

Monkton Town Forest

Management Plan

Town of Monkton, Addison County, Vermont

(450 acres)



March 23rd 2024, stream valley in the future Monkton Town Forest

This Plan has been adopted by its stakeholders:

the Monkton Town Forest Committee: April 2nd, 2025

the Monkton Conservation Commission: _____ (Date)

the Monkton Selectboard: _____ (Date)

the Vermont Land Trust: _____ (Date)

the Vermont Housing and Conservation Board: _____ (Date)

and took effect on _____ (Date)

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1. Overview & Summary (Executive Summary)

(For further detail, background and reasoning, see the full plan starting with Section 2.1 on page 7).

1.1 Description of the Property:

The Monkton Town Forest (MTF) spans 450 acres of forest and wetland in a hilly region of southern Monkton. The property is bounded to the east and west by steep ridges of exposed cliff and talus while the land in-between rises to a gentler, accessible, ridgeline which forms the divide between the Little Otter Creek watershed to the west and the Lewis Creek watershed to the east. The land is adjacent to 1,000 acres of conserved forestland stewarded by the Watershed Center of Bristol.

1.2 Summary of the Management Plan Development Process:

The Monkton Town Forest Committee (MTFC) initially engaged with the public in 2021 about what they would value in a community forest. After a parcel was identified and brought under an option to purchase in 2023 there was a more extensive public engagement in 2023 to assess support for the project and get initial feedback. We heard directly from 32% of Monkton's registered voters in that process! This involved tabling at Town Meeting Day, the Monkton Recycling Center on several occasions, and the Russell Memorial Library's Strawberry Festival. There were numerous updates and posts on Front Porch Forum and Monkton's Community Facebook page, site walks, updates on the MTFC website, the town yard sign and articles in the Addison Independent. A town-wide postcard survey was sent to registered voters asking if they supported the use of some ARPA and town funds for a portion of the town forest purchase and 75% were in favor. In August of 2024, a community outreach survey was sent to registered voters and was open until November. Public input sessions were held in the Fall to discuss how the following uses should be considered at the MTF: dogs, horses, hunting, trapping, mechanized recreation, timber, foraging, sugaring, signage. The Town closed on the purchase on November 22nd, 2024, and the Interim Management Plan took effect. The Committee took all of this input into account in developing a draft of the long-term Management Plan. The draft was shared with the community for their input in Spring 2025 as well as with the Selectboard, Vermont Land Trust, Vermont Housing and Conservation Board, and the USDA Forest Service. The draft was then revised by the MTFC based on community and stakeholder feedback before being shared again with the community and sent to the stakeholders for final review and approval. This Management Plan then replaced the Interim Management Plan.

1.3 Management Goals, Vision, Guidelines, and Allowed/Restricted Uses:

1.3.1 Goals:

Goals include ensuring the land is available for public use and enjoyment of educational, recreational, and other appropriate community activities; to be responsible stewards; to prioritize rare species and sensitive habitats; to support the health of wetlands and streams; to protect water quality; to co-exist with beavers; to maintain trails within an ecological standard; to prioritize the long-term health of the forest and wildlife; and to model and demonstrate sustainable forestry practices that put the health of the forest, wildlife and water first.

1.3.2 Vision Statement:

The Monkton Town Forest is a place where people experience and enjoy the land in a variety of ways while remaining conscious of and managing their impact, achieving a sustainable coexistence with natural communities and wildlife. The healthy ecosystem enables wildlife to thrive and demonstrates resilience in

the face of climate change. Headwater streams and wetlands on the Town Forest benefit from robust trail, buffer, and forest management standards and best practices to consistently produce clean water, supporting the health of our rivers and lakes. The Town Forest is a good neighbor and supports a landscape view of natural resource management and human uses. The public develops a multi-generational culture of stewardship for this land and an appreciation for the value it brings into their lives and community.

1.3.3 General Guidelines:

- Quiet hours 9:00pm-7:00am, exceptions for hunting, emergencies, or by permission of the MTFC.
- Be considerate of neighbors, property boundaries and others enjoying the forest.
- Park in designated areas off the traveled way, drive slowly and be mindful of pedestrians.
- Pack out what you carry in.
- Trails may be closed due to muddy conditions. Trail expansion is not allowed
- Follow the allowed, limited and prohibited uses. In an emergency, please call 911.

1.3.4. Allowed Uses: Birdwatching, walking/hiking/running, fishing (per state rules), snowshoeing, cross country skiing, quiet contemplation, wildlife viewing, ice skating, swimming, botanizing (plant study), water quality monitoring.

1.3.5. Limited Uses (restricted): (see Section 5.1.4 for more detail on these activities):

- **Camping or campfires** - not allowed, except by permission of the MTFC.
- **Dogs must be on-leash or wearing an e-collar** that effectively allows the dog to be immediately recalled. Dogs must remain within the sight of their owner and under their control. Owners are expected to exercise good trail etiquette and must have a leash with them to further manage trail interactions and protect wildlife. Owners are responsible for their dogs. No dogs in vernal pools. Pick up after your dog(s).
- **Horses** - are allowed on forest roads, but not footpaths or off-trail. Trails are closed to horses during wet/muddy conditions. Parking is limited, do not block access. Owners are responsible for their horses and expected to exercise good trail etiquette during interactions with other users.
- **Bikes** - are allowed from November 1st to April 1st only, out of concern for protecting a rare reptile population in the warmer months. No e-bikes. Trails may be groomed in winter, with permission of MTFC, to improve conditions. See section 5.1.4 for more detail.
- **Non-motorized boating** - is allowed according to state rules. Boats must be clean/dry.
- **Education and Events** (field trips, workshops, etc.) - allowed with permission of MTFC.
- **Foraging** - The responsible collection of plants/fungi for personal use is allowed except for wild leeks/ramps, ostrich ferns/fiddleheads, state and federally listed species and rare/uncommon species (See Section 5.2)
- **Sledding** - may be allowed in the future, in designated location(s) (TBD).
- **Art/signage** - allowed at the discretion of the MTFC.
- **No trail/game cameras** - except by permission of the MTFC.
- **Hunting** - the VT Fish & Wildlife deer and turkey hunting seasons are allowed. Other hunting seasons are not allowed. Hunting is not allowed between Hardscrabble Rd. and Old Airport Rd. See section 5.1.4 for specifics and details on tree stands and climbing saddles. All users of the Town Forest are encouraged to wear visible blaze orange during hunting seasons. Hunter safety/education workshops are encouraged, to bring user groups together to share information and understand each other's experiences/concerns while promoting safety.
- **Trapping** - is not allowed on the property, except by permission of the MTFC to address a nuisance situation. See Section 5.1.4 for justification re: safety and resource concerns.

1.3.6. Prohibited Uses: No trash dumping - carry out what you carry in. No motorized vehicles outside of designated parking areas, with certain exceptions. No commercial recreation or profitable/commercial foraging.

1.3.7. Natural resource management: There are two types of ecological protection zones (EPZs) in the Monkton Town Forest. These are used to protect specific ecological features on the property by limiting the activities allowed within a certain distance of these features. (See Section 4.2.3)

Dry Oak-Hickory-Hophornbeam: 8.5 acres, state-significant area. Management activities must focus on goals of maintaining soil integrity, natural hydrology, and water quality values in addition to maintaining the natural structure and species composition while following “Acceptable Management Practices for Maintaining Water Quality of Logging Jobs in Vermont” or “AMP”s. (See Section 4.2.3.1)

Vernal Pool EPZ: Five vernal pools have been identified in the MTF. The vernal pool and 100-foot buffer are the Primary Zone, an additional 500-foot buffer beyond is the Secondary Zone. The goal is to provide and maintain high quality amphibian habitat, with dense shade and coarse woody material. Agricultural activity is prohibited in the primary zone, no new structures, land disturbance or improvements, removal of timber or downed wood, or disturbance to the hydrology is allowed. The secondary zone allows careful timber harvests as long as amphibian habitat is protected.

There are several uncommon and significant natural communities in the Monkton Town Forest, many of which are found in the far western portion and eastern ridges of the property. Some trees provide habitat for rare species including fire-maintained red pine and shagbark hickory, which is potential habitat for the federally endangered Indiana Bat. UVM LIA students identified additional rare species which will require future botanical surveys to confirm. Given that these rare and significant communities are in the remote areas of the property, we aim to reduce the disturbance in these areas and concentrate trails and recreation in the central area.

1.3.8. Wildlife management: Results from the community outreach survey in 2024 identified that the long-term health of the forest and wildlife habitat were the most important and that the protection of rare species and sensitive areas should take priority over recreation. Future management will rely on what we learn about rare species and how they use it. Visitors can help us by documenting species using a Monkton Town Forest iNaturalist project. On-going field surveys are needed to manage for rare and sensitive species. Acoustic surveys for the federally endangered Indiana Bat are planned for Summer 2025 and a local researcher plans to continue their work focusing on a Rare/Threatened/Endangered (RTE) reptile this year as well. Keeping some log landings open will support edge habitat as well as places for basking, foraging and nesting. Mowing of landings should be done during the inactive season for reptiles and birds and woody debris left along the perimeter for habitat. Tools and equipment should be electric, where feasible, to minimize the impact and disturbance on the surroundings.

1.3.9. Timber harvests: Forest Management Plan(s) will be developed in the coming months/years as needed (see 5.2). Will collaborate with the Monkton Tree Warden on the shade tree preservation plan.

1.3.10. Sugaring: Allowed at a community / demonstration project scale.

1.4 Proposed Improvements:

(See section 5.5 of the management plan for further detail)

- **Access/Parking Areas:** Hardscrabble Rd (4-8 cars), potential alternate Hardscrabble location north of Queen Bee's (4-8 cars), Old Airport Road: use existing log landing for parking area, Old Lovers Lane (1-2 cars). Boulder perimeter, gravel base, room for school bus nearby.
- **Old Airport Road** to be accepted as a Class 4 road pending deeds of dedication from residents.
- **Welcome Kiosk(s):** Hardscrabble Rd and Old Airport Road (larger kiosks). Old Lovers Lane (mini).
- **Improve boundary markings** with paint and signs (as needed)
- **Gates:** Hardscrabble Rd gate, gate near Queen Bee's, Old Lovers Lane gate possible (pent road).
- **Stream crossing improvements** (to be minimized and built in accord with AMPs/wetland rules)
- **Trails:** new/existing woods roads and paths to be assessed and improved according to ecological trail standards. Capacity to handle storm events to be upgraded with water control structures.
- **Benches, picnic tables,** potential for 1-2 **small shade structures** if suitable location is determined.
- **No existing structures** will be utilized. Old Kaolin foundations will remain for historical evidence.
- **Kaolin Dam - evaluate & execute next steps for Unsatisfactory status; potential decommissioning.**

1.5 Responsibilities, Governance, and Timeline for Actions

Responsibility for governance and management of the MTF rests ultimately with the Monkton Selectboard, who have a duty to follow the Conservation Easement and to enact a Management Plan acceptable to the easement holders and created with robust community input. The Selectboard has delegated most responsibilities to the MTFC but retains certain decision-making, particularly regarding finances and larger decisions (see section 2.3 for more detail). The Selectboard and MTFC pledge to collaborate with the easement holders, other partners and stakeholders, and the community as appropriate to advance the Management Objectives and Goals of the Monkton Town Forest (see Sections 1.3 and 5) and in pursuit of the Overall Vision for Community Lands (Section 2.1).

The MTFC will be responsible for coordinating and overseeing the implementation of the Management Plan and engaging the community in the same; establishing access and trails; reviewing educational programs/field trips; communicating with the community; creation/implementation of Forest Management Plan(s) (FMP) as needed; coordinating with the game warden on hunting and trapping enforcement; establishing a Friends of the Monkton Town Forest group of volunteers and donors and a Grants subcommittee to pursue small grants in support of access, trail drainage structures and the like.

Timeline for actions (may be +/- 1 year - see Section 5.7 for more detail):

2025: Parking area improvements. Assess existing forest roads, footpaths and stream crossings. Engage the community in actions/improvements/projects. Re-route trail going west from OAR parking. Parking & signage at Old Lover's Lane (OLL). Work with the town to resolve beaver-related water going over OLL. Assess invasive species in the MTF and develop an Invasives Management Plan with the MCC. Work with the Conservation Commission on a Beaver Management Plan. Continue to engage with a neighbor on management of the Kaolin Dam. Assess the presence of bats on the property with VT Fish & Wildlife.

2026: Improve kiosks. Add benches & picnic tables. Add gate(s). Re-route trail going up the eastern ridge where erosion is significant. Work with the Historical Society and Conservation Commission on potential interpretive signage. Continue to translate areas of the conceptual trail network into reality on the ground. Implement Invasives and Beaver Management Plans.

2027: Continued trail work. Implement/monitor Invasives and Beaver Management Plans.

2. Vision, Process, and Responsibilities

2.1 Overall Vision for Community Lands

The creation of a Monkton Town Forest (MTF) has been part of the Monkton Town Plan since 2014. The current (2020-2028) Monkton Town Plan states that the creation of a Town Forest “improves residents’ quality of life by providing opportunities for recreation, hunting, appreciation of the natural environment, and exercise for health and well-being.” Our hope is to create a management plan that will help the Monkton Town Forest meet this town vision:

The Monkton Town Forest is a place where people experience and enjoy the land in a variety of ways while remaining conscious of and managing their impact, achieving a sustainable coexistence with natural communities and wildlife. The healthy ecosystem enables wildlife to thrive and demonstrates resilience in the face of climate change. Headwater streams and wetlands on the Town Forest benefit from robust trail, buffer, and forest management standards and best practices to consistently produce clean water, supporting the health of our rivers and lakes. The Town Forest is a good neighbor and supports a landscape view of natural resource management and human uses. The public develops a multi-generational culture of stewardship for this land and an appreciation for the value it brings into their lives and community.

2.2 Development Process for the Management Plan

The creation of the Monkton Town Forest has been a community-driven effort from the start, dating back almost a decade. Community conversations about the potential benefits of creating a town forest led to the inclusion in Monkton Town Plans since 2014 of a specific goal to “create a town forest that can serve education and recreation needs of residents.” In 2019, the Selectboard created the Town Forest Committee to explore more actively the creation of the MTF. The Monkton Town Forest Committee (MTFC) conducted multiple community outreach efforts to learn about the community’s vision for a town forest including two open houses in September 2021. The committee also talked with other towns and conservation organizations about other town forests in Vermont. After developing a better understanding of the desired qualities for a town forest, the committee looked at properties in Monkton to consider their potential to fit the community’s vision for a town forest. A suitable parcel was identified in 2022 and the committee began a conversation with the owner, A. Johnson Co. LLC, about acquiring the parcel to develop a town forest for the community.

Upon the signing of an option agreement between Vermont Land Trust (VLT) and A. Johnson Co. in February of 2023, the Committee reached out to the public in many ways to try to reach the full diversity of the community. Information was provided and community participation was sought through Monkton’s in-person Town Meeting Day, the town website, a (physical and virtual) local newspaper article, meetings of the Town Forest Committee open to the public, meetings with the Selectboard and other town boards and committees, and through multiple information sessions held with in-person and virtual options. These information sessions were advertised in Monkton’s virtual “Front Porch Forum,” the town events sign, the Town website, and verbal invitations to friends and neighbors. The MTFC hosted guided walks of the property and additional community engagement. The MTF effort has been unanimously supported by the Town of Monkton Selectboard, Planning Commission, Conservation Commission, and Agricultural and Natural Areas Committee. Letters of support were also received from the Addison County Regional Planning Commission, Vermont Family Forests, Lewis Creek Association, Hannaford Career Center, Vermont Master Naturalist program, Monkton Girl Scouts, Monkton BSA Troop 525, the Watershed Center, Willowell Foundation, and Red Cedar School.

In early 2023 following the signing of the option agreement, the MTFC quickly moved to apply for federal and state grants, working with VLT, to cover the bulk of the \$1.116 million project. In May 2023, a \$371,000 grant from the Vermont Housing & Conservation Board was awarded and in July the USDA Forest Service's Community Forest and Open Space Program awarded \$400,000 to the project. The A. Johnson Co. had already reduced the purchase price \$100,000 below the appraised value, to support the project. Taken together these made up 78% of the project budget.

What about the last 23% of the funds needed? With the goal of reaching as many voters as possible, the Town Forest Committee worked with VLT on a mailing and postcard survey that was sent to registered voters in June 2023 and held a number of events to engage with residents. The question was whether the community supported the project and the spending of some Monkton ARPA and ANAC funds to make it happen. The survey had a very strong 25% response with many written comments and the following results to the main question asked:

"Do you support the Town acquisition of 445 acres from the A. Johnson Co. to create a Monkton Town Forest using \$150,000 of existing Monkton ARPA funds, up to \$45,000 of existing Monkton Agricultural and Natural Area Funds, and other grants? YES NO Unsure/Need to know more."

SURVEY RESULTS: Yes: 341 (75.1%) No: 93 (20.5%) Unsure: 17 (3.7%) Blank: 3 (0.7%) Total: 454

The full report on the survey, including the hundreds of comments (de-identified), are included in the committee's [progress report](#) from July 7th, 2023.

The committee also heard in other ways (in-person, email, a petition, and online) from a total of 32% of the voters and with an overall 71% of them in favor. On the strength of this 3-to-1 overall support for the project and use of funds, the Selectboard approved the use of American Rescue Plan Act (ARPA) and Agricultural & Natural Areas funds to make up an additional 17% of the project budget, without drawing any new funds from taxpayers.

Later in 2023, a group of volunteers began outreach to raise the last 5% (\$50k) of the project budget through smaller grants and individual contributions. This effort was very successful, with many contributions received from individuals through Spring 2024, along with grants from NorthCountry Federal Credit Union and the Davis Conservation Fund.

From January to May 2024, the University of Vermont Field Naturalist Landscape Inventory and Assessment class used the soon-to-be Monkton Town Forest as their classroom. During this period, a group of skilled graduate students collected information on the geology, soils, hydrology, physical features and historic land use, vegetation features, wildlife features, and current recreation in the Monkton Town Forest. Additionally, the students conducted a trails assessment, collected information from other town forests, and investigated community science and outdoor education opportunities. The students then developed a detailed report on their findings along with management recommendations for the future long-term management plan of the forest. In May 2024, the students hosted a site walk at the town forest site for the community and presented their work at the town hall.

With the necessary funds acquired to purchase the town forest and a better understanding of the property, the committee began working with the community to determine management priorities and future allowed uses on the property. Along with engaging the community at Town Meeting Day, the Russell Memorial Library Strawberry Festival, and at the recycling center; a detailed community outreach survey was developed and made available to the public between August and November 2024. In late

August, the committee sent a postcard to all registered voters inviting them to the Town Forest Management Plan visioning workshop in September and shared a link to the survey. The survey was available both online and as paper copies at the Town Hall.

