The glacier left them behind as it advanced and retreated, burying many below the soil surface. In areas free of vegetation, rocks move upward with freezing and thawing action, so each year, the farmer needed to remove the new stones that had worked their way upwards before plowing. Look closely for other evidence of past human use such as cellar holes and house and barn foundations.

**Landscapes change through the process of succession.** If most of this land was farmed, why is it now a forest? In the early to mid 1900s, the Town acquired the land that is now the Town Forest through purchase, donation, or as payment in lieu of taxes. Because the land was no longer being farmed, gradually, shrubs and then trees began to take root and grow through the process of succession.

Community members also planted approximately 50,000 pine and spruce seedlings during the 1940s and 50s, which assisted reforestation. Since that time, some areas of the forest have been selectively logged, while others have been left to grow.

The Hinesburg Town Forest is currently being managed for recreation, wildlife habitat, and sustainable timber harvesting. Visitors come to hike, mountain bike, hunt, horseback ride, cross-country ski, snowshoe, and bird watch. Local school groups also visit to learn about the forest.

Thanks for being a responsible visitor to this shared forest by leaving what you find and carrying out what you brought with you.

Please come again soon.

Stories in Stone

**Observing geology and landscape clues can teach us about the history of the Hinesburg Town Forest.**

Welcome to the Hinesburg Town Forest! This 837 acre forest is owned and managed by the town of Hinesburg and is open to the public.

Geology is the study of the earth and its life as recorded in rocks. Read on to find out more about how the geology of Vermont has influenced the history of this beautiful forest.
The Hinesburg Town Forest is located in the foothills of the Green Mountains, which have been eroded over millions of years as evidenced by their smooth, rounded peaks. Have you ever wondered how mountains are formed, or why some mountains are tall with sharp peaks and others are short and rounded?

**Uplifting and erosion have shaped the Green Mountains over time.**

Imagine the earth as an apple. The skin of the apple is the earth’s crust, while its flesh is the earth’s mantle, a fluid made of molten rock. Unlike the skin of an apple, however, the earth’s crust is divided into many pieces called plates that are moving very slowly.

When two plates collide, the earth’s crust sometimes fractures as it gets pushed upward forming mountains in a process called uplifting. When mountains are newly formed, they are usually tall and jagged. As time passes, they become worn and rounded through the process of erosion, the wearing away of soil and rocks by wind, water, and glacial ice. These same processes also effect the soil and vegetation in the Hinesburg Town Forest.

However, like a bull-dozer, the glacier brought calcium-rich rocks from the Champlain Valley to some areas of the Town Forest as it advanced from northeast to southwest, which helped enrich the soils in places. Trees like oak and pine can tolerate soils low in nutrients. Sugar maple prefers soils rich in nutrients. As you travel through the Town Forest, watch for changes in patterns of these trees on the landscape.

The most recent glacial retreat nearly 15,000 years ago influenced the soil and vegetation we see today. Look closely at the forest floor. Now, try to find a bare patch of ground—tip-up mounds of fallen trees are good places to look. Reach down, and carefully pick up a small handful of soil. Observe the particles’ color, size and shape. Are the particles different sizes? If so, you are looking at soil that is unsorted and may therefore be formed from glacial till.

Fifteen thousand years ago, the glacier that covered Vermont in a mile-thick sheet of ice began to retreat northward. As it retreated, pieces of rock as large as giant boulders and as small as clay were exposed.

The till, formed from the bedrock under the Hinesburg Town Forest, generally produces soils that are poor in nutrients.

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Human land-use can also be observed from clues on the landscape. Other patterns in the landscape can be seen by those with a watchful eye. Have you noticed stone walls criss-crossing the forest floor? It may be difficult to believe, but over 80% of the Town Forest was in cultivation or pasture during the late 19th century.

Stone walls helped to keep livestock out of cultivated fields. Imagine the effort of building them! Where did the farmer get the seemingly endless supply of stones?