Chapter 6 - Open Space & Recreation

Section 1: Introduction

According to the Massachusetts's Executive Office of Energy and Environmental Affairs, open space is "conservation land, recreation land, agricultural land, corridor parks and amenities such as small parks. green buffers along roadways or any open area that is owned bv an agency or organization dedicated to conservation." The primary purposes for protecting open spaces are to retain both the town's rural character and the



land's intrinsic ecosystem services and to promote and provide high diverse, high quality, recreational opportunities. Ecosystem services include protection of water quality, groundwater recharge, habitat for wildlife from pollinators to apex predators, attenuation of heat, dust and noise, replenishing the oxygen in the air we breathe, and, perhaps most importantly, the removal of carbon dioxide from the atmosphere.

This chapter serves the purpose of helping the town to identify critical resources in need of protection and direct growth to areas that are most appropriate for it. Therefore, the Open Space & Recreation element must examine a community's desire to ensure a balance between the conservation of open space areas and the future and current development trends of the community. As communities seek to improve public health, the provision of recreational programs for people of all ages should be accommodated. Much of the information in this chapter was obtained from the 2018 Open Space Recreation Plan¹ (OSRP). However, some information has been obtained from draft documents of the update to the plan that is currently underway.

Hubbardston received input from the residents of the Town through a survey that asked questions regarding the importance of the preservation of open space and other community priorities. The results obtained from these questions have been incorporated and included in both the Goals and Actions. Utilizing information from OSRP, this chapter includes a description of the community's needs for recreational opportunities, suggestions for conserving land for Open space & Recreation, and an outline of community goals and actions for conserving open space and preserving the Town's rural landscape character.

¹ Hubbardston's current OSRP will expire in 2025 and is currently in the process of being updated

It is the Community's desire to balance Open Space & Recreation needs with other important needs for the future growth of the Town. To accomplish this vision Hubbardston will maintain and cultivate an outstanding environment, providing high quality, engaging recreational activities and opportunities, and will pursue the foresightful conservation of Open Space & Recreation lands throughout Hubbardston, while continuing to implement related goals and actions for the benefit of the Town and its residents and visitors.

Ultimately, the OSRP is designed to meet the Massachusetts Open Space & Recreation Plan requirements set forth by the Executive Office of Energy & Environmental Affairs, Division of Conservation Services, and will make the Town eligible for certain State grant programs, in particular, LAND and PARC grants for open space acquisition of conservation or park lands, or active and passive outdoor recreational facility improvements. Hubbardston's current OSRP and previous iterations of the Plan and past accomplishments along with drafts of the updated chapters of the OSRP update that is underway can be viewed on the Town of Hubbardston's Open Space & Recreation Committee webpage.²

Importance of Open Space Protection

A town's "open space", or undeveloped lands provide many benefits. Protected Open Space & Recreation lands can be designated for a variety of purposes including outdoor recreation, agriculture, forests & forestry, wildlife habitat, and parks & playgrounds. Some open space lands may be dedicated for conservation purposes and used for passive outdoor recreation activities such as walking, hiking, and nature study while others may be dedicated to active recreation for uses such as soccer, baseball, or mountain biking. Still yet, some open space lands may allow for other serviceable, yet sustainable land-uses such as agriculture, forestry, fishing, and hunting.

The protection of open land is important for many reasons. Uncontrolled development or taking of land for things like pipelines can result in degradation of public drinking water sources as well as other very important environmental and aesthetic features. Hubbardston helps provide drinking water for millions of people in metropolitan Boston, Fitchburg and Gardner. Loss of open space results in the destruction of wildlife habitat, destruction of unique scenic and historic resources and the destruction of recreational resources. Protecting land in perpetuity for the purpose of providing critical renewable natural resources, such as forests and clean drinking water, as well as for fish and wildlife habitat and outdoor recreation is necessary and beneficial for a community.

Besides providing recreational opportunities and wildlife habitat, undeveloped open space lands contribute to community health and well-being through the provision and protection of clean air, and clean water, and can provide economic benefits to a town.³ Recent studies have found that Open Space lands save towns money because they generate more revenue than they cost. Residential lands, on the other hand, cost towns money because they generate less tax revenue than the cost-of-services they require the town to provide. Several studies, conducted for locations throughout Massachusetts and the United States, support that assertion. The results of those studies indicate that

² <u>https://www.hubbardstonma.us/open-space-committee/pages/open-space-recreation-plan</u>

³ <u>https://masswoods.org/communityconservation</u>

Open Space lands may be a more cost-effective land-use for a town's budget than Residential lands.⁴ While there are short-term costs to acquiring Open Space lands, the long-term benefits are clear: Open space lands play a key role in maintaining a balanced town budget and vibrant local economy.

There are economic benefits associated with the protection of open space lands. Agricultural lands, and other types of open space lands have been shown to have lower cost of services ratios. Numerous cost-of-community-service studies prepared by the American Farmland Trust have proven that residential development requires more in service costs than it pays in taxes. Hubbardston is a destination for recreational pursuits such as camping, hunting, skiing, hiking, mountain biking, and horseback riding. Loss of recreational areas could help contribute to loss of potential associated income revenue for local campsites, stores, and restaurants.

Hubbardston's desire is to protect. maintain, and diversify the open space available to its citizenry. Hubbardston acknowledges the value of existing open spaces-in terms of aesthetics, health, welfare, the economy, and recreation. At the same time, Hubbardston recognizes the need to maintain a balanced fiscal budget, largely dependent upon tax revenue, while providing for a variety of land uses to meet commercial, industrial, and residential needs, all while still providing for the protection of natural resources, ecological



habitats, clean air and water, and public conservation and recreation lands and opportunities. To balance these desires, Hubbardston also seeks to make better use of existing conservation and open space land for appropriate recreational activities and opportunities, and to expand upon and provide higher-quality recreational opportunities for residents while also increasing economic growth.