In total, 146 people participated in the survey, 133 who self-identified as Monkton residents. The committee is working on a complete summary of the survey responses and an overall analysis. Responses from the survey allowed the committee to identify potentially controversial land uses which required additional conversation with the community. Between October and December, the committee hosted six special topic meetings: dog walking and horseback riding, hunting and trapping (two meetings), mechanized recreation (biking/snowmobiling/races/fitness events), extractions (timber harvests, foraging, sugaring), and visual/aesthetics (signage, art). Feedback from the community at these meetings helped the committee to further tailor proposed land uses in the initial draft of the long-term management plan.

In November 2024, the purchase of the parcel was completed, and the interim management plan took effect as the committee worked with the community to draft the long-term management plan. From December 2024 to February 2025, the committee worked on creating a preliminary draft of the long-term management plan which they shared with Vermont Land Trust for an initial review in late February before sharing the plan with the community for feedback in March. After incorporating feedback from VLT, the committee made the plan available for community review on March 14th 2025 and held meetings on March 19th and 22nd for community members to discuss the proposed management plan. The final draft reflecting community feedback was shared with the community and Selectboard on April 4th for review.

The plan must be approved by VLT, VHCB and the Selectboard before taking effect.

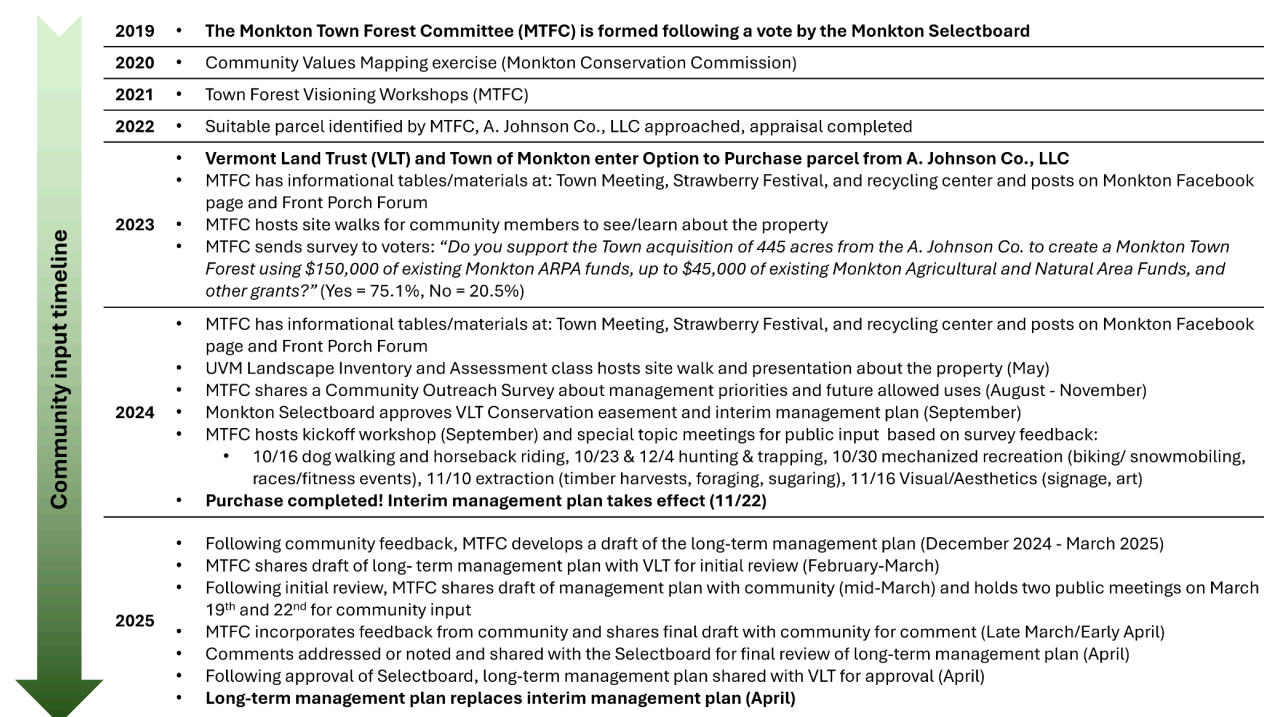


Figure 1: Timeline of major events and community input opportunities during the Town Forest acquisition and management plan drafting processes.

2.2.1 Community involvement in the implementation of the plan:

Community engagement in the implementation of the management plan will be very important, as a way to engage the public in creating and caring for their community forest. Educational opportunities are clear (see Section 5.4). Volunteer effort is also important, as there will be opportunities to learn by working to improve recreational opportunities, manage invasives, and more. The town forest is a community asset that can benefit all residents in the area and opportunities include:

- Volunteer work days (invasives control, trail maintenance & layout/building)
- iNaturalist project so community members can contribute to surveys and understanding of species composition/distribution on property, which will impact management decisions
- Collaboration with other committees/groups (e.g., Monkton Historical Society- potential history signage, etc.)
- Work with local groups (e.g., Scouts) on creating kiosks, etc.
- Provide follow up surveys about how community members think multi-uses are or are not working and how we can adjust
- Community involvement in any future forest management plan creation and implementation
- Provide workshops related to specific uses allowed in the town forest to teach community members about the use and how to participate responsibly (e.g., bird watching, water monitoring, foraging, sugaring)
- Host experts on specific topics so community members can learn about the unique features on this property and why they are influencing the management plan and its implementation

All Monkton Town Forest Committee meetings are open to the public (both in person and via Zoom) and have at least a 10-minute period reserved for public comment. Meetings are at least monthly, posted on the town calendar available on the town website, and will provide community members the opportunity to provide feedback about the implementation of the management plan. If certain themes continue to arise relating to the management plan and its implementation, the committee may host additional special topic meetings to discuss questions and/or concerns community members have and how to address them. The long-term management plan is considered a living document which can and likely will change over time as we learn more about this property, the best science informing its management, and the priorities of the community for whom this property was purchased.

2.3 Responsibilities and Governance

Responsibility for governance and management of the Monkton Town Forest (MTF) rests ultimately with the Monkton Selectboard, who have a duty to follow the requirements of the Conservation Easement (see Section 7.1.1) and to enact and support a Management Plan for the property that is acceptable to the easement holders, and created with robust community input. The Selectboard has delegated most responsibilities to the Monkton Town Forest Committee (MTFC) but retains certain decision-making, particularly in regard to finances and approving uses of the Monkton Town Forest Management Fund, approval of Management Plans, and involvement in substantial actions / projects / operational challenges related to the MTF. The Selectboard and MTFC will determine best practices for management of routine tasks, such as the timing of trail mowing or giving permission for a field trip. Both the Selectboard and MTFC pledge to collaborate with the easement holders, other partners and stakeholders, and the community as appropriate to advance the Management Objectives and Goals of the Monkton Town Forest (see Sections 1.3 and 5) and in pursuit of the Overall Vision for Community Lands (Section 2.1) .

The following responsibilities have been delegated to the MTFC, who will consult with and make recommendations to the Selectboard as described above. Any responsibilities/tasks not listed here will remain with the Selectboard, unless also delegated:

- Coordinating and overseeing the implementation of the Management Plan and updating it as needed or at least every 10 years, following the process described in the Conservation Easement and ensuring community engagement (see Section 7.1.1).
- Coordinating the establishment and upkeep of access points.
- Reviewing and approving public workshops, field trips or event uses.
- Collaborating and coordinating with the Monkton Conservation Commission for their input and guidance on areas of management including invasives and a beaver management plan.
- Approving scientific uses, keeping track of the field research and monitoring results, using fieldwork to update and amend the Management Plan over time.
- Approving projects related to forest and wildlife habitat management and recreation projects.
- Supporting and encouraging educational opportunities at the Monkton Town Forest.
- Supporting and encouraging community engagement in management activities, including invasives, trail maintenance, and the like.
- Communicating with the community about trail closures, hunting seasons, the location of any nuisance trapping activity, or other timely updates.
- Maintaining and assessing the trail network on a routine basis to make sure it meets our ecological trail standard and that any issues are acknowledged and addressed.
- Monitoring and maintaining the property boundaries - seeking out professional services as necessary.
- Communicating with and educating the community on allowed, restricted and prohibited uses.
- Coordinating and overseeing the creation and implementation of a Forest Management Plan (FMP) as needed, following the process in the Conservation Easement (see Section 7.1.1).
- Coordinate with the Addison County Forester and/or consulting foresters and Vermont Land Trust's forester as needed on topics such as the FMP, invasives, management for wildlife, education, etc.
- Coordinating with the game warden on hunting and trapping enforcement.
- Establishing a 'Friends of the Monkton Town Forest' community volunteer and donor group.
- Establish a Grants subcommittee to pursue small grants in support of access, trail drainage structures and the like.

3. Property Description

The Monkton Town Forest spans 450 acres of forest and wetland in a hilly region of southern Monkton. The property is bounded to the east and west by steep ridges of exposed cliff and talus while the land in-between rises to a gentler ridgeline which forms the divide between the Little Otter Creek watershed to the west and the Lewis Creek watershed to the east. On the southern border of the Monkton Town Forest is an additional 1,000 acres of conserved forestland stewarded by The Watershed Center of Bristol. Together, these conserved properties are part of a large block of contiguous forestland and wildlife habitat identified at a statewide level by Vermont Conservation Design (VCD) as a "Highest Priority Interior Forest Block" and a "Highest Priority Connectivity Forest Block." VCD is a vision developed by the Vermont Agency of Natural Resources to "sustain the state's ecologically functional landscape based on our best science." (See Figure 2). The town forest is diverse in topography, natural communities, and water features that provide important habitat for a variety of species.

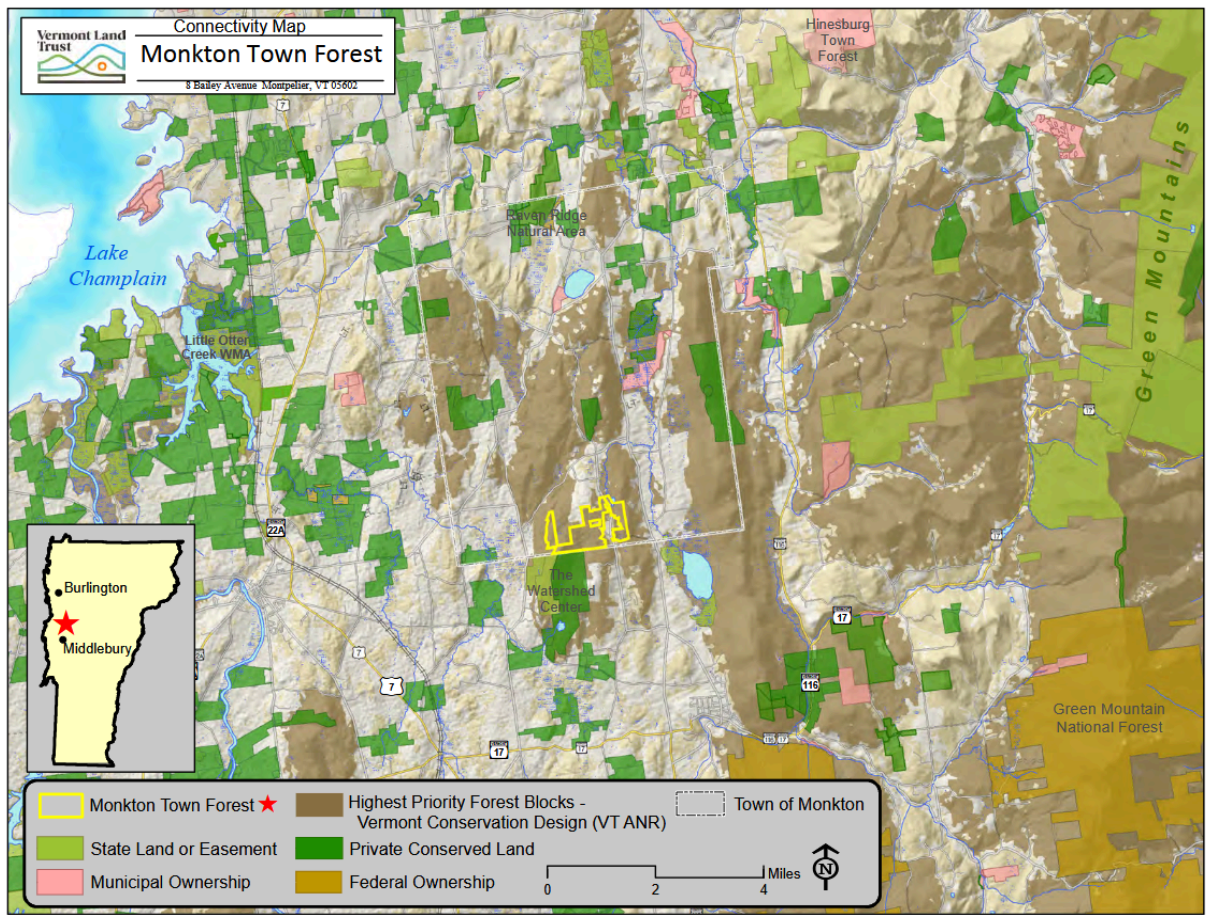


Figure 2: This connectivity map of the surrounding towns shows the connection from the Green Mountain National Forest as it heads westward out to Lake Champlain.

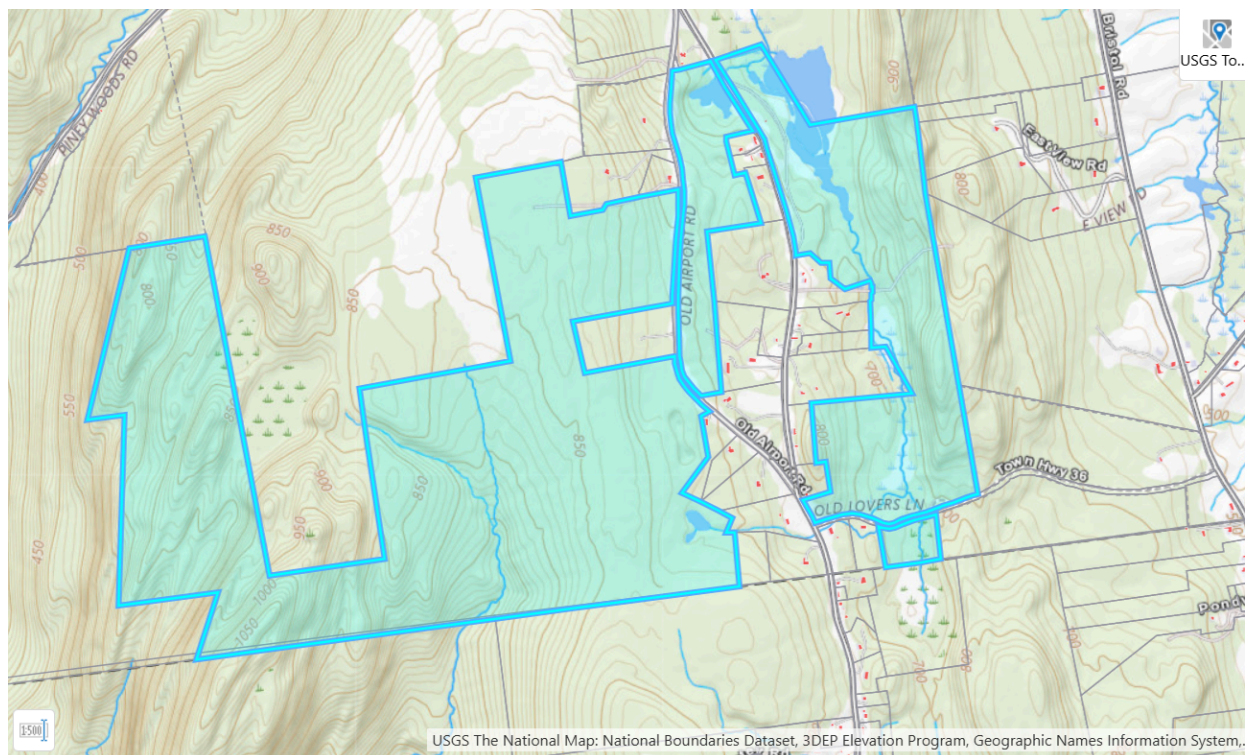


Figure 3 - Old Airport Road and Hardscrabble Road split the town forest into three sections, allowing for multiple access points. A former log landing to the west of Old Airport Road provides access to over 300 acres of forestland, streams, vernal pools, rocky outcrops, and historical sites such as excavated iron ore beds from the 1800s. Approximately 30 acres of the town forest are situated between Old Airport Road and Hardscrabble Road. In the northeastern corner of this section, parking is available along Hardscrabble Road by Putty Bed Pond, a remnant of the kaolin mining industry in Monkton. Across from Putty Bed Pond is an access point to the remaining 100 acres of Town Forest which encompass a beaver wetland complex, the remnants of a kaolin processing plant, and a rocky quartzite ridge offering glimpses towards Lake Champlain to the west and views of Hogback Mountain and Mount Abraham to the east. Old Lover's Lane serves as the southern border to this section of town forest.

3.1 Human and land use history

Below is a summary of the human history in the Monkton Town Forest but we suggest anyone interested refer to “East Monkton, Vermont: A History of its Land and People” (Parren et al. 2023) and “Monkton Town Forest, Vermont: Landscape Inventory and Assessment” (Goland et al. 2024) to learn more.

We also want to acknowledge that the Monkton Town Forest property is part of the traditional home of the Western Abenaki people, who have long inhabited Vermont's landscape and who make up a living culture today (University of Vermont Landscape Inventory & Assessment Class 2024).

While there are no known artifacts or oral histories tying the Abenaki or their ancestors to the Monkton Town Forest, a robust archeological record exists for Bristol Pond one mile to the southeast. Following the retreat of glaciers, Paleoindian groups were likely attracted to the Bristol Pond area due to its resource abundance including outcroppings of quartzite which could be used to fashion tools (Robinson et al. 2018). These extensive outcrops may have been one of the primary sources of quartzite for Paleoindian groups within the Champlain Basin and across the region (Robinson et al. 2018). As the climate and landscape changed with the shrinking of the Champlain Sea, the Paleoindian way of life came to an end (Parren et al. 2023). However, Bristol Pond remained a place of abundance where the descendants of the Paleoindians hunted waterfowl and gathered nuts and berries along the same quartzite ridges their

ancestors visited (Goland et al. 2024). The presence of Woodland pottery at this site reveals that thousands of years later the western Abenaki continued to hunt, fish, and forage these lands (Haviland and Power 1981).

Many of the indigenous Abenaki were displaced as European traders and then settlers entered the Champlain Valley beginning in the mid-1600s (Vermont Historical Society 2021). Following a series of conflicts between the French and British, the town of Monkton was chartered in 1762 (Parren et al. 2023). However, the town was sparsely populated until after the American Revolutionary War concluded in the late 1780s (Parren et al. 2023). Monkton grew rapidly in the early 1800s as farmers moved northward from southern New England colonies where poor agricultural practices had depleted the soil (Parren et al. 2023). Early farms were small and family run but with the introduction of the sheep industry, farms became larger and more specialized (Parren et al. 2023). By the mid-1800s, Addison County contained more sheep than any other county in the country (Brennan 2017) and most forestlands had been cleared for pasture (Merrill 2023). Excessive grazing led to soil depletion and the outmigration of people from Monkton and Vermont (Parren et al. 2023).

