.ft./ac. of basal area at each entry. The widely accepted rule is that about one third of stocking is removed at each entry. When stocking is reduced by harvesting, hardwood forests tend to grow back at a rate of approximately 1-3 sq.ft./acre per year. Thus, 15 years growth, at an annual accrual rate of 2 sq.ft./acre should yield 30 sq.ft./acre of harvestable basal area. Twenty years of growth should yield 40 sq.ft./acre of harvestable basal area. We envision a cutting cycle of 20-25 years, with a reduction of basal area to approximately 80 sq.ft./acre. Since we would retain a higher residual stocking level, our stands would be more crowded and growth would be expected to be slower. We estimate that slower rate of annual basal area accrual to be approximately 1.5 sq.ft./acre. If we re-enter the stand at 20 years, we should have 30 sq.ft./acre of basal area available for harvest. If we return at 25 years, we should have 35-40 sq.ft./acre available for harvest. However, since it is a stated goal to cut less than what grows, we might expect to harvest 20-25 sq.ft./acre of basal area in each harvest so that over time we have more and more standing

volume. Increasing the volume of wood in the forest over time, also will increase the amount of stored carbon. This management approach, and these expected outcomes, should hold true for stands 1 and 2 (please refer to the forest stand map that accompanies this plan) after the initial management entry. Stand 3 is younger and will be on a shorter cutting cycle initially, perhaps 15 years, but will eventually reach 20-25 years as the forest develops.

ASH MANAGEMENT

The Ashley Community Forest is 9 miles away from a known Emerald Ash Borer (EAB) infestation in Pomfret. It is only a matter of time before EAB is found at the Ashley Community Forest and when firmly established, EAB is expected to kill most if not all of the ash present in the forest within 5-10 years. In some parts of the Ashley Community Forest white ash makes up nearly 10% of the species composition, so the loss of this species will have a significant impact on the composition of the forest. The management of ash going forward will adhere to the following management goals:

- Maintain ash as a component throughout the forest for as long as possible.
- Some individual ash trees will be harvested, but the majority of the ash present in the forest will remain.
- Promote a diverse mix of native species, so that the species that will naturally replace ash will be present and able to do so.
- Follow State of Vermont recommendations to slow the spread of EAB in the region.

CARBON MANAGEMENT

Trees and other plants sequester (absorb) carbon from the atmosphere, storing it in biomass (wood and other plant tissue). This carbon is found in both living and dead biomass in the forest, and a large portion of stored carbon can be found below ground in healthy forest soils. Forests are a major global carbon "sink," sequestering and storing huge amounts of carbon. Large, old trees with large, deep root systems store more carbon than smaller, younger trees, but sequester carbon more slowly. Young, densely stocked, fast-growing trees sequester carbon at a faster rate than large, old trees, but store less carbon because they have less collective biomass. Some believe that healthy natural forests best balance carbon storage and carbon sequestration, by having the full component of available species and a mix of tree sizes, forms and ages. This diversity of tree species, age, form and size is referred to as "forest structure" and the general thinking is that forests with more complex forest structure are more resilient to climate change and more likely to remain healthy in a changing future. Elements of forest structure can also include standing dead trees, coarse woody material on the forest floor, variation in overstory stocking levels, native shrub layers and herbaceous plants, mosses and lichens. In a very broad definition of forest structure, even the microbes in the soil, insects, amphibians, or the animals and birds that live in the forest, add to complexity of forest structure. We believe that structural complexity is desirable, that more and bigger, living and dead organisms will result in more stored carbon, and that complex forest structure results in healthier forest ecosystems.

Forests can be managed intensively to maximize carbon sequestration by regular cutting and the creation of new cohorts of vigorous, young forest. This management approach encourages rapid growth, and thus rapid absorption of carbon, but other benefits of the forest are sacrificed in

having a simplified forest structure and damage associated with repeated forest management entries on short intervals.

Forests can alternatively be managed passively to maximize carbon storage by minimizing harvest and allowing the forest to reach full stocking and to ultimately be populated by mostly large, old trees. This type of passive management will generally result in larger carbon stores, but limited carbon sequestration and reduced wildlife habitat benefits that are associated with active forest management. In addition, in order to reach full stocking of mature, native trees, and thus maximize carbon storage, we must first have full stocking of immature, native trees that will grow into that condition. That is not currently the case at the Ashley Community Forest.

The management at the Ashley Community Forest will be a combination of the two approaches seeking balance while favoring development of larger trees and generally higher stocking. In the proposed ecological reserve areas, carbon storage will be a primary objective and no timber harvest is anticipated. In the early successional patch cuts planned for stand 1 (please see the forest stand map accompanying this plan), sequestration will be the carbon goal. In the bulk of the remainder of the forest, we will seek to manage for both carbon storage and carbon sequestration by growing our forest at higher stocking and to larger individual tree diameters than is the regional norm, while retaining some proportion of very large trees as "legacy" trees to enhance structural complexity, to act as recruits for future snags and coarse woody material, and to increase carbon storage. We intend our management approach to be less intensive than the norm, but not passive. We intend to manage carefully and conservatively, but we do intend to practice forest management and to periodically harvest forest products.

<u>Carbon sequestration and storage priorities:</u>

- Avoid creating large-scale disturbances, such as openings larger than 5 acres. Most openings created in the forest through harvesting will be less than 1 acre in size. In the initial management entry, the concentration of mature or unhealthy trees will dictate opening size. After that initial harvest, creation of openings larger than 1 acre would be unusual.
- Minimize soil disturbance during silvicultural activities.
- Retain dead biomass in the form of dead-standing and fallen trees and as much coarse and fine woody debris as possible during forest management.
- Employ multi-aged and low-impact silvicultural techniques as much as possible to encourage a healthy, diverse, resilient forest. In practice, this means use of smaller equipment, smaller trails, smaller landings, and the use of forwarders in preference to cable skidders and cable skidders in preference to grapple skidders.
- No whole-tree-harvest is planned. The goal is to periodically harvest and remove trees that have economic value, but not all trees with economic value, and to leave as much organic matter in place as possible, especially in cut trees with little value.
- Encourage the development of large trees throughout the forest. Allow for some significant number of these large trees to naturally live out their life cycle in the forest as biological legacies.
- Manage for high quality, valuable trees that can be turned into durable wood products when removed from the forest. That is, minimize the removal of low-quality, low-value

forest products with short carbon residence times, and focus management instead on early forest stand improvement practices that result in a higher proportion of high-quality, trees that produce valuable forest products with longer carbon residence times.

- In stands to be managed for timber, extend cutting cycles (harvest re-entries) to an average of 20-25 years. This will result in higher stocking in the forest and greater carbon storage per acre.
- Maintain higher post-harvest stocking levels than is the regional norm. This will result in slower growth and a reduced rate of carbon sequestration, but leaves more carbon stored on site at any given time.

SPECIES AND AGE DIVERSITY

Forests can be quite complex. Some forms of forest management (even-age management) intentionally seek to simplify forest structure, while other management approaches seek to enhance complexity (uneven-age management or multi-age management). All forest management recommended at the Ashley Community Forest will utilize a multi-age management approach that embraces the enhancement of forest complexity in all components of the forest. The proportion of tree species will be managed, and those species proportions will vary from place to place, but all native species are part of this forest and all have an ongoing role in maintaining the ecological integrity of this forest. Even though we do not, and never will, fully understand all of the hidden interactions between species, we trust that all species have value and function, as demonstrated by their survival and presence in the mix.

In order to maintain a continuous developmental progression of all native species, with species proportions that fall within the natural range of variability, it will be necessary to maintain individuals or groups of trees of various ages. A forest composed of the full suite of native species with multiple age classes represented, will result in a forest that is more structurally complex and more resilient to changing conditions associated with invasive insects, disease and plants and to climate change.

"NATURAL" FOREST STRUCTURE

Attaining a "natural" forest structure will be a long-term management objective and by definition will take time. Forests develop over decades and centuries, and that developmental pathway can be reversed, changed or slowed by natural disturbances, such as weather events, insect infestations or disease outbreaks. Our forests have been so dramatically changed by past human disturbance, that we do not know for certain what the current "natural" condition is or should be. While we may not know exactly how our forests will develop in the future and what that new natural equilibrium is that they will move toward, we can recognize their trajectory and remove obvious obstacles that slow forest succession. That is the management approach we plan to take at the Ashley Community Forest. From our forestry training and years of observation, we know that the pine, aspen and paper birch will all decline and lose proportion in the forest over the next century. The reduction in proportion of pine, aspen and paper birch is a natural process occurring in a disturbed forest, and their decline will create available growing space for those species that will take their place in the natural development of this forest. We can advance the restoration process of our forest by recognizing what is happening and speeding the natural decline of certain species to aid the natural accession of other species.

LEGACY TREES, CAVITY TREES, SNAGS AND COARSE WOODY MATERIAL

Legacy trees will be retained as part of all recommended forest management activities. These are trees that will be left to complete their life cycle naturally. While some will be retained simply because they are beautiful, healthy specimens of their species, most will be large, old trees and many will be defective. In the ecological sense, being defective is not a negative characteristic. Seams, cracks, large broken branches and cavities provide multiple habitat niches for wildlife. While large trees are healthy, they spread copious amounts of seed. As they become less and less healthy with age, they will exhibit more breakage, rot and cavities. All of these conditions are common in well-developed, natural forests and are necessary to provide the full range of natural habitats in a functioning forest ecosystem. As all living things will, the legacy trees we leave behind will ultimately die. They will provide habitat value as large standing dead trees, and different habitat value when they find their way to the forest floor as coarse, woody material. All stages of life of large trees have value and provide critical and varied habitat for multiple organisms, large and small, that live in the Ashley Community Forest.

INVASIVE PLANT MANAGEMENT

Invasive plants are present in this forest and in the surrounding landscape. Populations of new plants (and also insects and diseases) are often slow to establish, then at some point enter a rapid (exponential) growth phase before populations ultimately stabilize as all available growing space is filled. Eradication of invasive plants is not a practical option. What we strive for instead is to control invasive plant populations at manageable levels. As invasive plant species naturalize, and become part of our ecosystems, we must accept their ongoing presence. Our goal in treating invasive plants is to limit their expansion so that our native plant communities, and the habitat they support, can survive.

Currently, Japanese Barberry is well established in the wetter portions of the southern half of the Ashley Community Forest, and is established at low to moderate levels elsewhere. Autumn Olive and Common Buckthorn are established at low levels and are found primarily in the northern part of the forest. It is recommended that volunteers be recruited to hand pull individual plants throughout the forest on a series of organized work days during 2023. Our goal is to muster enough volunteer support to effectively suppress established invasive plant populations. If successful, it will likely be necessary to follow with at least one volunteer invasive plant work day per year thereafter.

Forest management activities or natural disturbances such as insect defoliation, wind, snow or ice damage result in canopy openings that allow more sunlight to reach the forest floor. This additional sunlight provides an opportunity for the establishment and growth of invasive plants. Following all forestry activities, insect defoliations, or storm events, impacted areas will be monitored for new infestations of invasive plants and any plants detected will be promptly treated.

WATER QUALITY

There are many water resources on the property. These include wetlands, streams, and multiple, unmapped small seeps. All the water resources on the property will be protected during forest management activities. This will be accomplished primarily by employing respectful (100-foot) buffers with clearly defined boundaries on all significant water resources. All forest

management activities will fully adhere to the Vermont Acceptable Management Practices (AMPs), as detailed in the booklet **Vermont Water Quality, Acceptable Management Practices, Manual for Logging Professionals (2019).** Stream crossings will be avoided where possible and all roads and trails used during logging operations will be properly closed out to the standard of the AMP manual.

CONCLUSION

This forest is a community forest and it is for all of us. We give thanks for the opportunity to share in the joys of this place and to protect it.

TECHNICAL DESCRIPTIONS OF FOREST STANDS

For purposes of management planning, the Ashley Community Forest was divided into four forest stands that differ by species composition, age or past land use. In addition, two ecological reserves were established, one in Strafford and one in Sharon. During July of 2019, stand information was gathered at 102 variable radius sample plots, randomly located throughout the forest. At each sample plot, trees to be measured were determined using a 10-BAF glass prism. Measured trees were tallied by species, crown position, and stem quality. Diameter at breast height (dbh) was measured for each tree and notes on tree health, coarse woody material, invasive plants and regeneration were made at each plot. The data was then processed in FOREX, an FPR developed forest inventory software. This information was used to determine the proportions of species composition, mean stand diameters, and total and acceptable growing stock basal areas by stand. Basal area is a measure that is closely correlated to crown closure and thus the degree of crowding. "Acceptable" growing stock is defined as that portion of total stocking that has the potential to develop commercially valuable products. Economic value is certainly not the only value in a forest, but it does dictate our management options, so it is important to have some sense of what it may be. In each of the four forest stands identified, stocking levels and recommended treatments were determined by referencing U.S. Forest Service silvicultural guides for mixedwood (25-65% softwood) and northern hardwood forest types.

STAND 1

Forest Type: Mixedwood, Pine-Hardwood

Area: 60.4 Acres

Stand Description: This site has the potential to grow high-quality northern hardwoods. However, the current overstory is dominated by mature Paper Birch and Aspen spp., large low-quality White Pines that are suffering from needle cast disease, mature Red Spruce and firewood-quality Beech, most of which are infected with beech bark disease. The proportion of softwoods in this stand (28%) currently defines it as mixedwood (25-65% softwood). The understory is dominated by mixed northern hardwood seedlings overtopped by well-established Beech saplings and poles. Japanese Barberry is established in the understory and well distributed.

Sampling Information: 24 sample plots, 10 BAF prism, July 2019.

Terrain: Gently to steeply sloping with southwest aspect.

Species Composition: Sugar Maple (24%); White Pine (15%); American Beech (13%); Paper Birch (13%); Aspen spp. (9%); Eastern Hemlock (9%); with lesser amounts of Red Spruce; Ironwood; White Ash; Yellow Birch, Red Maple, Black Cherry and Basswood.

Total Basal Area: 116 sq.ft./acre

Acceptable Growing Stock Basal Area: 39 sq.ft./acre

Trees/Acre: 209

Quadratic Mean Stand Diameter: 9.9 inches

Stocking Level: Just below A-level. USDA Research Paper NE-603.

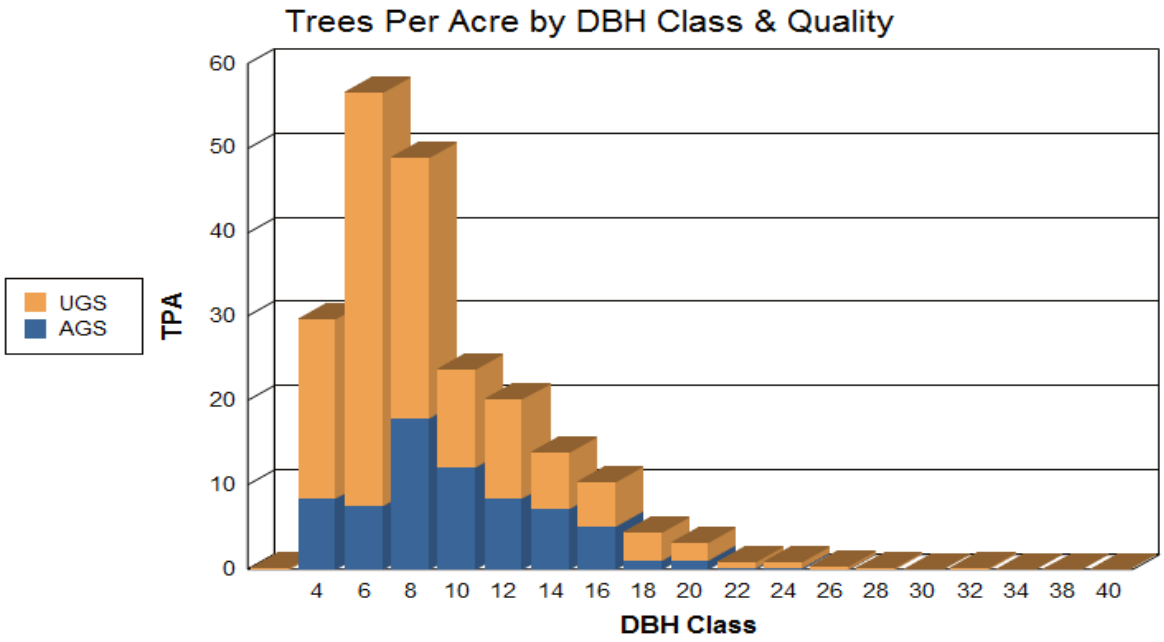
Site Class: I, II

Soil Series: Glover-Vershire complex, with Glover being approximately 45% and Vershire being approximately 40%. Glover soils tend to be shallow, 10-20 inches to bedrock, excessively well drained and composed of fine sandy loam with a thin forest floor (< 2 inches). Vershire soils are deeper, being 20-40 inches to bedrock, also made up of fine sandy loam, also with a thin forest floor (< 2 inches) and are considered well drained. Microsite is important with this complex. Areas of Glover soil are more likely to support beech, while Vershire soils are more likely to support sugar maple.

Stand Structure: Two-aged, or possibly Three-aged. The overstory is dominated by large stems of White Pine, Paper Birch, Aspen spp. Along with Sugar Maple, Hemlock and Yellow Birch. Many trees were tallied in the 20-40 inch diameter classes, almost all of which were classified as unacceptable growing stock due to open grown characteristics. The classification of "unacceptable" or "acceptable" are forestry terms that refer solely to potential timber quality. Much "unacceptable" growing stock has great ecological value. Acceptable growing stock was tallied in trees from 4-20 inches dbh. Regeneration is variable, with northern hardwood seedlings common below beech saplings and poles. Rich site indicators were noted at some sample plots. Invasive plants, primarily Japanese Barberry, were common. Overall, coarse woody material (CWM) abundance is considered moderate in this stand and managing for additional CWM would be desirable. It would be desirable to manage for additional snags, as these trees have wildlife value while they stand and will be recruited as CWM when they fall. There is potential in this stand to retain 2-5 large trees/acre as legacy trees for structural diversity, and recruitment as future snags and CWM.

Stand History: This area was once open agricultural land that was abandoned approximately a century ago. There is a stone foundation near the center of the stand that appears to have been a shed or barn associated with the house foundation across the stream. Scattered stumps provide an indication that logging has occurred within the last 20-30 years under previous ownership. It is unlikely that a forester was associated with the logging.

Diameter Distribution:



Access: Terrain allows access to this stand for forest management from the trails established in the northern portion of the forest. More trails will need to be developed and the planned trail that parallels the stream will ultimately mark the western edge of this stand and will constitute the eastern edge of the Sharon Ecological Reserve. The exact location of this trail is yet to be determined but will be close to the location shown on the forest stand map. During previous logging entries, much of this stand was accessed from Clifford Farm Road, but that requires crossing land of other owners and crossing a major stream. While the distance to a landing located along Nutting Road is longer, this will be the access route in the future, since the trail is entirely on this parcel and there are no streams to cross.