Ultimately, the quality of life for all of Hubbardston's residents is enriched by the quality of the open space in the Town and region, whether the space is enjoyed for recreational activity or for the tranquility and aesthetic benefits that green open space lands provide. Hubbardston enjoys a vast array of open space resources, in part a result of large state land conservation.

https://masswoods.org/communityconservation

https://masswoods.org/sites/masswoods.org/files/pdf-doc-

https://farmlandinfo.org/publications/cost-of-community-services-studies/ https://masswoods.org/sites/masswoods.org/files/COCS%20metanalysis.pdf

⁴ For more information on the economic benefits of open space lands and the evaluation of cost-of-services for agricultural and open space lands visit the UMass-Amherst MassWoods Community Conservation webpage or view the Fact Sheets produced by UMass - Amherst (2019) and Farmland Information Center (1995 – 2016). For an academic review and scientific meta-analysis of cost-of services studies see Kotchen and Schulte, 2009. Access to source documents referenced within this footnote can be found at the following web-addresses:

Preservation of open space has natural, social, economic, and physical and psychological health & wellness benefits. Open land provides aesthetic beauty and visual relief from the developed landscape. Vegetation helps filter out pollutants from air, rainwater, and runoff, providing clean air and water. Vegetation also mitigates temperature extremes through the process of transpiration mitigating the local effects of climate change. In short, protection of open land is important for both human physical and mental well-being, and the ecological health of natural landscapes and ecosystems, habitats, and wildlife.

The examples demonstrated above are just some of the many reasons why Open Space is important to a community. The natural, geo-physical, socio-economic, and cultural make-up of every community is different, therefore, the community setting of any given place is as varied and unique as the place itself. This is especially true relative to regional context, population dynamics, development patterns, history & heritage, natural and physical landscape, natural resources, environmental challenges, and existing open space lands, including those that are privately or publicly owned and unprotected, permanently protected, or partially protected by restriction, easement, or term-limited program. For this reason, it is important to identify a community's specific needs, establish a clear vision, set meaningful, relevant, attainable goals, identify priorities, and create an achievable action plan to enact the vision and attain the goals, ultimately meeting the specific community vision and needs.

Hubbardston faces some major decisions such as determining which land parcels, if any, are important to acquire, identifying and then addressing any unmet Open Space & Recreation needs, and how to keep the preservation of town character at the forefront of any development discussions without greatly stimming opportunities for growth. Having a solid inventory of open space lands and recreational facilities and a plan as to how they will be taken care of will be a critical stepping-stone as the town moves towards

achieving its goals. The current update of Hubbardston's Open Space & Recreation Plan, and this present Chapter of the Master Plan, aim to accomplish that mission: An up-to-date and accurate inventory of Open Space & Recreation assets; Identification of Open Space & Recreation Needs and Goals; and the creation of a Vision and Action Plan capable of guiding and accomplishing the Town's specific Open Space & Recreation needs and goals.



Section 2: Community Setting

Surroundings of Hubbardston

The Town of Hubbardston is located in the hills of northern Worcester County, Massachusetts. Towns bordering Hubbardston are: Gardner and Westminster on the northeast, Princeton and Rutland on the southeast, Barre on the southwest, and Phillipston and Templeton on the northwest. Hubbardston is 19 miles northwest of Worcester and 56 miles northwest of Boston, with the urban areas of Gardner, Leominster, and Fitchburg nearby. This convenient location to urban centers of employment has contributed to the changing demographics of the town. The past years have witnessed the transformation and growth of a rural, small-industry based community into an increasingly suburban, commuter/bedroom community⁵

The hilly terrain and numerous streams found here powered many of the small mills and industries of the nineteenth century. Geographical location and the geological framework of Hubbardston contribute to the production of some of the best drinking water in Massachusetts. The cities of Fitchburg, Gardner, and Metropolitan Boston derive a substantial amount of their drinking water from surface and ground water sources located in Hubbardston. The town's rich biological diversity is also attributable to its location. The boundary of two eco-regions, the Worcester Plateau and the Lower Worcester Plateau, divides Hubbardston in half. Eco-regions are defined by geology, hydrology, climate, and biological diversity. Where two eco-regions comingle, habitats and associated wildlife are much more diverse. Figure 2 provides regional context for the landscape-scale open space lands in Hubbardston and bordering communities.

Landscape Character and Bio-Geographic Context

Like many towns in rural Massachusetts, Hubbardston possesses a landscape made up of hills, valleys, rivers and streams, and is primarily forested with numerous wetlands, fields, and the stonewalls of a former agriculturally dominated community.

Because of its location within the Ware River Watershed and given the significance of that watershed to the water supply protection and distribution of the Wachusett and Quabbin Reservoir systems, there are large tracts of contiguous forests that are permanently protected to preserve the quality of the water flowing into the Quabbin Reservoir. Large tracts of land located within the eastern section of town (and into Westminster) are also conserved to protect the City of Fitchburg's water supply.

Hubbardston is located along the bio-geographical boundary of two eco-regions⁶, the Worcester/Monadnock Plateau and the Lower Worcester Plateau⁷, dividing Hubbardston in half, potentially accounting for the town's rich biological diversity. Hubbardston's geologic substratum and surficial substrate, sediments, and soils have all influenced the natural and man-made landscape and development patterns present in the town today. Generally, the bedrock and soils found within Hubbardston contribute significantly to the presence of vast wetlands and poorly draining landscapes. (OSRP, 2019)

⁵ from 2023 Draft OSRP

⁶ Eco-regions are defined by geology, hydrology, climate, and biological diversity. Where two eco-regions comingle, habitats and associated wildlife are much more diverse.

⁷ Map of Level IV Ecoregions of New England:

https://gaftp.epa.gov/EPADataCommons/ORD/Ecoregions/ma/new_eng_map_hill.pdf

Water Resources

Hubbardston's surface drainage network of streams, ponds, and wetlands is the direct result of the topography. The drainage network is perhaps the most important

environmental feature that should be considered in open space planning. Phil Lewis, a Wisconsin land-use design expert who based his state's open space protection plan on drainage networks, refers to them as a "string of pearls" where rivers and streams are the "string" and ponds, wetlands, endangered species habitats, rich floodplains, historic sites, etc. are the "pearls". The protection of these networks thus provides prime wildlife habitat, recreational opportunities, water supply protection,



historic preservation, and other important aspects.