While there were farms in and around the Monkton Town Forest, as evidenced by stone walls and a cellar hole, other industries also shaped this land. While surveying lotted land in East Monkton in the late 1700s, Stephen Barnum discovered iron ore in the area of the Monkton Town Forest. By 1807, the Monkton Iron Company was formed by a group of Boston businessmen, making use of a pre-existing forge in Vergennes and the nearby ore bed in the Monkton Town Forest (Rolando 1992). The business grew quickly and was contracted by the U.S. government during the War of 1812 to produce 300 tons of shot for gunboats in Lake Champlain. Following the war, the company was unable to remain profitable without their biggest customer and with the return of cheaper European iron (Rolando 1992). The company sold the Monkton iron ore beds in the 1830s and the unused mined pit filled with water, creating a pond which locals used to harvest ice until electricity arrived in Monkton (Parren et al. 2023).

In 1792, while searching for iron in East Monkton, Stephen Barnum also discovered and classified the first kaolin deposit in the United States (Ogden 1969). Kaolin is a soft, white clay used in many products such as cosmetics and paints (Parren et al. 2023). From the early 1800s until the 1960s, a series of companies and individuals mined kaolin along Hardscrabble Road for a variety of uses from the manufacture of crockery to paper filler (Ogden 1969). In fact, while Monkton iron was being used to produce cannonballs during the War of 1812, Monkton kaolin was being used to whiten army belts (Hill 1961).

In the 1950s, the Vermont Kaolin Corporation was founded, and a large processing plant and storage facility was built along Hardscrabble Road in what is now the eastern section of the Monkton Town Forest (Parren). Additionally, an earthen dam with a concrete spillway was constructed on the northern boundary of the property to create a sedimentation pond. The company invested considerable time and resources in developing a process which would produce high-grade kaolin for paper makers who were the primary consumers of kaolin in New England, New York, and Canada (Ogden 1969). Ultimately, the Monkton kaolin was too coarse and discolored due to graphite deposits to be profitable and the plant closed in 1967 (Parren et al. 2023). Along with the concrete foundation from the plant, the history of kaolin mining in the Monkton Town Forest is visible in the “Putty Bed Ponds” left behind following the extraction of thousands of tons of clay.



Figure 4. View of the Vermont Kaolin Corporation on Hardscrabble Road. From Vermont Life 1961.

The A. Johnson Company , a local forestry and timber management company, bought the Monkton Town Forest in 1975 and conducted logging operations there for almost 50 years (Goland et al. 2024). The company practiced a variety of forestry management practices on this parcel, largely with the goal of management for hardwood veneer and sawlog production (Goland et al. 2024). Wood harvested in the town forest was processed at the local A. Johnson mill in Bristol, Vermont, which shut down in late 2023. Logging roads used by A. Johnson have created an existing network of paths through the central portion of the Town Forest, many of which will be maintained as a trail system for visitors provided they meet ecological trail standards (see section 5.).

3.1.1 Management: Historic and Cultural Resources

The varied historic land uses in the Monkton Town Forest have left traces throughout the property. The University of Vermont (UVM) Landscape Inventory and Assessment (LIA) class, which studied the Monkton Town Forest during the Spring 2024 semester, created a map of ten historic points of interest (Goland et al. 2024).

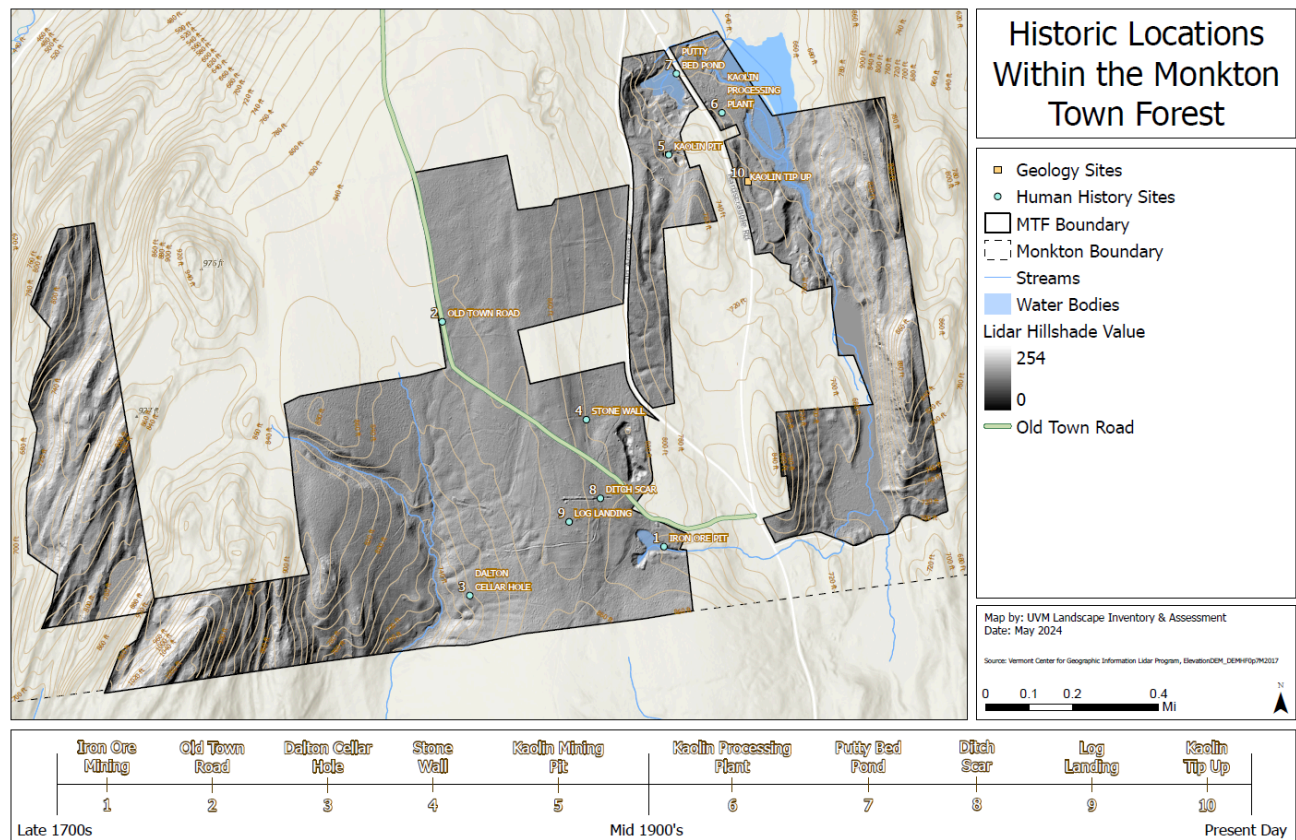


Figure 5: UVM Landscape Inventory and Assessment students map on the “Historic Locations Within the Monkton Town Forest.”

The four points of interest located east of Old Airport Road are the remnants of the kaolin industry in Monkton and are detailed by the UVM LIA class below. Note that numbers correspond with numbers on the map and are oriented in time with smaller numbers placing a point of interest further back in time.

Following the advice of Samantha Ford (MSc, Historic Preservation), owner of Turn Stone Research, we hope to include some interpretive signage about the cultural story of this property. Thanks to the work of the UVM LIA class, we have specific locations we will prioritize for future signage. Additionally, the UVM LIA class has suggested that we share their map and timeline digitally so visitors to the forest can reference these resources as they navigate the property and visit these sites. We hope to collaborate with both Samantha Ford and our local Monkton Historical Society to create effective signage which tells the land use history of this parcel. In addition to signage, we will also ensure that any future trails will not disturb historical sites.

Between Old Airport Road and Hardscrabble Road:

5) **Kaolin Mining Pit** (early 1900s): This is referred to in D. Ogden's report as the Lower Bushey Pit, and is a location where the Bushey's mined kaolin for many years prior to the sale to the Vermont Kaolin Corporation. The lowest portion of the pit now functions as a vernal pool, hosting amphibian habitat.

7) **Putty Bed Pond- Former Kaolin Mining Site** (mid 1900s): Though picturesque at present, the view west from here in the 1960s was one of a barren white landscape. This was the site of over 100 years of

kaolin mining, in which fine, powdery kaolin clay, referred to locally as "putty", was mined for use in fine porcelain and many other products. Note: Located between Old Airport and Hardscrabble Road.

East of Hardscrabble Road:

6) **Ruins of the Kaolin Mine Processing Plant** (mid 1900s): A concrete base still remains from the once shining, space-age Vermont Kaolin Corporation processing plant, where a 45' tall aluminum rotary dryer. This drum dried kaolin ore after it had been crushed, so that the ore could be sent to a "whizzer" which sorted it into grades by blowing it through high-pressured air.

10) **Kaolin Tip Up**: The fallen tree with bright white clay exposed among its roots reveals the shallow depth of the soil layer here, and the kaolin clay embedded in the fragmented bedrock just beneath the thin layer of leaves. This forest is extremely young and is regenerating atop the formerly excavated mine site, likely restricting the roots and causing shallow root systems, susceptible to blowdown. This particular tip-up is located on what is likely the former tailings pile, where crushed bedrock was deposited after kaolin extraction.

West of Old Airport Road:

1) **Iron Ore Mining Pit** (late 1700s): This location was mined for iron ore in the late 1700s and early 1800s, and iron from this mine was used to forge cannons for use in the war of 1812. There were about 10-20 men who were employed by a Vergennes-based company to work the mine, and there were bunkhouses built here to accommodate them. After the mine was abandoned, locals came here in the winter to harvest ice from the flooded pond for use in the summertime. The tracks made from their horse-drawn sleds can still be seen on the east side of the pond.

2) **Old Town Road and Stone Wall** (mid- 1800s): Deep wheel ruts along this path mark the way of the old town road, seen on the 1871 Beers Atlas map of this area. The road passed a farmstead along this stretch marked on the map as G.E. Barnum, and joined with Hardscrabble Rd after passing the excavated ore beds. Along the side of the path is an old stone wall, likely built by the Barnums. Remnant barbed wire, embedded into a nearby tree, has short barbs, a type used to contain sheep. Many of the trees along this stone wall are quite old.

3) **Dalton Cellar Hole** (late 1800s): This is the site of the Dalton homestead, built by Davis Dalton in the mid-late 1800s and operated as a small farm until the early 1900s. Dalton and his wife Elnora raised numerous children here and grew crops such as potatoes and corn - a difficult task on these acidic, rocky soils. The cellar hole of their farmhouse can still be seen here, among scattered iron tools - the materials for which may very well have been mined from this forest in the late 1700s. A patch of birch trees in the regrown forest denotes the location of the former field.

4) **Stone Wall Crossing Trail** (late 1800s): A stone wall crosses perpendicular to the path here, possibly associated in origin with those to the north near G.E. Barnum's farm.

8) **Ditch Scar** (mid 1900s): This excavated trough runs from the watershed divide at the top of the ridge and is bisected by the recently installed logging road. While the origin of this trough is not explicitly known, an investigation and report done by the Geological Survey in the early 1960s, around the time of the founding of the Vermont Kaolin Company, indicates that several backhoe trenches were dug in the area in an effort to determine the extent of the kaolin deposit beneath the thick layer of glacial till.

Samantha Ford also offers another possible explanation for the Ditch Scar: "When I was out with the Vermont Master Naturalists, one of the participants said they'd seen something similar in the mid-Atlantic area associated with historic mining. We hadn't yet talked about or even seen the iron pits, so I found that to be a neat independent source. We think they were channels to help facilitate removing ore from the larger bed on the mountain, where the ore was transported in the ditch with livestock hitched up on the mounds on either side pulling. There was a brief mention of this process in one of the resources I gave the UVM students that I had overlooked."

9) **Log Landing** (early 2000s): Log piles can still be seen which tell of this site's recent history as an actively forested stand, owned by the A. Johnson company. Landings like these are used to set aside logs as they are extracted from nearby stands, for later transport to a mill or processing facility. The uppermost part of this opening is, incidentally, the watershed divide between the Lewis Creek and Little Otter Creek watersheds. Waters falling on this side of the divide flow through the beaver wetlands on the parcel before joining a tributary of Lewis Creek.

3.2 Current Uses of the Property

3.2.1 Physical Improvements

The A. Johnson Company owned the lands that are now the Monkton Town Forest from 1975 to 2024. During their ownership, the land was managed for high quality timber and a series of logging roads were created and maintained. These roads created an informal network of trails that have been utilized in recent decades by local hunters, trappers, mountain bikers, ATV riders, dog walkers, and other recreationalists. In addition to logging roads, log landings were established to set aside logs harvested from nearby stands for later transport to their mill.

In 1958, an earthen dam and concrete spillway were constructed by the Vermont Kaolin Corporation along the northern boundary of the wetland complex east of Hardscrabble Road. This dam has recently been used for logging and recreational access. Following the flooding of summer 2023, the dam was inspected for safety and found unsatisfactory due to high water levels upstream of the dam. As a result, debris was removed from the spillway. Through a Vermont Land Trust grant, Skip Lisle installed a beaver deceiver device on the neighboring property that shares ownership with the Kaolin Dam. It has been functioning well and maintaining the water level through heavy rains while allowing the beavers to co-exist in their habitat. There's the possibility of adding additional devices on the eastern side of the Town Forest. If a need is identified, the committee will seek grant funding for those installations as well.



Figure 6: UVM DRONE IMAGERY from the UVM LIA course, Monkton VT 04-22-2024

3.2.2 Zoning Districts

The Monkton Town Forest is covered by four different zoning districts identified by the Monkton Unified Planning Document. The majority of the property is zoned as Low-Density Rural District (RA5-LD) while sections along Old Airport Road and Hardscrabble Road are zoned as Medium Density Rural Agricultural District (RA2-MD) and a section east of Hardscrabble Road is classified as Conservation District (CON-P - Wetlands District). While both RA2-LD and RA5-MD permit most uses, the Monkton Ridgeline Overlay District also covers much of the land situated further from Old Airport and Hardscrabble Roads. Below is the description of the Ridgeline Overlay District from the Monkton Unified Planning Document:

“The ridgelines and hillsides of Monkton are an important scenic, natural, environmental and ecological asset and protecting them is in the public good. This District includes areas unsuitable for development due to steep topography, erodible or shallow soils, fractured bedrock areas with high groundwater recharge potential. Lands in this District contain stream headwaters, more fragile habitat, and are often part of forest blocks central to maintaining forest integrity. The Ridgeline Overlay District is determined by measuring the distance from the nearest public highway (Classes 1, 2 or 3) to the top of the ridge. The ridgelines consist of the upper 42% of that measurement and encapsulate the most important parts of the ridgelines and hillsides of Monkton.”

“The Zoning Districts map shows the results of this calculation and delineates the Ridgeline Overlay District. Uses on this land will be limited to agriculture, forestry, outdoor recreation and wildlife refuge. No development shall be permitted within this overlay district except by conditional use. The conditional uses that may be permitted are accessory buildings, home occupation and public utilities co-located with existing utilities.”

“Permitted uses in the Ridgeline Overlay District and the Conservation District are limited to agriculture, forestry, outdoor recreation, and wildlife refuge. However, development of accessory buildings, home occupation and public utilities co-located with existing utilities are conditional uses in the Ridgeline District.” (Figure 7).

The Conservation Easement (see Section 7.1.1) on the property precludes some of the uses that might otherwise take place in the RA5-LD, RA2-MD, CON-P, or Ridgeline Overlay District.

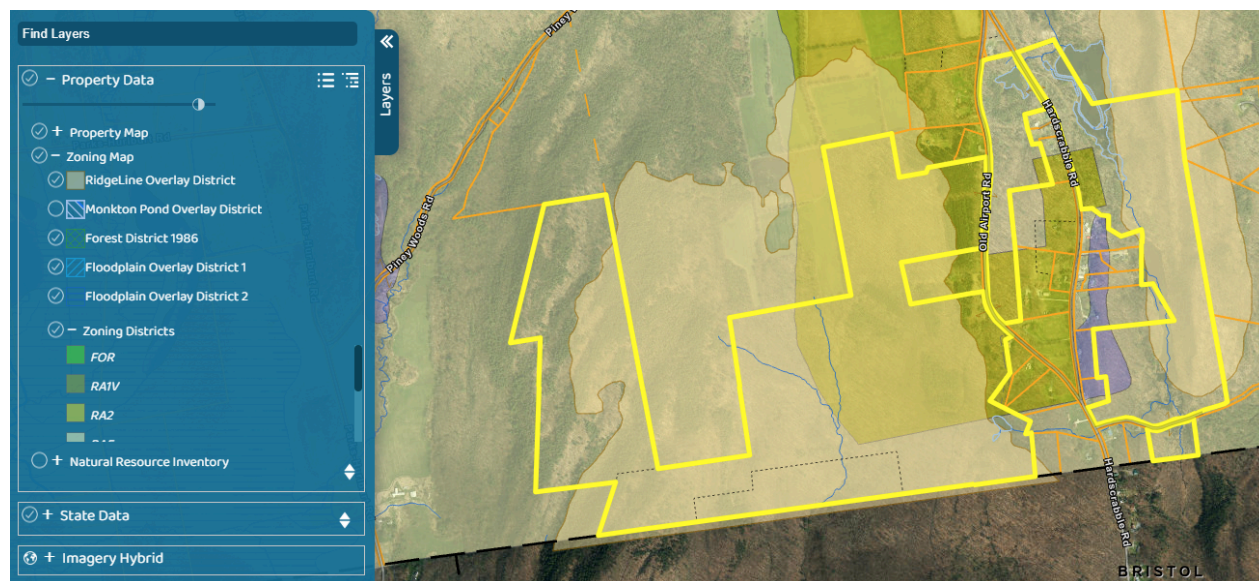


Figure 7: Monkton Interactive Digital Parcel and Zoning Map: <https://www.axisgis.com/MonktonVT/>

4. Natural Resources

4.1 Physical Setting

The diverse natural communities found in the Monkton Town Forest and the suite of species they host are the result of millions of years of processes that have shaped this land, beginning with bedrock formation. Cheshire Quartzite, which underlies the entirety of the town forest, began forming over 500 million years ago as sandy sediment was deposited in the warm, shallow waters of the Iapetus Ocean and lithified into sandstone. As the Iapetus Ocean began to close about 100 million years later and tectonic plates collided, the sandstone was thrust upward onto land and metamorphosed into quartzite. This collision, termed the Taconic Orogeny, created the Green Mountains and folded and thrust older Cheshire Quartzite on top of younger Monkton Quartzite where the town forest is located (Ogden 1969). As a result, the Monkton Town Forest is situated on a rise of land composed of Cheshire Quartzite surrounded by valleys of younger bedrock.