Stand Health: Many White Pine trees in this stand exhibit thin, unhealthy crowns, likely due to needle cast disease. The resulting thin, weak crowns eventually result in weaker root systems and the trees become less structurally stable and more subject to wind damage. Recent wind damage is evident in this stand. Most of the pines also exhibit damage by the white pine weevil, an insect that infests the terminal leader of trees, and results in crooked or multi-stem form. Many of the larger trees of all species exhibit poor form and are of low commercial value.

Invasive plants are common here and constitute the largest threat to ecological integrity in the forest. Japanese Barberry is most common and is well-established at low to moderate levels in the understory. Left untreated, invasive plants would be expected to inhibit regeneration of native trees and plants, changing the future forest, with severe degradation of native wildlife habitat.

Wildlife Habitat: This stand is remote, located just above the major stream that runs through the parcel and has a high degree of structural complexity due to varied species composition and a wide range of diameter classes. These factors all contribute to quality wildlife habitat.

Long-term Objective: The long-term objective is to maintain or enhance structural complexity, improve species composition, and promote the best quality, most healthy individuals of all species represented, using a multi-age silvicultural system with a 20-year cutting cycle. While the current stocking level may appear optimum, the trees that compose that stocking are generally mature, low-quality or at risk. The short-term management objective in this stand is to establish or release adequate regeneration of native species.

Treatment Recommendation:
Summer 2023: Treat invasive plants. This will be accomplished using volunteers to hand pull individual plants.

During the winter of 2024-25, implement a combination of large patch cuts (3-5 acres maximum), with individual tree selection between patches. The patches will be located in areas of mature, low-quality or at risk trees and will include cutting of beech saplings and poles down to 1-inch in diameter, with legacy tree retention. Three or four patches, totaling 10-15 acres, are expected. Within patches, retain 2-5 large legacy trees/acre, girdle large open-grown white pines and cut and leave 5-10 well-distributed trees/acre > 14-inches dbh, in place as coarse woody material.

Outside the patches, individual tree selection will seek to improve species composition and quality through harvest of mature, at-risk trees and unacceptable growing stock while releasing sugar maple of quality. Residual basal area between groups will be 70-80 sq.ft./acre. Residual basal area within groups is expected to be 10-20 sq.ft./ac.. Products harvested will be primarily pulpwood, and firewood with a small amount of mixed logs of primarily White Pine, Ash, Red Spruce, and Paper Birch. White Pine here is generally considered mature and at-risk due to advanced needle cast disease, regardless of diameter. Approximately 10% of the white pine will be left to die and be recruited as snags and ultimately coarse woody debris. Beech infected with beech bark disease is available for harvest at any diameter. Use a 14-inch diameter objective for healthy Paper Birch, Aspen spp. and Red Spruce, 16-inch diameter objective for White Ash and 18-inch diameter objective for Hemlock. Sugar maple and yellow birch will largely be reserved from cutting during this entry.

Summer 2026: Post-harvest invasive plant treatment, using volunteers to hand pull individual plants.

STAND 2

Forest Type: Northern Hardwood

Area: 49.0 Acres

Stand Description: A well-developed northern hardwood stand with the potential to grow high-quality sugar maples. Currently the stand is a mix of species, with broad representation of diameters and quality. The understory is dominated by mixed northern hardwood seedlings overtopped by well-established Beech saplings and poles. Japanese Barberry is established and well distributed in the understory and will require treatment.

Sampling Information: 18 sample plots, 10 BAF prism, July 2019.

Terrain: Gently to steeply sloping with easterly aspect.

Species Composition: Sugar Maple (50%); Yellow Birch (9%); White Ash (9%); Aspen spp. (8%); Ironwood (7%); American Beech (5%); Basswood (4%); with lesser amounts of White Pine, Red Maple, Black Cherry, Paper Birch, American Elm, Butternut, Eastern Hemlock and Gray Birch.

Total Basal Area: 95 sq.ft./acre

Acceptable Growing Stock Basal Area: 41 sq.ft./acre

Trees/Acre: 144

Quadratic Mean Stand Diameter: 10.9 inches

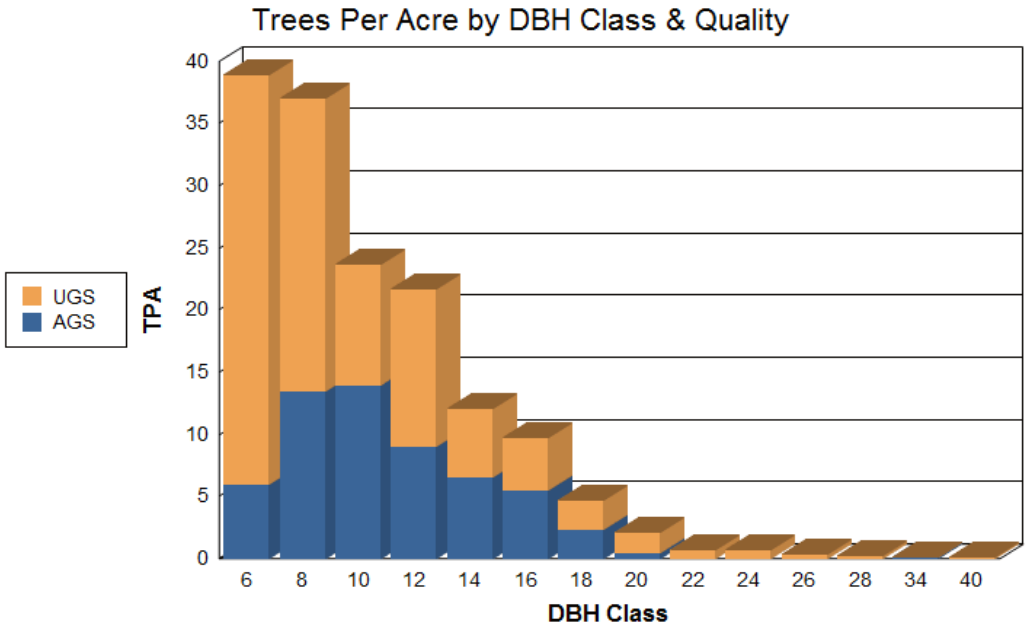
Stocking Level: Just below A-level. USDA Research Paper NE-603.

Site Class: I, II

Soil Series: Tunbridge-Woodstock complex and Glover-Vershire complex. These complexes are quite similar but are classified differently across county lines. In the Tunbridge-Woodstock complex, each soil series makes up approximately 45% of the total. Tunbridge soil is a fine sandy loam, that is moderately deep at 20-40 inches to bedrock, and is considered to be well drained and quite productive. Woodstock soils are also fine sandy loam, but are shallow, being 10-20 inches in depth to bedrock, and are considered excessively well drained. In the Glover-Woodstock complex, Glover makes up approximately 45% and Vershire being approximately 40%. Glover soils tend to be shallow, 10-20 inches to bedrock, composed of fine sandy loam with a thin forest floor (< 2 inches) and tend to be excessively well drained. Vershire soils are deeper, being 20-40 inches to bedrock, also made up of fine sandy loam, also with a thin forest floor (< 2 inches) and are considered well drained. Microsite is important with these complexes. Areas of Glover and Woodstock soils are more likely to support beech, while Vershire and Tunbridge soils are more likely to support sugar maple.

Stand Structure: Two-age classes. The overstory in most areas is dominated by large stems of Sugar Maple, White Pine, Beech, White Ash, Aspen spp., Paper Birch and Yellow Birch. Some trees were tallied in the 20-40 inch diameter classes, almost all of which were classified as unacceptable growing stock, but most trees tallied were 20-inches in diameter or less. Acceptable growing stock was tallied in trees from 6-20 inches in diameter. Cavity trees and snags are common. Regeneration is variable, with northern hardwood seedlings and saplings being common and well-established in most areas. Plants indicating rich site are abundant. Invasive plants, primarily Japanese Barberry, are also common. Overall, coarse, woody material (CWM) abundance is considered moderate in this stand and managing for additional CWM would be desirable. It would be desirable to manage for additional snags, as these trees have important wildlife habitat value while they stand and will be recruited as CWM when they fall. There is potential in this stand to retain 2-5 large trees/acre as legacy trees for structural diversity, and recruitment as future snags and CWM.

Diameter Distribution:



Stand History: This area was once pastured woodlot, and probably served as the sugarbush for the farm further downslope to the east. Scattered stumps provide an indication that logging has occurred within the last 20-30 years and the lack of trees in the larger diameter classes likely indicates diameter limit cutting took place. It is unlikely that a forester was associated with the logging although old blue paint was noted on two trees.

Access: Terrain allows access to this stand for forest management, and trails are well developed here. A potential landing exists downhill, in stand 4, with access to Nutting Road in Strafford. An old landing, used in a previous logging entry, is found to the south of the main trail near the border of stand 4. It is interesting that trucks traveled this far into the forest to pick up logs, but that will not be feasible or desirable in the future.

Stand Health: White Pine trees in this stand exhibit thin, unhealthy crowns, likely due to needle cast disease. The resulting thin, weak crowns eventually result in weaker root systems and the trees become more subject to wind damage. Beech has beech bark disease and Aspen spp. and Paper Birch are mature and in decline.

Invasive plants are common in this stand and constitute a significant threat to ecological function. Japanese Barberry is well-established at low to moderate levels in the understory and if left untreated, can be expected to inhibit natural forest regeneration in the future, with associated degradation of wildlife habitat and reduction of ecological function. Invasive plant treatment is recommended.

Wildlife Habitat: This stand is located on the hillside above the northern farm foundations. It has significant species diversity and structural complexity. These factors contribute to quality wildlife habitat.

Long-term Objective: The long-term objective is to maintain a productive northern hardwood stand that has a significant component of Sugar Maple. Enhance structural complexity, improve species composition, and promote the best quality and most healthy individuals of all species represented, using a multi-age silvicultural system with a 20-year cutting cycle.

Treatment Recommendation:
Summer 2023: Treat invasive plants. This will be accomplished using volunteers to hand pull individual plants.

During the winter of 2024-25, implement an individual tree selection treatment. Improve species composition and quality through harvest of mature, at-risk trees and unacceptable growing stock while releasing Sugar Maple and Yellow Birch of quality. Residual basal area will be 70-80 sq.ft./acre. Products harvested will be primarily pulpwood and firewood, with a small amount of mixed logs of primarily White Pine, White Ash, and Paper Birch. White Pine here is generally considered mature and at-risk due to advanced needle cast disease, regardless of diameter. Approximately 10% of the white pine will be left to die and be recruited as snags and ultimately coarse woody debris. Beech infected with beech bark disease is available for harvest at any diameter. Use a 14-inch diameter objective for healthy Paper Birch and Aspen spp. and 16 inches for White Ash. Sugar maple and yellow birch will largely be reserved from cutting during this entry.

Summer 2026: Post-harvest invasive plant treatment, using volunteers to hand pull individual plants.

STAND 3

Forest Type: Northern Hardwood

Area: 19.0 Acres

Stand Description: This site has the potential to grow a high-quality northern hardwood stand. The current overstory consists mostly of well stocked poles and small sawtimber of good quality and vigor, with overtopping pasture hardwoods and White Pine. There is a significant component of Black Locust in this stand that likely seeded in on abandoned open land from trees around the old farmstead. The proportion of acceptable growing stock is relatively high here despite the fact that many of the larger trees are of moderate to poor stem quality. Implementation of forest stand improvement practices such as girdling of large, rough White Pine and crop tree release would greatly improve the quality of this stand. Autumn Olive , Common Buckthorn and Japanese Barberry are all present at low levels in this stand and will require treatment of these plants.

Sampling Information: 8 sample plots, 10 BAF prism, July 2019.

Terrain: Gently sloping with variable east and south aspect.
Species Composition: Sugar Maple (32%); Black Locust (16%); Red Maple (12%); White Ash (11%); White Pine (10%); American Beech (6%); Aspen spp. (4%); with lesser amounts of Yellow Birch, Paper Birch, Basswood, Black Cherry, Butternut, Northern White Cedar and Red Pine.

Total Basal Area: 118 sq.ft./acre

Acceptable Growing Stock Basal Area: 56 sq.ft./acre

Trees/Acre: 231

Quadratic Mean Stand Diameter: 9.4 inches

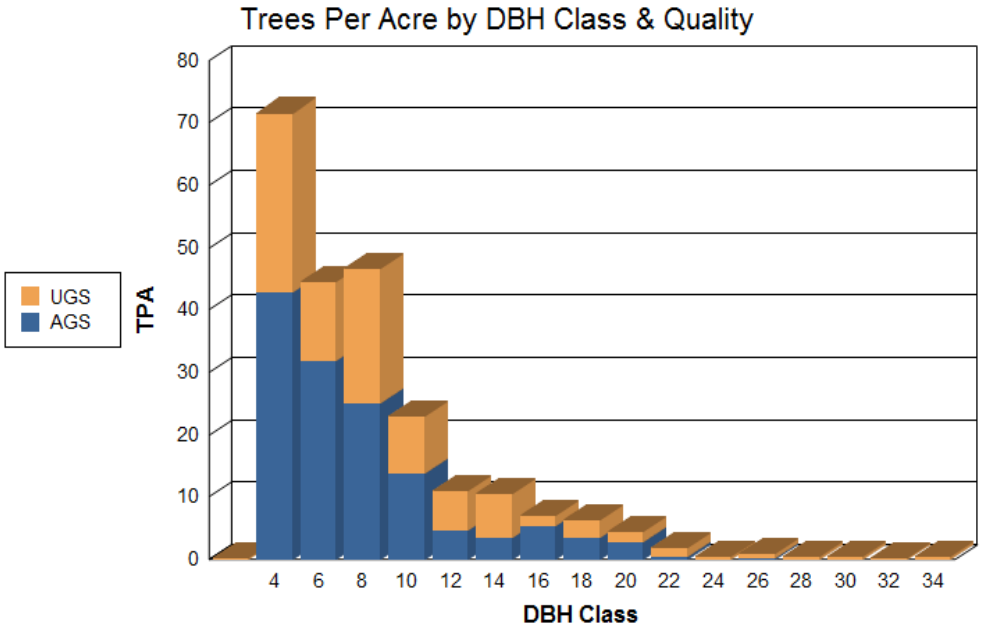
Stocking Level: Just below A-level. USDA Research Paper NE-603.

Site Class: I, II

Soil Series: Tunbridge-Woodstock complex and Glover-Vershire complex. These complexes are quite similar but are classified differently across county lines. In the Tunbridge-Woodstock complex, each soil series makes up approximately 45% of the total. Tunbridge soil is a fine sandy loam, that is moderately deep at 20-40 inches to bedrock, and is considered to be well drained and quite productive. Woodstock soils are also fine sandy loam, but are shallow, being 10-20 inches in depth to bedrock, and are considered excessively well drained. In the Glover-Woodstock complex, Glover makes up approximately 45% and Vershire being approximately 40%. Glover soils tend to be shallow, 10-20 inches to bedrock, composed of fine sandy loam with a thin forest floor (< 2 inches) and tend to be excessively well drained. Vershire soils are

deeper, being 20-40 inches to bedrock, also made up of fine sandy loam, also with a thin forest floor (< 2 inches) and are considered well drained. Microsite is important with these complexes. Areas of Glover and Woodstock soils are more likely to support beech, while Vershire and Tunbridge soils are more likely to support sugar maple.

Diameter Distribution:



Stand Structure: Two-age classes. The overstory in most areas is dominated by large stems of Sugar Maple, Black Locust, Red Maple, White Pine, White Ash, American Beech and Aspen over smaller, younger northern hardwoods of quality. Several trees were tallied in the 22-34 inch diameter classes, almost all of which were classified as unacceptable growing stock. Acceptable growing stock was tallied in trees from 4-22 inches in diameter. Cavity trees and snags are present but not common. Regeneration is not well established in most areas, as the bulk of the stand itself is composed of young trees. Rich site indicators are present. Invasive plants, primarily Japanese Barberry, Autumn Olive and Common Buckthorn are established at low levels. Treatment is recommended. Black Locust is both a non-native invasive tree, and a legacy of past agricultural use. It is expected that the proportion of Black Locust will be reduced in this stand during future management activities. Black Locust legacy trees will be retained near the old farmstead. Black Locust legacy trees will be retained near the old farmstead. Overall, coarse woody material (CWM) abundance is considered low in this stand and managing for additional CWM would be desirable. It would be desirable to manage for additional snags, as these trees have important wildlife value while they stand and will be recruited as CWM when they fall. There is potential in this stand to retain 2-5 large trees/acre as legacy trees for structural diversity, and recruitment as future snags and CWM.

Stand History: This area was once open agricultural land that was abandoned approximately 50 years ago. Two stone house foundations and foundations for several sheds or barns are found in this stand. Scattered stumps provide an indication that a small amount of logging has occurred

within the last 20-30 years and the main log landing for future activity is located here. It is unlikely that there was forester involvement with the past logging.
During 2022, a small number (7-8) Black Locust trees were cut and skidded to the landing by volunteers. Some were sawn on site, while one was removed and sawn off site for kiosk posts and Black Locust lumber. The kiosk posts will be used on site for the Ashley Community Forest informational kiosk, as well as at the Manning Farm trail in Strafford, and for other town kiosks in Sharon, Royalton and Tunbridge. The lumber will be used in the restoration of the bell tower of the historic Strafford Townhouse.

Access: This stand can be accessed from the end of Nutting Road in Strafford. Trails are developed in some areas and can easily be extended into most parts of the stand. A parking area and an old landing are located in this stand near the entrance to the property.

Stand Health: Overall stand health is good in the featured young hardwoods, and in the large pasture hardwoods that will form legacy trees. The White Pine trees in this stand exhibit thin, unhealthy crowns, likely due to needle cast disease. The resulting thin, weak crowns eventually result in weaker root systems and the trees become more subject to wind damage. Most of the pines also exhibit damage by the white pine weevil, an insect that infests the terminal leader of trees, and results in crooked or multi-stem form. The Paper Birch and Aspen trees here are mature and in decline. Emerald Ash Borer is nearby and can be expected to kill the majority of ash in this stand in the near future.

Invasive plants, primarily Japanese Barberry, but also Autumn Olive and Common Buckthorn are established and well-distributed in this stand, and constitute a significant threat to wildlife habitat and to long-term ecological function.

Wildlife Habitat: This stand is young and is located near the entrance to the parcel and is adjacent to the open/idle agricultural lands. The large residual pasture trees provide an important element of structural complexity that benefits wildlife.

Long-term Objective: Manage using multi-age silvicultural techniques to enhance structural complexity, favor native species that are well adapted to the site, and promote the best quality, most healthy individuals of all species represented. Reserve a minimum of 2-3 large legacy trees per acre as seed sources, and as future recruitment for snags and coarse woody material. Any forest management activity should leave some large, coarse, woody material in place on the forest floor. Cutting cycle 20 years.

Treatment Recommendation:
Summer 2023: Treat invasive plants. This will be accomplished using volunteers to hand pull individual plants.

