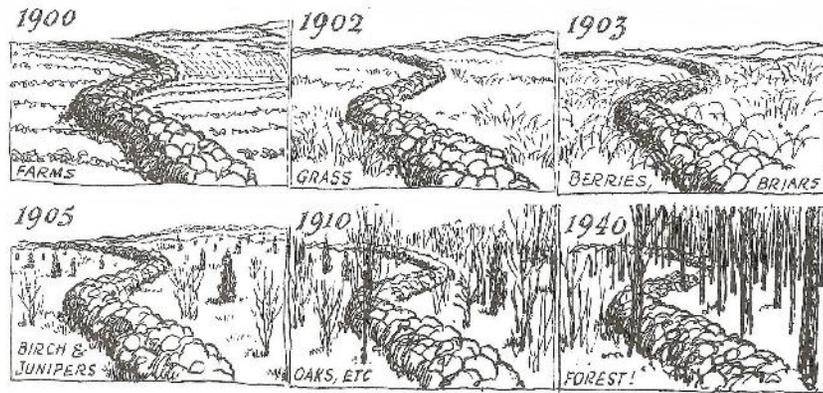


Post 10

Nature has an incredible ability to reclaim land that has been temporarily tamed by humans. Changes brought about by human activity often occur quickly, over a matter of months. Changes driven by nature and succession are much slower, occurring over the course of decades or centuries. Change is inevitable because nature is dynamic, with a constant battle for survival and dominance.

Take some time and try to imagine what this forest may look like in another 100 years.



Written by: Amanda McCreary & Josh Pulito, 2017

Image Sources:

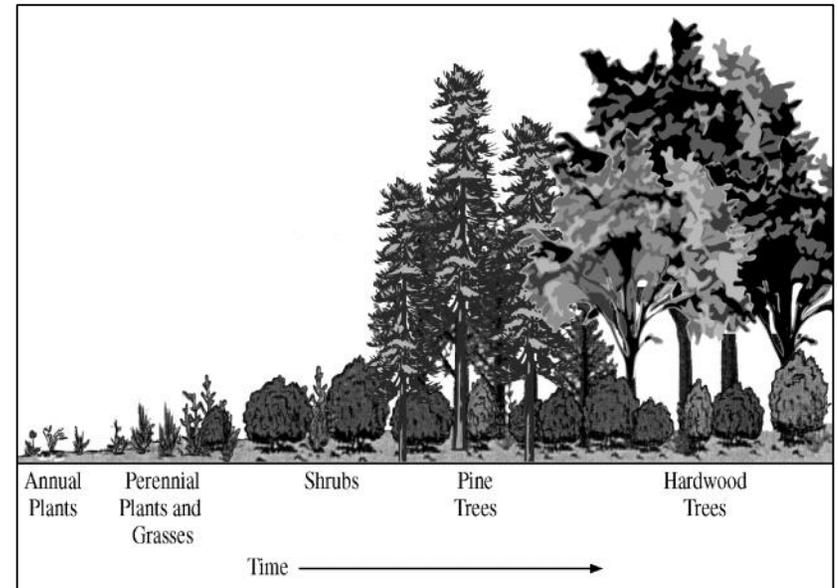
Rothery, M. 2017. A level biology. Mark Rothery's biology website. Available from: <http://www.mrothery.co.uk/ecology/Mod5Notestrimmed.htm>

Sloan, E. 1974. Our vanishing landscape. Ballantine Books, Inc., New York



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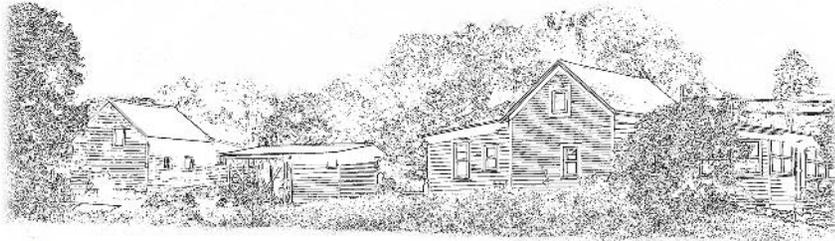
Abbt Farm Trail History and Change

Welcome

Welcome to the Abbt Farm Trail. The trail is named for the Abbt family, German settlers who farmed this land in the 19th and 20th centuries. This trail is a half-mile loop that will take you through some of the forest that has grown up since the farm was abandoned. This booklet will describe some of the history of this land, and the important role change plays in a forest ecosystem.