About 2.6 million years ago, North America began experiencing a series of glacial and interglacial periods during which ice sheets would expand and retreat. The most recent glacial period reached its maximum extent about 25,000 years ago and covered Vermont in over a mile of ice (Thompson et al. 2019). As the glacier advanced, it carved long grooves into the Cheshire Quartzite ridges that bookend the town forest to the east and west, leaving behind barren rock (Goland et al. 2024). About 10,000 years later, the climate warmed and the glacier retreated to the north. As the ice sheet retreated, it deposited debris that

it had accumulated during its advance and covered the town forest in up to 10 feet of rock fragments and sediment (Goland et al. 2024). Ice and deposited debris blocked stream outlets, and the valleys of Vermont began to fill with meltwater, creating Glacial Lake Vermont. At its maximum, this lake covered 70% of Monkton but not the ridgeline on which the town forest is situated. Eventually, the ice dam holding back the lake broke, allowing it to drain northward to the St. Lawrence River and out to the Atlantic Ocean. (Figure 8).

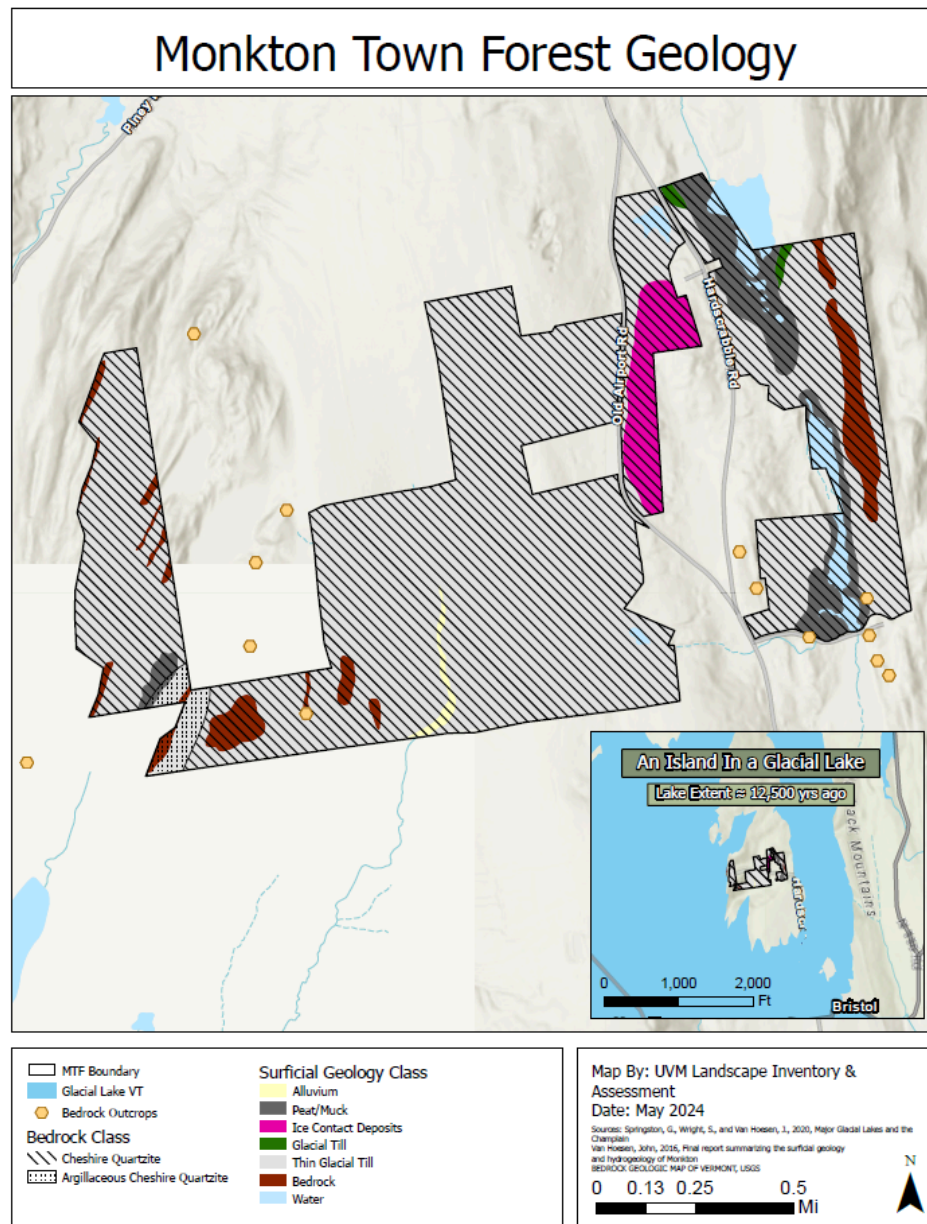


Figure 8: UVM GEOLOGY MAP produced by the UVM Landscape Inventory & Assessment students.

Unlike the valleys of Monkton that had been inundated by Glacial Lake Vermont, the town forest did not accumulate a layer of calcium-rich lake-bottom sediments. Instead, it is largely composed of exposed bedrock and rock fragments deposited by the glacier (glacial till). Most of this loamy glacial till was derived from phyllite, granite, and mica schist, and is the parent material of the mostly acidic soils found

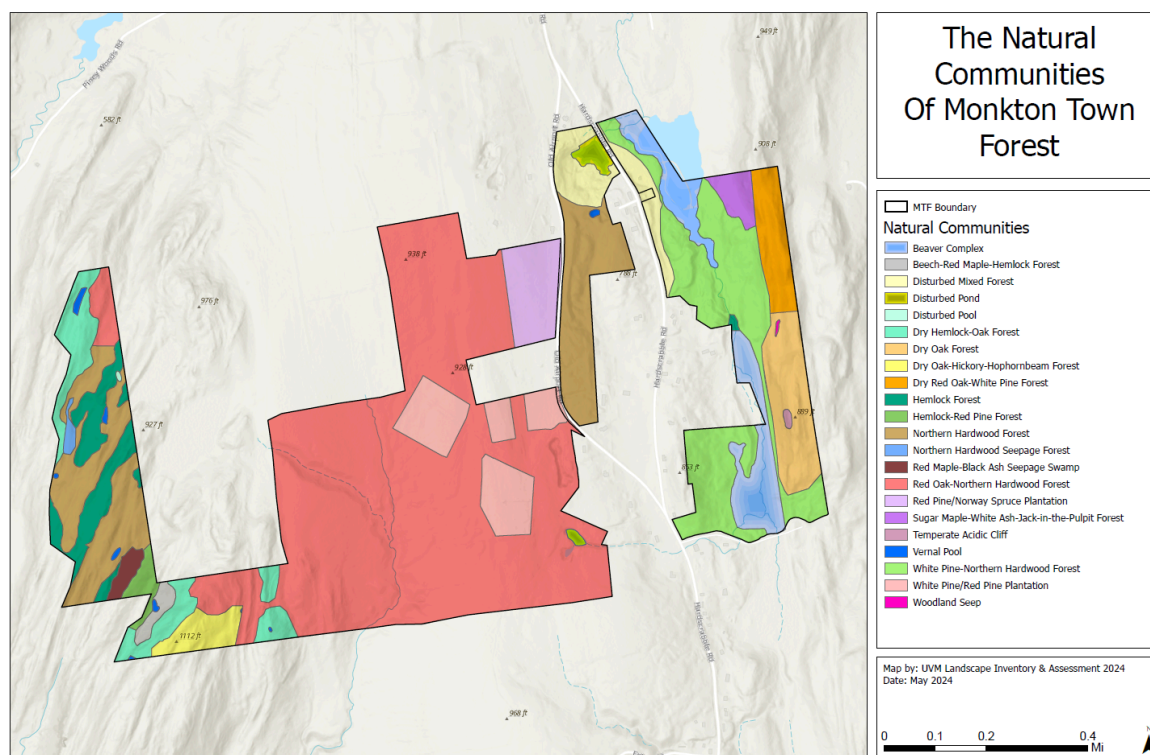
on the property. However, the lower elevational areas in the eastern section of the town forest are composed of sandy deposits made by flowing glacial meltwater and deposits of organic material which form muck and peat.

Due to its position at the rise of a hilly region, the Monkton Town Forest straddles two watersheds, Little Otter Creek to the west and Lewis Creek to the east. Water on the western side of the parcel flows south while the water to the east flows north. Most of the soils in the town forest are well-drained due to the mixture of glacially-deposited stony till and sand. However, the soils along the Lewis Creek drainage are a mix of poorly and excessively drained soils. East of Hardscrabble Road, muck and peat drain slowly allowing wetlands to form while Lewis Creek flows through adjacent sandy deposits where water is removed rapidly due to the coarse texture of the soil.

4.2 Natural Communities

The above combination of bedrock, topography, surficial deposits, soils, hydrology, and natural and human disturbance has determined what natural communities can be found in the Monkton Town Forest. Because this land was never inundated by glacial lakes and calcium rich sediments, The Monkton Town Forest contains the well-drained soils of the mountains combined with the warmth of the Champlain Valley (Goland et al. 2024). This rare upland habitat can therefore support uncommon dry communities characterized by more southerly species (Goland et al. 2024).

In 2024, the University of Vermont (UVM) Landscape Inventory and Assessment (LIA) class made the Monkton Town Forest their classroom and inventoried the natural communities on its lands. They identified 15 upland natural communities and seven wetland natural communities. These are presented and briefly detailed below (See Figure 9). To learn more, we encourage you to look at the 2024 report prepared by the University of Vermont (UVM) Landscape Inventory and Assessment (LIA) class.



4.2.1 Uplands

- **Beech-Red Maple-Hemlock Forest:** A variant of Northern Hardwood Forest located between a dry ridgetop and vernal pool. Situated in a hard-to-access area, it has not been logged and could possibly be old growth.
- **Disturbed Mixed Forest:** This section of forest has been heavily impacted by the topsoil and bedrock removal associated with kaolin mining and could be a good site for restoration.
- **Dry Hemlock-Oak Forest:** Found on forest ridgetops in the Monkton Town Forest and often used as travel corridors by wildlife.
- **Dry Oak Forest:** An uncommon community in Vermont that is only found in a small portion of the Monkton Town Forest with warm, dry climatic conditions.
- **Dry Oak-Hickory-Hophornbeam Forest:** This community extends down in the Watershed Center and is associated with rare plants and spring ephemerals.
- **Dry Red Oak-White Pine Forest:** Another uncommon natural community that occurs on rocky ridgelines with acidic bedrock. Currently, this community contains a logging road that has been accessed by ATV riders.
- **Hemlock Forest:** Found in strips along ridgetops with sparse understories due to dense shading by mature hemlocks.
- **Hemlock-Red Pine Forest:** This is not an official community in Vermont and was studied by several UVM field naturalist students after the LIA class identified the need to learn more about this stand. Red pine and eastern hemlocks are rarely seen in the same stand given the differences in the conditions each species requires to germinate and persist. Students cored several trees along the ridge where this stand is located and found that the red pine are over 160 years old, the eastern hemlock are around 140 years old, and the white pine in the stand range between the two. Students believe this stand started sometime in the 1850s and think it is possible that the surrounding area was cleared for pasture when the sheep industry took hold in Vermont. If so, this could have created appropriate conditions for a lightning-induced fire on the ridge to establish the red pine. Students hypothesize that steeper slopes along the ridge were not fully cleared (or cleared but not pastured) which allowed eastern hemlock to colonize the ridge sooner than would otherwise be expected. The ridge is now primarily eastern hemlock with red and white pine canopy trees. Without a disturbance like fire, it is likely that the pine component will get shaded out. Old growth characteristics are developing in this stand, and it may transition to old growth.
- **Northern Hardwood Forest:** The most common natural community in Vermont, typically moister than the Monkton Town Forest.
- **Red Oak-Northern Hardwood Forest:** This is the largest natural community in the Monkton Town Forest and lies on land that was reliably and repeatedly cut by A. Johnson Co. to promote both red oak and black birch.
- **Sugar Maple-White Ash-Jack-in-the-Pulpit Forest:** The forest here was thinned several times since the 1980s to foster oak, sugar maple, and black birch. The classification of this natural community is more of a hypothesis of what used to naturally occur here before thinning took place.
- **Temperate Acidic Cliff:** There is only one example of this natural community documented in the Monkton Town Forest but there may be more. These cliffs may provide important nesting habitat for birds like ravens or peregrine falcons and are vulnerable to disturbance and erosion.

- **Temperate Acidic Outcrop:** There is one small example of this natural community documented in the Monkton Town Forest. With sparse vegetation, the warm, exposed bedrock can provide important basking habitat for snakes.
- **White Pine-Northern Hardwood Forest:** A highly disturbed community that is found on top of a former kaolin mine. The white pine is likely the result of logging disturbance, rather than naturally occurring.
- **White Pine-Red Pine Plantation & Red Pine-Norway Spruce Plantation:** These even-aged stands were likely planted to stabilize soil in sections of the Monkton Town Forest after initial clearing and logging last century. A. Johnson recently focused on converting these stands to northern hardwood.

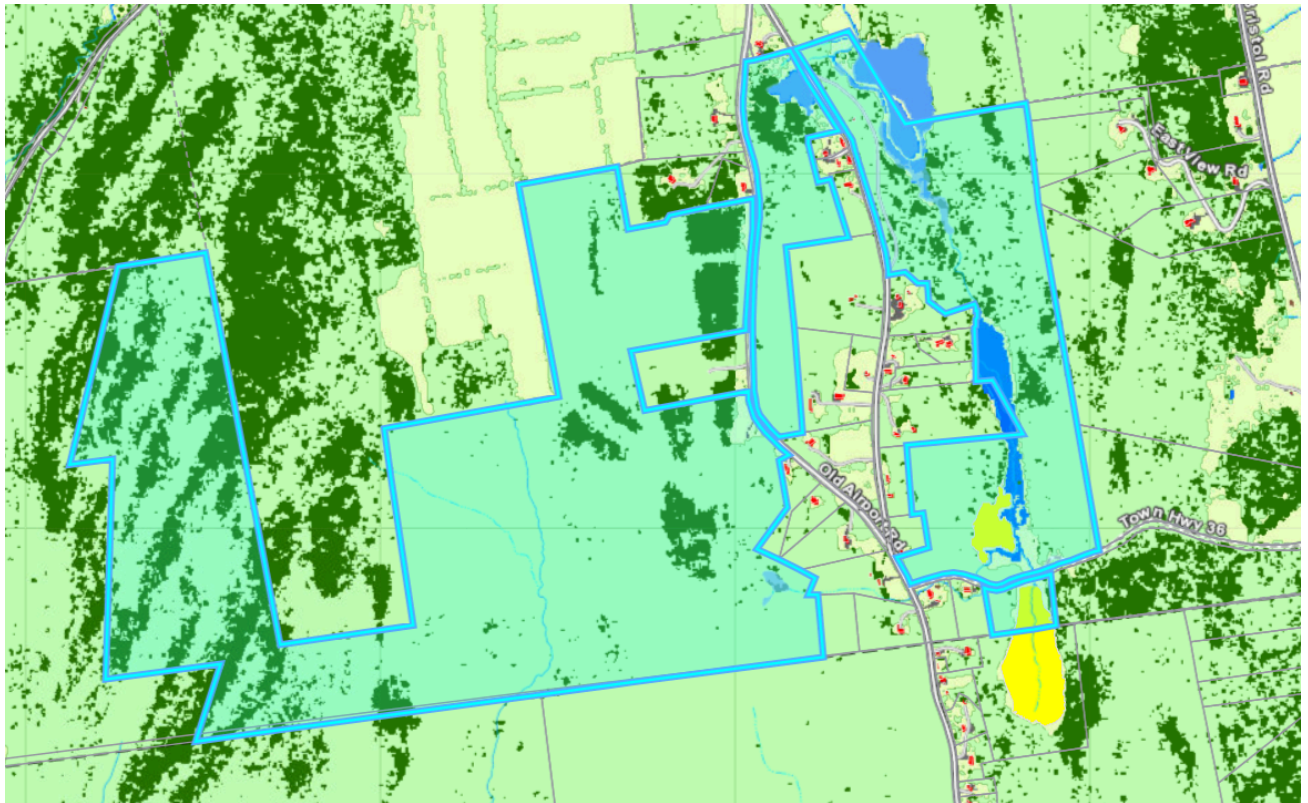


Figure 10: USGS 2022 National Land Cover Database: [VT Interactive Map Viewer \(HTML5\)](#)

4.2.2 Wetlands

- **Beaver Complex:** This wetland complex is located east of Hardscrabble Road and has experienced extensive human disturbance from logging roads and kaolin mining. However, beavers are actively using these wetlands and have done so for decades.
- **Disturbed Pond:** There are two ponds on this property that were excavated for mining. Putty Bed Pond, west of Hardscrabble Road was excavated for kaolin and an unnamed pond in the western section of the Town Forest was excavated for iron.
- **Disturbed Pool:** This pool could not be designated as a vernal pool or woodland seep. Given the evidence of logging in the area, it is possible its hydrology was disturbed. UVM students identified this as a good spot to observe over time in different seasons to clarify the natural community designation.

- **Northern Hardwood Seepage Forest:** Limited to one acre, this is a small example of a recently discovered natural community. Cut stumps around the seep indicate logging and it is hard to know how this affected the community.
- **Red Maple-Black Ash Seepage Swamp:** Considered the most ecologically sensitive community in the Monkton Town Forest, this swamp could host several rare plant species. The LIA class suggests conducting a botanical survey in this community in the summer. Cooler temperatures in this swamp, mediated by topography, could provide climate refugia in the future.
- **Vernal Pool:** There are at least five examples of these small, ephemeral pools in the Monkton Town Forest. These pools are crucial to the persistence of an array of amphibians and invertebrates on the landscape. A closed canopy around these pools is important to maintain cooler temperatures that slow evaporation, allowing pools to remain longer into the summer.
- **Woodland Seep:** The single example of this natural community in the Monkton Town Forest is found at the base of a slope and is groundwater fed. Seeps can be important hubs for biodiversity due to their numerous herbaceous plants.

4.2.3 Management

The Vermont Land Trust and Vermont Housing and Conservation Board easement has identified two types of ecological protection zones (EPZs) in the Monkton Town Forest. These zones are used to protect specific ecological features on the property by limiting the activities allowed within a certain distance of these features. (See Figure 11)

4.2.3.1 Dry Oak-Hickory-Hophornbeam Ecological Protection Zone

About 8.5 acres of the Monkton Town Forest are classified as Dry Oak-Hickory-Hophornbeam, a state-significant area of this natural community. Within this EPZ, protection of the natural community, its ecological processes, and the natural communities that naturally develop in the future are of highest priority when considering allowed activities. Additionally, all management activities within the EPZ must focus on the goals of maintaining soil integrity, natural hydrology, and water quality values as well as maintaining the natural structure and species composition of the natural community or communities that may develop naturally over time. All forest management activities in the EPZ must follow “Acceptable Management Practices for Maintaining Water Quality of Logging Jobs in Vermont” and be informed by the best current ecological understanding of the characteristics at this site. Silviculture methods at this site should mimic the natural, low-intensity disturbance regime specific to the natural community.