- Harvest Black Locust to be used as kiosk posts, sign posts, outdoor bench lumber or other local uses. Retain Black Locust legacy trees near the farmstead.
- Forest stand improvement project: Girdle 3-5 trees/acre; Crop Tree Release of 50-100 trees/acre on 2-3 sides. Favor healthy trees of all species that have superior stem quality. Sell some of the smaller stems that are cut to release crop trees, as yurt poles, if possible.
- Extend recreational trails into this area.

Summer 2026: Follow-up treatment of invasive plants using volunteer labor to hand pull individual plants.

STAND 4

Forest Type: Northern Hardwood

Area: 30.9 Acres

Stand Description: This stand has the potential to grow a high-quality northern hardwood stand. The current overstory is highly variable, consisting mostly of well stocked poles and small sawtimber, with overtopping pasture hardwoods, Paper Birch, Aspen spp. and White Pine. The proportion of acceptable growing stock is quite low but this is influenced by the dominance of large trees that are mostly classified as unacceptable growing stock. Access to this stand is difficult and it is immediately adjacent to the Strafford Ecological Reserve. A light, pre-commercial harvest focused on cutting and dropping 3-5 trees per acre to enhance coarse woody material, girdling of 3-5 large trees (> 12 inches) per acre, and crop tree release of 5-10 trees per acre would lead to more complex structure and enhanced species composition and future value. Japanese Barberry is well distributed in the understory and will need to be treated.

Sampling Information: 14 sample plots, 10 BAF prism, July 2019.

Terrain: Gently to steeply sloping with variable east and south aspect.

Species Composition: Sugar Maple (29%); American Beech (22%); White Pine (16%); Paper Birch (11%); Ironwood (10%); Aspen spp. (5%); White Ash (3%); Basswood (3%); with lesser amounts of Yellow Birch and Black Cherry.

Total Basal Area: 106 sq.ft./acre

Acceptable Growing Stock Basal Area: 42 sq.ft./acre

Trees/Acre: 236

Quadratic Mean Stand Diameter: 9.4 inches

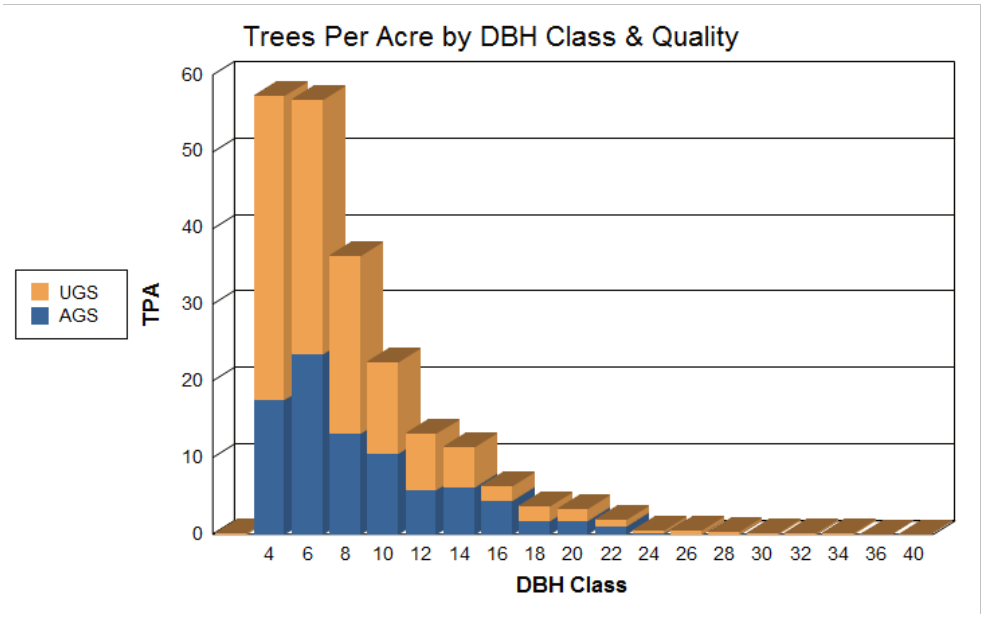
Stocking Level: Just below A-level. USDA Research Paper NE-603.

Site Class: I, II

Soil Series: Tunbridge-Woodstock complex. In the Tunbridge-Woodstock complex, each soil series makes up approximately 45% of the total. Tunbridge soil is a fine sandy loam, that is moderately deep at 20-40 inches to bedrock, and is considered to be well drained and quite productive. Woodstock soils are also fine sandy loam, but are shallow, being 10-20 inches in depth to bedrock, and are considered excessively well drained. Microsite is important with this

soil complex. Areas of Woodstock soils are more likely to support beech, while Tunbridge soils are more likely to support sugar maple.

Diameter Distribution:



Stand Structure: Two-age classes. The overstory in most areas is dominated by large stems of Sugar Maple, White Pine, White Ash, Paper Birch and Aspen over smaller, younger northern hardwoods. Many trees were tallied in the 24-40 inch diameter classes, almost all of which were classified as unacceptable growing stock. Acceptable growing stock was tallied in trees from 4-22 inches in diameter. Cavity trees and snags are common. Regeneration is not well established in most areas, as the bulk of the stand itself is composed of young trees. Rich site indicators are present. Invasive plants, primarily Japanese Barberry, are common. Black Locust is both an invasive tree, and a legacy of past agricultural use, but it will be managed as a naturalized component of the stand. Overall, coarse woody material (CWM) abundance is considered low in this stand and managing for additional CWM would be desirable. It would be desirable to manage for additional snags, as these trees have important wildlife value while they stand and will be recruited as CWM when they fall. There is potential in this stand to retain 2-5 large trees/acre as legacy trees for structural diversity, and recruitment as future snags and CWM.

Stand History: This area was once open agricultural land that was abandoned approximately 50-70 years ago. A stone foundation for a house and another for a barn are found in this stand. A stone culvert is present between the house and barn foundations. **Access**: This stand can be accessed from the end of Nutting Road in Strafford. Trails are developed in some internal areas and could be extended into most parts of the stand, but landing access would require crossing the stream that feeds the wetland. This stream crossing would also pass through the Strafford Ecological Reserve, so if this does happen, great care needs to be taken to locate a temporary crossing carefully and remove it when forest management activities are complete. The main landing is located in adjacent stand 3, near the entrance to the property.

Stand Health: Overall stand health is good in the featured young hardwoods, and in the large pasture hardwoods that will form legacy trees. The White Pine trees in this stand exhibit thin, unhealthy crowns, likely due to needle cast disease. The resulting thin, weak crowns eventually result in weaker root systems and the trees become more subject to wind damage. Most of the pines also exhibit damage by the white pine weevil, an insect that infests the terminal leader of trees, and results in crooked or multi-stem form. The Paper Birch and Aspen trees here are mature and in decline. Ash is at risk from Emerald Ash Borer.

Invasive plants, primarily Japanese Barberry, but also Autumn Olive and Common Buckthorn are well-established and well-distributed in this stand, and constitute a significant threat to wildlife habitat and to long-term ecological function.

Wildlife Habitat: This stand is young and is located near the entrance to the parcel and is adjacent to the open/idle agricultural lands. The large residual pasture trees provide an important element of structural complexity that benefits wildlife.

Long-term Objective: Manage using multi-age silvicultural techniques to enhance structural complexity, favor native species that are well adapted to the site, and promote the best quality, most healthy individuals of all species represented. Reserve a minimum of 2-3 large legacy trees per acre as seed sources, and as future recruitment for snags and coarse woody material. Any forest management activity should leave some large, coarse, woody material in place on the forest floor. Cutting cycle 20 years. This stand has difficult access and generally low-quality trees. A light pre-commercial forest stand improvement practice should be implemented, and then more time should be allowed for growth.

Treatment Recommendation:
Summer 2023: Treat invasive plants. This will be accomplished using volunteers to handpull individual plants.

- Implement a light forest stand improvement project that seeks to girdle 3-5 trees/acre and cut and leave 3-5 trees per acre. Five to 10 crop trees of quality should be released per acre. Trees selected for cutting or girdling will mostly be 12 inches in diameter or greater and consist of unhealthy trees or low-quality trees competing with trees of high stem quality.
- Extend recreational trails into this area.

Summer 2026: Follow-up treatment of invasive plants using volunteer labor to hand pull individual plants.

SHARON ECOLOGICAL RESERVE

Forest Type: Northern Hardwood (uplands) and Mixedwood (along the streams)

Area: 65.2 acres (Acreage may change as the exact location of the eastern edge of the reserve is determined)

Stand Description: The east facing hillside has the potential to develop a high-quality northern hardwood stand. The current overstory is dominated by large, northern hardwoods, with a component of mature White Pine, Paper Birch, Aspen spp., and Red Spruce. Japanese Barberry is well-established in the understory particularly in the eastern portion of this area and will require treatment. The riparian zone along the stream and the west-facing hillside immediately above it to the east is dominated by a mix of hardwoods and softwoods.

Terrain: Gently to steeply sloping with east and west aspects.

Species Composition: Sugar Maple, Eastern Hemlock, White Pine, White Ash, American Beech, Yellow Birch, Paper Birch, Bigtooth Aspen, Ironwood, Black Cherry, Basswood, Eastern Red Maple, Northern White Cedar and Red Spruce.

Total Basal Area: Not measured.

Trees/Acre: Not measured.

Quadratic Mean Stand Diameter: Not measured.

Site Class: I, II, III

Soil Series: Glover-Vershire complex, with Glover being approximately 45% and Vershire being approximately 40%. Glover soils tend to be shallow, 10-20 inches to bedrock and composed of fine sandy loam with a thin forest floor (< 2 inches). Glover soils tend to be excessively well drained. Vershire soils are deeper, being 20-40 inches to bedrock, also made up of fine sandy loam, also with a thin forest floor (< 2 inches) and are considered well drained. Microsite is important with this complex. Areas of Glover soil are more likely to support beech, while Vershire soils are more likely to support sugar maple.

Vershire-Dummerston complex, with Vershire being approximately 60% and Dummerston being approximately 25%. Vershire soils are deep, being 20-40 inches to bedrock, composed of fine sandy loam, with a thin forest floor (< 2 inches) and are considered well drained. Dummerston soils are very deep, being more than 80 inches in depth to a restrictive layer such as ledge or fragipan. They are considered to be well drained, with a thin forest floor (< 2 inches). Proximity to the stream means that soils of any depth may be saturated with water, or may be well drained, but with root access to saturated soils.

Stand Structure: Two-age classes. The overstory in most areas is dominated by large stems of Sugar Maple, White Pine, Beech, Eastern Hemlock, White Ash and Yellow Birch. Many trees

were noted in the 20-40 inch diameter classes, almost all of which were classified as unacceptable growing stock. Acceptable growing stock was tallied in trees from 4-30 inches in diameter. Cavity trees are common. Regeneration is variable, with northern hardwood seedlings and saplings being common and well-established in most areas. Rich site indicators are abundant on the upper slopes with east aspect, as are invasive plants, primarily Japanese Barberry. Overall, coarse woody material (CWM) abundance is considered to be moderate.

Stand History: This area was once open agricultural land that was abandoned approximately a century ago. There is an excavated foundation for what appears to have been a significant farmhouse in the east-central portion of this reserve, just uphill and west of the stream. Scattered stumps provide an indication that logging has occurred within the last 20-30 years. It is unlikely that a forester was associated with the logging.

Access: This stand could be accessed from either access point along Clifford Farm Road, if recreational access is granted by the adjoining owners. Old logging trails are found in the southern portion of the reserve area that may be incorporated into a trail that could be constructed to connect to other trails on the east side of the stream.

Forest Health: Tree health is generally good, except that most of the White Pine trees in this stand exhibit thin, unhealthy crowns, likely due to needle cast disease. The resulting thin, weak crowns eventually result in weaker root systems and the trees become more subject to wind damage. Most of the pines also exhibit damage by the white pine weevil, an insect that infests the terminal leader of trees, resulting in crooked or multi-stem form. Invasive plants, primarily Japanese Barberry, are well-established and well-distributed in this stand, and constitute a significant threat to ecological function and future wildlife habitat. Emerald Ash Borer will likely kill the bulk of the ash present in this reserve area.

Wildlife Habitat: This reserve area is remote. It is located just above the major stream that runs through the parcel and has a high degree of structural complexity due to varied species composition and a wide range of diameter classes. These factors all contribute to quality wildlife habitat. The presence of well-established invasive plants contributes to a reduction in wildlife habitat quality.

Long-term Objective: Manage as a long-term ecological reserve.

Treatment Recommendation:
Summer 2023: Invasive plant treatment using volunteers to handpull individual plants.

Summer 2026: Follow-up treatment of Invasive plants using volunteers to hand pull individual plants.

- Construction of a footpath through this area.

STRAFFORD ECOLOGICAL RESERVE

Forest Type: Rich Northern Hardwood with associated stream, wetland and associated buffers.

Area: 27.2 Acres

Stand Description: The Strafford Ecological Reserve consists of two discrete areas that are connected. The rock outcrop formation on the western edge of the reserve is populated by young northern hardwoods consisting mostly of sugar maple. Rich site indicators are abundant. The adjacent area on the east-facing slope includes a small stream and a 100-foot buffer to the stream and the wetland at the base of the hill. Many small seeps and areas of steep slope or exposed ledge are found here. The Strafford Ecological Reserve is a rich northern hardwood natural community, with the stream buffer and the wetland and wetland buffer below, being part of the reserve as protection for these important riparian features. The understory here is dominated by mixed northern hardwood seedlings overtopped by well-established Beech saplings and poles. Japanese Barberry is established and well distributed in the understory and will require treatment.

Terrain: Gently to steeply sloping with easterly aspect.

Species Composition: Sugar Maple; American Beech; White Pine, White Ash; Paper Birch; Ironwood; Aspen; Yellow Birch; Red Maple.

Total Basal Area: Not Measured

Trees/Acre: Not Measured

Quadratic Mean Stand Diameter: Not Measured

Site Class: I, II

Soil Series: Tunbridge-Woodstock complex. Tunbridge soil is a fine sandy loam, that is moderately deep at 20-40 inches to bedrock, and is considered to be well drained and quite productive. Woodstock soils are also fine sandy loam, but are shallow, being 10-20 inches in depth to bedrock, and are considered excessively well drained. Microsite is important with this complex with areas of Woodstock soils more likely to support beech and Tunbridge soils more likely to support sugar maple. The Strafford Ecological Reserve has a high proportion of Tunbridge soils relative to Woodstock soil.

Stand Structure: Two-age classes. The overstory in most areas is dominated by large stems of Sugar Maple, White Pine, Beech, White Ash, Aspen spp., Paper Birch and Yellow Birch over younger, smaller northern hardwoods. Some trees were noted in the 20-40 inch diameter classes, but most trees are 20-inches in diameter or less. Cavity trees and snags are common. Regeneration is variable, with northern hardwood seedlings and saplings being common and well-established in most areas. Plants indicating rich site are abundant. Invasive plants,

primarily Japanese Barberry, Autumn Olive and Common Buckthorn are also common. Overall, coarse, woody material (CWM) abundance is considered moderate in this reserve area.

Stand History: The area on the east and west sides of the Strafford Ecological Reserve were open pasture from around 1800 until the 1970s. The area in the middle of the reserve (stand 2) was once pastured woodlot, and probably served as the sugarbush for the farm further downslope to the south. Scattered stumps provide an indication that logging has occurred within the last 20-30 years and the lack of trees in the larger diameter classes likely indicates diameter limit cutting took place. It is unlikely that a forester was associated with the logging although old blue paint was noted on two trees.

Access: Terrain ranges from nearly flat to moderately steep, with the steepest terrain being along the stream. The area is accessible by trails to the east, west and south and a trail to the north is planned. This reserve area is a short walk from the parking area at the end of Nutting Road. It may be necessary to put a temporary logging trail across the stream at some point in order to gain access to stand 3. This is not planned in the near-term, but if this is deemed necessary in the future, the stream crossing will be carefully planned and installed in full accordance with State of Vermont requirements for stream alterations.

Forest Health: White Pine trees in this reserve exhibit thin, unhealthy crowns, likely due to needle cast disease. The resulting thin, weak crowns eventually result in weaker root systems and the trees become more subject to wind damage. Beech has beech bark disease and Aspen spp. and Paper Birch are mature and in decline. Emerald Ash Borer is expected to kill the majority of the ash present in the reserve at some point.

Invasive plants are common in this stand and constitute a significant threat to ecological function. Japanese Barberry, and to a lesser extent Autumn Olive and Common Buckthorn are well-established at low to moderate levels in the understory and if left untreated, can be expected to inhibit natural forest regeneration in the future, with associated degradation of wildlife habitat and reduction of ecological function. Invasive plant treatment is recommended.

Wildlife Habitat: This stand is located on the hillside above the northern farm foundations. It has significant species diversity and structural complexity. These factors contribute to quality wildlife habitat.

Long-term Objective: This area will be managed as an ecological reserve.

Treatment Recommendation:
Summer 2023: Treat invasive plants. This will be accomplished using volunteers to handpull individual plants.
Summer 2026: Follow-up invasive plant treatment using volunteers to handpull individual plants.

OPEN LAND

There are two small areas of open/idle agricultural land at the Ashley Community Forest. One area consists of 1.9 acres and is north of Nutting Road in Strafford. The other area is south of Nutting Road and consists of 1.5 acres, located in Sharon.

Area: 3.4 Acres.

Treatment Recommendation: The mowing plan for the open land is outlined on page 11 under Recreation and Aesthetics. The open areas are not large enough to provide valuable habitat for grassland nesting birds but they are potentially useful to a wide range of pollinators. Un-mowed milkweed plants tend to be tough by the end of the growing season when Monarch Butterfly caterpillars feed on them. By mowing in July, the milkweed plants present at the end of the growing season are more succulent and attractive to Monarchs. By mowing alternate openings every year we intend to let the herbaceous growth become better established and encourage more flowering plants, rather than grasses.

We may expand one or both areas slightly when logging equipment is on site, then follow with stumping when an excavator is on site to close out work post-harvest.

Treat invasive plants in Summer 2023 using volunteer labor to handpull individual plants.

