

Post 8 – White Pine and Decomposers

The White Pine is a grove tree that is usually found in groups which protects it from wind damage. It is also considered a healing tree since its sap can be used to stop bleeding and disinfect cuts. Post 8 also contains strong evidence of decomposers like insects, worms and fungi in the act of breaking down dead trees and recycling the nutrients into rich compost. It's an essential part of any healthy ecosystem.



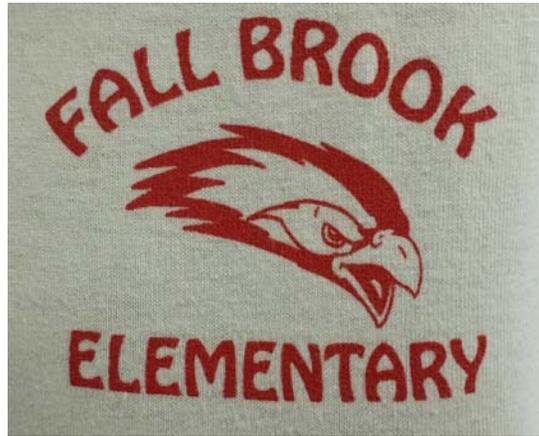
Decomposing Trees

Post 9 – Ice Storm Damage

Storm damage is a normal occurrence in New England and the trees in this area are highly adaptable and most can recover like the seemingly killed trees that are still upright but leaning over. If you look closely you will notice they are growing vertical shoots for new branches. Although some survive, some are killed. However, fallen trees provide opportunity for new trees to grow. The fallen trees also serve as a habitat for small animals and a food source for insects in the duff (ground) layer.

Post 10 – Catkins

Catkins are scaly looking seed pods found on the limbs of some trees. They are narrow and about 3 to 4 inches long. They come in small clusters and are an important food source for birds and some small mammals. They grow on birches and some other different species of tree such as willow and hickory. The seeds fall in late winter/early spring and look like pepper when they rest on the snow.



Fall Brook Elementary School

Hello and welcome to the Fall Brook Outdoor Classroom and Trail! This brochure will help you observe the many fascinating types of plants and animals found right in your own backyard here in New England. I hope it will entertain you as much as it will educate you. As always, watch out for poison ivy that lines the trails. Also, wear closed toe shoes to protect your feet and wear long pants to protect against ticks which are naturally found on the trail. Welcome to your outdoor classroom!

Have fun hiking it!

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BSA Eagle Project 2014

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City of
Leominster

Fall Brook Elementary School
Trail

Outdoor Classroom



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Post 1 – Rain Garden and Greenway

To the right of Post 1 is a rain garden built by the students of Fall Brook Elementary School. The purpose of the garden is to naturally filter the parking lot salt and oil runoff and protect the brook from contamination. The plants of the rain garden were selected because they not only tolerate the 20,000 gallons of runoff per year but can thrive and clean the water before it enters Fall Brook.

The lush plant growth in front of you running along Fall Brook is called a greenway which provides a rich habitat with water nearly all year long. This greenway was destroyed by exotic invasive Oriental Bittersweet, vines that harmed the trees and birds. The vines were removed and the students of Fall Brook replanted White Pine trees to restore the greenway to its former health.



Fall Brook Rain Garden

Post 2 – Fall Brook and Aquatic Insects

Fall Brook Elementary School was named after the brook that runs in front of you. This brook supports many organisms that dwell in it since the environment always supports the organism, which you can observe if you look carefully. The water quality of the brook can be determined by the insects and fish found within it. For instance, Caddisfly larvae found here can only survive in clean water indicating that Fall Brook is very clean and

Post 3 – Oak Trees

There are three oak trees located at Post 3. A number of species of oak are native to New England. Oaks are ideally suited for this area with their ridged bark which allows the tree to handle both hot summers and very cold winters. Red Black oaks families can be identified by the sharp lobes and a hair at the end of the lobe. White oaks have rounded lobes on the edges of their leaves with no hairs. Can you identify which single type of oak is present here?

Post 4 – Meadowed Area

This meadow area is rich in plant and animal diversity. There are three levels of growth found here: ground cover, bushes and trees, all at different heights. These plants both support each other yet compete for sunlight and nutrients. One example of this is the Concord grape vine covering trees at the edge of the meadow. Some of the ground cover plants dominate during different seasons of the year. If you visit at various times you can observe these changes in the meadow.

This dynamic environment supports a diverse insect and animal population that is interlinked and interdependent. The diversity of plant life here creates a unique ecosystem and a thriving one at that.



Fall Brook Meadow

Post 5 – Sheep Wall and Shrews

The stone wall here at Post 5 is a sheep wall that runs all the way to post 9 of the Samoset Middle School Trail. It is identified by the large stones and high wall height and was used by Leominster's farmers to retain their sheep in the 1800's. The walls are populated by many small mammals, but none as fascinating as the shrew. Shrews are the only venomous mammal native to North America (they are not harmful to humans). They use their venom to paralyze their prey. Although it has both weak eye-sight and sense of smell, it uses echolocation and its fine touch to find its prey. Its diet consists of insects, earthworms, salamanders, snails and sometimes other shrews. Take some time and sit on the benches to quietly look, listen, and discover nature.

Post 6 – Black Locust Trees

The tall trees before you are Black Locust Trees. Though not native to New England, they have become a naturalized species. It is one of the plants classified as a legume. Legumes utilize bacteria that use nitrogen fixation to break down nitrogen gas and turn it into ammonia. The tree is known for being very durable and resistant to rot. They are also one of the few trees that are either male or female. Males are identified by the small spikes found on their limbs. Can you find a male tree in this grove?

Post 7 – Staghorn Sumac

As you travel the trail along the school swings toward Post 7 near the start of the trail to Samoset School, you will notice Staghorn sumac trees. They are a native species to New England and can survive in a wide variety of environments, but thrive in conditions others find difficult. If the fruit of the Sumac is washed and soaked in cold water, and then strained, it resembles and tastes like pink lemonade. The Staghorn Sumac is not poisonous like its more famous relative, Poison Sumac, which possesses white berries.