There are fifteen ponds in Hubbardston that range in size from 2 to 127 acres (see Table OSR1) and a few other small ponds which are smaller than two acres. These ponds are great recreational assets in Hubbardston, providing opportunities for boating, swimming, hunting, fishing, nature photography, wildlife observation, and other outdoor aquatic recreational opportunities. In the 2001, 2006 and 2014 citizen questionnaire, Comet Pond was ranked as one of the primary open space recreational opportunities in Town.

Waterbody Name	Acreage
Asnacomet Pond	127
Bemis (Road) Pond	16.4
Bents (Sawyers) Pond	28.7
Bickford Pond	163 (partially located within Princeton)
Brigham Pond	46.9
Cunningham Pond	27
Cushman (Perry Hill) Pond	23
Lovewell Pond	81.6
Marcan (Marean) Pond	62
S. Mare Meadow Reservoir	240
Moosehorn Pond	67.4
Natty Pond	3
Tannery Pond	5
Waite Pond	34.4
Williamsville Pond	57

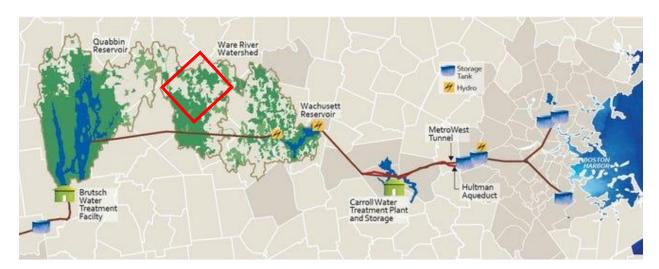
Table OSR1: Ponds of Hubbardston

Watershed

One of the reasons that Hubbardston is predominantly undeveloped is because of its placement in the state's watershed system. The DCR Division of Water Supply Protection (DCR-DWSP) is responsible for the stewardship of over 92,000 acres of critical lands and 45.6 square miles of reservoir surface water within the watersheds of the Quabbin, Wachusett, and Sudbury Reservoirs, and the Ware River in order to protect the municipal drinking water supply for current and future generations.

Most of Hubbardston is within the approximately 60,000-acre Ware River watershed which also encompases parts of Rutland, Phillipston, Oakham, Barre, Templeton, Princeton, and Westminster and eventually draining to the Chicopee River basin and thence the Connecticut River and Long Island Sound of the Atlantic Ocean). The DCR-DWSP owns approximately 23,000 acres of that total acreage. DCR land acquisition and water supply efforts have created some large, un-fragmented and undeveloped tracts of land in Hubbardston. A large acreage is also owned by the City of Fitchburg for water protection.

The Burnshirt River enters Hubbardston from Templeton, to the northwest, and then travels for almost six miles through Hubbardston, converging with Canesto and Natty Pond Brooks and entering the Ware River before flowing into Barre. The East and West Branches of the Ware River are also significant watercourses within Hubbardston. The West Branch originates in Hubbardston and flows for five miles south before entering Rutland. The East Branch begins in Westminster, flows for almost three miles in Hubbardston and continues southward to Princeton. The Ware River supplies drinking water to Quabbin Reservoir and to the Wachusett reservoir through the Quabbin Aqueduct. Diversions of water from the river are conveyed into the Quabbin Reservoir through the two-way Quabbin Tunnel. Water flows west from the Ware River to the Quabbin during the high-water months (October through May or June) and east to Wachusett the rest of the year.



Wetlands and Flood Zones

Wetlands are a very important resource for wildlife habitat, water purification, groundwater recharge, and flood control. Many species of flora and fauna only occur in wetlands. Numerous types of wetlands exist in Hubbardston, comprising approximately 1,200 acres. Hubbardston also has numerous forested and non-forested wetlands and bogs. Two such instance, a large bog located around Natty Pond, and another just south

of Cunningham Pond along Joslin Brook, provide unique habitats for many species of wildlife, with deep mats of sphagnum moss (which become peat), Labrador tea, pitcher plants and other plant species. Shrub swamps, with thickets of dogwood, willow, and alder, are also very common in the lower and more level valleys in the southern part of town. Shrub swamps often have wet meadows associated with them providing another unique landscape and habitat type.



Floodplains, a type of Wetland

Resource Area, consist of low-lying areas adjacent to streams, rivers, or lakes, or depressions among the landscape which are susceptible to flooding. Floodplains protect downstream resources and maintain streamflows by storing and slowly releasing water during periods of high flow or sudden or extreme precipitation or snowmelt. Floodplains are determined by the elevation and topography of the landscape and are influenced by the frequency, intensity, and duration of precipitation and associated stream flows. Flood frequencies, associated with the 100-year or 500-year flood zone, are calculated by plotting a graph of the occurrence and size of all known floods for a specific area and thus determining how often floods of a particular size will occur. The 100-year flood plain areas (those designated as Zone A by FEMA flood insurance maps) in Hubbardston occur along all mapped streams and ponds in Hubbardston, although the widths of the floodplains vary with the topology. Within Hubbardston, the most extensive floodplain areas occur along the East and West Branches of the Ware River, and the lands adjacent to Moosehorn Pond, all in the southern portion of town. (OSRP, 2019)