4.2.3.2 Vernal Pool Ecological Protection Zone

The conservation easement identifies five vernal pools in the Monkton Town Forest. Each vernal pool, along with a 100-foot buffer, creates the Vernal Pool EPZ Primary Zone while an additional 500-foot buffer beyond the Primary Zone functions as the Vernal Pool EPZ Secondary Zone. The goal of these EPZs is to provide and maintain high quality amphibian habitat, including breeding habitat, by promoting and maintaining high levels of shade and coarse woody material. Within each Primary Zone, agricultural activity is prohibited other than the collection of maple sap for sugaring operations. No new structures, land disturbance or improvements, removal of standing timber or downed wood, or disturbance to the pool’s hydrology is allowed within the Primary Zone. The only forest management activities that may be approved within the Primary Zone are the control of exotic species and enhancement of amphibian habitat. Within the Secondary Zone timber harvesting is permitted but amphibian habitat needs, such as

coarse woody debris and shade, shall be addressed in the preparation of forest management plans which shall explicitly state what prescriptions have been imposed to protect and enhance amphibian habitat.

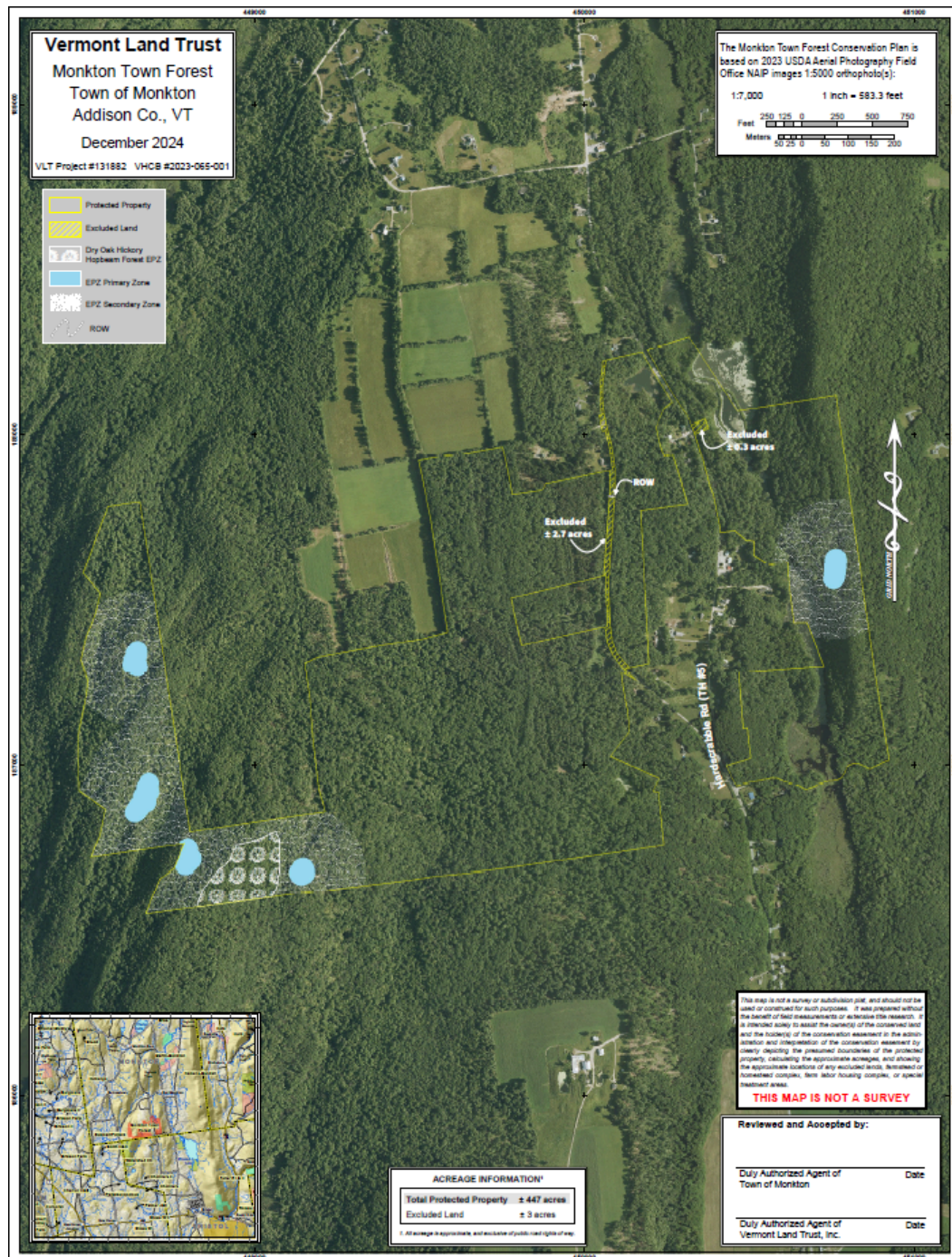


Figure 11 VLT CE MAP: https://drive.google.com/file/d/14Ggtv7C_FTGickrGVnh5ZKiT-ld9Kdix/view?usp=sharing

4.2.3.3 Uncommon and Significant Natural Communities

In addition to the ecological protection zones identified by the easement, there are several uncommon and/or significant natural communities in the Monkton Town Forest. These communities, including the variety of “Dry Oak” and “Hemlock” forests, and seepage swamps are found in the far western and eastern ridges of this property. These communities also host some of the more significant and/or rare species such as shagbark hickory, which provides potential roosting habitat for Indiana bats, and red pine, which is a rare, fire-maintained species for Vermont. The University of Vermont Landscape Inventory and Assessment course in 2024 identified additional rare species that may be found in the Monkton Town Forest such as swamp fly-honeysuckle, poke milkweed, Loesel’s wide-lipped orchid, Virginia spring-beauty, and yellow lady’s slipper. Future botanical surveys will be needed to confirm the presence of these species.

Given that these rare and significant natural communities and species largely occur within the western and eastern ridges of the Monkton Town Forest, we aim to reduce the disturbance in these areas. Thankfully, the majority of existing infrastructure, such as logging roads, are already located within the more central area of the town forest and we intend to concentrate future trails and recreation there.

4.3 Wildlife Habitat & Rare Species

The diverse upland and wetland natural communities found in the Monkton Town Forest provide a suite of differing habitats that host a wide variety of species. Rocky outcrops provide denning habitat for bobcats and porcupines, basking habitat for snakes, and potential nesting habitat for ravens. Wetlands attract beavers, river otters, painted turtles, and wood ducks. The abundance of oaks throughout the property provides food for squirrels, bears, and turkeys. Robust populations of small mammals fed by the forest bring in coyotes, gray foxes, and barred owls. Vernal pools provide breeding habitat for spotted salamanders and wood frogs while stands of hemlock provide nesting habitat for red-breasted nuthatches and winter shelter for white-tailed deer.

While the UVM Landscape Inventory and Assessment class surveyed much of the town forest for wildlife using trail cameras and visual encounter surveys, they were restricted by the cool temperatures of early spring. Despite this, the class documented 13 mammal species, 32 species of birds, one reptile species, and six species of amphibians between January and May 2024. In the summer of 2024, a UVM graduate student utilized small, mesh traps to survey turtle species in the wetlands east of Hardscrabble Road. This trapping effort documented an additional three species of reptiles (painted turtle, snapping turtle, common watersnake) and one species of amphibian (American bullfrog).

The Monkton Town Forest is home to at least one rare, threatened, and endangered (RTE) reptile species. However, given the assortment of both upland and wetland habitat types on the property and the somewhat limited sampling effort, it is possible that there are more RTE species on this property that have not yet been discovered. We hope that future survey efforts will allow us to identify important habitat features for the known RTE species and any others that may be detected over time.

While not yet confirmed, it is very likely that the Monkton Town Forest hosts the federally endangered Indiana bat (*Myotis sodalis*). The Small Mammals Biologist for Vermont Fish & Wildlife has visited the site, identified appropriate habitat, and hopes to do acoustic surveys for bat species in the Monkton Town Forest in 2025. It is possible that these surveys might pick up other listed bat species such as the northern long-eared bat.

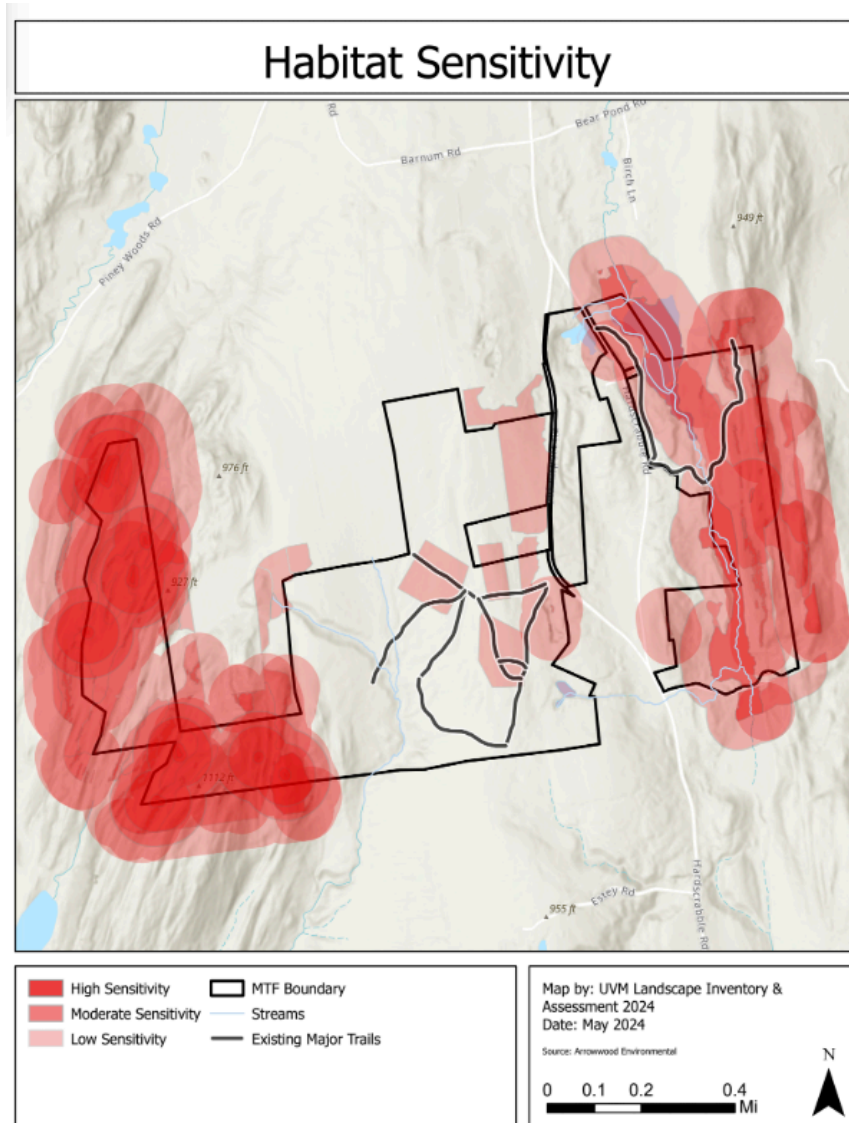


Figure 12: University of Vermont Landscape Inventory & Assessment habitat sensitivity map from May 2024, which was based on various layers of data such as wetlands, wildlife habitat, steep slopes in order to analyze and identify the low sensitivity vs. high sensitivity areas on the property.

4.3.1 Management: Wildlife

In the fall of 2024, a survey was shared with members of the Monkton community to gauge the community's interest in different land uses and management priorities in the Monkton Town Forest. When asked how they valued different management priorities in the forest, the majority of survey participants identified the long-term health of the forest and wildlife habitat as most important. Similarly, when asked about deciding what uses should be allowed in the town forest, the majority of survey participants said that protection of rare species and sensitive areas should take priority. Given these responses, the town forest management plan was developed with the goal of maintaining wildlife habitat and protecting rare and sensitive natural communities. Land use decisions and their reasoning are presented in section 5 below, with specific management goals and protections for wildlife on the property.

Future management of the Monkton Town Forest (MTF) will rely on what we learn about the species within this forest and how they use it. Our hope is that visitors to the forest will help us to document the species they see using a Monkton Town Forest iNaturalist project. A property-specific iNaturalist project will allow us to collect all observations in one location so that we can track what species are found where and how that may change over time. This data could help us identify areas that may be important for foraging or a travel corridor and we can adjust our human land uses accordingly.

In order to properly manage the property for rare and sensitive species, we need to continue survey efforts to better understand the species present. Acoustic surveys for Indiana bats are planned for summer 2025 and a local researcher who studies Rare/Threatened/Endangered (RTE) reptiles plans to target surveys and subsequent monitoring in and around the Monkton Town Forest. These survey efforts will improve our understanding of the species present, and their habitat needs so we can adjust management appropriately.

As we learn more about the species within the town forest, we hope to prioritize both the maintenance and creation of habitat features. Existing log landings create edge habitat and sunny openings that attract a subset of species for basking, foraging, and potentially nesting. We hope to maintain some of these log landings to create patches of early successional habitat. Maintenance of landings will require occasional mowing, which will be done during the inactive season for reptile species to avoid the risk of mortality. Any woody debris removed from log landings to prevent habitat succession will be piled along clearing edges to provide cover for wildlife that visit these landings. When safe, snags and woody debris will be left in place to provide habitat for cavity-nesting birds and cover for salamanders.

While not currently planned, we may want to girdle or remove certain trees shading the rocky outcrops utilized by wildlife species. The warmth provided by these rocky outcrops depends on solar exposure and occasionally key areas can become too shaded. Any daylighting would be based on the recommendation of biologists and may need to be approved by the Vermont Land Trust, depending on scope.

5. Management Goals and Objectives

- *“The Grantor (Town of Monkton) and Grantee (Vermont Land Trust) 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”* - Conservation Easement (with parenthesis added here) - see Section 7.1.1 Conservation Easement
- To be responsible stewards of the land
- To put the protection of rare species and sensitive areas over potential recreation opportunities
- Restore and conserve wetlands and allow streams to naturally adjust their form
- Monitor and protect the water quality in the headwaters of the Little Otter Creek and Lewis Creek watersheds
- To co-exist with beavers and allow them to thrive in a way that enhances wetland health and minimizes water level concerns.
- Manage recreational opportunities that are in line with other goals of the MTF
- Maintain and build thoughtful trails that follow ecological trail standards
- All uses should comply fully with best management practices.
- Prioritize the long-term health of the forest, wildlife
- Support educational and community uses that are compatible with other management goals
- Model and demonstrate sustainable forestry practices that put the health of the forest, wildlife and water first

Indicate how you value these as Management Priorities in our Community Forest:

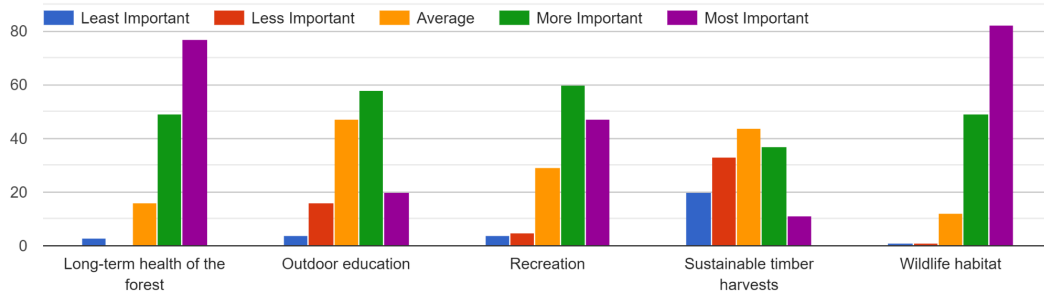


Figure 13: The Monkton Town Forest Committee put together an online survey in the Fall of 2024 and asked a variety of questions on allowed/restricted uses in addition to questions such as how the community valued various management priorities at the Monkton Town Forest.

5.1 Public Access and Recreation

5.1.1 General Guidelines

- The Monkton Forest is open 24 hours for walking, running, skiing, and other non-mechanized recreation. Quiet Hours are in effect from 9:00pm-7:00am, with exceptions allowed for hunting, emergencies, or by permission of the MTFC.
- At all hours: please be considerate of others by protecting the quality of their experience: avoid loud voices and noises.
- Please be considerate of the neighbors and property boundaries.
- Park in designated areas off the traveled way, drive slowly and be mindful of pedestrians.
- Pack out what you carry in.
- Trails may be closed at times due to muddy conditions, trail expansion is not allowed.
- In an emergency, please call 911.
- Follow the allowed, restricted and prohibited uses

5.1.2 Access & Parking

Due to size and the 450-acre Monkton Town Forest being split by two roads, there are a few different ways to access the property. The eastern portion of the property can be accessed from Hardscrabble Road, with parking next to the fire pond. The western portion of the property can be accessed from Old Airport Road, with parking at a former log landing site. Parking at Old Lover's Lane is very limited, but space for 1-2 vehicles is planned for the near future. In all locations please refrain from blocking access for other users, blocking gates, parking on roads, etc. If space is not available please try one of the other parking/access points, which are all within three minutes driving time of one another.

There will be town forest related signage such as trail marking, boundary markers, parking, and welcome kiosks where appropriate. Improvements to stream crossings and other wet locations on Existing Primary Forest Roads (also referred to in this document as "trails"), if any, will be in accord with Vermont Acceptable Management Practices and Vermont Wetland Rules. Refer to the Map. See section 5.5 Proposed Improvements for more detail.