Follow the tan trail markers

Many of the plants along this trail are protected by New York State. Under penalty of law, they may not be gathered from public lands.



Post 1

The land around you was once a working farm, which has now been reclaimed by the forest and declared a park. If you look down the hill you will see the old farmhouse, built in the 1800s, which is currently used as the park office. German immigrants settled this area in the 19th century. The 2.5 mile entry road to the park once passed through six farms. As you walk the trail look for evidence that farming once occurred here. Stone walls and old foundations are some of the reminders of past generations and their interactions with the land.

Post 2

Early settlers faced many obstacles working this land, including rocky, nutrient poor soil and a short growing season. These conditions, paired with the onset of the Great Depression, caused many farms like this one to be abandoned. Without the regular disturbance of plowing and harvesting, natural succession resumed, transforming fields into forests.

Post 9

A forest is not just a collection of trees, but the interaction of hundreds of living things. The animals living here have changed along with the regenerating forest. The fields maintained by farmers were ideal habitat for cows and sheep. Once early succession began, the habitat became ideal for snowshoe hare, rough grouse, and American woodcock. After 100 years, these woods have returned to the state of a natural ecosystem rich in biodiversity. This forest is home to deer and foxes, coyotes and bobcats, fishers and porcupines, and many smaller mammal species. Hundreds of bird species can be found nesting in the trees around you, either as permanent residents or as migratory visitors. None of these species could have lived here when it was farmland, but now there is plenty of high quality habitat to support a diverse community of organisms.



Feel free to keep this guide, or return it after your hike.

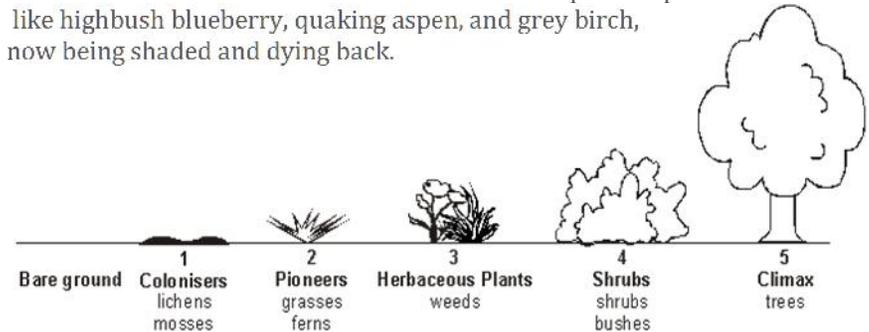
Post 8

Next to the trail you will see another boulder left here by the glacier. The rock appears indifferent to change, when in fact it has undergone numerous changes since it arrived here. Look closely, and you'll see succession, which you read about at post #2, is occurring here as well, but on a much smaller scale.

The small plants you see are mosses and lichens, grasping the rock with their tiny rootlets, thriving in the absence of larger plants. Often referred to as pioneer plants, they are the first settlers in a harsh, and for them, vast area. As individual plants live and die, they change conditions in their micro-environment by providing organic material. This thin layer of organic soil, combined with accumulations of dead leaves from the surrounding trees, allows ferns and clubmosses to become established as well. As ferns and clubmosses live and die, they will continue to contribute organic material to the rock. Eventually there will be an adequate layer of soil for a tree seed to develop and grow.

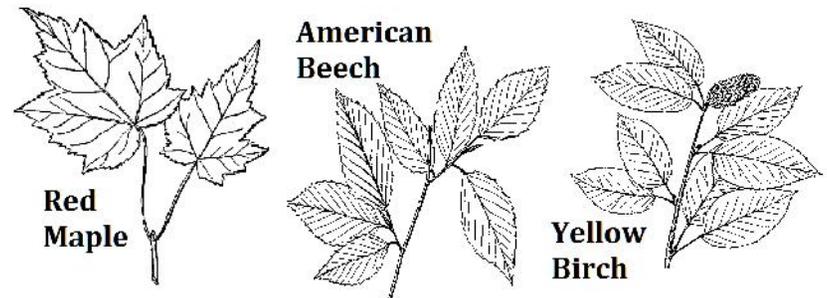


When this field was abandoned in the 1930s, the first wild plants to show up were sun-loving herbs and shrubs like goldenrod, blueberries, and strawberries. The next plant community to dominate the site included tree species which grow in full sunlight. These trees are called pioneer species and include aspen, birch, and cherry trees. As these pioneer species matured and provided shade, the understory conditions were changed to favor shade tolerant trees such as beech, maple, and hemlock. This process of change is called natural succession. Notice the remnants of pioneer plants like highbush blueberry, quaking aspen, and grey birch, now being shaded and dying back.



