

# HISTORIC, SCENIC, AND ARCHEOLOGICAL RESOURCES

## Historic Resources

### Historic record

The Town of Hardwick has a rich history, which informs the values and traditions held by residents today. A period of about 30 years (1890-1920) of industrial production of commercial granite sets it apart from other towns in the region. The town, through support of the Hardwick Historical Society (HHS) will ensure that this history is available for residents, new and old. The HHS spearheaded a major renovation of the 19th century railroad depot into a remarkable archives and museum for its holdings.



A survey of historical documents in the various repositories in Hardwick, completed in April 2001, revealed a wealth of holdings. The Town Clerk's Office has responsibility for town records from the early 19th century, including the records of the school system. HHS has focused on records in the areas of business and social activity as well as genealogical resources. The Hardwick Gazette recently donated its complete morgue from 1896 to the Hardwick Historical Society.

The two Historic Districts recorded on the National Register of Historic Places are the Downtown Hardwick Village Historic District and the Hardwick Street Historic District. In addition, the Vermont Division of Historic Preservation recognizes the West Church Street Historic District, Granite Street Historic District, Wakefield Farm Historic District, Holton and Kimball Hills Historic District, the East Hardwick District and the Mackville Historic District.

### Historic sites and structures

Listing in the National Register honors a historic place by recognizing its importance to its community, State, or Nation. Recognition does not add any additional permit requirements or limit the use of private property. Owners have no obligation to open their properties to the public to restore them, or even to maintain them. Similarly, recognition on the state survey does not add any additional permit requirements or limit the use of private property.

Hardwick is fortunate to have had an inventory of the historic structures completed for the town. The *Town of Hardwick Historic Sites and Structures Survey* (1985) includes descriptions of the 434 structures. Of all these historic structures, only two have been listed on the National Register- the Cobb School and 143 Highland Avenue. A third structure has been found eligible for the National Register; the 1913 Yellow Barn, formerly associated with Greensboro Garage. The Yellow Barn might be added to the National Register in the future which might make renovations eligible for grant funds.

In 1898 the former Hardwick Academy / Town House was converted to an opera house. In 2001 the Northeast Kingdom Arts Council was founded and began work to restore the Town House. Many improvements have been completed and the Town House is once again a functioning theatre.

### **Scenic resources**

Hardwick is the “Gateway to the Northeast Kingdom” and has a varied landscape including open and wooded land, working farms and appealing village areas. Views of rural lands from the following vantage points have special scenic importance to the community: Center Road, Bridgman Hill, Slapp Hill, Ward Hill, and Belfry Road. Central to Hardwick’s scenic offerings are Buffalo Mountain, Hardwick Lake, the Lamoille River, and Mackville Pond, which contribute to both the beauty and the recreational opportunities. The Hardwick Trails system and the Lamoille Valley Rail Trail (LVRT) provide walking and biking in the summer months. In winter, the Hardwick Trails offer groomed cross country skiing and plan to groom its 6 miles of bike trails for fat bikes. The LVRT offers snowmobiling and cross country skiing.

### **Archeological resources**

Archeological sites contain a fragile, complex and irreplaceable record of past human activity. Two areas have been identified as “expected moderate-to-high archeological sensitivity.” The first is located on both sides of Alder Brook) from Hardwick Lake to Eligo Pond in Craftsbury. The second area of archeological sensitivity is along the entire length of Greensboro Brook from the Lamoille River up to Caspian Lake in Greensboro. This rating does not necessarily indicate

that any archaeologically significant resources have been located in the area and none have yet been found.

With the Lamoille River flowing through the heart of the town, and Alder, Cooper and Nichols Brooks flowing into the Lamoille from the surrounding hills, the town of Hardwick was almost certainly an important landscape for Native American peoples. Native Americans not only utilized rivers and streams for food and water, but also as vital transportation corridors. Although there have been no Native American archaeological sites reported in Hardwick to date, this is largely due to a lack of professional archeological studies conducted in the area, the alteration of some portions of town's landscape through development, and the inundation of certain areas due to dam impoundment. Native American archaeological sites and historic archaeological sites related to early settlement, agriculture, industry and tourism likely remain to be discovered within Hardwick's borders, as they have been in most of the towns surrounding Hardwick.

## **Goals, Policies, & Recommendations**

### **GOAL**

- To identify, protect, and preserve important natural and historic features of the Hardwick landscape, including significant scenic roads, waterways and views, important historic structures, sites or districts, archaeological sites, and archaeologically sensitive areas.

### **POLICIES**

- Development within any designated historic districts should be in character with the surrounding architecture.
- Telecommunications towers and other large obvious structures should be carefully sited to minimize impacts on scenic resources.
- Development around the natural scenic resources identified should be sited and constructed in such a manner as to retain the natural scenic beauty of the areas. Removal of the natural vegetation on the site should be minimized and structures should be screened or hidden from view as best possible.