Vernal pool are areas of pooled water that provide critical habitat for breeding salamanders, woodland frogs, and other obligate species. These seasonal or temporary woodland pools provide important aquatic breeding habitat for many amphibians for a prolonged period of time during their mating season(s). These unique and critical habitat features are prevalent and very well documented resources in this community. The Natural Heritage & Endangered Species Program (NHESP) of Massachusetts Division of Fisheries and Wildlife (DFW) has established criteria for certification of vernal pools. Hubbardston has 311 Certified Vernal Pools, more than any other township in

the Commonwealth. Vernal pools host a unique biotic community; having water for only a limited period of time, then drying up, prevents the presence of fish and other predatory organisms. This characteristic makes them a unique trophic system, allowing many species of animals, especially reptiles and amphibians, to increase their breeding success by limiting (or eliminating) predation on their eggs, larva, and juvenile life stages. Vernal pools are, for this reason, an important biological feature. Many other animals whose life cycles are predominantly or entirely terrestrial depend upon vernal pools for nesting materials and food sources (e.g. certain bird species, certain small mammals), for use as watering holes (e.g. deer), and grazing of emergent vegetation (e.g. moose, small mammals). Vernal pools also act as storage "tanks" for groundwater, allowing surface water to slowly percolate into the ground over time and recharge aquifers. The abundance of these resources for breeding grounds and specialized food sources in Hubbardston makes this place biologically significant and important. (OSRP, 2019)

Aquifers and Recharge Areas

Hubbardston's possesses subsurface bedrock groundwater aquifers that require artesian wells on average of 100- to 150-feet deep, with some, in some areas, requiring depths of up to 400-feet to attain necessary flow and storage capacity. Generally, well yields are higher in the northwestern part of Town, but are highly variable throughout most of the community and require deeper depths than most other surrounding Towns. A Zone II Aquifer Recharge Protection Area, designated by the Massachusetts Department of Environmental Protection (MassDEP) exists in the Northwest part of Town associated with a stratified glacial drift medium-yield groundwater aquifer of the Hubbardston Brook drainage within the Upper Otter River basin. (OSRP, 2019)

Vegetation

Hubbardston's landscape is dominated by secondary growth forests that have grown back since the time more than 100 years ago when there was substantial clearing of land for timber and agriculture. Many of these forests are considered "upland," or sites that are dry and well-drained. Oak, red maple, hickory, and ash trees dominate the uplands, interspersed with black cherry, basswood, yellow and black birches, and sugar maple. Large stands of hemlock and white pine are



also common in Hubbardston's upland forests. Understory shrubs include witch-hazel, striped maple, hazelnut, blueberries, and a variety of ferns and other herbaceous plants.

Wild highbush blueberries and shoreline shrubs such as alder and sweet pepperbush line the shores of many of Hubbardston's ponds, bogs, and wetlands. Shrublands and red maple swamps are also characteristic of many of the Town's wetlands and wet meadows.

North-facing slopes and damper, protected areas are dominated by beech, red maple, birch, and green ash. Groves of hemlocks fill valley bottoms, especially at the toes of north-facing slopes. These places are also known to accommodate some balsam fir and red spruce—softwood trees common to more northerly regions, found here at the southernmost limit of their range. Large, forested wetland complexes are very prevalent along Natty Pond Brook, the lower stretches of Joslin Brook, and at the headwaters of the East Branch of the Ware River. These areas have important wildlife and flood control values. Hubbardston's woodlands, like others throughout the Southern New England region are facing serious threats from three invasive pests: Hemlock Woolly Adelgid, Emerald Ash Borer and the Asian Long Horned Beetle. (OSRP, 2019)

Wildlife

Hubbardston, due to a combination of large expanses of protected and undisturbed land and the diversity of habitats, is home to many common species of wildlife. State biologists recognize this area for its impressive biodiversity. Please refer to the Natural Resources element of this Master Plan for additional details.

Public Shade Trees

Shade trees exist on all Hubbardston's roadways due in large part to the Scenic Roads Act of 1973. On many of the small back roads, branches of large trees that span the road. All cemeteries in town are bordered by shade trees. In addition, there are 2 other main sites with public shade trees in Hubbardston, Curtis Recreation Field and Millenium Park. Shade trees play an important role in beautifying the recreation field and providing much needed shade for spectators. Lilac bushes were planted in the very early years of the field along a boundary line and three maple trees were planted around 2005 using funds from a state grant. Similar funds were used to plant trees at Millenium Park. It is likely that more trees will be deemed beneficial for both locations in future years should funding permit. Efforts are currently underway to beautify the town center and a Town Center Committee has been formed. Some years ago, crab apple trees were planted in locations along Main St. by the town.

One public shade tree of note is a giant Beech tree on the Mt Jefferson public parcel. This tree is located just behind the main parking area. The diameter of the shaded shadow cast by the canopy of this magnificent tree is approximately 100-feet! (OSRP, 2019)

Scenic Landscapes

Protecting Massachusetts' scenic beauty plays an important role in the future desirability of the Commonwealth as a place to locate. "The Massachusetts Landscape Inventory" published in 1981 by the Department of Environmental Management (now Department of Conservation and Recreation (DCR)) remarks that extensive areas of pastoral scenery are becoming rare due to development. These areas are valuable not only for scenic beauty, but for agricultural, economic, environmental, and historic qualities. Several trails in Hubbardston provide access to the scenic landscapes in the hills and river valleys and are an attraction that draws people to the community. These

trails are located on state, town and local land trust properties offering a variety of experiences in the fields. forests, wetlands, and waterways that dominate much of Hubbardston's landscape. Scenic landscapes play a significant role in the way residents characterize the town. Unfortunately, the loss agricultural lands of to development in the past few decades adversely has Hubbardston's impacted many scenic vistas.



Working to mitigate the adverse impact on the open spaces and landscape of Hubbardston is a popular point of view in Hubbardston. Surveys collected from previous OSRP Updates and most recently in June of 2021 for the updated plan, have expressed a common theme focusing on the preservation and positive aspects on the quality of life of Hubbardston's "rural character".

Hubbardston contains within its borders several natural and managed features which are valuable from a scenic and economic standpoint. The southernmost section of Mare Meadow Reservoir, Barre Falls Dam Reservation, and many of the town's ponds provide attractive waterfront views. There are several points of high elevation that offer outstanding looks toward Mt. Wachusett, the region's most prominent landscape feature.