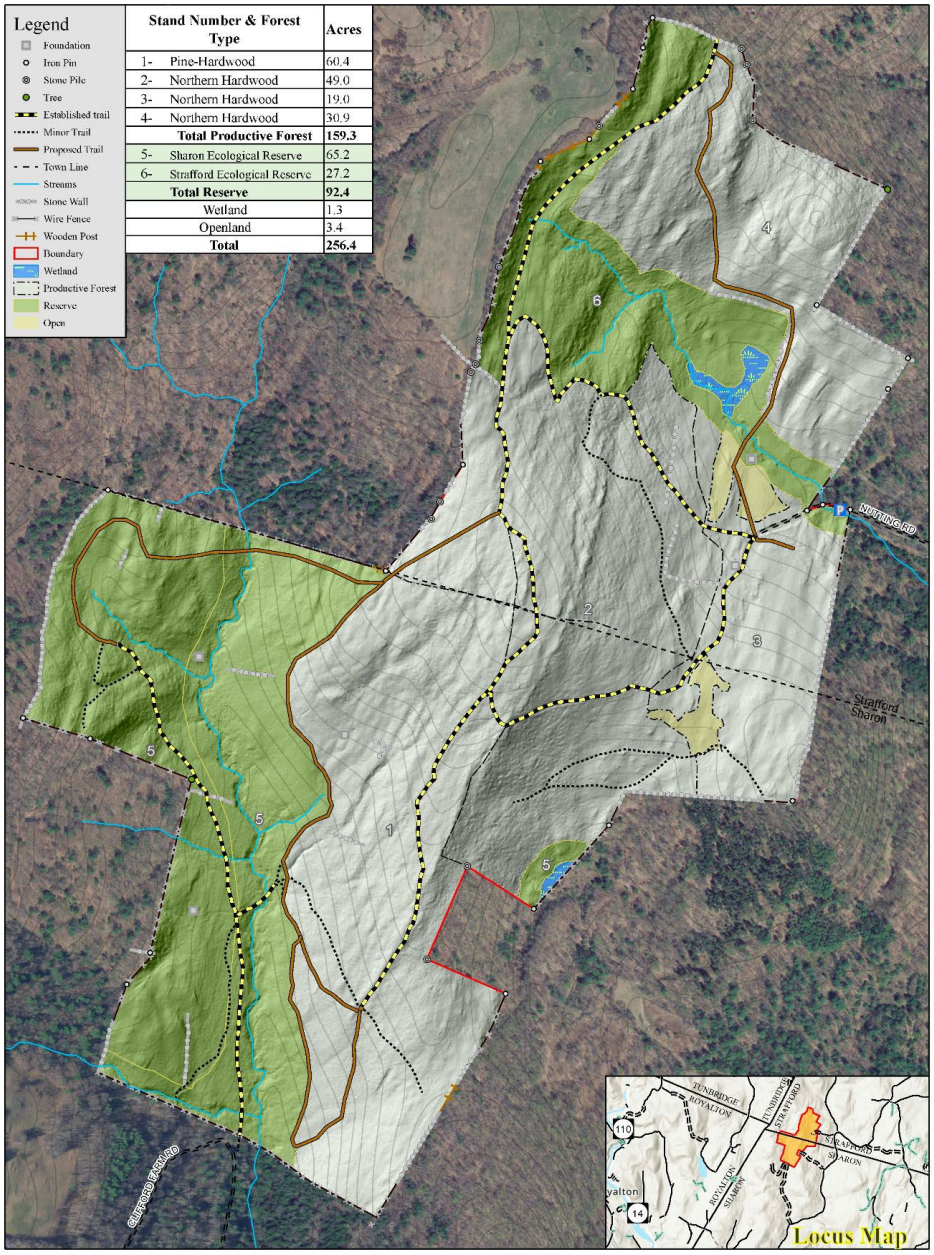
MANAGEMENT SUMMARY

All	Summer 2023	Invasive plant treatment. Hand pulling using volunteer labor.
	2023-2024	Trail assessment, planning, maintenance and construction.
		Boundary blazing and painting.
Stand 1	Winter 2024-2025	Patch cuts and individual tree selection.
Stand 2	Winter 2024-2025	Individual tree selection.
Stand 3	Summer/Fall 2023	Girdling/Felling low-quality trees. Some small stems may be marketed as yurt sticks.
	Winter 2023-24	Commercial timber sale to harvest Black Locust Some small stems may be marketed as yurt sticks.
Stand 4	Summer/Fall 2023	Girdling of low-quality trees and Crop Tree Release of 50-100 stems/acre.
Open Land	Annual - July	Mowing annually in July. All trails mowed each year in both openings and one opening mowed completely every other year.
	Winter 2024-2025	Any additional clearing that may be desired should be done concurrent with work in stands 1-3.
All	Winter 2024-2025	Clear any additional trails concurrent with work in stands 1,2.
All	Summer/Fall 2025	June: Close out the timber sale in stands 1,2. This involves cleaning, grading, seeding and mulching the landing area(s), cleaning any debris from stream crossings, and installing water bars on all trails.
		- Construct any desired new trails and clear any additional open land while equipment is on site to close out the timber sale.
All	Summer/Fall 2026	Treat invasive plants using volunteer labor to handpull individual plants. Monitor each year thereafter to determine when retreatment is necessary.

Appendices

Appendix 1.	**Ashley Community Forest Stand Map**
Appendix 2.	**Ashley Community Forest Survey Map**
Appendix 3.	**Conservation Easement**
Appendix 4.	**Interlocal Agreement**
Appendix 5.	**Ashley Community Forest Wildlife Habitat Report**
Appendix 6.	**Ashley Community Forest Ecology Recommendations**
Appendix 7.	**Ashley Community Forest Education Plan**
Appendix 8.	**Recreation and Public Use Recommendations**
Appendix 9.	**Public Comment on the Draft of this document**

Appendix 1
Ashley Community Forest Stand Map



Ashley Community Forest-256.4ac
Sharon, Strafford
Scale: 1:5,000

0 200 400 800 1,200 1,600 2,000 Feet

Map created by: AJ Follensbee
Date: 9/7/2022

Acres are prorated to match grand list acres. Boundary information based on 2020 Holt Gilmore Survey Tax Parcel #R17958L4

Map is for planning purposes only and is not intended to convey ownership. Accuracy of map is limited by accuracy of data used.

ALLEN FOLLENSBEE #148.0122877 VERMONT State of Vermont LICENSED FORESTER

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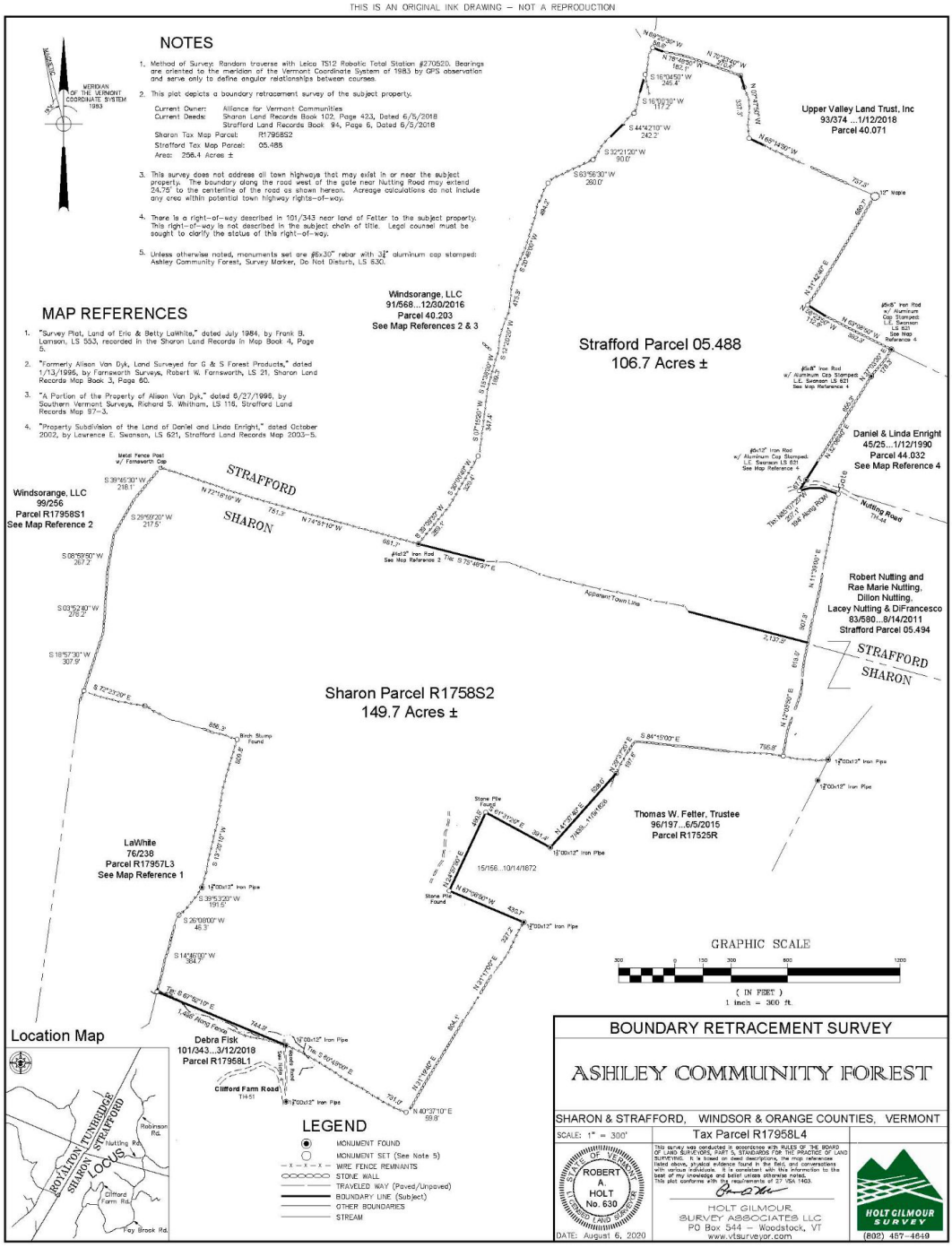
Appendix 2
Ashley Community Forest Survey Map



Appendix 3
Conservation Easement

GRANT OF DEVELOPMENT RIGHTS, CONSERVATION RESTRICTIONS,
and PUBLIC ACCESS EASEMENT

KNOW ALL PERSONS BY THESE PRESENTS that ALLIANCE FOR VERMONT COMMUNITIES, INC., a Vermont non-profit corporation with its principal office in Tunbridge, Vermont, on behalf of itself and its successors and assigns (hereinafter "Grantor" or "AVC"), pursuant to Title 10 V.S.A. Chapters 34 and 155 and in consideration of the payment of Ten Dollars and other valuable consideration paid to its full satisfaction, does freely give, grant, sell, convey and confirm unto the VERMONT LAND TRUST, INC., a non-profit corporation organized under the laws of the State of Vermont, with its principal offices in Montpelier, Vermont, and the VERMONT HOUSING AND CONSERVATION BOARD, a public instrumentality of the State of Vermont with its offices in Montpelier, Vermont, and their respective successors and assigns (collectively known hereinafter as the "Grantees") as tenants in common, forever, the development rights, perpetual conservation easement restrictions, and public access easement (all as more particularly set forth below) in a certain tract of land (hereinafter "Protected Property") situated in the Town of Sharon, Windsor County, and the Town of Strafford, Orange County, State of Vermont, the Protected Property being more particularly described in Schedule A attached hereto and incorporated herein.

The development rights hereby conveyed to Grantees shall include all development rights except those specifically reserved by Grantor herein and those reasonably required to carry out the permitted uses of the Protected Property as herein described. The development rights, perpetual conservation easement restrictions, and public access easement hereby conveyed to Grantees consist of covenants on the part of Grantor to do or refrain from doing, severally and collectively, the various acts set forth below. It is hereby acknowledged that the development rights, perpetual conservation easement restrictions, and public access easement shall constitute a servitude upon and shall run with the land.

I. Purposes of this Grant and Management Plan

A. Statement of Purposes

1. Grantor and Grantees acknowledge the objective of ensuring the availability of the Protected Property for public use and enjoyment, including, but not limited to, educational, recreational and other appropriate community activities by the

people of the Town of Sharon and the Town of Strafford and local schools and, to that end, the purposes of this Grant (hereinafter referred to as "the Purposes of this Grant") are as follows:

a. To conserve productive forestland, wildlife habitats, biological diversity, natural communities, riparian buffers, wetlands, soil productivity, water quality and native flora and fauna on the Protected Property and the ecological processes that sustain these natural resource values as they exist on the date of this instrument and as they may evolve in the future;

b. To provide for non-motorized, non-commercial recreational, educational and other appropriate community uses on the Protected Property;

c. To conserve open space values, and scenic resources associated with the Protected Property for present and future generations and

d. To require that management of the Protected Property be guided by a public management planning process.

2. Recognizing that conservation of productive forestland is included in the purposes of this Grant, and that both the resource values of the Protected Property and responsible forest management standards will evolve over time, the forest management objectives of this Grant are to:

a. Manage forest stands for long rotations which maximize the opportunity for the production of maple sap and/or for harvesting, sustained over time, high quality sawlogs while maintaining a healthy and biologically diverse forest. Grantor and Grantees acknowledge that site limitations, biological factors and public uses may preclude the production of high quality sawlogs, and further that the production of a variety of forest products can be consistent with the goal of producing high quality sawlogs and/or maple sap.

b. Conduct all sugaring and/or forest management and harvesting activities (including the establishment, maintenance, and reclamation of log landings and skid roads) using the best available management practices in order to prevent soil erosion and to protect water quality.

3. To insure that the Protected Property will be owned in perpetuity by the State of Vermont, a municipality, or other nonprofit corporation qualifying under 501(c)(3) of the Internal Revenue Code; or such other entity approved by the Grantees.

4. These purposes will be advanced by conserving the Protected Property because it possesses the following attributes:

a. 249.4 acres of forest available for long-term sustainable management for the production of forest products;
b. is located in Sharon and Strafford and is considered by town residents to be an important property for maintaining the beauty, unique rural Vermont character and strong sense of place for community residents;
c. can be used for numerous recreational, cultural and educational purposes by the Towns, local schools, and the community;
d. streams, including headwater tributaries of Fay Brook that, with wooded buffers and natural flow, provide an array of ecological benefits including maintaining water quality and providing corridors for species movement;
e. wetlands, including seeps and other small areas of open, shrub, and stream- associated wetlands; and,
f. additional wetland, upland, and riparian habitat for wildlife.

Grantor and Grantees recognize the Purposes of this Grant and share the common goal of conserving these values of the Protected Property by the conveyance of conservation restrictions, development rights and public access easement to prevent the use or development of the Protected Property for any purpose or in any manner which would conflict with the Purposes of this Grant.

Grantees accept such conservation restrictions, development rights and public access easement in order to conserve these values for present and future generations.

B. Management Plans.

Grantor will, from time-to-time develop comprehensive management plans, including updates, revisions and amendments, for the Protected Property (hereinafter “Management Plan”). The Management Plan shall:

1. Provide for the use and management of the Protected Property in a fashion which is consistent with and advances the Purposes of this Grant; and

2. At a minimum, the Management Plan shall include the provisions required under this Grant, and shall appropriately balance all the resource attributes of and human uses for the Protected Property. The following items shall be addressed in the Management Plan, as applicable, to ensure compliance with the conditions of this Grant:

a. identify and address the management needs of the recreational uses that may need special or more intensive management focus;

b. provide for public access and meaningful recreational links to private and public lands;
c. include a forest management plan approved by Grantees in accordance with Section I(C), below, if the Grantor proposes to harvest timber or commercial non-timber forest products;
d. provide a plan for road, sign, trail and sanitary facility use that has minimal impact on water quality and plant, wildlife and aquatic habitat resources and historic and cultural features;
e. provide for the sustainable use of fish and wildlife resources;
f. provide for the identification and protection of natural communities, plant, wildlife and aquatic habitat and other ecologically sensitive or important areas;
g. provide for use by local schools and educational programs; and,
h. otherwise be consistent with this Grant.

Prior to the final adoption of each Management Plan, including updates, revisions and amendments, Grantor shall, in consultation with Grantees: (a) secure appropriate public input from the general public, (b) develop the Management Plan in a timely and responsive manner, and (c) provide Grantees with a draft of each such Management Plan for its review and approval prior to adoption as well as a copy of each final adopted Management Plan. Grantees' approval of the Management Plan shall not be unreasonably withheld or conditioned if such Management Plan is consistent with the terms of this Grant.

C. Forest Management Plan.

Grantor shall not harvest timber, wood products, commercial non-timber forest products, or to establish and operate a maple sugaring operation without first developing a forest management plan (hereinafter, "Forestry Plan"). All updates, amendments, or other changes to the Forestry Plan shall be submitted to Grantees' for its approval prior to any harvesting. The Forestry Plan as updated amended, or changed from time-to-time hereinafter referred to as "Amended Forestry Plan." Grantees' approval of the Forestry Plan or Amended Forestry Plan shall not be unreasonably withheld or conditioned, if the Forestry Plan or Amended Forestry Plan has been approved by a professional forester and if the Forestry Plan and Amended Forestry Plan are consistent with the Purposes of this Grant. Grantees may rely upon the advice and recommendations of such foresters, wildlife experts, conservation biologists or other experts as Grantees may select to determine whether the Forestry Plan and Amended Forestry Plan are consistent with the Purposes of this Grant. The Forestry Plan and Amended Forestry Plan shall be consistent with the Purposes of this Grant and shall include at least the following elements (except that those elements of the Forestry Plan or Amended Forestry Plan which do not change need not be re-submitted in updates or amendments to Forestry Plan):

1. Grantor's forest management objectives;

2. An appropriately scaled, accurate map indicating such items as forest stands, streams and wetlands, and major access routes (truck roads, landings and major skid trails);
3. Forest stand ("treatment unit") descriptions (forest types, stocking levels before and after harvesting, soils, topography, stand quality, site class, insect and disease occurrence, previous management history, and prescribed silvicultural treatment including harvest schedules);
4. Description of any sugaring operation, including how management will account for impacts on species diversity and ecosystem health, and impacts on wildlife movement and public access;
5. Plant and wildlife considerations (identification of known significant habitats and management recommendations);
6. Aesthetic and recreational considerations (impact on viewsheds from public roads, trails and places);
7. Historic and cultural resource considerations (identification of known resources and associated management recommendations); and

The Forestry Plan shall be updated at least once every ten (10) years if Grantor intends to harvest timber or other wood products. Amendments to the Forestry Plan shall be required in the event that Grantor proposes a treatment not included in the Forestry Plan, but no such amendment shall be required for any change in timing or sequence of treatments if such change does not vary more than five (5) years from the prescription schedule set forth in the Forestry Plan as approved by Grantee. In the event that any treatment unit is substantially damaged by natural causes such as insect infestation, disease, fire or wind, Grantor may elect to conduct an alternative treatment in which event Grantor shall submit an amendment to the Forestry Plan for Grantee's approval prior to conducting any alternative treatment.

Disapproval by Grantees of a Forestry Plan or an Amended Forestry Plan proposing a heavy cut (as defined below) shall not be deemed unreasonable. Grantees, however, may approve a Forestry Plan or an Amended Forestry Plan thereto proposing a heavy cut in its discretion if consistent with the Purposes of this Grant, including for the following purposes:

1. To release an established understory;
2. To permit the planting of different species of trees or the establishment or re- establishment of a field, orchard, or pasture;
3. Wildlife management; or
4. To promote natural regeneration.

"Heavy cut" shall mean the harvesting of wood products below the "C-Line" or minimum stocking level on the Protected Property as determined by applying the protocol set forth in the current U.S. Department of Agriculture, Forest Service

Silvicultural Guidelines for the Northeast or by applying a similar, successor standard approved by Grantees.

II. Restricted Uses of the Protected Property

1. The Protected Property shall be used for educational, forestry, agricultural, non-motorized, non-commercial recreation, habitat conservation, natural area, and open space purposes only, except as otherwise specifically permitted under this Grant. No residential, commercial, industrial or mining activities shall be permitted. No buildings, structures, or appurtenant facility or improvements shall be constructed, created, erected or moved onto the Protected Property, except as specifically permitted in both Section III below and the Management Plans.