### **ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION**

- Hardwick should continue to support the endeavors of the Hardwick Historical Society.
- The Select Board should continue to support the Village Center Designations in the Hardwick Village and in East Hardwick.
- The Select Board should explore a tax stabilization program for downtown façade improvements.
- The Select Board should continue to provide funds that will make a significant contribution to those matching funds raised by local organizations and individuals for the purpose of maintaining or improving the above named historic structures owned by the Town of

Hardwick. Line items for these funds for each of these buildings should be included as part of the town budget.

- Where an archeological site is discovered on an undeveloped property or part of a property, the town supports the purchase of development rights on the effected portion as a means of compensating landowners for the loss of development rights. Purchase of development rights are always on a willing seller basis.

## **LAND RESOURCES**

### **Geography**

The Town of Hardwick is in north-central Vermont at the western edge of Caledonia County and is bordered by three counties: Orleans (north), Lamoille (west) and Washington (south). Hardwick comprises approximately 24,890 acres (38.6 square miles) of sloping farmland and forest, which extends up into hills and low mountains, all drained by the narrow valleys of the Lamoille River and its tributaries.

### **Topography**

#### Elevation

Elevations in Hardwick range from over 1,800 feet above sea level in the northwest corner of town to a low 810 feet in the west where the Lamoille River crosses into the Town of Wolcott. Elevation is generally not a limitation to development in Hardwick as only Buffalo Mountain and some high slopes in the northwest corner of town are above 1,500 feet.

#### Steep slopes

Slopes are considered “steep slopes” when they reach or exceed a 25% grade over a distance of 50 feet. Some soil types, particularly clay, are unstable at slopes as shallow as 5-8%, but based on Hardwick’s soil types, this is not usually an issue. The sand, gravel, and boulder soils found in town are generally stable to at least 30% provided that they have some vegetation cover (i.e. grass or trees). Steep slopes present problems when they are cleared for development or timber extraction because soil erosion is increased when vegetation is removed. Hardwick has many areas that are considered to have steep slopes (see Natural Resources Constraints Map). The map also identifies land with a slope over 20%. These areas have development limitations due to conventional wastewater rules established by the State of Vermont which prohibit wastewater systems on slopes above 20%.

### **Geology**

#### Bedrock

The shallow subsurface of Hardwick contains no major faults, but it does contain three major geologic units comprised of metamorphic rocks. Rocks along and east of Route 14 belong to the “limey” Northfield Formation, those further east to the Waits River Formation, and those to the west to the Moretown Formation. The bedrock materials under Hardwick contain few metallic minerals. As is known from the history of our granite industry, there is bedrock with quality dimension stone attributes around Buffalo Mountain and areas to the south.

#### Surface materials

Away from the river valleys the surface materials in Hardwick are primarily glacial till. In wet areas, the surface materials will be peat and muck. The valley bottoms and floodplains are dominated by sand and gravel river deposits and, because highways usually follow rivers, these

are best developed along Routes 14, 15, and 16. Additionally, there are glacial kames (steep-sided mounds of sand and gravel deposited by a melting ice sheet) along Route 16 near East Hardwick and along the north side of Route 15 towards Wolcott.

Hardwick is rich in both sand and gravel deposits which are valuable non-renewable resources. Sand and gravel are needed for road repair and construction. These deposits are also important areas for recharging groundwater supplies.

### Soils

The type of soil in an area can determine both opportunities and limitations to construction and agriculture. Soils that pose limits to development are often characterized by excessive slope, shallow depth to bedrock, high seasonal water, instability or high erosion potential. Soils also vary in how easily they absorb water and in their load-bearing capacity. Where percolation rates are sufficient, soils can be used to treat effluent from a septic system. Soils also have qualities that make them productive for timber and agricultural by providing the medium and nutrients for growth. Primary Agricultural soils have been classified based on these and other criteria. A Soil Resources Map and Agriculture Values Map are included with this plan to show the general locations of these soils.

## **Goals, Policies, & Recommendations**

### **GOAL**

- To protect and enhance Hardwick's land resources, including productive farm and forestland and available earth resources, in order to maintain an adequate land base to sustain farming and forestry operations and to secure needed supplies of sand and gravel for the benefit of existing and future generations.

### **POLICIES**

- Extraction and related processing operations will be permitted only when it has been demonstrated that there will be no undue adverse impacts on the town or its residents. Potential conflicts between current land use and proposed extraction operations will be minimized. Strict standards for the operation, maintenance, and restoration of extraction sites may be established as appropriate based on the unique conditions of the area affected. The full restoration of extraction sites will be ensured through the submission of site restoration plans.
- Development on slopes greater than 25 percent is prohibited.
- Further fragmentation of productive agricultural and forestland is to be avoided.
- Development within agricultural areas will be sited to minimize the permanent loss of agricultural soils. Non-agricultural structures should not be placed in open fields and meadows; such structures and related infrastructure will be set back from field edges and follow tree lines where feasible to minimize disturbance and visual impacts, and to maximize open productive space.

## **ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION**

- The town supports the efforts of organizations in the purchase of development rights and other conservation methods provided the land protected meets the objectives of this plan. Where possible, the Planning Commission and the Conservation Commission should review proposed purchases and comment based on the goals of this plan.