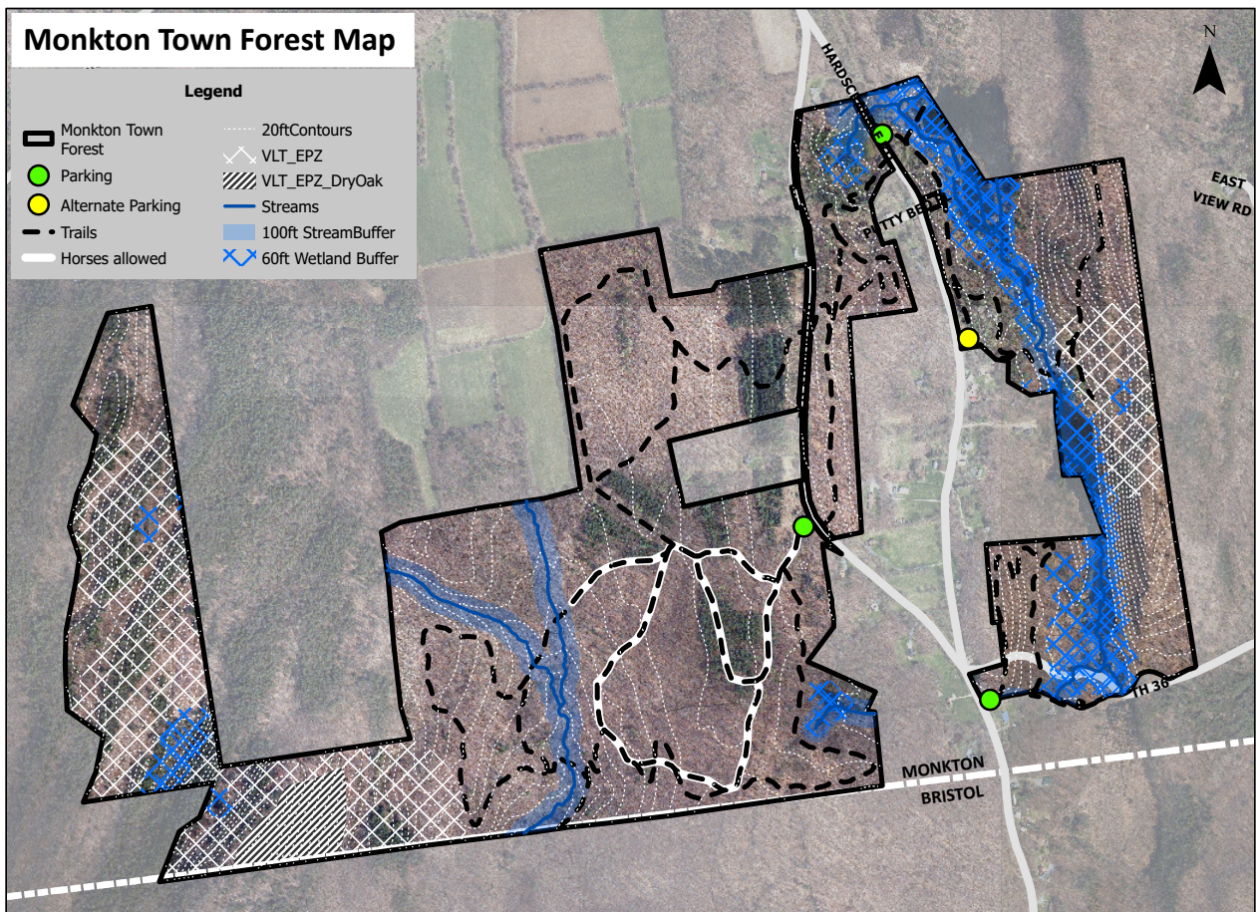


Figure 14: Latest trail map, which includes some sections that are conceptual and not built at this time. This map is not a survey. Trails and natural features may be updated from time to time based on new data that becomes available.

5.1.3 Allowed Uses

The following activities are allowed at the Monkton Town Forest (MTF):

- Birdwatching, walking/hiking/running, fishing (state rules), snowshoeing, cross country skiing, quiet contemplation, wildlife viewing, ice skating, swimming, botanizing (plant study), water quality monitoring.
- All activities are at your own risk. Users should be aware of other uses and respectful of neighbors and other visitors.

5.1.4 Limited Activities (Restricted):

The following activities have certain limitations that need to be followed. Please reach out to the Monkton Town Forest Committee (MTFC): townforest@monktonvt.com with questions or concerns or to request permission:

- **Camping and campfires** - are not allowed, except by permission of the MTFC - which will consider location, fire danger (may consult with the fire warden), the organization/group requesting, and appropriate oversight of the activity.
- **Dogs - must be on-leash or wearing an electronic collar that effectively allows the dog to be immediately recalled.**

- **Dogs must remain within sight** of their owner and under their control. Owners must have a leash with them to further manage trail interactions and protect wildlife.
- **Owners are responsible for their dogs** and must be physically capable of handling their dogs appropriately during interactions with other users and their dogs or horses and wildlife. MTFC may prohibit individual dogs due to behavioral issues on the part of the pet or pet owner. Pet owners are asked to recognize that the ability to bring your pet to the MTF is a privilege and will only be possible through responsible behavior by pet owners. Users are asked to know your pet, and make informed and realistic decisions about the appropriateness of bringing your pet to the MTF. The MTFC will provide signage reminding pet owners of their responsibilities and the MTFC's expectations.
- **Dogs are not allowed in vernal pools.** These are all pools west of Old Airport Rd. and also at upper elevations east of Hardscrabble. Streams and ponds by Hardscrabble Rd. are OK.
- **Pick up after your dog.** Dog waste and bags on trails or in the woods degrades soil and water quality and the experience of other users.
- **Reasoning for on-leash or electronic collar only:**
 - Off-leash is probably the better option for the off-leash dog but it isn't better for wildlife, some humans, or for some other dogs or horses encountered on the trail. Loose dogs tend to roam off-trail and spread their scent more widely on the property, which has a negative impact on wildlife. Their feces would also not be collected and would reduce water quality.
 - Unattached "long lines" are not allowed. The dog may still run loose in a trail interaction and long lines can have an increased impact on wildlife (e.g. red eft).
 - Most people understandably believe their dog will be fine and stay under their verbal control, but they can be mistaken. It is an unpredictable element for trail interactions and has a negative impact on many visitors. Survey results indicated only 35% support for off-leash dogs, whereas support for on-leash was 69%.
 - The University of Vermont Landscape Inventory and Assessment class's report notes that leash requirements for dogs are important because bats can abandon summer roosting locations near trails where dogs are allowed. The National Audubon Society also acknowledges that off leash dogs can impact birds: <https://www.audubon.org/news/why-leashing-dogs-easy-way-protect-birds-and-their-chicks> [off-leash dogs can impact birds](https://www.audubon.org/news/why-leashing-dogs-easy-way-protect-birds-and-their-chicks).
 - Ultimately, the MTFC decided that simply following the **Town Dog Ordinance:** <https://monktonvt.com/documents/2012/01/animal-control-ordinance.pdf/> was not a suitable option for all groups, given community feedback (too many dogs are not "clearly under the verbal or non-verbal control of the owner"). The Town dog ordinance applies to MTF, but this plan adds additional requirements and expectations for this Town property. Other proposed options were not adopted: the suggestion of off-leash during certain hours was problematic from several angles (including user groups, wildlife, seasons). Having a designated off-leash area would likely concentrate trail interactions and not be satisfactory for most users. There were concerns about long-lines. The electronic collar off-leash option seems feasible but requires substantial training, for both owner and dog, to be a responsible, positive and effective option that supports additional freedom of movement. The MTFC remains concerned about shifting the burden of off-leash activity onto other user groups and wildlife, but is mindful that exercising with your dog is an important recreational activity for many users.

- **Horseback riding** - is allowed on mapped forest roads for horses (see Figure 14), but not on footpaths or off-trail.
 - Trails are closed to horses during wet/muddy conditions, primarily in the spring. Trail closures will be noted on the Monkton Town Forest Committee website: <https://monktonvt.com/boards-and-committees/town-forest-committee-2> and at the parking locations.
 - Parking is limited at all locations, but space for one or two smaller truck/trailer combinations should often be available. Do not block access for other users, block gates, or park on roads, etc.
 - Owners are responsible for their horses and must make best efforts to manage their horses appropriately during interactions with other users and their dogs or horses and wildlife. MTFC may prohibit individual horses due to behavioral issues on the part of the pet or pet owner. Pet owners are asked to recognize that the ability to bring your pet to the MTF is a privilege and will only be possible through responsible behavior by pet owners. Users are asked to know your pet, and make informed and realistic decisions about the appropriateness of bringing your pet to the MTF. The MTFC will provide signage reminding pet owners of their responsibilities and the MTFC's expectations.
 - **Reasoning** for no footpaths or off-trail access:
 - To reduce trail conflicts by giving more time and space for all users of the trail to react to each other; to reduce soil compaction and erosion; to reduce the effect of horse droppings on other users and reduce the potential for introduction of invasive species into new areas via droppings/hooves.
- **Biking** (mechanized recreation - mountain biking, fat biking, etc. No e-bikes)
 - **Bikes** - are allowed from November 1st through April 1st only, out of concern for protecting a state Rare/Threatened/Endangered (RTE) reptile population in the warmer months on the property and surrounding areas. We will continue to coordinate with The Watershed Center to the south on this topic during the term of this Plan and would prefer a unified approach, but we have been unable to identify how to accommodate spring/summer/fall biking without putting this vulnerable population of a RTE reptile at risk. These RTE reptiles are reasonably certain to be in winter dens between November 1st and April 1st, so biking/fat biking is allowed during this time.
 - Biking is only allowed November 1st to April 1st under dry or frozen conditions. Trails may be closed at times due to muddy conditions or otherwise as necessary.
 - Trails may be groomed in winter, with permission of the MTFC, to improve conditions.
 - No E-bikes are allowed (additional impact due to speed/weight/power increasing trail conflicts, erosion, etc.)
 - Yield to others
 - **Reasoning:**
 - The RTE reptile population is fragile and needs a high level of protection. They are inclined to sun themselves on trails. Trail conflicts are also reduced in leaf-off conditions with improved visibility. Erosion / trail maintenance concerns are reduced in mostly frozen conditions. Salamanders and other herptiles are on the move at night, which would conflict with night riding during the majority of the year.
 - Trail expansion by users is not allowed (building single-track trails, new shortcuts, etc.)
- **Non-motorized boating** - is allowed, following applicable state rules: <https://vtfishandwildlife.com/fish/boating-in-vermont> and the Conservation Easement.

- All boats must be clean and dry, following VT Fish & Wildlife rules on minimizing the spread of invasives:
<https://vtfishandwildlife.com/about-us/departments/divisions/fish-division/fish-management/aquatic-invasive-species/stop-the-spread-of-ais>
- The Conservation Easement defines the extent of public access to specific types of uses, noting in Section II.7: “There shall be no operation of motor vehicles on the Protected Property for recreational purposes except as approved in Grantees’ sole discretion.” Section III.1 notes a right to use the Protected Property for non-commercial, non-motorized boating, where it is consistent with the purposes of the Grant and Management Plan.
- **Education & Events** - examples may include school field trips, outdoor educational workshops/programs, **hunter safety**, and recreational events (such as tree ID, birding, chainsaw safety, or a 5k walk/run/ski event, and the like). These are only allowed by permission of the MTFC on an appropriate scale that considers factors such as limited parking, whether there is a significant community interest/value from the activity, that impact to wildlife and neighbors is well managed, etc. The MTFC will also provide information to groups if an activity is approved, such as about trail closures, hunting seasons, etc.
- **Timber Harvest:** **See Timber & Other Forest Products*
- **Maple Sugaring:** **See Timber & Other Forest Products*
- **Foraging:** **See Timber & Other Forest Products*
- **Sledding** - may be allowed in the future, in designated location(s) (TBD). If allowed, location and information will be posted on the Monkton Town Forest Committee page:
<http://monktonvt.com/boards-and-committees/town-forest-committee-2> and at access points.
- **Visual/Art Aesthetics** - art (such as sculpture) is allowed only by permission of the MTFC and on a limited basis consistent with the Conservation Easement. The MTFC should strongly consider that a majority of responses in the community input survey opposed art installations in the MTF.
- **Interpretive trails/signage** - are allowed at the discretion of the MTFC. There was support for this in the community survey, but also concern about having too many signs in the woods. Interpretive signage, if implemented, should be mostly in higher traffic locations closer to parking. Trail signage should be helpful and sufficient, such as painted blazes, but minimalist in nature and quantity in order to minimize the visual and physical impact in the forest.
- **Trail/Game Cameras** - no cameras are allowed, except by permission of the MTFC. Cameras may be allowed for wildlife studies, to address security concerns, to count visitors to the Town Forest, for hunting purposes, or otherwise at the discretion of the MTFC. Cameras must be labeled with contact information and unauthorized/unlabeled cameras will be removed. The Town is not responsible for stolen or damaged cameras or tampering.
- **Hunting - Vermont’s deer and turkey seasons are allowed. Other seasons are not allowed** (see the section on Reasoning below). The Town may choose to formally post the land as “By Permission”, and require a Landowner Courtesy Card, in order to enforceably limit seasons to deer and turkey. The card serves as evidence of permission, if requested by a game warden, and can be obtained by contacting the MTFC: townforest@monktonvt.com
- **Spring:**
 - Turkey: Youth & Novice Weekend - 2 days - typically in late April

- Turkey: Spring Season - 31 days - typically the month of May
- **Fall:**
 - Deer: Archery - 60 days - usually October through mid-Nov. and first half of Dec.
 - Turkey: Archery - 20 days - typically in October
 - Deer: Youth Weekend and Novice Weekend - 2 days - typically in late October
 - Deer: Regular Season - 15 days - typically in the second half of November
 - Deer: Muzzleloader - 8 days - typically in the first half of December
- The dates of deer and turkey seasons for the current year will be listed on the Vermont Fish & Wildlife page: <https://vtfishandwildlife.com/hunt/hunting-and-trapping-seasons> and referenced from the Monkton Town Forest Committee page: <http://monktonvt.com/boards-and-committees/town-forest-committee-2>. Signage at parking/trailheads will be clear about allowed hunting seasons.
- **No Hunting** between Old Airport Road and Hardscrabble Road, due to proximity to residences. This zone is almost entirely within 500' of a residence.
- **Safety zones** - Adjacent landowners may post "Safety Zone" posters on the Town Forest in coordination with the Town Forest Committee and in accord with VT State rules.
- **Tree stands and climbing saddles**
 - No person shall build, erect, maintain, use, or occupy a permanent or portable tree stand or ground blind for any purpose without MTFC permission.
 - Absolutely no drilling of trees for affixing climbing steps, stands, bow-hangers or other purpose is allowed in MTF
 - A person building, erecting, or maintaining a tree stand or ground blind shall permanently mark the stand or blind with the owner's name and address. Marking shall be legible and placed in a manner that enables a person to read it conveniently and easily.
 - Climbing saddles with portable climbing sticks are exempt from permission, as long as the equipment is removed at the end of each outing.
 - If tree damage is observed in connection with tree stands the MTFC may choose to revoke permission and may reevaluate this policy.
- **Blaze Orange**
 - During hunting seasons, hunters and other visitors are strongly encouraged to wear a blaze orange vest and hat for their safety and to alert others to their presence. All users of MTF are encouraged to follow the guidelines of "be seen, be safe".
- **Trail/Game Cameras** - no cameras are allowed, except by permission of the MTFC (townforest@monktonvt.com). Cameras may be allowed for wildlife studies, to address security concerns, to count visitors to the Town Forest, for hunting purposes, or otherwise at the discretion of the MTFC. Cameras must be labeled with contact information and unauthorized/unlabeled cameras will be removed. The Town is not responsible for stolen or damaged cameras or tampering.
- **Other Requirements & Expectations:**
 - Cutting of vegetation or trees for any reason is prohibited. Hunters found to have cleared shooting lines or trails will have their permission revoked.
 - Random shooting or target practice is prohibited

- No commercial hunting or guide services
- **Reasoning for some, but not all, hunting seasons:**
 - In the process of assembling the Monkton Town Forest Management Plan, the Town Forest Committee considered the historical usage of the A. Johnson Property, feedback and suggestions from the town solicited between 2022-2024, and various ecological factors to arrive at a set of site specific rules around hunting. The priorities of the guidelines primarily focus on preserving the access of hunters, managing wildlife populations and ensuring reasonable access for other users of the parcel.
 - Management of the property for wildlife and recreation were top priorities in the community feedback. There are many groups of users for this shared community space, with different interests. Compromise is needed to share the space and not all uses affect other uses equally. Hunting has a larger impact on other uses/users than hiking does, for instance.
 - The general approach to hunting then is to balance the outsized impact it has on other recreational activities by limiting it to certain seasons. This gives hunters some of the more popular seasons to enjoy, maintains an ecosystem predator dynamic, and gives the larger population of non-hunters substantial portions of the year when hunting is not a factor for their forms of recreation.
 - Hunting is a significant cultural, economic and ecological act in the state of Vermont. Besides providing the public with an invaluable connection to the landscape, many Vermont residents rely heavily on wild game to supplement nutritional needs. Critically important is the role that hunting of white-tailed deer plays in managing the resilience of our forests in the face of climate change and invasive species.
 - Preserving the ability for the public to hunt on public land acknowledges that not everyone has access to private land to hunt and/or recreate.
 - The Vermont Department of Fish and Wildlife has recently placed increasing emphasis on the importance of deer harvest (particularly of antlerless deer) as a population management tool. Increasing, and unbalanced, deer populations, in the absence of robust predator populations has created detrimental situations for forest health, human health and animal/herd health throughout the Northeast. Particular concerns include:
 - Reduced recruitment/regeneration of native tree species as deer preferential browse these species. Lack of native species regeneration leaves gaps for noxious invasive species, which then put management (and cost) pressures on the town for removal either mechanically or chemically.
 - High deer populations reduce the available quality forage for the herd, resulting in reduced fawn weight, and increased winter mortality. Higher population density also increases the transmission of disease within the population.
 - Increased occurrence of human deer conflict resulting in collisions, crop damage and Lyme disease transmission can occur in areas of high deer density.
 - **Municipal land:** The Monkton Town Forest is public, municipally owned land, which is not the same as state or federal land. The Vermont League of Cities &

Towns has clarified that options to manage hunting on municipal land are the same as on land that is owned privately by an individual or organization. While a municipality cannot restrict a hunting season townwide or create a new season it can exercise ownership rights on land it directly owns and manages (such as the Town Forest or Morse Park, etc.). As with any owner, town land can be posted as By Permission. The Town may opt to initially approach the limitations listed above as a request and not formally post the land as By Permission unless necessary. The Conservation Easement held by Vermont Land Trust allows limits on hunting and trapping for safety or resource reasons.

- The Vermont Supreme Court confirmed this authority in the case of Hunters, Anglers & Trappers Ass'n of Vermont, Inc. v. Winooski Valley Park Dist., 2006 VT 82, 2, 181 Vt. 12, 14, 913 A.2d 391, 394 (2006). The decision can be found [here](#).
 - **Safety concern:** When surveyed many residents told us they are not comfortable, or are less comfortable, recreating in a forest where hunting may be taking place. While a particular hunter has the expressed responsibility under VT state law to hunt in a legal and safe manner, a large number of surveyed Monkton residents expressed concerns about safety/ comfort around hunting. A number of concerns were also expressed about the safety of pets. While generally available data indicates a very low real-world risk of accidents, the fact remains that many residents have been clear that they reduce or stop their visits to forests while hunting is occurring there. This is particularly an issue for reasonable public access to the Town Forest. Psychological safety affects many of our choices as humans and changes our behavior, regardless of whether that is always logical. These concerns may not be shared by a majority of residents, but it appears to be a substantial percentage. Part of the purpose of a Town Forest is to provide a space where members of the public can enjoy outdoor recreation and that means different things to different people.
 - **Resource concern:** No hunting of predator species. Reasoning: Management goals include supporting wildlife habitat for a range of species. More predators can help manage prey species naturally.
- **Trapping**
 - **Trapping is not allowed**, except by permission of the MTFC to address a nuisance situation.
 - Trapping may only occur under the direction of the Town as a management tool when other methods are not effective or feasible to manage a significant nuisance conflict on this Town property. The Town will inform the public of the timeframe and areas where trapping is occurring, and post signage, to allow visitors to make informed choices on where to recreate. The MTFC and the Monkton Conservation Commission will develop a Beaver Management Plan for the property.
 - **Reasoning** for not allowing the public to trap as per Vermont law:
 - All trapping in Vermont on private or municipal land is by permission. As a municipal owner the Town and easement holders have the same options as a private land owner on land it directly owns and controls. The Vermont Supreme Court confirmed this authority in the case of Hunters, Anglers & Trappers Ass'n of Vermont, Inc. v. Winooski Valley Park Dist., 2006 VT 82, 2, 181 Vt. 12, 14, 913 A.2d 391, 394 (2006). The decision can be found [here](#).