The Mt. Jefferson Conservation Area, which maintains open fields and offers dramatic views of Mt. Wachusett, as well as attractive vistas of church steeples amongst the rolling hills, is a valuable scenic asset to the town. Not as well known, because of its seclusion on the Malone Road Conservation Area, is the view of Mt. Wachusett from the cliffs above Natty Pond. Many of the open vistas in town remain that way because of periodic grazing, mowing, clearing, and stewardship. While several Hubbardston's most treasured scenic aspects are available on public property, many of the most aesthetically pleasing viewing points and scenic locations in town are in private ownership.

Some of the more popular scenic vistas are:

- Mt. Wachusett from upper Mt. Jefferson Road;
- Mt. Wachusett and open meadow from Curtsey Farm on Hale Road;
- Brigham Pond from upper Brigham Road to Evergreen Road;
- Mare Meadow Reservoir from New Westminster Road near Westminster line;
- Mt. Wachusett from George Howard Road;
- Comet Pond from Old Princeton Road.

Unique Environments

The town has several unique features. The northwest section of town is an area of vast gravel reserves which have been heavily mined over the years. Within the same area as these former gravel pits, is one of the town's most important aquifers which is within the Zone 11 protection area for the City of Gardner's Snake Pond Well. There is also a large area of NHESP priority and core habitat located within the gravel reserves.

New Templeton Road is the site of two notable geologic features that many residents are

not aware of. The cliffs that rise above the swamps in New Templeton Road provide a wonderful overlook in the Malone Road Conservation Area, and just a short while further north they are the site of the Indian Caves. There are several caves, and one has a large chamber big enough for two people. A hole at the bottom of the cave is the site of a fire pit and three windows above it allows the smoke to escape.



Below are several other unique environments or Scenic Landscapes present within Town:

- Fields and Open Lands (e.g., hayfields, pastures, croplands, shrublands)
- BioMap Core Habitats, Estimated and Priority Habitats of Rare and Endangered Species, and Unique Landscape Features
- Wildlife Corridors and Greenways

Section 3: Open Space & Recreation Assets

The Town of Hubbardston has diverse open space lands and recreational assets, distinguished by the form of land ownership and by the primary use of each parcel. Some open space lands are privately owned and unprotected, others are publicly owned protected, partially protected, or unprotected lands. Much of Hubbardston consists of Town and State-owned public lands protected for conservation and water supply protection purposes, much of those lands are protected in perpetuity under Article 97 of the Massachusetts Constitution. In 1972 Massachusetts voters approved Article 97, granting people the right to a clean environment and authorizing the Commonwealth to acquire conservation easements. Article 97 was intended to be a legislative 'check' to ensure that lands acquired for conservation purposes were not converted to other inconsistent uses.

Hubbardston's Open Space & Recreation lands (by ownership) can be viewed within OSR-Map1 as part of the Open Space & Recreation Appendix of this Plan. In Hubbardston, there are six major categories of Open Space lands and land-ownership categories described below:

Privately-Held Parcels With Only Wetlands and Zoning Protection

Approximately 1,200 acres of forests, fields, and wetlands in Hubbardston are owned by individuals, trusts, and corporations without any restrictions on the use of the land except as provided by wetlands and zoning regulations. Much of this land could be converted to residential or other developed use at the discretion of the owner. Thus, this land is often considered non-protected open space.

Privately-Held Parcels With Chapter 61 or Easement Protection

Chapter 61 provides an incentive in the form of reduced property tax for private owners of forest and farm land to voluntarily maintain their land in some form of open space. Chapter 61 also provides the Town with the option to purchase the land, if the owner elects to withdraw from Chapter 61. If the Town declines to exercise that option, the land reverts to the category of privately-held parcels with only wetlands and zoning protection. A private owner may grant a conservation easement to the state or a conservation organization, which would provide permanent protection.

Type of Protection	Acres	Acres % of Town Area
APR	44	0%
CR	261	1%
WPR	769	3%
Town Owned, Article 97	66	0%
MA DCR-DWSP	9,078	34%
MA DCR-Parks	1,256	5%
MA Fish & Game	280	1%
Fitchburg Water Supply	465	2%
TOTAL	12,219	45%

Table OSR 1: Open Space Protected in Per
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Nongovernmental Conservation Organization Owned Parcels

Nongovernmental organizations (NGOs) dedicated to protecting open space own and manage several parcels in Hubbardston. Conservation NGOs are non-profit and typically funded by private donations. When acquiring land, an NGO may grant a conservation easement to the state in exchange for funds to help pay for the acquisition. The East Quabbin Land Trust, North County Land Trust, Mount Grace Land Conservation Trust, and North Quabbin Regional Landscape Partnership each own protected land or have assisted other entities in protecting open space in Hubbardston. Two such areas within Hubbardston that are owned by conservation NGOs are as follows:

- Henry's Grove, East Quabbin Land Trust (94 acres)
- Underwood Road Conservation Area, North County Land Trust (65 acres)

Other large conservation NGOs in the region include Mass Audubon and New England Forestry Foundation.

Privately Owned Parcels

Private Parcels constitute private land that is considered protected, which happens if it has a deed restriction in perpetuity, if an Agricultural Preservation Restriction (APR) has been placed on the property, or if DEP has placed a conservation restriction on it as part of the Wetlands Conservancy Program. Removing land from permanent open space protection status so that it may be developed requires an affirmative vote by two thirds of the State Legislature. In most cases, the watershed district would be required to show the Massachusetts Department of Environmental Protection just cause for converting the use of the land. Much of Open Space land held as private parcels in Hubbardston are classified as Chapter 61, 61A, or 61B land⁸.

Municipally-Owned Parcels

The Town of Hubbardston currently owns four permanently protected recreation and conservation areas totaling nearly 380 acres:

- Mt. Jefferson Conservation Area (250 acres)
- Malone Road Conservation Area (67 acres)
- Curtis Recreation Field (11.5 acres)
- Sharron Conservation Area (50 acres)

A conservation easement was granted to the state in order to help with the cost of acquisition of some of these lands. The conservation easement describes the specific limitations on changes in the use of the land.