## NATURAL AREAS & WILDLIFE RESOURCES

### Critical wildlife habitat in Hardwick

#### Deer Wintering Areas

Vermont's deer require specific winter habitat to survive the seasonally severe weather and heavy snowfall. Winter deeryards provide two features important to whitetail deer survival: shelter and food. Statewide, between 6% and 8% of Vermont's forestland is suitable for winter deer range under average winter conditions. Wintering areas do not change significantly between years and can be used by generations of deer over several decades if appropriate habitat conditions remain favorable.

#### Bear Habitat

Bears require large areas of uninterrupted forestland for breeding. They also require travel corridors to move from one part of their habitat to another, especially as forested areas may be subdivided and developed. According to the Vermont Natural Resources Inventory, Buffalo Mountain and the hills in the northwest part of town are areas that can support bear year-round. Much of the river valleys support bears seasonally. Only the center of town does not have habitat to support regular use by bears.

#### Rare & Endangered Species Habitat

Rare plants and animals are important for a variety of reasons. Some are indicators of unusual habitats or of environmental quality. Still others may provide compounds for medicines. Hardwick has two areas in town with rare, threatened or endangered species. To prevent disturbance or illegal collection of these species, the specific information on the species is withheld.

#### Fisheries

According to Vermont Fish and Game Department's 2018 Vermont Trout Map, the entire length of the Lamoille River in Hardwick is recognized as a wild trout fishery. The river has naturally sustaining populations of rainbow trout, brown trout and brook trout. Additionally, the State of Vermont stocks the Lamoille River on a yearly basis with rainbow trout. Alder Brook and Haynesville Brook are also identified as wild trout fisheries.

#### Forest Blocks & Habitat Connectors

Large blocks of unfragmented forestland provide ample opportunity for wildlife habitat and travel. Fragmentation occurs when human settlement divides large blocks of land into smaller and smaller areas. By creating gaps between blocks, fragmentation results in the direct loss of habitat. The smaller the habitat block, the smaller the number and diversity of species that can survive there.

For the first time in a century, Vermont is experiencing an overall loss of forest cover; possibly up to 69,000 acres between 2010 and 2015. The primary driver of forest fragmentation is rural



sprawl. This type of fragmentation occurs incrementally, beginning with cleared swaths or pockets within an otherwise unbroken expanse of tree cover.

The loss of forests and their benefits reduces the overall sustainability and resiliency of communities both near and far from the forest. In the short term, a forest loss results in a reduction of economic goods and services, wildlife habitat, and flood mitigation capabilities. In the long term, carbon absorption and climate change mitigation benefits are lost. These short and long-term impacts can also have fiscal implications on towns through increased costs associated with infrastructure, water quality, or flood resilience previously supplied by forests.

Since 2016, Act 171 requires town plans to identify and map forest blocks and habitat connectors that are important to the community and beyond. An assessment of the Biofinder data (<http://anr.vermont.gov/maps/biofinder>) helps to identify priority planning areas for Hardwick, which are depicted on the attached Forest Blocks and Wildlife Habitat Maps.

- **Highest priority interior forest blocks:** Areas with high-quality interior, unfragmented core forest cover (i.e. land that is more than 100 meters from the non-forest boundary).
- **Highest quality connectivity blocks:** Land or water that function as “stepping stones” between core forest, as well as riparian habitat, or strips of forest cover between developed areas.
- **Highest value wildlife blocks:** Lands that support the greatest diversity of wildlife.

Looking at these layers collectively -- and they clearly overlap -- it is evident that Hardwick’s northwest area (including Jeudevine Mountain), west (including Keeler Brook and Millard Brook) and southwest (including Buffalo Mountain area) all provide critical connectivity to a vast expanse that encompasses Wolcott, Elmore, Woodbury, and even Worcester. Places where forest blocks are close to sides of roads are likely to be important wildlife crossings, such as long stretches of Route 15 and the Craftsbury Road. Roughly half of the critical areas are included in the Forest Reserve District and the remaining half is included in the Rural Residential District. Clustering provisions and incentives in the zoning bylaw should be reviewed to determine if they are effective in promoting clustering as appropriate. Enrollment in the Current Use program and conservation easements may also effective land use tools for protected these assets.

## Goals, Policies, & Recommendations

### GOAL

- Maintain and enhance the abundance and diversity of game and non-game wildlife in Hardwick.

### POLICIES

- Critical wildlife habitat should be protected from development and other uses that threaten the ability of the habitat to support its species.

- Subdivisions and other development should avoid fragmenting habitat. Core habitat areas and interconnecting links (e.g. wetland areas, riparian zones, and travel corridors) are to be preserved.
- Rare, threatened and endangered plants and animals and their habitats will be protected and preserved through appropriate conservation techniques. Where appropriate, a buffer strip should be designed and maintained to ensure protection.

#### **ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION**

- The Planning Commission and the Conservation Commission will support and provide guidance to any property owner with questions or concerns about their natural resources.
- A Natural Resources Inventory should be conducted throughout Hardwick.

- Per the connected maps, AT&T location is in the Highest Priority Connectivity Block, the Highest Priority Interior Forest Block, and in the High Value Wildlife Block – (9 out of 10). ZA *note*.