- Regarding the policy of the owner(s): the Conservation Easement indicates that trapping may be restricted by the Town for reasons of safety or resources. The Town has considered input from residents, the public and the Conservation Commission about safety and resources and takes the following positions:
 - **Safety concern:** many residents told us they are not comfortable, or are less comfortable, recreating on land where trapping may be taking place. There was clear input that residents consider trapping to be incompatible with a shared recreational space that kids and pets (and adults) are using. While generally available data indicates a very low real-world risk of accidents, the fact remains that many residents have been clear that they reduce or stop their visits to places where trapping is taking place. This is particularly an issue for reasonable public access to the Town Forest because the locations of traps are not known to the public. Trappers understandably do not want expensive equipment to be tampered with or stolen, so are reluctant to provide information about locations. Due to the degree of opposition to trapping in the public we would see less than full use of the property if trapping were generally allowed. Psychological safety affects many of our choices as humans and changes our behavior, regardless of whether that is always logical. These concerns appeared to be shared by a substantial majority of residents, with primary concerns being about safety and compatibility with other uses. In the community input survey 68% supported a ban on trapping for these reasons and others (such as resource and ethical concerns). 27% were in favor of trapping in some form.
 - **Resource concern:** the management goals and objectives for the Town Forest seek to encourage more wildlife on the property, not less. Predator species should be encouraged, not removed from the landscape. The Monkton Conservation Commission notes the importance of beaver as a keystone species that, while often difficult to coexist with, improve wildlife habitats, storm resilience, and water quality. Protection of water quality in these headwater streams and ponds are supported by beavers. The Commission recommends the adoption of a Beaver Management Plan either for the Town Forest or preferably at the town level. The Commission indicates that such a plan should recommend non-lethal management first (such as beaver deceiver devices) with trapping as a tool of last resort. The plan would describe the process the Town would use to determine if a nuisance situation exists for which trapping is a necessary step, working with residents, the MTFC, Conservation Commission, the Road Crew (if applicable), and the Selectboard.
 - Many residents also stated that trapping is inhumane. That perspective is noted, but per the Conservation Easement the reasons by which trapping can be limited beyond Vermont law are for safety or resource reasons, both of which are described above.
- There are other forms of trapping for scientific research (an example of catching and releasing turtles is mentioned in section 4.3) or to protect a rare species. The MTFC will consider such requests related to field studies and the like and consult with or inform the Selectboard of these projects.

5.1.5 Prohibited activities

The following activities are not allowed at the Monkton Town Forest:

- **No trash dumping**, please carry out what you carry in.
- **No Motorized vehicles: ATVs, dirtbikes, snowmobiles, motorized boats, and other vehicles are prohibited outside of designated parking areas** (except for property maintenance and other management or educational activities with permission of the MTFC, timber harvests, or in response to emergencies). Limited exceptions for mobility disabilities can be granted by the easement holder and MTFC on a case-by-case basis.
 - **Snowmobiling** - the Town has elected not to allow snowmobiles due to substantial concerns raised in the Fall 2024 community survey (63% opposed or concerned, 20% neutral, 17% in favor). Trail conflicts/safety, noise, and pollution/emissions were leading concerns. The property also has limited suitable trails.
- **No commercial recreation** (for-profit recreational activities)
- **No profitable/commercial foraging** (see Timber & Other Forest Products below re: personal use)

See the Conservation Easement for full language on prohibited uses (Section 7.1.1).

5.1.6 Trails & Ecological Trail Standard

Recommendations from the Monkton Conservation Commission are that Monkton Town Forest Committee should: *follow best science and best practices to protect habitat connectivity, making changes where necessary to maintain or improve habitat connectivity.” Limit the number of new trails. Consider removing existing trails where they interfere with habitats. Minimize stream crossings. Avoid slopes and sensitive wetland areas. Agree with proposed content regarding trail construction and maintenance. With regard to mowing trails. Develop schedules that protect native species like the (Rare/Threatened/Endangered) RTE reptile. Avoid disruptive schedules, refer to best science to identify appropriate occasions for this work.*

Existing trail system: The Monkton Town Forest (MTF) was previously owned by the A. Johnson Co, a local forestry and timber management company, who conducted logging operations on the property for almost 50 years. Their goal was largely to manage hardwood veneer and sawlog production that they processed at their local mill in Bristol, VT. (Goland et al. 2024). Logging roads were built and used by A. Johnson, many of which remain and have formed the existing network of forest roads through the central portion of the property. Some of these roads had crushed stone added to them over the years as they prepared for timber harvests. Many of these will serve as the main framework of trails for the Monkton Town Forest, provided they meet the ecological trail standards described below.

Since the land is now a Town Forest, the use has changed and therefore some of the trails will as well. In order to provide recreational opportunities to the community, while respecting the wildlife and sensitive habitats and natural communities, the forest roads and walking paths will be designed with that balance in mind. The University of Vermont (UVM) Landscape Inventory and Assessment (LIA) students produced a report in the Spring of 2024 after spending the semester in the forest. They stated that the Central Zone (See zone map Figure 15: West of Hardscrabble Road, and East of the ledges) is most appropriate for recreational trails given the lowest proximity to sensitive habitats and has no areas of erosion or flooding concern and has had the most historic disturbance. They encourage MTF to concentrate trails in the central zone where most disturbance has occurred and suggest using existing logging roads as trails (“avoiding creating new trails outside this zone is encouraged”).

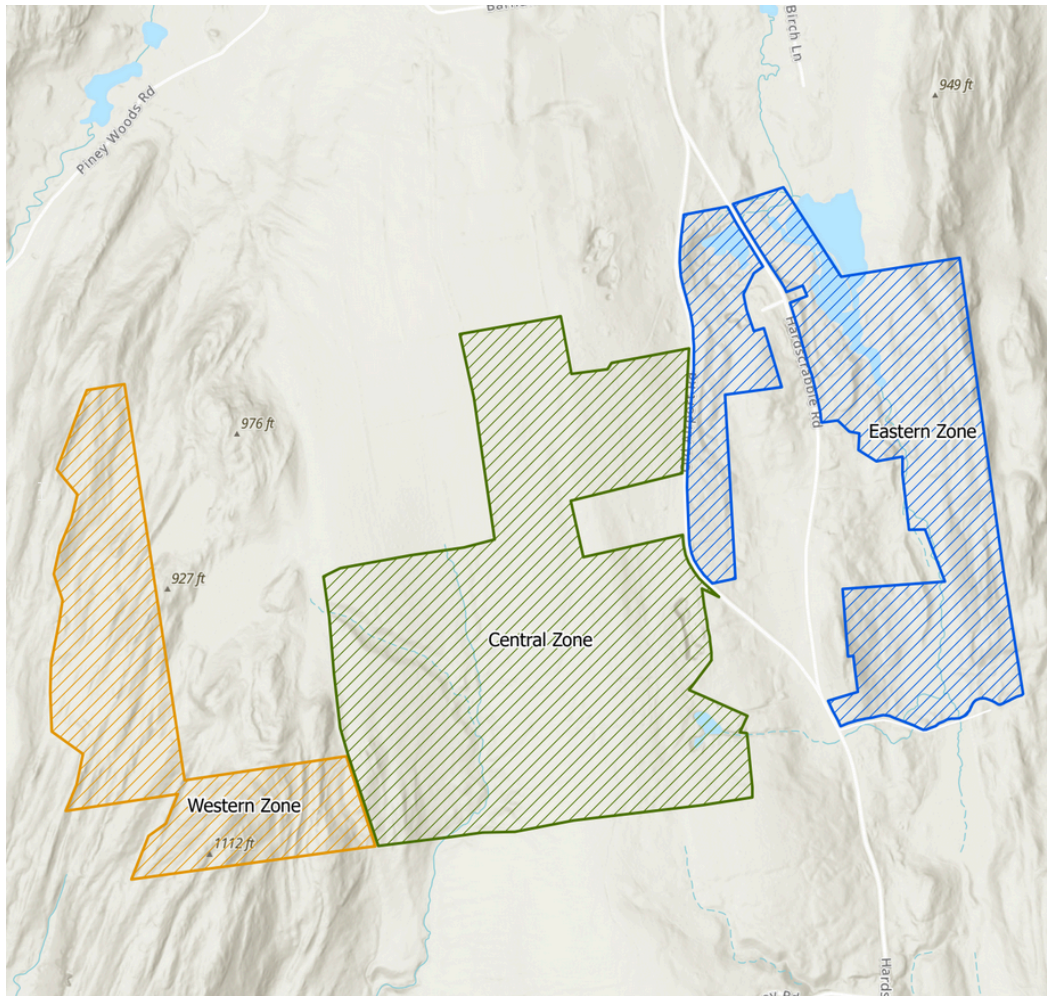


Figure 15: This Zone map was produced by the UVM Landscape Inventory & Assessment students, which identifies suggested zones for various uses to allow for concentrated recreation and activity in the central zone while allowing wildlife and sensitive areas to be less disturbed in the far eastern and western portions of the property.

Proposed Trail Improvements: Follow ecological trail standards. Create a couple loops through gentle topography, close or reroute steep sections. Assess existing forest roads and confirm with the UVM LIA work (UVM Slope Analysis Map - see Section 7.12)

Users: A variety of user groups will recreate on the property throughout the seasons as outlined in the allowed and restricted uses, with the right of way favoring the pedestrian.

Trail maintenance: The Monkton Town Forest Committee will be responsible for maintaining and coordinating trail maintenance as well as managing user conflicts.

User conflicts: If user conflicts arise, the MTFC will learn about the conflict from various perspectives and users, discuss as a committee in order to determine a solution that is in line with the management plan goals and objectives while minimizing the impact to one group or another. The MTFC will communicate their decision with the users.

Adding and removing trails: If it is determined that additional trails or segments are needed. The MTFC will review the proposal and refer to the ecological trail standards as to whether the addition or removal is appropriate. In order to be sensitive to the wildlife that lives at the MTF, the goal will be to limit the

number of new trails and consider removing existing trails where they interfere with habitats or other sensitive areas

Ecological trail standards (See Figure 16):



Figure 16 DRAFT ecological trail standards map, to be updated as trails are assessed, field data is gathered and additional information is learned about the property. To include contours, buffers, streams, wetlands, sensitive areas, steep slopes, natural communities etc.

● **General guidelines:**

- Identify areas where there shouldn't be trails, remove/close if appropriate (steep, sensitive, wet)
- Limit number of new trails/roads/landings in order to stay beneath the threshold of 5% or less of suitable acreage.
- Assess existing forest roads and paths (See 7.1.2)
- Avoid habitat fragmentation by concentrating trails in the central zone. Larger mammals are aware of human presence at 400 ft.
- Avoid steep slopes and unstable soil conditions where possible (maximum slope considered acceptable without implementing erosion control measures (e.g., water bars) is 5-10%)
- Avoid special habitat types (vernal pools, ledges, cliffs, and talus slopes)
- Restrict trail building near wetlands and their buffers, check in with state wetlands ecologist for review and approval.
- Minimize stream crossings
- Avoid sensitive natural communities
- Central zone (area west of Old Airport Road to pinch point) is most appropriate for trails given lowest proximity to sensitive habitats and has no areas of erosion or flooding concern and has had the most historic disturbance. Concentrate trails in the central zone (west of old airport and east of pinch point)- already where most disturbance has

- occurred and suggest using existing logging roads as trails (“avoiding creating new trails outside this zone is encouraged”). (See Figure 15)
- Close trails for specific breeding seasons if necessary
 - **Trail building and maintenance:** Trail construction should be as contained as possible, to minimize frightening and disturbing wildlife. Tools should be kept small, simple and electric vs. gas where possible to prevent excess noise and fuel.
 - Mowing best practices: the MTFC will collaborate with the Conservation Commission and other experts to establish a best practices document for mowing to protect reptiles on this property before any mowing occurs during the Plan period. Examples may include: mow clearings after 11/1 (and maybe every other year) and trails only on dry overcast days when reptiles and amphibians would not be sunning themselves on trails. Mowing before 11/1 should avoid ground-contact wheels/rollers or strong updrafts in favor of a sickle-bar or similar, if such equipment is available.
 - Directionally the MTFC should look toward electric options for mowing, trail maintenance, etc., where available/feasible/practical. Reduced noise and other emissions would tend to lower the impact of these activities on wildlife, water, soils, recreation, neighbors, etc.
 - **Maintain and Establish Buffers** (utilize the following buffers when laying out new trails, or assessing existing):
 - Wetland = 60ft minimum. Route trails away from wet areas to limit disturbance to wildlife, vegetation and sensitive areas.
 - Stream = 50’ from the top of bank or 100ft from either side of stream (whichever is greater).
 - Monkton zoning’s definition of top of bank: “Top of Bank: means that vertical point along a stream bank where an abrupt change in slope is evident. For streams in wider valleys, it is the point where the stream is generally able to overflow the banks and enter the floodplain. For steep and narrow valleys, it will generally be the same as the top of slope.”
 - 610.C.2: “River corridors as established by the Vermont Agency of Natural Resources including the Statewide River Corridors and the area within 50 feet from the top of slope along any stream without a defined corridor.”
 - Ponds = 50ft
 - Vernal Pools = 100ft primary zone, 650 ft secondary zone.
 - Steep slopes = 30% and greater. (Monkton has some zoning rules for 20% needing a Conditional Use for development. Section 599 addresses Steep Slopes and notes in 599.B that “No land development, soil disturbance, or alteration of the natural grade shall occur on very steep slopes (greater than 25%) unless approved by the DRB through a conditional use process.” In 599.C: “Land development, soil disturbance, or alteration of the natural grade is strongly discouraged on moderately steep slopes (greater than 15% up to 25%).”)
 - Property boundary buffer = 50 ft or greater (to the extent practical and when no alternate route exists, some exceptions are allowed for historical features, such as the Old Town Road)
 - Building buffer = 500 ft (to the extent practical)
 - If additional rare species or habitats are discovered, appropriate buffers will be put in place to protect the species
 - From Monkton’s Unified Planning Document (zoning rules):

- The Wetlands District includes all land designated as Class I and II wetlands as defined by the Vermont Wetland Rules and generally consists of mapped wetlands on the National Wetlands Inventory Maps and their required State buffers. Riparian buffers around streams or rivers must be kept vegetated with non-invasive species and native trees. Wetland buffers for adjacent land with slopes equal to or greater than 20% slopes are increased to 100 feet. Other than the exception noted above, uses on this land will be limited to agriculture, forestry, public outdoor recreation and wildlife refuge.

5.2 Timber & Other Forest Products

Forestry: As the easement holders, any forest management plan (FMP) would need to be approved by Vermont Land Trust and the Vermont Housing and Conservation Board. By default, a FMP would need to follow the VT Water Quality Acceptable Management Practices, developed by the VT Department of Forests Parks and Recreation, and the restrictions found in the Conservation Easement. The AMPs include provisions for protecting water quality during logging operations, set guidelines for forestry operations around sensitive areas (such as vernal pools), and spell out other practices that ensure the forest ecosystem is protected during forestry operations. Additionally, any Plan would need to be approved by a professional forester.

While the easement does not specifically require active timber management for the purposes of timber or habitat quality, it is important to look at the historical and ecological context of the parcel. Aside from a few isolated remote patches of older growth, a vast majority of the property has been managed for timber for several decades. Currently most of the property is composed of northern hardwood mix with a few patches of planted red pine. It is likely that some form of timber management would support wildlife and forest health, depending on management objectives, under the supervision of a professional forester. The ultimate goal of a FMP should be to describe an approach that is complementary to the town of Monkton's values and priorities related to wildlife and the long-term health of the forest, opportunities for recreation, and potential economic and cultural value for the town from timber products, in that order. It will be essential to take a full accounting of benefits and impacts from any harvest, including the likelihood and cost of managing increased invasive plants following a harvest (these are currently a very light presence in the Central Zone of the parcel). The frequency of major storms and invasive and native insect infestations is increasing as well.

There appears to be little need to urgently establish an FMP and much still to do in other areas of establishing the Town Forest. Although the Town is not immediately pursuing an FMP there are some key inputs that will be considered when we do, along with past inventories and FMPs:

Shade Tree Preservation Plan: Collaborate with the Monkton Tree Warden on their shade tree preservation plan as it relates to the Monkton Town Forest property. (Contact: treewarden@monktonvt.com)

Legacy Trees: Create a standard for identifying legacy trees on the Monkton Town Forest that can be protected, documented and studied.

From the Monkton Conservation Commission in January 2025: *Resources (use) should be based on science and conservation thought leadership over the past 10-15 years, new learning about how to manage forest should be used. Regenerative forestry focused on mimicking the conditions of an old growth forest featuring multiple layers and habitats necessary for native species, especially keystone plant and animal species. Leaving some sections untouched. Adopt a Forest/Timber management plan*

addressing scale and priorities such as native wildlife preservation and invasive species management. Budget and ROI. Funds should benefit forest management and not purposes unrelated to Town Forest.

From the University of Vermont Landscape Inventory & Assessment report: *Concentrate any logging operations in the central zone (west of old airport road and east of pinch point) - soils most stable and no state ranked natural communities or rare plant populations. Limit logging seasonally - when ground is frozen to minimize soil compaction and vegetation impact.*

Guidance from Vermont Family Forests: *be sure the timber harvests are sustainable: economically viable, ecologically feasible, and socially responsible. Avoid whole tree harvesting. Leave anything in the woods that does not pay its way out. Be clear about the return on investment. Be certain not to make invasives worse.*

Another resource to review when creating an FMP is the Vermont Forest Parks & Rec guide on [Town Forest Stewardship](#).

The use of biodegradable chainsaw bar oil is required for all chainsaw work, except in emergencies.

Firewood: firewood obtained to clear forest roads or paths during trail maintenance/trail building, under the supervision of the MTF Committee, may be given to volunteers doing the work, donated to the Monkton Wood Bank, or sold to benefit the Monkton Town Forest Management Fund. This incidental firewood harvesting does not require a Forest Management Plan (per Vermont Land Trust).

