Station 8. There are species of paper, black, and yellow birches (Betula papyrifera, lenta, and alleghaniensis) in this area. They can be identified by their double-toothed, more or less egg-shaped or triangular leaves. The shore of the pond, with its marsh grass and low bushes, is a very attractive and productive place for wildlife, especially the many kinds of birds that utilize this habitat. Further ahead you will cross a small stream.

Station 9 On the right about 30 feet up the slope is a good example of an American beech tree (Fagus grandifolia), identified easily by its smooth gray bark, Its small triangular-shaped nuts, utilized by many species of wildlife are produced in quantity only once every several years. The beech is a very shade tolerant tree.

Station 10 You can see a white ash (Fraxinus Americana) at this station. This tree has beautiful flowers from April-June and can. also be identified by it leaflets, consisting of 5-9 small toothed leaves This tree usually grows on uplands, like this area where water can drain away When trees like this one die, their cavities are used by many species for a home or nesting area.

Station 11. The pile of stones to the left is the result of many hours of work clearing this land for a farm field. These stones were probably used to build many of the stone walls and homes in the area. Today they offer a hiding place for small mammals from predators and the elements.

Station 12. There is a large shagbark hickory (Carya ovata) at this station This tree is just off the trail to your right and has bark that looks like it's being shredded or peeled off. This tree is very valuable both ecologically and commercially. Its nuts are eaten by squirrels, opossums, and wild turkey, while its twigs are browsed by rabbits and deer. In addition, because its wood is so strong, heavy, and elastic it is a valuable building material.

Station 13 The land that station 13 sits on is a good example of land that was selectively forested about 10 years ago. Notice how the underbrush is beginning to fill in and grow higher. This kind of forest cover is an important habitat for many species of wildlife and birds. The debris of branches and downed trees on the ground make excellent shelters and homes for red-backed salamanders because of the protection they offer from predators.

Station 14. The tall tree standing atone to your left is a pitch pine (Pinus rigida). This conifer has long needles that are coarse, stiff, dull and yellow-green in color It can be identified by its plated bark as well as looking at the grouping of the needles: pitch pine has grouping of three needles (three pitches and the batter is out). The white pines we saw earlier can be identified by their grouping of three needles (white has 5 letters).

At the split in the trail, go to the right.

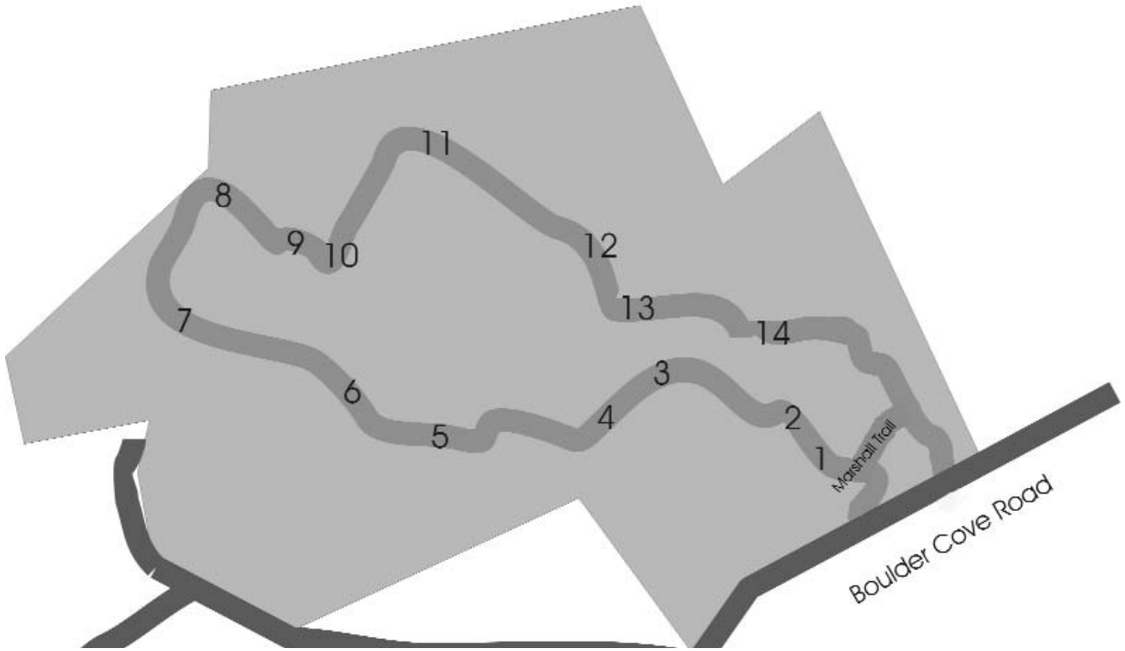
Station 15. To the left of the trail is a four-inch hop hornbeam tree (Ostrya virginiana). The grey, thin, flaky bark is quite distinctive. This tree doesn't grow very big and the wood is very hard and strong, making it excellent firewood. This tree also provides nourishment for many species of wildlife in this area. Ruffled grouse, northern bobwhite, and ring-necked pheasant eat its seeds, while white-tailed deer graze on the twigs.
A little further ahead at this station on the right, you can also see the Luther Chase cellar hole. The house was probably built in the early 1770's by a Moses Brown and was occupied from 1847 by the Chase family for 60 years or so. An 1857 County map shows the name "L. Chase.