2. No rights-of-way, easements of ingress or egress, driveways, roads, or utility lines or easements shall be constructed, developed or maintained into, on, over, under, or across the Protected Property without the prior written permission of Grantees, except as otherwise specifically permitted under this Grant. Grantees may grant such permission (with or without conditions) if in their reasonable discretion they determine that any such improvement is consistent with the Purposes of this Grant. Grantor shall not convey use restrictions or other easements on, over, under, or across the Protected Property without the prior written permission of the Grantees.

3. There shall be no signs, billboards, or outdoor advertising of any kind erected or displayed on the Protected Property; provided, however, that Grantor may erect and maintain reasonable signs including but not limited to signs indicating the name of the Protected Property and its ownership by Grantor, boundary markers, directional signs, memorial plaques, informational and interpretive signs, and signs limiting access or use (subject to the limitations of Section IV, below). Grantees may erect and maintain signs designating the Protected Property as land under the protection of Grantees, with the prior written permission of Grantor.

4. The placement, collection or storage of trash, human, hazardous or toxic waste, or any other unsightly, harmful or offensive material on the Protected Property shall not be permitted except at such locations, if any, and in such a manner as shall be approved in advance in writing by Grantees and shall be consistent with the Grant and the Management Plans. The temporary storage of trash generated on the Protected Property in receptacles for periodic off-site disposal, shall be permitted without such prior written approval.

5. There shall be no disturbance of the surface, including but not limited to filling, excavation, removal of topsoil, sand, gravel, rocks or minerals, or

change of the topography of the land in any manner, except as may be reasonably necessary to carry out the uses permitted on the Protected Property under this Grant. In no case shall surface mining of subsurface oil, gas, or other minerals be permitted.

6. Grantor shall not give, grant, sell, convey, subdivide, partition, convey in separate parcels, transfer, mortgage, pledge, lease or otherwise encumber the Protected Property without the prior written approval of Grantees which approval may be granted, denied or conditioned - including the condition that the Protected Property be sold for only nominal consideration - in the Grantees' reasonable discretion.

7. There shall be no operation of motor vehicles on the Protected Property for recreational purposes except as approved in Grantees' sole discretion. However, Grantor may permit motorized personal assistive mobility devices for use by persons with mobility disabilities on the Protected Property if consistent with the Purposes of this Grant, and as may be required by 42 U.S.C. §35.137. Other non-recreational uses of motor vehicles, including ATVs, for uses consistent with the Purposes of this Grant, such as agriculture, wildlife and forest management, education, trail grooming, maintenance, and for safety or emergency purposes, is permitted. Notwithstanding the foregoing, snowmobiling may be permitted at the discretion of the Grantor.

8. No use shall be made of the Protected Property, and no activity thereon shall be permitted which is not or is not likely to be consistent with the Purposes of this Grant. Grantor and Grantees acknowledge that, in view of the perpetual nature of this Grant, they are unable to foresee all potential future land uses, future technologies, and future evolution of the land and other natural resources, and other future occurrences affecting the Purposes of this Grant. Grantees, therefore, in their sole discretion, may determine whether (a) proposed uses or proposed improvements not contemplated by or addressed in this Grant, or (b) alterations in existing uses or structures, are consistent with the Purposes of this Grant.

III. Permitted Uses of the Protected Property.

Notwithstanding the foregoing, Grantor shall have the right to make the following uses of the Protected Property:

1. The right to use the Protected Property for all types of non-commercial, non- motorized recreational purposes including, but not limited to, bird-watching, cross-country skiing, fishing, hiking, hunting, snowshoeing, walking and wildlife observation consistent with the Purposes of this Grant and the Management Plans. Use of the Protected Property for snowmobiling, and for non-motorized, mechanized recreation such as mountain biking and by animals capable of transporting humans (including, but not limited to, horses) may be permitted in the

discretion of Grantor if such uses are regulated in the Management Plans and are consistent with the Purposes of this Grant.

2. The right to establish, maintain and use fields, orchards and pastures for agricultural uses, recreational, scenic or open space purposes and/or for the purpose of maintaining or enhancing wildlife habitat, plant habitat or scenic vistas or values on the Protected Property, provided that the initial forest clearing activity required to establish such fields, orchards, pastures, wildlife habitats, plant habitats, and/or scenic vistas occurs only upon the prior written approval of Grantees. Grantees' approval shall not be unreasonably withheld if such clearcutting is consistent with the Purposes of this Grant and is a component of the Management Plans.

3. The right to perform forest management activities, including maple-sugaring and the harvest of timber, other wood products and commercial non-timber forest products, provided that:

a) all such activities are conducted in accordance with an approved Forestry Plan or an Amended Forestry Plan meeting the requirements of Section I above;

b) all such activities are conducted under the supervision of a professional forester holding a current Vermont forester license, or a forester or other land manager whose education, experience and qualifications are otherwise approved in advance by Grantees (hereinafter "Professional Forester"); and

c) any maple sugaring operations shall meet or exceed the standards outlined in Sugarbush Management Standards and Tapping Guidelines for Forestland in Use Value Appraisal (adopted in 2014) or successor guidelines as determined by the Grantees.

During any road construction, maintenance or harvesting and skidding of forest products, or activities associated with sugarbush management, Grantor shall at a minimum employ the applicable practices recommended in the publication "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont," a Vermont Department of Forests, Parks and Recreation publication dated August 11, 2018 (hereafter "AMPs"), or such successor standard approved by Grantees.

Nothing in this clause shall be interpreted to require Grantor to harvest a treatment unit, but only to require that any such harvest be conducted in accordance with the Forestry Plan or the Amended Forestry Plan should Grantor elect to harvest.

4. The right to construct and maintain barns, sugar houses, wood sheds or similar structures or facilities, together with necessary access drives and utilities, on the Protected Property, provided that they are used exclusively for agricultural or

forestry purposes, and provided further that such construction has been approved in writing in advance by Grantees. Grantees' approval may include designation of a "complex" (meaning an area or areas of the Protected Property within which certain structures are or shall be grouped together) surrounding the structures and shall not otherwise be unreasonably withheld or conditioned, provided that the structure or facility is located in a manner which is consistent with the Purposes of this Grant. Grantor shall not deem unreasonable a condition by Grantees that certain structures must be located within a complex which may be designated in the future as provided in this Section III.

5. The right to use, maintain, establish, construct, and improve water sources, courses, and bodies within the Protected Property for uses permitted in this Grant; provided, however, that Grantor does not unnecessarily disturb the natural course of the surface water drainage and runoff flowing over the Protected Property. Grantor may disturb the natural water flow over the Protected Property to improve drainage of agricultural soils, reduce soil erosion or improve the agricultural potential of areas used for agricultural purposes, but shall do so in a manner that has minimum impact on the natural water flow and is otherwise consistent with the Purposes of this Grant and complies with all applicable laws and regulations. Prior to undertaking a streambank stabilization project or placing any structure otherwise permitted under this Grant or approved by Grantees in accordance with this Grant within rivers or streams or on the banks thereof, Grantor shall provide written notice to Grantees of their intent to do so. The construction of ponds or reservoirs shall be permitted only upon the prior written approval of Grantees, which approval shall not be unreasonably withheld or conditioned; provided, however, that such pond or reservoir is located in a manner which is consistent with the Purposes of this Grant.

In addition, the following shall be designated as water protection areas: all those areas within the forested or naturally vegetated portions of the Protected Property (a.) lying within fifty feet (50') landward of the tops of the banks of any "stream" as defined by the AMPs and (b.) all 'significant wetlands' and their buffer zones as defined by the Vermont Wetland Rules adopted February 7, 1990 and amendments adopted January 6, 2020, effective January 21, 2020, or successor document approved by the Grantees. These areas shall move with the movement of the streams and the following goals and restrictions shall apply thereto:

The principal goal for management within the water protection areas is to maintain or enhance their ecological benefits, including but not limited to water quality, soil integrity, and natural hydrology; providing important terrestrial, wetland, and aquatic habitat; and providing organic matter, nutrients, shade, and large diameter coarse woody material for the benefit of wetland, riparian, and aquatic systems.

Notwithstanding anything to the contrary contained in this Section III(5), any management or use of the water protection areas shall incorporate up-to-date ecological knowledge and management practices, and shall be consistent with the principal goal above.

6. The right to maintain, repair, improve and replace existing recreational trails, together with the right to clear, construct, repair, improve, maintain and replace new trails, provided that the location, use and construction of such new trails are consistent with the Purposes of this Grant, and are provided for in the Management Plans.

7. The right to conduct periodic, temporary community and public entertainment events on the Protected Property, including concerts, fairs and celebrations, together with the right to erect tents and other temporary structures for such events and the right to use existing fields for temporary parking; provided that such events shall not result in the clearing of any forested areas and provided further that such events are consistent with the Purposes of this Grant and the Management Plans.

8. The right to construct, maintain, repair and use unpaved parking lot(s) on the Protected Property, including associated access drives and utilities, together with the right to construct improvements normally associated with a parking lot. Grantor shall first obtain the prior written approval of Grantees for the location and size of such unpaved parking lots on the Protected Property, which approval shall not be unreasonably withheld nor conditioned, provided that such location and use shall be consistent with the Management Plans and the Purposes of this Grant.

9. The right to construct, maintain, repair and replace permanent or temporary structures, drives and utilities reasonably necessary to support the uses permitted by this Grant (including modest structures to support public outdoor recreation and/or public outdoor education and/or for processing or storing wood products); provided that such structures comply with the requirements of this Section III(9) and the number and location of such structures, drives and utilities are consistent with the Purposes of this Grant, and the Management Plans.

10. The right to charge members of the public reasonable fees for admission to and use of the Protected Property, provided that such fees are collected only for community and public recreation, education or entertainment events on the Protected Property (including, but not limited to, children's activities, concerts, fairs and celebrations) or such fees are reasonably necessary to support Grantor's management of the Protected Property. The right to charge organizations reasonable fees for recreational use of a portion of the Protected Property provided that such use does not unreasonably interfere with the access of the general public to the Protected Property. All fees charged for admission to or use of the Protected Property shall be consistent with the Purposes of this Grant, especially that of public access, and shall be provided for in the Management Plans. Notwithstanding the foregoing, the Grantor must provide some form of meaningful public access on the Protected Property without charging a fee, such as dispersed pedestrian access.

11. The right to conduct and authorize temporary commercial and non-commercial uses of the Protected Property, provided that such uses (i) do not unreasonably interfere with the access of the general public to the Protected Property, (ii) do not materially detract from the Purposes of this Grant, and (iii) are detailed in an approved Management Plan described in Section I.B of this Grant.

IV. Public Access.

Grantor covenants and agrees that the Protected Property shall be available to the general public for all types of non-commercial, non-motorized, non-mechanized dispersed recreational and educational purposes (including, but not limited to, bird-watching, boating, cross-country skiing, fishing, hiking, hunting, snowshoeing, swimming, trapping, walking and wildlife observation) consistent with the Purposes of this Grant. Notwithstanding the foregoing, Grantor may limit or restrict public access to the Protected Property to assure compliance with the requirements of this Grant, to protect natural habitats, or to protect the public health or safety (including, but not limited to, the right to permit, regulate or prohibit fishing, hunting and trapping). If Grantees approve a conveyance of the Protected Property, then Grantees may also require that a separate Grant of Public Access Easement also be conveyed to Grantees in a form approved by Grantees.

V. Enforcement of the Restrictions.

Grantees shall make reasonable efforts from time to time to assure compliance by Grantor with all of the covenants and restrictions herein. In connection with such efforts, Grantees may make periodic inspection of all or any portion of the Protected Property and for such inspection and enforcement purposes, Grantees shall have the right of reasonable access to the Protected Property. In the event that Grantees becomes aware of an event or circumstance of non-compliance with the terms and conditions herein set forth, Grantees shall give notice to Grantor of such event or circumstance of non-compliance by hand or by certified mail, return receipt requested, and demand corrective action by Grantor sufficient to abate such event or circumstance of non-compliance and restore the Protected Property to its previous condition. In the event there has been an event or circumstance of non- compliance which is corrected through negotiation and voluntary compliance but which has caused Grantees to incur extraordinary costs, including staff time, in investigating the non-compliance and securing its correction, Grantor shall at Grantees' request reimburse Grantees all such costs incurred in investigating the non-compliance and in securing its correction.

Failure by Grantor to cause discontinuance, abatement or such other corrective action as may be demanded by Grantees within a reasonable time after receipt of notice and reasonable opportunity to take corrective action shall entitle Grantees to bring an action in a court of competent jurisdiction to enforce this Grant and to recover any damages arising from such non-compliance. Such damages, when recovered, may be applied by Grantees to corrective action on the Protected Property, if

necessary. If the court determines that Grantor has failed to comply with this Grant, Grantor shall reimburse Grantees for any reasonable costs of enforcement, including court costs and reasonable attorneys' fees, in addition to any other payments ordered by such court. In the event that one of the Grantees initiates litigation and the court determines that Grantor has not failed to comply with this Grant and that such Grantee has initiated litigation without reasonable cause or in bad faith, then such Grantee shall reimburse Grantor for any reasonable costs of defending such action, including court costs and reasonable attorneys' fees. The parties to this Grant specifically acknowledge that events and circumstances of non-compliance constitute immediate and irreparable injury, loss and damage to the Protected Property and accordingly entitle Grantees to such equitable relief, including but not limited to injunctive relief and ex parte relief, as the Court deems just.

The remedies described herein are in addition to, and not in limitation of, any other remedies available to Grantees at law, in equity, or through administrative proceedings. No delay or omission by Grantees in the exercise of any right or remedy upon any breach of Grantor shall impair Grantees' rights or remedies or be construed as a waiver. Nothing in this enforcement section shall be construed as imposing a liability upon a prior owner of the Protected Property, when the event or circumstance of non-compliance occurred after said prior owner's ownership or control of the Protected Property has terminated.

VI. Miscellaneous Provisions.

1. Where Grantor is required, as a result of this Grant, to obtain the prior written approval of Grantees before commencing an activity or act, and where Grantees have designated in writing one of the other Grantees herein or another organization or entity which shall have the authority to grant such approval, the approval of said designee shall be deemed to be the approval of Grantees. Grantor shall reimburse Grantees or Grantees' designee for all extraordinary costs, including staff time, incurred in reviewing the proposed action requiring Grantees' approval; but not to include those costs which are expected and routine in scope. When Grantees have authorized a proposed action requiring approval under this Grant, Grantees shall, upon request, provide Grantor with a written certification in recordable form memorializing said approval.

2. While title is herein conveyed to Grantees as tenants in common, the rights and interests described in this Grant, including enforcement of the conservation easement and restrictions, may be exercised by Grantees collectively, or by any single Grantee individually, provided that court enforcement action by a single Grantee shall foreclose action on the same issue(s) by the other Grantees who shall be bound by the final determination.

3. It is hereby agreed that the construction of any buildings, structures or improvements, or any use of the land otherwise permitted under this Grant, shall be in accordance with all applicable ordinances, statutes and regulations of the Town of Sharon and the Town of Strafford and the State of Vermont and at Grantor's sole expense.

4. Grantees shall transfer the development rights, public access easement, and conservation easement and restrictions conveyed by Grantor herein only to a State agency, municipality, or qualified organization, as defined in Chapter 34 or Chapter 155 Title 10 V.S.A., in accordance with the laws of the State of Vermont and the regulations established by the Internal Revenue Service governing such transfers.

5. In the event the development rights or conservation restrictions conveyed to Grantees herein are extinguished by eminent domain or other legal proceedings, Grantees shall be entitled to any proceeds which pertain to the extinguishment of Grantees' rights and interests. Any proceeds from extinguishment shall be allocated between Grantor and Grantees using a ratio based upon the relative value of the development rights and conservation restrictions, and the value of the fee interest in the Protected Property, as determined by a qualified appraisal obtained at the direction of either Grantor or Grantees in the year of extinguishment. Grantees shall use any such proceeds to preserve undeveloped and open space land in order to protect the aesthetic, agricultural, cultural, educational, scientific, forestry and natural resources of the state through non- regulatory means.

6. Without limiting the restrictions contained in Section II(6) of this Grant, in any deed or lease conveying an interest in all or part of the Protected Property, Grantor shall make reference to the conservation easement, restrictions, and obligations described herein and shall indicate that this easement and restrictions are binding upon all successors in interest in the Protected Property in perpetuity. Grantor shall also notify Grantees of the name(s) and address(es) of Grantor's successor(s) in interest.

7. The term "Grantor" shall include the successors and assigns of the original Grantor, Alliance for Vermont Communities, Inc., including the Town of Sharon, Vermont and the Town of Strafford, Vermont, which shall immediately become successor Grantors upon the filing of this Grant. The term "Grantees" shall include the respective successors and assigns of the original Grantees, Vermont Land Trust, Inc. and Vermont Housing and Conservation Board.

8. Grantor shall pay all real estate taxes and assessments on the Protected Property and shall pay all other taxes, if any, assessed in lieu of or in substitution for real estate taxes on the Protected Property.

9. Any signs erected on the Protected Property which mention funding sources shall include the Vermont Housing and Conservation Board and the Vermont Land Trust, Inc.

10. Grantor warrants that Grantor has no actual knowledge of a release or threatened release or hazardous substances or wastes on the Protected Property.

11. During the term of Grantor's ownership, Grantor shall hold harmless, indemnify and defend Grantees against any liabilities, claims and expenses, including reasonable attorney's fees to which Grantees may be subjected, including, but not limited to, those arising from any solid or hazardous waste/hazardous substance release or disposal, or hazardous waste/hazardous substance cleanup laws or the actions, or inactions of said Grantor as owner or operator of the premises, or those of said Grantor's agents.

12. Grantor and Grantees recognize that rare and unexpected circumstances could arise that justify amendment of certain of the terms, covenants or restrictions contained in this Grant. To this end, this Grant may be amended only by mutual agreement of Grantor and Grantees; provided that Grantees determine in their sole discretion that such amendment furthers or does not materially detract from the Purposes of this Grant, Amendments shall be in writing, signed by both Grantor and Grantees, and shall be recorded in the Town of Sharon and the Town of Strafford Land Records. Notwithstanding the foregoing, Grantor and Grantees have no right or power to agree to any amendment that would limit the term of the Grant, or adversely affect the qualification of this Grant or the status of Grantee under applicable laws, including without limitation Title 10 V.S.A. Chapters 34 and 155, Section 170(h) and 501(c)(3) of the Internal Revenue Code, as amended, and regulations issued pursuant thereto.

13. This Grant shall be governed by and construed in accordance with the laws of the State of Vermont. In the event that any provision or clause in this Grant conflicts with applicable law, such conflict shall not affect other provisions hereof which can be given effect without the conflicting provision. To this end the provisions of this Grant are declared to be severable. Invalidation of any provision hereof shall not affect any other provision of this Grant.