⁸ Massachusetts General Laws Chapter 61, 61A and 61B is designed to encourage the preservation and enhancement of the Commonwealth's forests, agricultural land, and privately-owned recreation parcels by offering tax incentives to property owners for managing these lands for those purposes and allowing the municipality the first option to buy (and protect) the land if landowner decides to sell.

The City of Fitchburg owns land near Mare Meadow Reservoir and Bickford Pond for the protection of their public water supply.

Chapter 1	Lands	Acres	%
Town Owned	Undeveloped	305	1%
61	Forestry	1670	6%
61A	Agriculture	1550	6%
61B	Recreation	650	2%
Total	Acres	4175	16%

Table OSR-2: Open Space with Limited Protection

State-Owned Parcels

The Commonwealth of Massachusetts is the largest landowner in Hubbardston. Much of this land is maintained for protection of the Ware River watershed. The water surface and much of the shorelines and adjacent forest of Asnacomet (127 acres open water) and Brigham (54 acres open water) Ponds, including the swimming area on Asnacomet and the boat launches on each pond are owned by the state. The Ware River watershed land is now managed by the Department of Conservation and Recreation.

Hubbardston State Forest and Hubbardston Wildlife Management Area are managed by the Department of Conservation and Recreation and the Department of Fish and Game, respectively.

While almost 11,000 acres within the town are permanently protected, there are numerous significant tracts of woodland or other open space which remain unprotected from degradation or destruction. Over 3,600 acres has been afforded some measure of protection through Chapter 61 tax programs, but those properties too are subject to sudden changes. Hubbardston is located on the very edge of the Boston metropolis and the next wave of building could have great impact on the town.

Due to Hubbardston's vital location within important water quality protection areas, residents are fortunate to have the recreational benefits that exist. The vast acreage of lands owned by DCR within the Ware River Watershed is permanently protected Open Space, but it should be known that recreational uses of those areas are controlled by DCR and are subject to the policies and regulations of watershed lands, and as such, can be prohibited or regulated accordingly at any time.

Hubbardston's residents benefit from a wide array of recreational activities, ranging from individual outdoor challenges and pursuits on both public and private property to team or group sports under the auspices of the Parks Commission. Many residents are also fortunate to have undeveloped areas, woodlands, or fields inviting unrestricted foot access "right out their back doors." Public access is common, and many allowable recreational uses exist, even in the highly regulated Ware River Watershed. For a more complete, in-depth inventory and description of Hubbardston's Open Space & Recreation lands, amenities, and opportunities, see Section 5 of the OSRP.

Section 4: Analysis of Needs

Below is a summary of general Open Space & Recreation "needs" within the Town of Hubbardston. For a more detailed description of specific *Resource Protection-Community-, Management-needs* see Section 7 of the *Hubbardston Open Space* & *Recreation Plan.*

Open Space & Recreation Lands

Hubbardston will unavoidably be facing the effects of climate change, which will require a range of measures to improve both resilience and sustainability. One aspect of this will be to improve the economic aspects of local food, fiber, and energy production at Hubbardston farms and forests, while maintaining the landscape's function of removing carbon dioxide from the atmosphere.

Another aspect will be the increased importance of both preserving and utilizing open space, and decisions will need to be made from a holistic point of view, such that ecosystem and wildlife corridor conservation, protection of water resources, and development of interconnecting walking and bicycle paths for public use, are all considered in a balanced way. Hubbardston's Open Space & Recreation needs should be considered from this perspective to maintain a strong history of conservation while ensuring responsible use of open space for recreation going forward.

A priority should be to establish which existing, if any, unprotected open spaces in Hubbardston need to have priority in terms of preserving ecosystems and wildlife habitat. Such an effort will involve the Town Administrator, the Board of Selectmen and other boards, but the initiative can come from Open Space Committee (OSC).

Another priority should be to ensure that Hubbardston's agricultural land, especially that in active use, is not lost to development. This is because average age of active farmers in MA is 60⁹¹⁰, so large tracts of land will soon be passed on or sold. OSIC needs to work closely with Hubbardston's Agricultural Commission, and together should work to develop a farm transfer program modeled after other programs established elsewhere. As a beginning, OSIC should consider providing links on its website to initiatives, such as the Rural Natural Resource Protection and the American Farmland Trust. Once such land is sold for development, it can be considered lost for good. A specific initiative will be to calculate how much "prime agricultural" land has already been lost to development, and how much is still available, and then formulate a plan to preserve prime agricultural land in a systematic way.

Recreational Opportunities and Activities

Hubbardston residents may take advantage of a wide array of recreational activities, ranging from individual outdoor challenges and pursuits on both public and private property to team or group sports under the auspices of the Parks Commission. Many residents are fortunate to have undeveloped areas, woodlands, or fields inviting

⁹ US Census

unrestricted foot access "right out their back doors." Allowed uses, even in the highly regulated Ware River Watershed, are many.

Additional organized recreation opportunities are available to youth sports teams, which make regular use of the playing fields at the Curtis Recreational Field. There is space for soccer and a baseball diamond and batting cage. Private baseball fields are also found at the Rod & Gun Club and on Barre Road. An enclosed skateboard park and children's play area are also at the recreation area. There is also a small basketball court and playground located at Hubbardston Center School.

Recent History of Open Space Community Accomplishments

Progress in Hubbardston

The Current Plan established a current Community Vision based on public input (See Section 6 of the OSRP) and community desires. Further, it provided a recent analysis and summary of Community "Needs" (See Section 7 of the OSRP), and documented past accomplishments and evaluated past goals, relative to currently identified needs to create new or revised Goals and Objectives (See Section 8 of the OSRP). Finally, it established a new 7-Year Action Plan based on the current community setting, vision, needs, and realized goals & objectives. The Action Plan (See Section 9 of the OSRP) provided actionable tasks aimed at implementing the Community Vision, addressing an established Community Needs, or accomplishing specified Open Space Goals or Objectives.