MARSHALL TRAIL GUIDE

Conservation Lands Trail Maps Town of Atkinson, New Hampshire

Produced by
The Conservation Board
Town of Atkinson
Summer 2002

Marshall Trail



This trail begins just beyond the old cellar hole on the right side of Houle's Grove Road Houle's Grove Road is off West Road, Hampstead This trail travels in a loop and is just over a mile long. It can be covered in a leisurely hour .The numbered stations along the trail correspond to the following explanations and can be stopped at along your walk to gain further insight and appreciation for this valuable piece of your community. We hope you enjoy this nature walk and your time in these beautiful surroundings!

Station 1 As you start down the trail, take the path that veers to the left To your left, at the first station, off the trail 35 feet or so, you will notice a piece of granite with an red "H" cut on one s1de and a red "A" on the other This is one of the 18 bounds that that changes of direction or angle pointers along the Atkinson-Hampstead line This portion of the line was established in 1741. Both of these towns were once part of Haverhill. The trail you're traveling on was probably once a farm path or roadway leading to other fields. The land on both sides of the trail was cleared at one time As you travel along the trail, you will see that most of the really big trees are along the stone walls. In the past, these trees were allowed to grow along the fences and walls to provide shade for the grazing cattle.

Station 2 At this point on the trait there are a lot of hemlock (Tsuga Canadensis) growing under the white pine. Hemlock is a shade tolerant tree species that is able to survive under a canopy of other forest trees. It is also one of the few trees that does not have terminal buds. Look at the top of a small hemlock and you can see that it looks just like another branch. Hemlocks also have small, pendant, perfectly formed brown cones The seeds and needles of this tree are eaten by grouse and red squirrels, its twigs are browsed by deer, snowshoe hare, and cottontail rabbits There is another important feature at this station. This area to your left is called a vernal pool A vernal pool is an area of forest land that is full of water at least two months of the year, usually m the spring, because most of these pools are created at this time of the year when the snow melts. During this time of wetness, it is a crucial habitat for many insect and amphibian species. Often these important areas are overlooked and abused, because they are unidentifiable many months of the year. However, it is necessary to protect and respect them because of their unique place in the forest system. Many species depend on them for breeding, including salamanders, wood frogs, fairy shrimp, spotted turtles, and spring peepers because of the lack of predators.

Station 3 At this station, you can see the flat face of a large rock form on your night. This rock was probably cut to make part of a foundation for a house. If you look closely you can see the marks were the stone was cut.

Station 4 Note the two dead cedar trees to your right. Eastern red cedar (Juniperus virginiana) needs a lot of sun, and as this land was once cleared, there was plenty of available sunlight when these trees stared growing. This was probably a pasture or open field used for agriculture. However, when the field was abandoned, maples, pines, and other hardwoods gradually shaded out the existing cedar trees and caused them to die. Behind you, at about 2:00, is a large dead tree known as a snag. It has many holes and an open cavity inside it. This kind of tree is utilized by many birds, insects, and small mammals for homes.

Station 5 At this station there is an enormous maple tree on the night side of the trail. This tree is between 200 - 300 years old. Trees this old are often referred to as wolf trees. They were left when this land was cleared to mark a boundary. That's why they are found along stone walls like the one at this station. You can see by looking at the map that the walls run all through this property. At one time they were used fences to keep livestock from running away as well as marking boundaries. The numerous stone walls also make for good homes for small mammals. Predators like red foxes and fishers hunt for prey in these stone habitats.

Station 6 Looking ahead on your right, you will see big eastern white pines (Pinus strobus) with four and five trunks. The poor quality lumber resulting from poorly shaped logs is probably the biggest economic problem in the white pine industry. It is all caused by a small insect called the white pine weevil The weevil kills the topmost shoot causing side branches to take their places, resulting in the crooked trees that you see. White pine is the most valuable timber species in New Hampshire, and growing straight, high quality pine us an important challenge for foresters.

Station 7 Perhaps the most scenic spot on the trail is right here, near the marsh of Island Pond and beside these giant boulders. In the marshy part of the pond, you can hear red-winged blackbirds and song sparrows singing at the waters edge. Red-winged blackbirds can often be seen perching in the reeds here. Growing on the rock you can see various kinds of lichens. The most prominent of which is called rock tripe, once said to be a survival food. These lichens grow very slowly and are an important food source for many mammals and birds. Notice that this rock here also has veins of quartz running through it. Quartz is one of the most common minerals found in New England.