Post 3

The forest around you is what a forest looks like after primary succession has occurred. Pioneer species once grew here, creating the shade necessary for trees like beech and maple to take root. Forests are categorized by the species which are most abundant in the area. This forest is categorized as a northern hardwood or beech maple forest. While some pioneer species still remain, like birch and aspen, beech and maple trees are the most abundant and dominant species.



Post 4

In front of this post is an old stone wall that was created by early settlers of this area. After clearing trees from the land to create fields, settlers had to prepare the ground for crops and livestock, which meant removing the rocks from the soil. Settlers tended to be both hard working and practical, and put these stones to good use by marking the borders of their property and creating enclosures for their livestock. The walkway through the wall was left to allow people to pass through, but is narrow enough to prevent livestock from escaping.

Can you guess which side of the wall was used to raise crops and animals? Look for clues like tree size and species, or the number of rocks still in the ground.



Cross the wall and follow the tan trail markers

Post 5

Next to the trail is a large boulder, which was deposited by a glacier about 11,000 years ago. This sheet of ice covered all of New York State, and was up to two miles thick in some places. For perspective, the entry road you used to reach the park is 2.5 miles long.

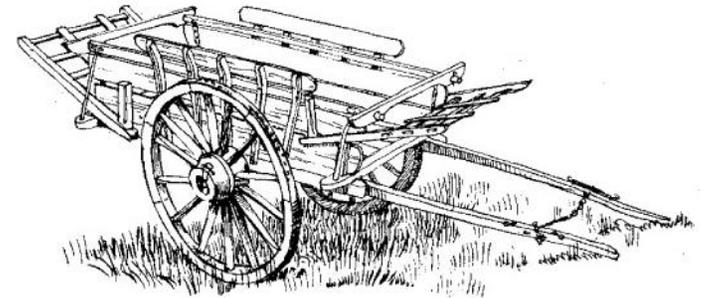
As the glacier moved and expanded to the south, it carved depressions and displaced soil, creating many of the lakes and hills that exist here today. When the glacier melted and retreated to the north, it deposited everything it picked up along the way, including the boulder in front of you, which may have originated from hundreds of miles away.

Continue along the trail until you reach the Old Road

Turn left to follow the tan trail markers

Post 6

The portion of the trail you are walking on was once part of an old roadway which joined the farm to the town of Grafton. It was never more than one ox-cart wide and has long since been abandoned. The bench is here so that you may comfortably enjoy the quiet stillness of this ancient road. The settlers of this area produced most of what they needed to survive themselves, and traded what they could. One item they did trade was charcoal, which was made in slow burning pits. They may also have traded apples and apple cider, cheese, and animal products. Everything coming in or going out had to be loaded onto an ox-cart or wagon for the slow, rough journey.



Post 7

Changes in the forest are also brought about by disease and invasive species. In front of you is a beech tree that is infected with beech bark disease. Most of the beech trees in this forest suffer from this affliction, caused by scale insects that look like white fuzzy patches. These insects cause cracks and furrows in the usually smooth bark of the beech trees, opening them up to fungal infection, which can eventually cause the death of the tree. This opens up space for other species to become established, altering the overall structure of the forest.

The farmers of long ago would be shocked to find no mighty chestnuts in today's forests. Most old farmhouses have chestnut beams holding them up. The chestnut blight was introduced in the early 1900s, and by the middle of the century had wiped out most mature American chestnuts throughout the country. Fortunately, the rootstocks of many trees survived and continue to send up shoots, though these almost always succumb to the blight before reaching sexual maturity and producing seeds. Efforts to breed resistant trees are promising, so keep an eye out for mature chestnuts in the next 20 years.

We are on the lookout for other forest pests migrating north that may affect our forests in the future. These include the hemlock wooly adelgid and the emerald ash borer.