The Town of Hubbardston has actively pursued and has made great strides towards accomplishing the community's goals and objectives related to its open space lands and recreational resources. Below is a summary of the Town of Hubbardston's Open Space Committee Accomplishments between 2000 and 2018 (See 2018 – 2025 OSRP¹¹ for additional details):

- Malone Road Acquisition and Management Plan
- Mount Jefferson and Malone Road Conservation Area Management and Management Plan(s)
- Basketball Court and Curtis Field Recreation Areas
- Low Impact Development Bylaw Study
- By-law Enforcement Improvement
- Chapter 40B Analysis
- Utilization of Open Space Plan a Valuable Guide and Decision-Making Tool
- Open Space & Recreation Plan Update Approach and Participation, Including Stakeholder and Board Input and Involvement
- Open Space & Recreation Public Town Survey/Citizens Questionnaire
- Previous updates of the Open Space & Recreation Plan required for most state grant applications.
- Secured funding from Massachusetts Self-Help Grant (now the LAND grant) and MDC for the purchase of Mt. Jefferson Conservation Area

¹¹ <u>https://www.hubbardstonma.us/open-space-committee/files/open-space-and-recreation-plan-osrp-2018-2025</u>

- Secured funding from Massachusetts Urban Self-Help Grant (now the PARC grant) for the development of the Curtis Recreation Field improved parking lot, walking path installation and skate park installation. Oversaw design and construction.
- Secured funding through brick sales for the development of the Millennium Park. Oversaw design and construction.
- Assisted in securing funding through a Mass Re-leaf Grant for planting shrubs at Millennium Park and the Curtis Recreation Field. Planting of those trees and shrubs.
- Secured funding through the Recreational Trails Grant for a map at the Millennium Park and trail maps of the network of trails within Mt. Jefferson Conservation Area and Hubbardston and Templeton State Forests.
- Laid out and developed the Gates Hill Trail, Mill Pond Trail, Muzzy Ridge Trail, Link Trail, Dottie Rock Trail and Between the Pines Trail
- Secured one week of work from AmeriCorps crew for work on Mill Pond Trail
- Worked with 5 Boy Scouts on Eagle projects including building of Gates Hill Trail building Link Trail bridge, building Link Trail bridge ramps and improvement of trail, building of picnic tables at Mt. Jefferson, seeding, fertilizing, liming and shrub planting at Millennium Park.
- Worked with multiple Boy Scout volunteers, community service teens, and prison detail participants for general trail maintenance and upkeep.
- Organized two National Trails Day workdays.
- Secured funding from Bay State Trail Riders for bridge construction materials on Mill Pond Trail.
- Developed maps of Mt. Jefferson Conservation/State Forest Area and printed two editions of the map. The second edition was funded with ads from local businesses.
- Developed the Fund for Hubbardston Preservation
- Oversaw the reclamation and leasing of hayfields at Mt Jefferson. Hay lease monies are deposited annually into Fund for Hubbardston Preservation.
- Secured funding from Massachusetts Source Water Protection Grant for Land Stewardship Plan of Mt. Jefferson Conservation Area. Oversaw hiring forester, development of plan and timber harvest resulting in \$7,000 deposit into Fund for Hubbardston Preservation.
- Negotiated and facilitated bidding process for removal of slash from Mt. Jefferson timber harvest to be used for cordwood in exchange for mowing of town common areas including the Curtis Recreation Field for one year after Parks budget had been zero funded.
- Updated the town's Capitol Score from 59 to 92, increasing Hubbardston's potential for successful state grant applications. Secured funding for purchase of the Malone Road Conservation Area through Massachusetts Self-Help grant, CPA funds, grants from North Quabbin Regional Landscape Partnership, Wharton Trust, Fields Pond Foundation and private donations.

- Supervised removal of abandoned house and derelict barns, reclamation of hay field, meadow and building of trails at Malone Road Conservation Area. Community Service person helped emptying the house.
- Implemented Guided Hike Series in 2011 to introduce town residents and visitors to the many trails in Hubbardston.
- Responsible for implementation of Land Management Plan of the Mt. Jefferson/Malone Road Conservation Areas.

Inevitably, the implications of open space protection upon the Town's tax base are a large part of the political debate when it comes to public policy choices. Potential FY23 Tax Revenue Potential provides a view of Hubbardston Assessor's tax parcels organized into categories germane to municipal planning and policy choices, based on land use codes and other information. It should be noted that not all forms of the tax exempt land are created equal. All State-owned lands in Hubbardston are enrolled in one of two Payment In Lieu of Taxes (PILOT) programs which contribute >\$400,000 per year to the Town budget. It is also useful to know that approximately 15% of the Town's land is enrolled in Chapter 61 programs that are taxed at a very low rate. ¹²

Section 5: Goals and Actions

Vision:

Hubbardston will maintain and cultivate an outstanding environment, providing high quality, engaging recreational activities and opportunities, and will pursue the foresightful conservation of Open Space & Recreation lands throughout Hubbardston, while continuing to implement related goals and actions for the benefit of the Town and its residents and visitors.

Goal OSR1: Continue to protect water quality, carbon sequestration, and other ecosystem services, wildlife habitat, agricultural resources, priority parcels, and enhance the quality of life.

- **OSR1-1:** Develop and maintain a Land Protection Priority map, based upon changes in ownership, use protection status, character, etc.
- **OSR1-2:** Continue to make connections and build relationships with landowners to encourage protection of priority acreage through conservation restrictions (CR's); landscape scale conservation projects such as Forest Legacy; donations of land or CR's to take advantage of tax benefits or environmentally sensitive development.
- **OSR1-3:** Continue building connections and relationships with land conservation organizations, land trusts, etc.
- **OSR1-4:** Encourage towns to develop protective protocol for lands being removed from Chapter 61 status.
- **OSR1-5:** Continue applications for relevant grants and funding as needed.
- **OSR1-6:** Advocate for adoption of town bylaws that encourage environmentally friendly "green" development.

¹² 2023 OSRP Draft Update

• **OSR1-7:** Explore protection of Millers Watershed area in Hubbardston.