14. It is further agreed that the Protected Property is accurately depicted and described in both the Ashley Community Forest Conservation Plan and a Baseline Documentation Report ("BDR") signed by the original Grantor on or about the date of this Grant and held by Grantee Vermont Land Trust, Inc. Grantees may use the Ashley Community Forest Conservation Plan or BDR in enforcing this Grant, but are not limited in their use of the Ashley Community Forest Conservation Plan and BDR to show a change of conditions.

INVALIDATION of any provision hereof shall not affect any other provision of this Grant.

TO HAVE AND TO HOLD said granted development rights, conservation easement and restrictions, and public access easement, with all the privileges and appurtenances thereof, to the said Grantees, VERMONT HOUSING AND CONSERVATION BOARD, and VERMONT LAND TRUST, INC., their respective successors and assigns, to their own use and behoof forever, and the said Grantor, ALLIANCE FOR VERMONT COMMUNITIES, INC., on behalf of itself and its successors and assigns, does covenant with the said Grantees, their successors and assigns, that until the ensealing of these presents, it is the sole owner of the premises and has good right and title to convey the same in the manner aforesaid, that the premises are free from every encumbrance, except those of record, not intending hereby to reinstate any interest or right terminated or superseded by this Grant, operation of law, abandonment of 27 V.S.A. Ch. 5, Subch. 7; and it hereby engages to warrant and defend the same against all lawful claims whatever, except as aforesaid.

I, Michael Sacca, duly authorized agent of the Alliance for Vermont Communities, Inc., have executed this Grant on this_____day of_____, 2022.

ALLIANCE FOR VERMONT COMMUNITIES, INC.

By:
___ Its Duly Authorized Agent

STATE OF VERMONT
COUNTY OF_____, SS.

At_____, Vermont, on this_____day of January, 2022, personally appeared Michael Sacca, duly authorized agent of the Alliance for Vermont Communities, Inc., and__acknowledged this instrument, by_____sealed and subscribed, to be _____free act and deed, and the free act and deed of the Alliance for Vermont Communities, Inc., before me.

_____

Print Name:
Notary Public, State of Vermont
Commission No:

My Commission Expires: 01/31/2023

Approved by the VERMONT LAND TRUST:

By:_____

Date Its Duly Authorized Agent

STATE OF VERMONT
COUNTY OF_____, SS.

At_____, Vermont, on this_____day of January, 2022, personally appeared
Christine McShea, duly authorized agent of the Vermont Land Trust, Inc., and she acknowledged this instrument, by her sealed and subscribed, to be her free act and deed, and the free act and deed of the Vermont Land Trust, Inc., before me.

_____
Print Name:
Notary Public, State of Vermont
Commission No:
My Commission Expires: 01/31/2023

Approved by the VERMONT HOUSING AND CONSERVATION BOARD:

By:
_____

Date Its Duly Authorized Agent

STATE OF VERMONT
COUNTY OF WASHINGTON, SS.

At Montpelier Vermont, on this_____day of January, 2022, personally appeared Lawrence W. Mires, duly authorized agent of the Vermont Housing and Conservation Board, and he acknowledged this instrument, by him sealed and subscribed, to be his free act and deed, and the free act and deed of the Vermont Housing and Conservation Board, before me.

_____
Print Name: Elizabeth Mary Egan
Notary Public, State of Vermont
Commission No: 157.0002746
My Commission Expires: 01/31/2023

SCHEDULE A
PROTECTED PROPERTY

Being all and the same lands and premises, with any and all structures and improvements that may be situated thereon, conveyed to Grantor by Warranty Deed of Holly A. Smit Kicklighter Guardian of Rosamond Ashley, dated June 5, 2018, and recorded in Book 94, Page 6 of the Strafford Land Records and Book 102, Page 423 of the Sharon Land Records. Said Protected Property is depicted as "Strafford Parcel and Sharon Parcel" on a survey entitled, *"Boundary Retracement Survey, Ashley Community Forest Sharon & Strafford, Windsor & Orange Counties, Vermont Tax Parcel R17958L4"* by Holt Gilmour Survey Associates, LLC dated August 6, 2020 and to be recorded on or about even date herewith in Slide ___ of the Sharon Land Records and Slide __ of the Strafford Land Records.

Meaning and intending to include in this description of the Protected Property all of the Grantor's land with any buildings and improvements thereon lying northerly of Town Highway #51 (also known as Clifford Farm Road), and westerly of the westerly terminus of Town Highway #42 (also known as Blake Hill Road in the Town of Sharon, Vermont, and westerly of the westerly terminus of Town Highway #44 (also known as Nutting Road) in the Town of Strafford, Vermont, and generally described as containing 256.4 acres, more or less.

NOTICE: Unless otherwise expressly indicated, the descriptions in this Schedule A and in any subsequent Schedules are not based on a survey or subdivision plat. The Grantor and Grantees have used their best efforts to depict the approximate boundaries of the Protected Property on a plan entitled "Vermont Land Trust - Ashley Community Forest, Towns of Sharon, Windsor Co. and Strafford, Orange Co., VT, January 2022" signed by the Grantor and Vermont Land Trust, Inc. ("VLT") (referred to throughout this Grant and its Schedules as "Ashley Community Forest Conservation Plan"). The Ashley Community Forest Conservation Plan is based upon Vermont Base Map digital orthophotos and other information available to VLT at the time of the Plan's preparation. Any metes and bounds descriptions included in the Schedules herein are approximate only. They are computer generated and are not the result of field measurements or extensive title research. The Ashley Community Forest Conservation Plan and any metes and bounds descriptions herein are intended solely for the use of the Grantor and Grantees in establishing the approximate location of the areas described and for administering and interpreting the terms and conditions of this Grant. No monuments have been placed on the ground. The Ashley Community Forest Conservation Plan is kept by VLT in its Stewardship Office. The Ashley Community Forest Conservation Plan

is not a survey and must not be used as a survey or for any conveyance or subdivision of the land depicted thereon.

Grantor and Grantees do not intend to imply any limitation on the area of land included in this description, should a survey determine that additional land is also encumbered by the Grant. If, in the future, the Grantor or Grantees shall prepare a survey of the Protected Property, of any portion
thereof, or of any excluded lands, and that survey is accepted by the other party or confirmed by a court, the descriptions in the survey shall control.

Reference may be made to the above-described deed and survey and the record thereof, and to the deeds and records referred to therein, in further aid of this description.

Appendix 4
Interlocal Contract

Interlocal Contract

Under the Provisions of 24 V.S.A §§ 4901-4902
Between
Town of Strafford, Vermont
and
Town of Sharon, Vermont

This is an Interlocal Contract in accordance with the provisions of Title 24 V.S.A §§ 4901-4902.

1. Definitions.

(a) Strafford. "Strafford" is the Town of Strafford, a Vermont municipal corporation. Strafford is in Orange County.

(b) Sharon. "Sharon" is the Town of Sharon, a Vermont municipal corporation. Sharon is in Windsor County.

(c) The Two Towns. The term "the Two Towns" is a reference to Sharon and Strafford together.

(d) AVC. "AVC" is Alliance for Vermont Communities, Inc., a Vermont nonprofit corporation.

(e) The Ashley Community Forest. "The Ashley Community Forest" is real property located in both Sharon and Strafford. The Ashley Community Forest was conveyed to AVC by a deed from Rosamond Ashley dated 05 June 2018 and recorded at Book 94, Pages 6-8, in the Strafford Land Records, and recorded at Book 102, Pages 423-425, in the Sharon Land Records. It is contemplated that land may be added to the Ashley Community Forest in the future, either by donation or by purchase. The Ashley Community Forest Board, described below, may recommend purchase of such additional land to the legislative bodies of both towns. In the event of an acquisition of real property, funds from the Ashley Community Forest Management Account, and other grants and contributions as may be obtained for that purpose, may be used for the acquisition and associated transaction costs, subject to the approval of the Selectboards of Strafford and Sharon.

(f) Vermont Land Trust. The Vermont Land Trust is a Vermont nonprofit corporation that is tax exempt under the provisions of Section 501(c)(3) of the Internal Revenue Code.

(g) The Vermont Housing and Conservation Board. The Vermont Housing and Conservation Board is a public instrumentality of the State of Vermont.

2. Statement of Facts

AVC purchased the Ashley Community Forest in order to preserve it for future generations. AVC intends to convey to the Vermont Land Trust and the Vermont Housing and Conservation Board a conservation easement ("the Conservation Easement") that will restrict the development of the Ashley Community Forest and preserve the Ashley Community Forest for the purposes of forestry, agriculture, horticulture, recreation, natural resource education, wildlife habitat conservation, historic preservation, sustainable timber harvest, and the preservation of scenic beauty. After the conveyance of the Conservation Easement, then AVC plans to convey the underlying fee interest in the Ashley Community Forest to the Two Towns to be held by them as municipalities as a community asset, subject to the Conservation Easement.

The Conservation Easement will limit subdivision, mineral extraction, residential development, and commercial development in the Ashley Community Forest. The Conservation Easement will require that agriculture, forestry, and recreation activities in the Ashley Community Forest be conducted in accordance with a management plan approved by the Two Towns and by the Vermont Land Trust and the Vermont Housing and Conservation Board.

Ownership of the Ashley Community Forest by the Two Towns will entail long-term management of the Ashley Community Forest for the purposes set out above. The Two Towns enter into this Interlocal Contract in order to set forth fully the purposes, powers, rights, objectives and responsibilities of the contracting parties, *i.e.*, the Two Towns.

3. Authority and Ownership. Each of the Two Towns is authorized by law to perform the governmental services, activities, or undertakings described in this Interlocal Contract.

The Town of Sharon will own the land in Sharon subject to the Conservation Easement. The Town of Strafford will own the land in Strafford subject to the Conservation Easement. While each town will own its own portion of forest independent of the other town, the Two Towns agree to manage the parcels in a coordinated fashion as described in this Interlocal Contract.

4. Management. The Ashley Community Forest shall be managed by a five-member board to be called "the Ashley Community Forest Board." The five members shall be appointed as follows:

(a) Two members shall be appointed by the legislative body of the Town of Sharon.

(b) Two members shall be appointed by the legislative body of the Town of Strafford.

(c) Each of the four members appointed by the legislative bodies of the Two Towns shall serve at the pleasure of those legislative bodies, and shall have set terms of three years.

(d) At the meeting at which these members are first appointed, they shall be appointed for the following terms: one for two years and one for three years.

(e) The fifth member shall be chosen by four members chosen by the legislative bodies and shall serve for a three-year term.

(f) Each of the five members shall serve until a successor is appointed for them as provided above.

5. Meetings of the Ashley Community Forest Board.

(a) The members of the Ashley Community Forest Board shall hold an annual organizational meeting. The members of the board shall select a person to chair the board, a treasurer, and a secretary.

(b) The Ashley Community Forest Board shall meet at the call of the chair of the board, but at least four times per year. Meetings shall be conducted in accordance with the latest edition of *Robert's Rules of Order*. Three members shall comprise a quorum for any meeting of the board at which action is to be taken. Only when a quorum is present at a meeting of the board can any action of the board be taken and a consensus of the quorum of the full board is the least number of votes needed to take action. That is, if not all members present at a meeting vote, then a majority of the members who do vote may take action only if they have the number of votes equivalent to a consensus of the quorum (three votes in favor of the action).

(c) All meetings of the board are public meetings of a Vermont municipal board, and all records of the board are public records, all as set out in Title 1, Chapter 5 of the Vermont Statutes.

(d) Notwithstanding the above, no action involving the commitment of funds exceeding $1000, action involving a lease, license, or easement or any other use of the premises by third parties exceeding one month in duration or the contracting for removing timber or other resources from the premises shall be authorized absent the agreement of at least one member appointed by each Town.

6. Management of the Ashley Community Forest.

(a) The Ashley Community Forest Board shall manage the Ashley Community Forest as municipally owned land in accordance with the provisions of the Conservation Easement

and the responsibilities listed below. The Ashley Forest Community Forest Board shall operate and manage the Forest and its finances in compliance with the policies and procedures applicable to each Town's Commissions and Commissioners. In the event of a conflict between Town policies, the more restrictive policy or procedure shall control. With approval of the two town's Selectboards, the Ashley Community Forest Board shall have the power to execute timber sale contracts and leases for periods of up to 10 years, concerning the Ashley Community Forest. Other than the leases described in the last sentence, the Ashley Community Forest Board shall not have the power to convey any other interest in real property concerning the Ashley Community Forest, and such power shall be exercised by the respective legislative bodies of the Two Towns.

(b) The Ashley Community Forest Board shall include these activities in the management of the Ashley Community Forest:

(1) Development of a management plan for the community forest in accordance with the requirements of the Conservation Easement and with the approval of the Vermont Land Trust and the Vermont Housing and Conservation Board.

(2) Development and maintenance of trails and recreation facilities on the Ashley Community Forest.

(3) Management and control of all species of plants growing on the Ashley Community Forest.

(4) Preservation of historic aspects of the Ashley Community Forest, including research relating to those historic aspects.

(5) Development of outdoor-education programs.

(6) The Ashley Community Forest Board shall submit an annual budget to the Selectboard of each Town. Desired expenditures in excess of annually approved budgeted amounts must be approved by each Selectboard. Neither Town shall be obligated or required to fund the Ashley Community Forest budget in excess of funds available in the Management Account.

(c) This Interlocal Contract shall be formally reviewed by the Ashley Forest Management Board at least every Five years in order to evaluate its effectiveness and efficiency. Notwithstanding the above, this Contract may be amended at any time if deemed desirable by both Towns.

7. Unified Management Goals. The Two Towns agree that the Ashley Community Forest is a single resource located in two towns. The Two Towns agree that all decisions relating to the Ashley Community Forest shall treat the Ashley Community Forest as a single, unified parcel. Because the Two Towns are located in different counties, the Two Towns request the County Foresters in Windsor County and Orange County to cooperate in the development of a unified management plan for the Ashley Community Forest.

8. The Ashley Community Forest Management Account.

(a) It is the intention of the Two Towns to have the Ashley Community Forest be a community asset that will be held for the long term, to benefit generations to come. The Two Towns recognize that a long-term asset like the Ashley Community Forest shall have a long-term financial structure.

(b) The Two Towns expect that the Ashley Community Forest may attract donations from interested persons, and may be eligible for receiving public or private grants for furthering the purposes of the Ashley Community Forest. The Two Towns expect that there will be sales of timber and other products of the Ashley Community Forest that will generate revenue from time to time. The Two Towns agree that funds such as income from sales, donations, and grants, as well as other income or funding directed specifically to the purposes of the Ashley

Community Forest, shall be used exclusively for the management and betterment of the Ashley Community Forest.

(c) All funds of the Ashley Community Forest shall be held in a separate account called, "The Ashley Community Management Account" to be held in accordance with the laws of Vermont by either the treasurer of Sharon or the treasurer of Strafford.

(d) The Ashley Community Forest Board shall use those funds for the purposes described above.

(e) To manage revenues and expenditures in line with the cooperative management structure, the parties to this agreement agree to establish the Ashley Community Forest Management Account ("Management Account") at the Town of Strafford or Sharon with the Town Treasurer, as designated by the Selectboards of the two towns.

(f) The Treasurer of the Ashley Community Forest Board will be responsible for all record keeping of revenues and expenditures and shall be responsible for coordinating with the Town Treasurer holding the funds. The treasurer will also provide an annual report to the full Ashley Community Forest Board and to the Two Towns' legislative bodies of the current fiscal status of the Management Account. The Management Account shall be included in the annual audit of each town's finances.

(g) For the purposes of accounting between the two towns, each town agrees that one half (1/2) of all funds received and deposited to the Management Account shall be accounted as belonging to each town regardless of the source, including contributions, grants, and forest product sales. Likewise, all disbursements and expenditures shall be charged one-half (1/2) to the account of each town.

(h) It is further agreed by the towns that in the event of the dissolution of this agreement and/or the transfer of ownership of the real property or any part of it by either town the part of the Management Account balance attributed to the withdrawing/transferring town shall follow the ownership interest conveyed.

(i) Each Town hereto grants to the other Town a one year Right of First Refusal to acquire for $1.00 the interest of the other Town in the event the other Town determines and votes to divest its ownership interest in the real property.

(j) The parties hereto agree to coordinate each Town's insurance coverage of its interest in the Ashley Community Forest and the Ashley Community Forest Board in order to efficiently and fairly manage risks and inform their oversight of the Ashley Community Forest and Board.

9. Effective Date; termination.

(a) This Interlocal Contract will become effective (a) when it has been approved by the legislative bodies in the Two Towns, and (b) AVC has conveyed to the Two Towns the real property described at Book 94, Pages 6-8, in the Strafford Land Records, and at Book 102, Pages 423-425, in the Sharon Land Records, and shall continue until terminated.

(b) This Interlocal Contract may be terminated in accordance the provisions of Vermont law for termination of Interlocal Contracts.

Strafford's Approval. This Interlocal Contract was approved in accordance with the provisions of 24 V.S.A. §§ 4901-4902 by the legislative body of the Town of Strafford, Vermont, at its meeting on the ___ day of _____2021.

Signature	Date
_____	_____
_____	_____

_____	_____
_____	_____
_____	_____

Sharon's Approval. This Interlocal Contract was approved in accordance with the provisions of 24 V.S.A. §§ 4901-4902 by the legislative body of the Town of Sharon, Vermont, at its meeting on the ___ day of _____2021.

Signature	Date
_____	_____
_____	_____
_____	_____

Appendix 5
Ashley Community Forest Wildlife Habitat Report - 2022

Prepared by Andrea Shortsleeve, Private Land Habitat Biologist, Vermont Fish & Wildlife

Potential Practices: Crop/Mast Tree Release, Invasive Species Treatment, Canopy Gaps, Change in Mowing Regimes.

Objectives/Interests: Grow regeneration, suppress invasives, plan for and develop trails, create a stream buffer, create a forested reserve area, & pollinator and open land considerations.

Features: A couple small wetlands, one large stream, a few very small streams, foundations and stone walls, mostly northern hardwoods in upland and mixedwood near water, previous harvesting in past, previous agriculture in past, two open areas, VCD – priority interior forest and connectivity block, riparian wildlife connectivity, wetlands and vernal pool life zones
Invasives Present: Barberry is common in understory

Mowing Options

We discussed the different methods and benefits of only mowing portions of the open fields each year, and rotating which portion is mowed annually. VTFWD recommends delaying the mowing until August 15th to benefit bird, pollinator, and wildflower populations. If possible, waiting until early October to mow will be the most beneficial to our native pollinators as they continue to stock up for the winter.

Choosing to mow and maintain some open fields while letting others continue to grow for a few seasons in between mowings is a good option for you to meet your multiple objectives and ensure your enjoyment of the property.

When mowing, one method is to creating curved edges and unmowed islands of taller shrubs and young trees throughout the fields to create habitat diversity for songbirds to feed in and perch from. Another mowing method is to simply cut wandering trails through the field that aren't straight. Leaving trails through the tall plants can also be beneficial for wildlife and for people walking through the property.