Note: the Monkton Wood Bank is a free heating assistance program serving low-income households in Addison County (since at least 2016) who are experiencing a heating emergency. Recipients are usually registered with H.O.P.E. (Helping Overcome Poverty's Effects) and are then connected with the Wood Bank to receive a delivery. Wood Bank volunteers accept donated wood from the community and process, dry, store, and then discreetly distribute it to recipients vetted by H.O.P.E on request.

Sugaring: Community level sugaring, when following best management practices, is not prohibited by the easement. Any proposals for sugaring operations would need to be thoroughly vetted in order to make sure that they do not run counter to any efforts to protect rare native species, enhance water quality and make sure that sugaring does not have a disproportionately negative impact on other users of the Monkton Town Forest. There is potential for community involvement in the sugaring operation, with specific interest in making an engaging and interactive program for schools.

Foraging: Foraging plants and fungi for personal consumption and use is allowed except for the collection of state and federally listed plant species (see list at VT Fish & Wildlife: [here](#)), rare and uncommon native vascular plants (see list at VT Fish & Wildlife: [here](#)), wild leeks/ramps (*Allium tricoccum*), or ostrich ferns/fiddleheads (*Matteuccia struthiopteris*). Please take only what you will use and leave the rest for other members of our human and natural community. Commercial harvest is prohibited on the property.

If you are taking invasive species, please be sure of what you are harvesting and report the location to the MTFC for future invasives awareness and management. Take care not to leave any portion of invasive plants in any new locations on the property.

5.3 Invasive Species

There are invasive species at the Monkton Town Forest (MTF). The goal is to mitigate the overall presence and spread of invasive plant and animal species through education, awareness and removal at a community level. The Monkton Town Forest Committee (MTFC) will work in partnership with the [Monkton Conservation Commission](#) (MCC) to educate, identify, and remove invasive species where

possible. The MTFC and MCC will also develop an Invasives Management Plan for the Town Forest and establish a map of known invasives and their locations as part of that plan. To date, the MCC hosts community events to remove parsnip, buckthorn and garlic mustard at various locations in town. If it is determined that a formal inventory or assessment is needed, the MTFC and MCC will consult with one another to formulate a plan to do so. If this requires funding, they will look at grants in the area or utilize the management fund if suitable.

There are a variety of uses that have the possibility to transport invasive seeds or aquatic invasives, which can be carried on our footwear, by horses, in boats, in bike tire treads, by logging or maintenance equipment, and by other vectors. Care should be taken to minimize further introduction and spread by educating users and caretakers of the town forest. If certain uses are identified as the reason for bringing in various invasives (plant or animal), the particular use should be evaluated by MTFC and MCC as to whether actions could be taken to minimize the invasives while still allowing the use, or if further limitations should be established.

In addition to the removal, the goal is to support the proliferation of native species.

The known animal/insect species of concern include but are not limited to: hemlock wooly adelgid, elongate hemlock scale, emerald ash borer, and spotted lantern fly. None are known to be present yet in the MTF although emerald ash borer is very likely here already, having been confirmed in adjacent towns.

See Appendix Section 7.10 for a table of the known invasive plant species to date along with the season for removal, priority for removal, ease of spread, risk to public, location, and amount on the property.

References: [Home | Vermont Invasives](#) (<https://www.vtinvasives.org>)

5.4 Education

The Monkton Town Plan sets forth the guiding principles for the town. One principle states: “Support opportunities for high quality education and educational opportunities for Monkton residents of all ages.” The Monkton Town Forest offers an outdoor classroom for all ages. A variety of natural features, wildlife, and historical landmarks offer engaging learning occasions for everyone. The forest will allow for hand-on, place based education that will foster connection between the community and the land.

Potential education opportunities include, but are not limited to:

- Non-lethal beaver management
- History of red pine in Vermont
- Watersheds and wetlands
- Kaolin and iron ore history
- Plant and bird identification
- Game of Logging
- Hunter safety **courses to promote safety and community awareness/understanding of hunting**
- Water quality monitoring
- Trail layout and maintenance workshops
- Invasive plant management
- Basket-making

Potential Partnerships - there are many schools and organizations that the MTF could partner with for learning opportunities, such as:

- Monkton Central School
- Monkton Russell Memorial Library
- Mount Abraham High School

- University of Vermont
- Middlebury College
- Monkton Conservation Commission
- Monkton Museum and Historical Society
- Vermont Master Naturalist Program
- Local Scout Troops
- Willowell
- Red Cedar School
- Hannaford Career Center
- Vermont Family Forests
- Vermont Reptile & Amphibian Atlas
- Vermont Coverts
- the Watershed Center
- Lewis Creek Association

Management objectives include:

- Offer opportunities for all kinds of people to become naturalists and learn about natural communities
- Educational activities should support and enhance the forest as an ecosystem, minimizing impacts and disruptions
- Support a wide variety of learning for diverse interests

Management actions, including:

- Partnering with organizations to offer programming in the forest
- Offering community events with options for education
- Allowing opportunities for learning during management components

5.5 Proposed Improvements

- **Access Points/Parking Areas** (with approval of easement holders)
 - Boulder perimeter around parking areas with a gravel base. Locations to be reviewed/approved by the State Wetlands Ecologist.
 - Hardscrabble Rd Parking Area (near the Fire Pond / Kaolin Pond):
 - Parking for 4-8 cars (may start smaller and expand if needed)
 - Note that a connecting trail between the roads would come out by the firepond.
 - Pulloff space for school bus at fire pond
 - Hardscrabble Rd Parking Area (Alternative to above location - just north of Queen Bee's)
 - Parking for 4-8 cars (may start smaller and expand if needed)
 - Pulloff space for school bus
 - Old Airport Road Parking Area:
 - Utilize existing log landing
 - Old Lovers Lane (OLL) - Potential parking near entrance at Hardscrabble Rd:
 - 1-2 cars
- **Old Airport Road to be laid out to be accepted as a 50' wide Class 4 public highway upon satisfaction of the Selectboard's following three conditions:**
 - A survey of the road (completed in August 2024)
 - The successful purchase of the Town Forest parcel for use as a public town forest (completed in November 2024)

- The dedication of Old Airport Road as a public highway by all of the landowners who own or possess an interest in the road. (Pending)
- **Welcome Kiosk(s)**
 - Hardscrabble Rd (larger kiosk)
 - Old Airport Road (larger kiosk)
 - Old Lover's Lane (mini-kiosk)
 - Mini-kiosks with two pages of info are in place during the Interim Plan at 6 locations. Similar mini-kiosks would remain at lower-traffic access points, such as Old Lover's Lane or at the border with the Watershed Center.
 - Boundary marking signs - paint, possible metal diamond shape boundary signs, possible By Permission Only signs for hunting.
 - Kiosks to be constructed from local wood and designed in an aesthetically pleasing, natural way, such as the kiosks at the Audubon Center in Huntington.
- **Gates**
 - Hardscrabble at Fire Pond (exists)
 - Chain or gate on the road going east just north of Queen Bee's in shared ROW (new) - locks for both the Town and the Jewell family
 - Gate just beyond the ROW with Jewell going east (new)
 - Old Lover's Lane (OLL) - potential gate to make OLL a pent road. Locks for Town and the A. Johnson Co.
- **Stream crossings**
 - Improvements to stream crossings such as bridges and other wet locations on Existing Primary Forest Roads (also referred to in this document as "trails"), if any, will be in accord with Vermont Acceptable Management Practices and Vermont Wetland Rules. Refer to the Map in Appendix A.
- **Trails**
 - There are existing woods roads and informal trails on the property but they need to be assessed according to the trail standards to determine which can stay and those that might need to close due to steepness, proximity to wetlands or sensitive areas. The University of Vermont Landscape Inventory & Assessment course stated that the **trail on the eastern portion of the property is most notable and should be further evaluated- areas of potential flooding and erosion due to steep grading.**
 - The goal is to have a trail system that follows the trail standards and aligns with the allowed uses on the property.
- **Benches (several):** to be built from local materials (if possible) and made from sustainable and thoughtful designs such as the Leopold bench.
- **Picnic tables/area** - may have one or more picnic tables near parking areas
- **Small shade structure (1-2)** if suitable location is determined and is in line with VLT easement.
- **Plans for the utilization or demolition of existing structures:** There are no existing structures that will be utilized. There are old foundations from the Kaolin operation that will remain as part of the historical evidence on the property.
- **Kaolin Dam** - evaluate & execute next steps for Unsatisfactory status; potential decommissioning (partial or full)

5.6 Community Benefits

The creation of a Monkton Town Forest has been part of the Monkton Town Plan since 2014. The current (2020-2028) Monkton Town Plan states that the creation of a Town Forest "improves residents' quality of life by providing opportunities for recreation, hunting, appreciation of the natural environment, and

exercise for health and well-being.” Additionally, the Monkton Town Forest will provide educational opportunities (as detailed in Section 5.4), a community meeting space, and bring Vermont closer to the goals set out by the Community Resilience and Biodiversity Protection Act (30 by 30).

In addition to benefiting our human community, the conservation and management of the Monkton Town Forest will protect and potentially enhance habitat for wildlife species, including several rare species. The Monkton Town Forest is also categorized at a statewide level by Vermont Conservation Design as a “Highest Priority Interior Forest Block” and a “Highest Priority Connectivity Forest Block.” The conservation of this property will help sustain Vermont’s natural legacy into the future by contributing to a “connected landscape of large and intact forested habitat, healthy aquatic and riparian systems, and a full range of physical features (bedrock, soils, elevation, slope, and aspect) on which plant and animal natural communities depend” (Vermont Agency of Natural Resources 2025).

5.7 Action Items

The Monkton Town Forest Committee will develop and maintain a roadmap of Action Items over time, consistent with Sections 1.4 (Proposed Improvements), 1.5 (Responsibilities, Governance, and Timeline for Action), 2.2.1 (Community involvement in the implementation of the plan), 2.3 (Responsibilities and Governance), the entirety of Section 5 (Management Goals and Objectives) and any other applicable sections of the Plan. This roadmap will include details, dates, funding, the plan for community engagement and involvement, and costs as they become available for the following: Public access & recreation, wildlife, water features, invasive species, education, timber management, and more.

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7. Appendices

Note: the following will likely be included in their entirety in the final Plan, but are mostly links for purposes of initial document review and document length.

7.1 Legal Documents

7.1.1 [Conservation Easement](#)

7.1.2 [Conservation Easement Map](#)

7.1.3 [Deed to the Monkton Town Forest](#)

7.2 [Community Engagement Report - Summer 2023 Report](#)

7.3 Community Engagement Report - Management Plan - see sections 1.2 & 2.2

7.4 [Baseline Documentation Report \(Vermont Land Trust\)](#)

7.5 [UVM Landscape Inventory & Assessment Final Project](#)

7.6 [Arrowwood Environmental Mapping Project](#)

7.7 Forest Management Plan (placeholder for a future FMP)

7.8 [Letters of Support](#)

7.9 Management of Invasive Species

	Name	Scientific Name	Season for Removal	Priority for removal	Ease / Rate of spread	Risk to public	Location on Property	Amount on property
1	Honeysuckle	<i>Lonicera morrowii</i>	Early Spring and late fall	medium	medium	low	East / Central	medium
2	Poison parsnip	<i>Pastinaca sativa</i>	June - August	high	high	high	Central	low
3	Buckthorn	<i>Rhamnus cathartica</i>	Spring and fall	medium	medium	low	Central	medium
4	Multiflora Rose	<i>Rosa multiflora</i>		high		high	Central	low
5	Garlic mustard	<i>Alliaria petiolata</i>	Early spring (before seeds are set)	high	high	low	Central (recent log landing)	medium
6	Japanese Barberry	<i>Berberis thunbergii</i>	Early spring	low	low	medium	?	low

7	Bittersweet	<i>Celastrus scandens</i>		high	high	low	?	very low
	Aquatic invasives?				high	low	Kaolin Dam	

7.11 Community Values Mapping Event (2020)

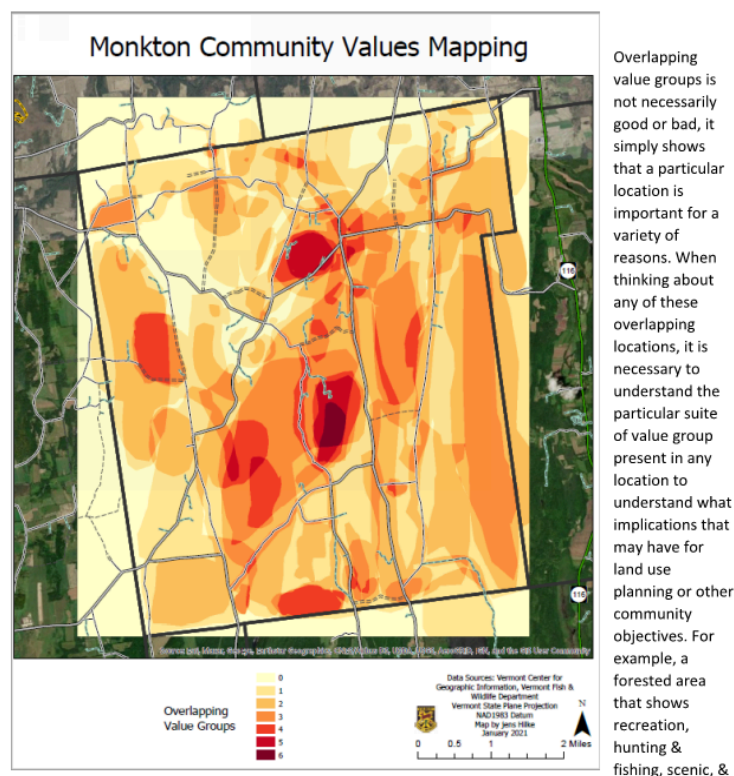
Monkton Community Values Mapping Event - Nov/Dec 2020

<http://monktonvt.com/documents/2021/08/monkton-community-values-mapping-report-2020.pdf/>

This is the final page which consolidated the various groups (recreation, hunting, scenic, historic, working landscape, natural resource, community (Monkton Town Forest would score even higher now):

Overlapping Values Map

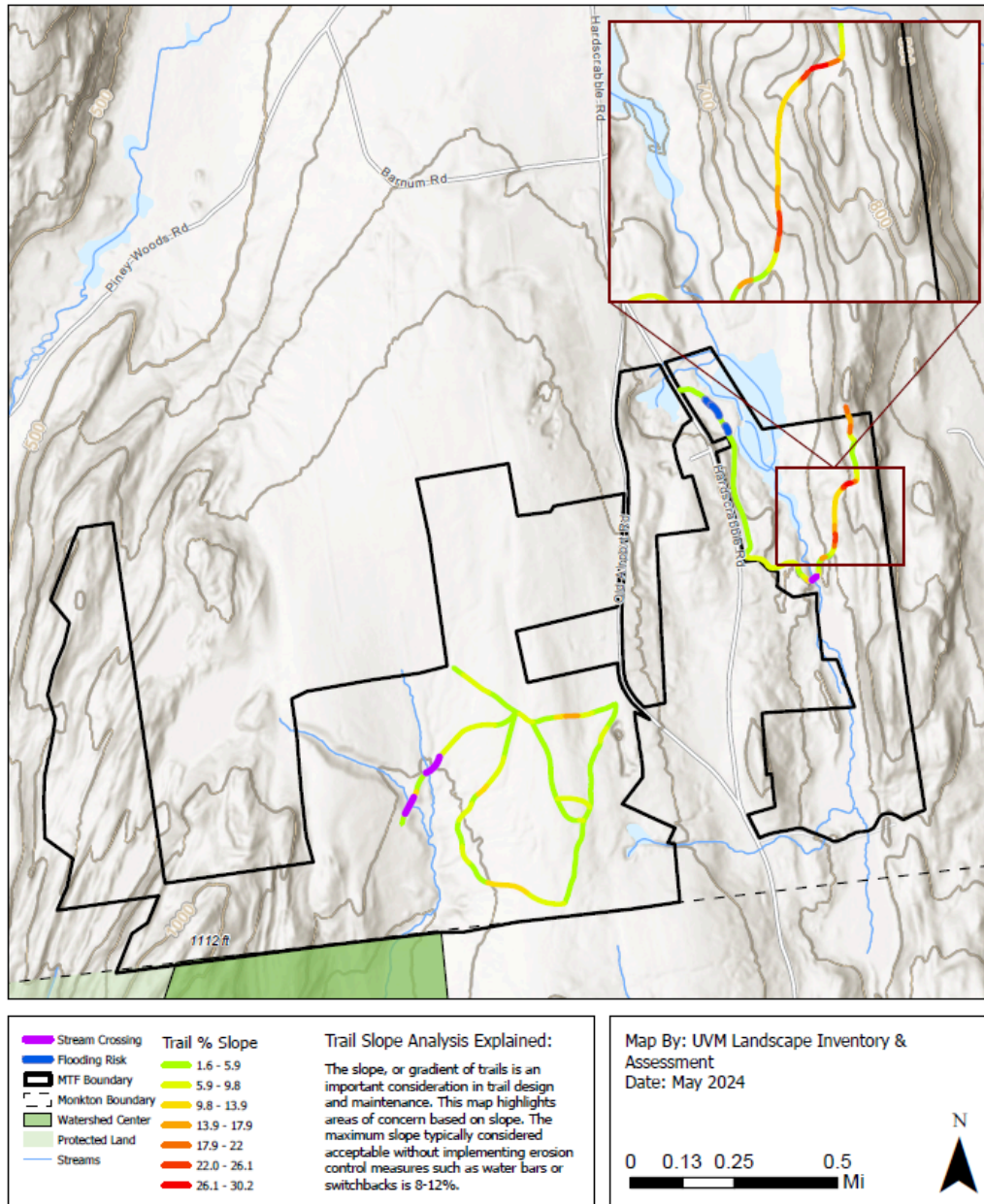
Each Value Group (e.g. "Recreation" or "Scenic") combines results from all of the small group maps in that category. Including the "Natural Resources" value group that Team 2 created, there were seven value groups in all. The following shows an overlap of these seven value groups. The legend shows numbers 1-6. These do NOT refer to a particular value group. Rather, they show the number of value groups overlapping at that location. To determine which values are present at that location, refer to the Results by Value Group section.



working landscape values at the same location suggests the location meets a variety of community needs and may be unsuitable for other values such as residential development based on public opinion.

7.12 Existing Major Trails Slope Analysis

Existing Major Trails Slope Analysis



7.13 Document History

A place to keep track of dates for various milestones, updates, revisions and a brief summary of what was changed and by whom.

The original Monkton Town Forest Management Plan authors and contributors included:

Monkton Town Forest Committee: Callie Brynn (chair), Jaime Schulte (vice-chair), Molly Parren, John McNerney, CJ Buzzy, Jessica Demeritt and Peter Dufault.

Monkton Conservation Commission: Sue Stasny, Ann Miller, Debra Sprague, Janet Schwartz, Jaime Schulte and David Moore.

Initial draft: March 14th, 2025

Final draft: April 4th, 2025

First long-term Monkton Town Forest Management Plan enacted: ? ?th, 2025