Goal OSR2:

Make town-wide improvements that increase and improve recreational opportunities, enhance open space protection, protect water quality, and support balanced "green development."

OSR2-1: Work with Parks Commissioner regarding specific developed recreation sites, such as possible ice-skating rink, opportunities for physically challenged and bicycle trails.

- **OSR2-2:** Develop and map localized trail systems in different areas of the town. This may involve existing trails on state land, new trails on newly acquired land or trail easements to connect existing trails.
- **OSR2-3:** Participate in Community Preservation Act fund allocation decisions. Town has approved CPA projects in each category.
- **OSR2-4:** Consider possible development of a "green cemetery" within town in partnership with the Cemetery Commission. A green cemetery is one that allows for green burials, which minimize environmental impact by forgoing embalming, use biodegradable burial containers, and do not use a vault or cement grave liner.
- **OSR2-5:** Continue to work with the Planning Board to promote green and low-impact development as needed.

Goal OSR3: Encourage community Involvement, to increase the general level of education and participation of residents.

- **OSR3-1:** Sponsor and organize special events and field trips to expose residents to open space lands and recreational opportunities with particular emphasis given to youth.
- **OSR3-2:** Consider partnership with the afterschool program to encourage after school activities at the conservation areas.
- **OSR3-3:** Hold public meetings and hearings regarding major land use goals and decisions on an as needed basis.
- **OSR3-4:** Post list of volunteer opportunities on website such as trail maintenance, leading educational events, etc.
- **OSR3-5:** Post on website and publicize Open Space Donation account to encourage donations for general maintenance of open space areas.

Goal OSR4: Continue trail and open space land improvement.

- **OSR4-1:** Continue assessing, GPS and mapping existing and historic cart paths and trails within the town; produce a town-wide trail map.
- **OSR4-2:** Explore opportunities for new, multiuse trailhead and trail systems around the town to encourage local use.
- **OSR4-3:** Create individual trail maps for new trailheads, and update maps for older trail systems as needed.
- **OSR4-4:** Explore opportunities for additional trails within the conservation area/state forest system, potentially with multiuse availability.

- **OSR4-5:** Continue to repair, enhance, and maintain existing trails through volunteer and cooperative efforts and seek out partnerships with local and regional stakeholders.
- **OSR4-6:** Explore the possibility of including current and/or future trail and recreation maps with the annual town report to increase awareness of existing opportunities.
- **OSR4-7:** Continue partnership with Montachusett Regional Planning Commission and abutting towns regarding region-wide trail system inventory and trail development.
- **OSR4-8:** Plan for and facilitate trail connections wherever practically possible. Explore opportunities to connect local trails into DCR Rail Trail and incorporate multiuse as a general principle.
- **OSR4-9:** Continue to explore appropriate funding opportunities for improvement of existing trails (culverts, bridges, etc.).
- **OSR4-10:** Encourage and assist Historical Commission efforts to develop a mill pond/mill site interpretive trail within existing trail network; promote trail access to other significant historical sites.
- **OSR4-11:** Complete Hubbardston's ADA Assessment, develop an initial plan (including funding), and, if funding available, begin an initial ADA trail.

Goal OSR5: Continue Resource Protection and Enhancement

- **OSR5-1:** Explore open space land plantings of Nonesuch¹³ apple trees and/or other fruit trees and plants beneficial to wildlife.
- **OSR5-2:** Encourage conservation and reclamation efforts at the Pitcherville gravel pits for aquifer and wildlife habitat protection.

Goal OSR6: Town Communication with State Agencies and Legislators

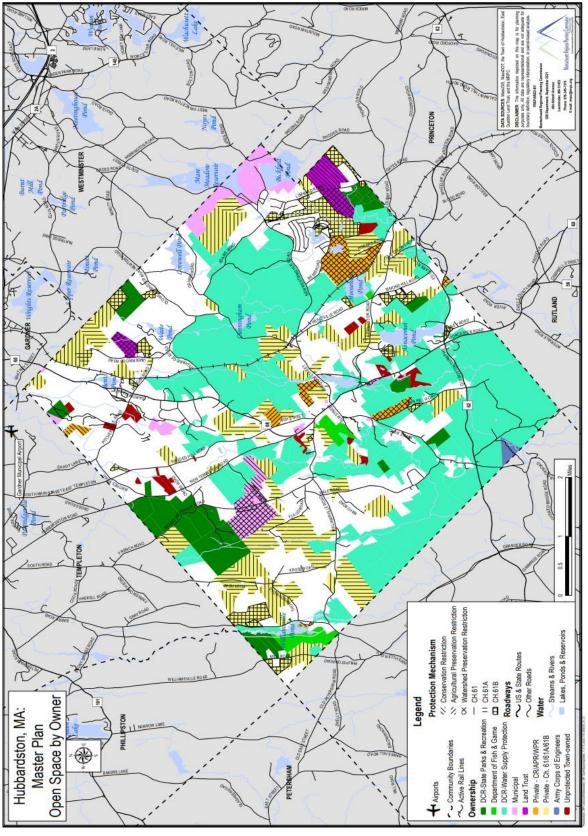


Hubbardston Nonesuch Apple

- **OSR6-1:** Continue to foster relationship with local state forest administration and advocate for town open space needs relating to state forest funding and protection issues.
- **OSR6-2:** Urge the Massachusetts Executive Office of Energy & Environmental Affairs (EOEEA) to support and promote non-motorized recreation and trail access to the Ware River Watershed.
- **OSR6-3**: Urge the EOEEA to require the Division of Water Supply Protection to allow non-motorized access to the many miles of single-track trails that are either currently or could be made sustainable in the watershed.

¹³ The 'Nonesuch' apple is an heirloom variety of unknown parentage discovered in Hubbardston, Massachusetts in the late 1700's. (<u>https://newenglandapples.org/apples/hubbardston-nonesuch/</u>)

APPENDIX Open Space & Recreation



OSRMap1: Open Space by Owner