For monarchs (and milkweed), the Xerces Society has a great website and document called Milkweeds: A Conservation Practitioner's Guide, which is worth checking out. In general, research shows that the best management practice for milkweed in our region is to mow milkweed during July to simulate regrowth. Monarchs will lay more eggs on the fresh growth than on older, unmown plants. The challenge for the committee will be to balance milkweed mowing with letting other blooming wildflowers grow during the summer, so VTFWD recommends mowing on a subset of the total area and focusing on where the milkweed is flourishing.

I can't remember if we discussed cleaning the equipment used to mow with a hose before it goes onto the town forest property from a different area to minimize the potential for spreading invasive plants, but it's a good practice to get into as a way to minimize the spread of invasives like chervil and poison parsnip.

We also discussed creating a soft edge, or more of a transition zone along the trees and the open area. A soft edge is approximately a 20-yard-wide buffer between tall, mature forest and the

open field which provides cover and food for birds and other wildlife. To create a soft edge, you can start by just not mowing up to the edge of the trees and let the shrubs, wildflowers, and young trees to grow in their place. This edge may take some maintenance every 5 years or so in the form of cutting back any larger trees to continue providing the transitional hiding cover.
The National Wild Turkey Federation has some good tips on creating a soft edge: https://www.nwtf.org/conservation/article/create-soft-edges-for-better-habitat
VTFWD has a great guidebook for landowners available on our website, with each chapter available as a pdf. Here are the chapters based on pollinators and field management: Grassland Habitat Management; Old Field Management; Bees and Other Plant Pollinators.
Here's one last technical note about pollinators, put out by the Vermont NRCS office. This document will discuss a few tips about creating pollinator nesting areas, which are very important to consider.

Group Selections and Mast Tree Release

Wildlife likes thick cover and structural diversity within stands, both for nesting structure and for security. If you can see through the woods without a lot of obstruction, then there usually isn't enough vertical structure in the various canopy layers. One the best ways to improve this within the forest matrix is to cut holes into the canopy by selecting (and cutting) groups of trees throughout the stand. This will allow for more sunlight to hit the ground and allow for new vegetation to grow.
Your forester and forest management plan can help dictate where to make these group cuts, but areas where there are decadent aspen trees in the main canopy are ideal spots for wildlife. The aspen thicket that is present where we took the south trail stuck out in my mind a good place to put in one of these group selections. The area where we stopped to discuss the large, dying white pines was another area that would be good for some group selections.
In addition to adding some vertical structure throughout the forest by group selection, releasing mast trees to promote species diversity and encourage nut and fruit production will benefit wildlife. Mast trees are those species that produce a nut, acorn, seed, or fruit that is eaten by wildlife. Examples of these are species in the Ashley Town Forest include apples, hawthorns, oaks, black cherry, butternut, beech, walnut (I think there were a couple?), and yellow birch. Releasing these trees means cutting any trees that are actively competing with that mast tree for sunlight and space in the canopy. By removing the trees that crowding out the mast tree, you are allowing for more sunlight and energy to be intercepted by the mast tree, which will result in the production of more nuts, acorns, fruit, etc. Releasing mast trees anywhere on the town forest will be beneficial to the wildlife that is living in and moving through the area.

Accumulating Coarse Woody Material

My notes from our walk highlight that in many areas, there wasn't a lot of Coarse Woody Material on the ground. Coarse Woody Material (CWM) is generally any large logs, root wads, large branches, or piles of branches strewn about the forest floor. It's an essential habitat component for bugs, salamanders and toads, many forest birds, and small mammals throughout the year. This debris also returns nutrients and retains moisture in the soil.
Accumulating more CWM can be accomplished easily by just allowing any trees or pieces of trees that are cut and not utilized for firewood or timber harvesting to just lay on the ground. There's no need to pile it up or remove it from the forest. If there is an issue in the community

about the aesthetics of leaving wood on the ground, this is a learning opportunity for the community about the importance of CWM. You can also choose areas away from trails to allow the woody material to accumulate, while piling or scattering branches and treetops that fall near the trail out further into the woods.

Trail Considerations & Reserve Area

Figuring out where and what kind of trails to develop is going to be an important part of the stewardship plan for the forest. We know that trail-less areas are a limited resource, and that the presence of trails has a negative impact on wildlife. More detailed information can be found in Meredith Naughton's thesis research, which she presents here: The Impact of Trails on Wildlife. It's also important to ensure that that the town can access, recreate in, and enjoy the forest, and trails help make that possible.

Looking at the E911-Viewer data, you can see that the Ashely Town Forest is part of a large forest block that is relatively trail-free area, minus the forest roads that aren't shown in the view and the VAST trail. Incorporating those pre-existing pathways into your new trail network would reduce the disturbance to wildlife and would create a fairly complete system throughout the parcel.

Some things to consider:

- One perimeter trail around the property would be favorable to having multiple trails bisecting the area. The more trails there are, the more edge habitat you will be creating. Additionally, by having one large trail essentially around the perimeter, you are leaving a larger block of habitat that is undisturbed in the parcel which can be used as a 'stepping-stone' for wildlife moving through the larger forest block.
- We spoke about how to best travel along the stream in the western portion of the property, and there are some logical arguments for both having a single crossing or having the trail go across multiple points. After giving it some thought, I think having two crossings would work from a wildlife perspective. Animals will be moving parallel with the riparian area, and I think having the trail cross the riparian area in two spots and then move away from the area will be less disturbing than having the trail cross once and run along the wet area for an extended length.
- We also discussed agreeing on some guidelines or at least a process for deciding how new trails would be considered when they are proposed in the future and deciding on what sort of recreation would be permitted in the town forest. Mountain bike trails tend to increase in density quickly once they are established. If mountain biking does become an allowed recreation use, VTFWD suggest keeping that use and their trails in one part of the forest rather than having the trails spread out all over the parcel to minimize the impact to wildlife.
- Seasonal and temporal closures on trails and areas are another way to minimize the impact on wildlife, whether it's limiting trail use after sunset/before sunrise or during breeding seasons (thinking about amphibians moving to the stream and wet areas) or if there's a location with dense mast trees during the fall.

The ANR Natural Resources Atlas doesn't show any sensitive or rare species and natural communities that would be damaged or critically disturbed by creating trails throughout the parcel. I think a consideration should be made to the overall, cumulative impact of trails and

roads on the landscape, which add up and contribute to forest fragmentation, but if you follow these suggestions and continue to have thoughtful conversations prior to trail building on the Woodlot, I think the multiple objectives that Craftsbury Academy has for this parcel can be achieved.

Having a Reserve Area that's set aside from the trail development and a typical forest management schedule sounds like a worthwhile idea. I think the area that we visited walking uphill back to the vehicles with the larger trees makes sense as an area to do this in.

I've been looking at the Biofinder maps with the Vermont Conservation Design layers turned on, but the entire property is a priority interior forest block. The two streams on the property show-up as Riparian Wildlife Connectivity areas, which are simply undeveloped riparian areas that VTFWD thinks are used as connecting lands for terrestrial wildlife movement. With that in mind, incorporating either of these riparian areas into the Reserve Area would benefit wildlife movement in the area.

Stream Buffer

I've attached our chapter on Riparian Habitat Management from the Department's Landowner's Guide to Habitat Management. It describes the function of a buffer and what it should look like to increase the wildlife value beyond just minimizing erosion and sedimentation in the water channel.

Appendix 6
Ashley Community Forest Ecology Recommendations

Compilation of input by Steve Faccio, Dan (Rudi) Ruddell, Micki Colbeck, and Michael Sacca
Prepared July 14, 2022, by Micki Colbeck

MAPS

- Correct parcel maps based on the most recent survey; update them to the many mapping apps (GAIA GPS, AVENZA, ESRI, etc.) and to the two town's Natural Resources websites.
- Conduct Natural Community mapping (possible project for a UVM Field-Naturalist MS student or AUNE Environmental Studies/Conservation Biology MS student)

NATURAL COMMUNITY INVENTORIES

- Conduct botanical inventories of:
    - Black Ash-Red Maple Seepage Swamp along east boundary, just north of Blake Hill Rd terminus (most of this wetland is on adjacent parcel); approximately 43.83241, -72.44673, 1364ft elevation
    - Small, uncharacterized wetland just north of Nutting Rd parking area, possible fen-like qualities. 43.83575, -72.44368, 1317 ft.
    - Ledges with calcium-rich flow feed steep hillsides with beautiful and uncommon plants—Rattlesnake Ferns, Blue Cohosh, Showy Orchis, and Maidenhair Spleenwort ferns, which should be protected. Approximately 43.83856, -72.44824, 1556ft.
    - Rich Northern Hardwood stands from the northwest border down along the northern tributary of Fay Brook. Several rare or uncommon plants (VT S3, uncommon) were noted here, along with several Showy Orchis (*Galearis spectabilis*). Potential for Hooker's Orchid (*Platanthera hookeri*) (VT S1, Threatened) here. Approximately 43.83960, -72.44680, to 43.83876, -72.44563, 1487ft

RIVERS, STREAMS, AND RIPARIAN AREAS

- Two headwater streams drain the northern and western portions of the Ashley Community Forest, flowing generally southeasterly. Both are unnamed tributaries of Fay Brook which flow into the White River, and then continue to the Connecticut River, and eventually to Long Island Sound. Vermont Conservation Design (Sorensen et al 2018) identifies Surface Waters and Riparian Areas as a key foundational unit due to a wide variety of crucial ecological functions including habitat connectivity. The calcium rich bedrock of the Ashley Community Forest area gives additional weight to the importance of the riparian areas connected with these streams, and they are further highlighted in Vermont Conservation Design as Highest Priority due to the presence of transitional low to mid-elevation calcareous and moderately calcareous riparian zones. These are "Responsibility" physical landscapes, common in Vermont but rare elsewhere. The combination of features present supports a number of uncommon plants, and it is likely these areas will continue to reveal a remarkable diversity of plant and animal life.

- Recommend 100-foot buffers on all streams and wetlands, but at a minimum, 50-ft buffers on each side of two primary streams on property as well as wetlands associated with smaller drainages (several connected with these two streams as well as a margin of a wetland primarily located on an adjacent property in the eastern portion of the property near Blake Hill Rd, Black Ash-Red Maple Seepage Swamp, named in the Natural Inventories section). These drainages are visible in LiDAR-derived imagery of the property, particularly using slope angle (percent slope) LiDAR derivative imagery (VCGI Interactive viewer). While retention of an intact forested buffer in these areas is the primary desired outcome, the importance of large woody debris to stream dynamics on these types of headwater streams suggest an even stronger no-cut policy within the 50 ft buffer.

- Document and evaluate condition and management options for culverts/other stream crossings on property.

FIELDS

- Manage open fields for pollinators by annual mowing after the first killing frost. Mowing fields in August will kill much of the last generation of Monarchs that migrate south and are vital for population viability. Mowing paths through fields will facilitate access. Consider management options for the open fields in a broader landscape context (including surrounding properties) as these open areas on the ACF property are small in terms of habitat and will require a relatively high degree of ongoing maintenance (compared with regenerating forest). That said, the wet meadow near the parking area on Nutting Rd is likely to remain relatively open (due to hydrology) and may benefit from/augment the additional nearby open land.

FOREST MANAGEMENT

- Consider establishing a "no-cut" or "Forever Wild" section of ACF. We recommend the Rich Northern Hardwood stand mentioned above, which appears to have a well-developed herbaceous layer with a high diversity of plants that would benefit from a no-cut zone, and rich soils that would be easily damaged by logging equipment. We would first want to complete a Natural Community Map to establish the boundaries of the Rich Northern Hardwood community and then buffer this no-cut management zone to develop old growth characteristics over time. A second area to be considered for no cut/no management (except for invasive control) is the western area, west of No. 7 on the map.

- Develop an invasive control plan, especially for the barberry thicket that is developing in the southwest section of ACF. If left unchecked, this dense stand of barberry will expand and become ever-increasingly difficult to control. Smaller incursions of barberry, honeysuckle, and other invasive species can be removed manually. Explore non-herbicide methods of control first i.e., burning. 43.83089, -72.45347, 1338ft.

Appendix 7
Ashley Community Forest Education Plan

Ashley Community Forest has countless opportunities for education at all levels. The range of possibilities would suit K-12 place-based education, university and graduate level research and community education. The area is accessible nearly year round, with the exception of "mud" season when the road is impassable. Hunting season is also a time when education groups would need to adjust their plans. Education providers need to follow Leave No Trace ethics so that the forest and cultural artifacts remain in the condition as outlined in the Stewardship Plan. This includes not moving or climbing on the stone walls, foundations or and removing any artifacts. The privilege of holding school in the forest may be revoked if these principles are not followed.

Educational Opportunities at the Ashley Community Forest

The Ashley Community Forest (ACF) is a 256-acre parcel with value to the two towns of Strafford and Sharon as well as surrounding towns as a community resource for recreation, wildlife habitat and corridors, forest connectivity, historic preservation, sustainable timber practices and for educational opportunities. The ACF is home to beautiful and productive forest, field and stream environments, and some really great cellar holes of houses and barns in remarkably good shape that offer a glimpse into the agricultural history of the area. The Ashley Community Forest is open to the public for hiking, cross-country skiing, bird watching and wildlife observations and for picnicking among other uses. The land is contiguous to other conserved parcels.

The Sharon Elementary School, The Newton School and both the middle and high schools of The Sharon Academy have discussed how to use the land as an educational resource and in a cooperative manner for place-based education, natural history outings, art class outings, outdoor skills development, mapping, school research projects, and citizen science efforts all year round. Further, it is a working forest with rich opportunities to educate, inspire, and promote stewardship. The ACF successfully blends recreation and education into a productive environment for learning. It will provide educational resources for not only the two host towns and schools, but residents and schools in the region. In addition, there are opportunities to host summer activities with local recreation committees.

A series of public outings have been offered on a wide array of topics highlighting both the natural and cultural history of the land. In all cases local experts have graciously offered their time to share their knowledge in engaging ways. It has made the series a success.

"We are educators from across the state of Vermont who all contribute to the inspiration of children and students in this world. We want to honor the legacy of Vermont's Indigenous people, the Abenaki People of the Dawn, who have cared for this land for generations and continue to do so. We recognize that colonialism and the oppression of Native peoples are a current and ongoing process, and we commit to building our awareness of our present participation. We pay our respects to the elders past and present. We honor with deep gratitude this land and all it gives us."

The Ashley Community Forest has excellent examples of historic stone foundations that date from the first half of the 19th century. The forest,wildlife and topography are interesting and diverse. It is a perfect place for exploration of natural and cultural history topics**.** It will be a gathering place for generations to come.

Specific outings have included the following topics:

Birding

Forest Management

Ferns

Mosses

Poems in the Forest

Geology of Ashley Community Forest

Cellar Holes and Stone Walls

Full moon walk

An introduction to iNaturalist

Reading the landscape

Summer solstice forest magic

Mushrooms

Naturalist Walk

Emerald ash borer

Exploring wetlands

Tyler Robinson remembers

Existing remains of historic foundations give this parcel unique community value. These historic resources, likely from the early European settlement period, have been the source of great community interest and illustrate an important era in the regionalhistory. The diverse forest habitats, historic resources and extensive trail system may also provide an incredible opportunity for local schools to use the property as an educational resource to support natural history and place-based curriculum.

The ACF currently has about three miles of hiking trails with more planned. It is part of a developing trail network in the area known historically as The Robinson District that will encompass approximately ten miles of trails on three of the four contiguous (or nearly so) conserved parcels totaling 972 acres. All four parcels have agricultural connections and are part of the working landscape Vermonters cherish.

The goal of the Ashley Community Forest is to transform a somewhat forgotten and underutilized parcel of land into a vibrant regional recreation and education resource. There is a network of local people who know the land, the history, and have experience leading outings observing birds, history of foundations and stonewalls, and other historical remnants. In fact it is this resource - people who know the land - that could be most quickly used by teachers.

{include descriptions of the physical attributes of the land - mature hardwood forests, field and stream environments, stonewalls and historical infrastructure, walking/skiing/hiking trails}

Historical resource
Early narratives of Abenaki settlements throughout this area and Black Ash
Area is Robinson DIstrict, agricultural community spanning Sharon and Strafford
Robinson District Meeting House
History as a subsistence farm, then a working sheep farm
Robinson Farm used it for grazing cattle in the mid 20th century

Educational opportunities:
Trails and trail work
Writing
Citizen science
Schools interacting, group projects across town and schools
Art
Mapping, GIS, orienteering
Wildlife studies
Plant studies
Invasive Species Management Training

The Ashley Community Forest Education Program can partner with foundations, nonprofits, school districts, municipalities, and businesses to support broad community impact. Visitors may learn about:

- The region's rich history, especially its agricultural history
- Local ecology and wildlife,
- Sustainable forestry
- The community action that led to the creation of the Ashley Community Forest
- Recreation – part of 4-town connected trail with Strafford, Sharon, Tunbridge, and Royalton
- Offer workshops and outings to community members on natural and cultural history

• Educators work with County foresters, local farmers, environmental education professionals
• Place-based education
• Year round recreation, science resource
• Trails and trail work
• Writing
• Citizen science
• Schools interacting across boundaries , group projects across schools
• Art
• Mapping, GIS
• Wildlife studies
• Plant and forestry studies

Potential Education Partners

- Marsh-Billings-Rockefeller Nat'l Historical Park
- Upper Valley Teaching Place Collaborative, (Emily Shipman)
- Sharon and Strafford conservation commissions
- Jason Loomis, Sharon? writing code for mega database for VCE
- Vermont Center for Ecostudies
- School Supervisory Unions
- Forest Kinder (Meg Teachout, Eliza Minuuci)
- School programs and field trips run Spring, Summer, and Fall for regional schools, and camps.
- Classes (partnerships with local govt, nonprofits and businesses, community colleges) - stargazing, birdwatching, foraging, ecology, and forestry events are provided on a monthly basis.
- Towns of Sharon and Strafford. From the Sharon town plan:
  "It is the policy of the Town to maintain its diverse community recreation program that provides such a wide range of recreational experiences and physical challenges for all age groups."
  "The Town should better educate the public on the existence of public trails and recreational facilities in Sharon and develop a town-wide trail and recreation map."

See also:

https://tuckertownforest.org/education/

Brushwood Community Forest

Barre Town Community Forest

Andrews Community Forest, Richmond VT

Appendix 8
Ashley Community Forest Recreational Use Plan

Ashley Community Forest Board encourages recreational use of the Forest that is ecologically sensitive, promotes the natural beauty of the region, and creates a sense of community. We strive to accomplish this mission by providing a network of quality non-motorized trails for all levels of ability incorporating the best of the natural scenery and natural diversity and offering group activities and a trail network.

We advocate for public involvement that is transparent and welcoming. Uses will continually be monitored and considered.

General Rules
Dogs are allowed in the Ashley Community Forest. They must be leashed in order to protect wildlife and be respectful of other walkers and dog owners.

Maps and signage will be available for trail use.

We ask that visitors not disturb the historic artifacts. Please do not climb on or remove stones from walls and foundations, so that we may protect the historic integrity of the site.

Visit, enjoy, but **leave no trace**. Do not harvest plants or trees or create new trails.

ACF may close access to the trails at any time to address erosion or safety issues.

General Uses
The Ashley Community Forest is open to the public for year-round, non-motorized, recreational purposes. A trail network may be developed offering single-use and multi-use trail designations. Trails may be closed seasonally to prevent erosion and preserve the integrity of the trails. Public events, such as walks and workshops, may be scheduled throughout the year. Races and organized events for group activities may be offered both for the general public and as paid fundraisers. Hunting takes place at various seasons, please be aware of specific dates annually.

Note: carpooling will be appreciated for large groups, as parking is limited.

Encouraged Recreational uses:

Mountain Biking on designated trails only
- Backcountry skiing
- Snowshoeing
- Hiking
- Wildlife Observation & Birding
- Running
- Horseback riding on designated use trails
- Hunting, by permission of ACF Board (contact:ashleycommunityforest@gmail.com)

- Community Activities & Organized Races, with approval of ACF Board
- Educational uses set forth in Education Section

Note: Trails will remain open during hunting season.

It is hoped that the property will continue to be used as an example of environmentally sustainable trail network that promotes enjoyment of healthy, outdoor, physical activity.

Prohibited Uses:

- Campfires and camping.
- Trapping. Trapping poses a safety hazard to visitors and their pets and at this time is seen as incompatible with recreational and educational off-trail hiking by residents, school groups, researchers, and hunters.
- Motorized vehicles are not allowed in the Ashley Community Forest, except with ACF Board Permission.
- Disturbing or removing flowers, plants, fungi, and historic artifacts.

Care and Maintenance of Recreation Trails

Ashley Community Forest Board will manage and maintain the public access and recreation trails to best promote appropriate use, public safety and environmental sustainability. Should damage to trails occur or if there is conflict between user groups the ACF Board reserves the right to limit uses or close trails.

Hunting, by permission of ACF Board, is allowed at the Ashley Community Forest, so for your safety please wear blaze orange during hunting seasons.
(Contact:ashleycommunityforest@gmail.com)

Trail and educational signage will be posted in all the proper and visible locations and maps of the forest will be developed and made available to the public.

The potential for future recreational trails will be continually evaluated in accordance with ACF Management Plan. There may be short sections of existing trail that are relocated in the future to reduce maintenance or to prevent erosion.

Access and Parking Areas

Vehicular access to the Ashley Community Forest will be from Nutting Road in Strafford, with a small parking area at the entrance to the forest. A kiosk is planned that will have a map of the forest and other information useful to the public.

Future Recreation Planning

The Ashley Community Forest Board envisions encouraging increased use of the forest through an expansion of the current trail system, with a focus on creating loop trails. At present the trail system consists of a single loop trail accessed from the Nutting Road parking area, with two spur trails off that loop. There is a section of trail in Sharon that originates on Clifford Farm Road at the switchback. This section of trail was used for logging by a previous owner and does not

currently connect with trails in the northern portion of the forest, but may ultimately be included in the planned trail system for the forest. At present it consists of a main trail that runs parallel to Fay Brook, with a short spur off this trail that crosses Fay Brook. This crossing may not meet State requirements for stream crossings and should be removed when equipment is next on site. The short spur from the main trail to the stream should be closed.

(See Appendices for Proposed Trail Map and Trail Development Map)

Sharon Right-of-Way

There is an unconnected segment of trail in Sharon that was built under previous ownership as logging access from Clifford Farm Road. There is evidence of historic use by the owners of this parcel and indication that the forest has a legal right-of-way, but an abutting landowner disputes the right-of-way claim. The Ashley Community Forest Board will seek legal counsel to determine the proper status of the apparent right-of-way. In the meantime, out of respect for the abutting landowner, this access is not open to the public.

Kiosk and Trail Signs

An informational kiosk will be installed in the vicinity of the Nutting Road parking area. It will have information about the forest, a map of the forest and possibly a brochure box with trail maps. At each trail junction it is expected that a trail sign would be installed. Trails may be marked with paint along their pathway.

Black Locust

Black locust is a rot-resistant, non-native tree that was likely planted by previous owners to be used as fence posts. There are many black locust trees in the forest near the Nutting Road parking area. It is the intention of the Ashley Community Forest Board to harvest black locust to be used as the main posts for the kiosk and also as posts for trail signs. In the process of harvesting and milling the posts needed for the forest, we may produce additional posts for kiosks or trail signs in Sharon, Royalton, Strafford and Tunbridge.

In addition, since our goal is to increase use of the forest, to make the site comfortable to use for school groups and other educational programs, we will allow placement of a portable toilet on-site for 2023. The location will be either in the vicinity of the parking area or the landing area just above it. In the longer-term, we would like to install a permanent composting or "mouldering" toilet for visitors to use. This would need to be constructed on a platform to be level and to allow access to waste for cleaning. While we are sawing black locust posts for kiosks and smaller black locust for sign posts, we may also mill a small amount of black locust lumber to build a platform for a permanent toilet.

Conclusion

This forest is a community forest and it is for all of us.

We give thanks for the opportunity to share in the joys of this place and to protect it.

Appendix 9
Public Comment on the Draft of this Document

I read the plan and wish to submit a couple of thoughts on it.

First off, about the upcoming timber sale: If most of the trees to be cut in stands 1&2 are low quality, low value trees, where are the loggers going to bring them to market? E. Ryegate? You know how I feel about that! I realize that you are trying to improve the future market value of the stand, but it is my opinion that the carbon sequestering and storage value of the trees, even the "unacceptable" ones, ought take precedence over the future market value.

Could we raise the money needed in some other manner? Grants? Donations? Bake sales?

Secondly, the use of herbicides on the widespread invasive plants, especially the barberry in the wetland area, causes me a great deal of concern, even if the invasive management's strategy is to paint a few drops of glyphosate on the cut stem. I know barberry is a thorny problem (literally and metaphorically), but I also know that there are ways of dealing with it, without using herbicides.

I am going to leave you a copy of a fact sheet on Common Forestry Myths, from the group Save Public Forests. While it is not very nuanced, it has some interesting things to say about logging and creating resilience, diversity, resistance to pests,etc. and the references to back up their statements (on back). I will leave it for you in the Town Office.

I appreciate all the hard work and thought that has gone into this ACF plan. Thank you!

Cheers!

Gayle Giovanna

Public comment from the Strafford Energy and Climate Committee on the DRAFT Ashley Community Forest Management Plan, 2023–2033

Members include Dorian Yates, chair; Jim Schley, recording secretary; and Doc Bagley, Matt Christie, Susan Hodges, David Lutz, Susan Tiholiz, and others.

In March 2020 at Town Meeting, the voters of Strafford resolved to work together to reach net- zero in greenhouse-gas emissions for the whole town by 2030. To achieve this commitment, the Strafford Energy and Climate Committee (SECC) serves as an advisor for the citizens and the municipality of Strafford and provides ongoing assessment of Strafford's progress in adoption of restorative and renewable policies and practices.
Achieving net-zero by 2030 is our benchmark. Are we doing what we need to do to reach that goal or not, and if not, why not?We appreciate all the time and effort that the Ashley Forest Committee has done in developing a draft plan and written document for public review.

We also fully endorse the stated mission of the Ashley Community Forest, including preservation of the land's natural areas, plant and animal communities, undeveloped character, historic significance, and scenic beauty; and fostering of ecological health and resilience, including through carbon sequestration and species diversification. And we count on being part of the network you are seeking to establish for ongoing public involvement with the community forest. We look forward to consulting with you on ways to most effectively reconcile management practices with the town resolution to achieve net-zero emissions by 2030.

We do have questions and concerns about the draft plan, which we'll summarize here.
— We are resistant to the assumption that chemical treatment to reduce or eliminate invasives is "necessary" and inevitable. The detrimental effects of herbicides such as glyphosate on reptiles and amphibians as well as humans are well documented.
We would like to see a more comprehensive acknowledgment of alternative mitigation strategies, including deployment of trained volunteers to manually pull troublesome plants. What the specific problems that need abatement: which invasives, where, with what options for response?

— Secondly, we see references to "modest and sustainable" timber management activities, and revenues from forestry was part of the case made to our town and Sharon for accepting the Ashley Forest as a gift. But the projected income from timber sales seems likely to be very small. What are the costs that we're trying to offset per year?
Are there actual expenses or just forgone tax revenue? What are the costs of "management" activities such as fostering tree growth, coping with invasives, building and maintaining trails and kiosks, insurance?

Are there other sources of income, including grants for conservation practices (from NRCS, for instance), experimental modeling projects, and educational programs that

could actually attract more income than “modest” timber extraction?

— On page 9, there is a paragraph that alludes to varied impacts of climate changes that are already evident and expected to intensify. Given these likely disruptions to plant communities, are there activities such as planting of native and resilient shrubs and trees that could involve communities volunteers, and likewise attract government or foundation support?

We look forward to your thoughts and answers to these comments and to working together with you to move Strafford towards its goal of net-zero by 2030.

Thank you for your time and efforts.
Respectfully submitted by the Strafford Energy and Climate Committee

Thanks for your work in developing the draft stewardship plan. Please extend my gratitude to the entire ACF Board (and A.J. Follensbee) for the collaborative work. I think it is an excellent start and greatly appreciate the thoughtful and considerate approach you have taken to balance the many interests that our two communities have for this shared resource. I'm sorry I was unable to stay for the entire public meeting last night. It's unfortunate when a single community member dominates a public meeting for such an extended period. While I have a few comments and questions about the draft that I was planning to bring up at the meeting, I will present them here instead.

1. You acknowledge that black locust is an invasive species in New England, but are choosing to treat it as "a naturalized component of the stand." Given its strong chemical allelopathic effect that inhibits seed germination of other species, I believe this is the wrong approach from an ecological perspective. I understand that black locust provides a connection to the site's agricultural legacy, but like other invasives that are present in the stand, including Japanese barberry, autumn olive, and common buckthorn, it represents a significant threat to wildlife habitat and to the long-term ecological function of the forest, which in my mind far outweighs any historical significance. I would advocate for a plan to eliminate (or greatly reduce) black locust from Stand 3 over time and allow native species to recolonize the site. I regret this didn't occur to me earlier or I would have brought it up in the Ecology report.

2. Regarding the treatment recommendation of open areas, the plan states, "Annual mowing of paths in both areas in mid-July, with full mowing of each area every other year." As written, it is not clear to me at what time of year the full mowing would occur. I completely agree with mowing paths in July, which will provide some young milkweed for the late generation of Monarchs, but is the plan to conduct full mowing every other year AFTER the growing season or in July? If the former, I agree and would just ask that you make that explicit in the plan. I would not agree that full mowing should occur in July unless it was on a rotational basis, otherwise most of the Monarch population would be eliminated before the migratory generation can get started.

3. A minor suggestion to the treatment recommendation of the open land section is to replace "ground nesting birds" with "grassland nesting birds." A few species of ground nesting birds will use these smaller openings (e.g. song sparrow, white-throated sparrow, etc), but grassland species require larger fields, as noted in the plan.

4. Charlotte had a question about whether there has been any thought to encourage schools or university researchers to utilize the homestead sites for teaching or archeological studies?

Again, thanks for the hard work in a short amount of time, and for providing public input on the draft stewardship plan. Charlotte and I look forward to seeing it develop and participating as we can.

Best,

Steve Faccio

Hi,

This email is in regards to the Ashley Forest. As an avid sportsmen I'm always for hunting and think it should be allowed. Also hikers and walkers/bicycles should be respectful of Rifle season and trails should be closed. Too many deer can over populate Forest and it's important to manage them and allow time to hunt. Thank you for your time and allowing suggestions.

Tyrell Manning

Sharon Vt

I read the whole proposal, which was very informative! Thank you for all your work on it.

The one thing I feel most strongly about is I think herbicides should NOT be used in the forest. Those chemicals will affect many living things in the ecology of the forest, and will contaminate the water. Surely, they can be controlled otherwise. I personally would be willing to work on uprooting what needs to go, or girdling the stems. Of course these will need attention each year, as you yourself have pointed out that it is virtually impossible to totally eliminate them. But I strongly believe that herbicides SHOULD NOT be used in the Community Forest.

Thank you for reading my comment!

Susan Hodges

To the Ashley Community Forest Committee,

Thank you for your work on the draft management plan. I am so glad that the Ashley Forest was saved, but I must say that I would never have considered donating to a forest that was going to be managed with pesticides/herbicides. The plan appears to me to be dangerously close to being handled more like a commercial forest than a forest that is for preservation and recreation. The fact that now glyphosate is being found in rainwater, in Cheerios, other commercial food, and fish is at the very least alarming.

There is never a good time to use pesticides. We already have the science and the proof of why that is true. We thought bugs were impervious, we are now losing whole species. I had the good fortune of meeting with scientists that had left Monsanto 20 years ago to educate people about the dangers of glyphosate and other pesticides. I also have a cousin who has made it part of her life work, including hiring scientists, to understand how severe the damage is from pesticides, especially glyphosate. One of the things that they have discovered is it takes up to 50 years for the soil to return to its healthy state after one application.

These invasive species are never going away so we need to look at them as part of the make-up of our forest and our ecosystems. At some point we need to accept that because of global warming/climate change there are going to be many changes that occur. We need to stop calling plants “invasive”. The planet has become a melting pot as it continues to change.

What I think would be wonderful is if we could offer in just this town alone, places of serenity and healthy ecosystems that can thrive and that includes the species that have moved in. We treat "invasive" species as though they have a plot to ruin our day, our lawn, our forests as though they are of a mind to cause havoc. When really, the species that has caused the most havoc on this planet is us.

Again, I appreciate the effort and work that has been put into strategizing for the use of this forest. It would be great to see it as a source of pleasure for humans and nature, but without the use of herbicides.

Thank you so much,

Mary Louise Pierson

South Strafford, VT

please, do not use poison [herbicides] in or on the forest. thank you
stephen marx

Dear neighbors,

I strongly oppose the use of herbicides in the Ashley Community Forest. I understand the problem of invasives, and my own forester, whom I respect, has talked about using herbicides, and I have argued with him as well. We need to use other means to deal with invasives.

Herbicides exacerbate many more problems on their way to solving the one problem--they may seem like good stewardship of a patch of invaded land, but they are the opposite of stewardship everywhere else, from production to disposal, from the nearby stream to the poor minority neighborhood suffering from the factory fumes.

This issue is personal for me. Two I dearly loved suffered sickness from separate toxic chemical exposures and both died young of environmentally caused cancers.

It is also of professional concern--I worked as an environmentalist and got to know people whose communities had been devastated by toxic chemicals, and now I serve as a pastor of a church in Strafford that works to protect the earth from human-caused environmental harm.

I do not support the use of herbicides, and if I had known they would be used by the towns I would not have supported the acquisition of the land. Getting rid of invasives is excellent stewardship; using herbicides is not.

Thank you,

Tom Kinder

To members of the Ashley Community Forest Board,

Thank you for the opportunity to comment on the Draft Community Forest Stewardship Plan. I wish to voice my concern on just one topic: the use of chemical herbicides to treat invasive plant species. I base my comments on extensive experience with invasive plant management, both with and without the use of herbicides.

This conversation so often focuses on invasive plants as the enemy we need to fight. I believe we need to widen the lens, and take in the fact that this situation is anthropogenic in every facet. It is our own species that moved these plants around the globe. The places where invasives predominately get their start are areas that have been degraded in some way by human activity; be it abandoned farm fields, riparian zones that have been stripped of healthy riparian habitat, polluted wetlands, along roadsides, and other places that have endured soil and/or habitat disturbance.

Chemical herbicides, by their very nature, further degrade the ecosystems on which they are applied. If one's goal is to foster the health of the forest, then applying poisons to the landscape is counterproductive - and in my opinion, untenable.

The particular species listed in the Draft Plan are not among the most difficult to manage. Hand pulling, weed wrenching, girdling, smothering (deprivation from sunlight) are among the tools that could be used. I'd be glad to have an in-depth conversation with any of you on the Board who is interested to know more from what I have learned in the field.

Respectfully,
Anne Fayen
Strafford

Thank you for your collective work in support of the Ashley Community Forest Property and in putting together the Stewardship Plan! My tardy comments on the plan are as follows:

- The document is very informative and the content will benefit anyone who reads it.

- The management approach outlined is respectful and sound. It acknowledges the existing communities present and helps shepherd them toward a more mature condition and healthy/valuable condition (i.e., thinning pioneers to release maturing hardwoods, removing invasives)

- In the carbon management section, can you suggest a typical harvest scope frequency (i.e., how much lumber is being removed and how often?). Also, stating the logging practices that are considered acceptable, such as:

- management events every five years that might include a patch cuts less than 1 hectare.

- maximum of [some reasonable volume] removed per year on average

- wood less than 2" in diameter chipped and left on site or some other compelling use. For example, can somem nominally dimensioned wood be earmarked for a needs-based community firewood repository, i.e., 2" to 10"?

- From Carbon sequestration and storage priorities:: A 5-acre disturbance in the parcel seems pretty large in the context of the property, though maybe this is an industry standard qualification. A 4.9 acre cat has the potential to significantly alter the dynamics of the property, particularly several times in a decade. Can we "cap" it at something smaller (my naive suggestion is 1 hectare)?

- In regard to invasive plant species and treatment / invasive plant management, please state that control of invasive plants should utilize mechanical means unless absolutely necessary (i.e., herbicide treatments should seldom be used). You have almost convinced me that immediate herbicide treatments of barberry (coupled with mechanical removal on smaller plants) may be necessary. I understand the decisions you have to make are complex but I do not consent to glyphosate application. Persistence can win, too. Note that I have not walked on the portions of the property stated as most adversely affected ,so my opinion about the full scope of the barberry issue at ACF should be given minimal weight.

- I am very interested in being able to utilize the Sharon Right-of-Way access but I appreciate that you are urging conservatism and respect on this front...hopefully it just works itself out in time.

- Please don't remove all of the black locust from around the old home site- these mature trees are a relic to a useful idea that the farmers that settled there utilized. Having said that, sign me up for some of those locust posts when some of them come down, if available.

- I am excited about the prospect of creating a composting toilet onsite. Let me know when that effort begins and what assistance you may need.

- Can you add a section about probable potable water access/use onsite? I think we should consider drilling a well for potable water onsite. A modern hand pump would then be installed for access. Maybe there is a simpler option that does not involve drilling?

- Can you include a map of the different forest stands referenced?

Thanks again for your stewardship.

- Ryan Haac

70 Horse Farm Road

Sharon, VT

I respectfully request that any tree cutting in the Ashley Forest, other than that required to alleviate a safety hazard, be delayed for at least 5 years.

Climate change is an immediate and urgent threat to our community. As we are all becoming aware, trees absorb and hold carbon and the science supporting leaving trees standing has become more and more compelling. A 5-year moratorium on cutting would give our community time to better understand the science and to adopt best practices in managing forests for climate change. There does not appear to be any urgency or necessity to begin cutting next year.

I also thank and commend the committee for their tireless work on our community's behalf.

Susan Tiholiz
Strafford, Vermont