



# CSVW RIVER TRAIL GUIDE

All 35 CSVW Trail Information Stations may be enjoyed from your home or on the trails using smart phone or tablet



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# 1 FIELD

New Hampshire's area is approximately 5.94 million acres, an acre being about the size of a football field—minus the last ten yards. Forests cover 4.74 million acres or 80% of the state. We are the second most heavily forested state. (Maine is the most.) Between 1997 and 2010 lost about 95,040 acres to development.

There are 1.2 million acres of non-forested land in New Hampshire. When the early colonists arrived and began settling, they made a tremendous effort to clear the land. What was once 93% forested was 50% cleared land by around 1850. The gold rush, the civil war, and emigration to the Midwest, where it was much easier to farm, led to the abandonment of cleared land and its reversion back to forest.

The field west of the wall in front of you is 4.4 acres, mown annually to keep it open. Otherwise thousands of seedlings would occupy the field within a few years and it would most likely revert to pure white pine largely. Presently, there is a semi-carpet of low bush blueberries covering the ground. The soil is very acid, a key requirement for dominance by blueberries. One of our goals is to convert this field to a carpet of blueberries. Burning the field, for example, will encourage their spread. This could become an excellent site for townspeople to pick a bountiful supply of this delicious fruit.



View to Teacup Lake

# 2

## White Pine Stand

This stand of white pine is approximately 70 years old. A white pine averages about one foot of growth per year, so to estimate the height of a white pine is to estimate its age. This area was formerly a field and when mowing was discontinued, the area seeded into pure white pine. Notice the difference in the diameters of the trees: some are large, some are medium, and some are small in diameter. Yet the trees are all the same age and about the same height. Some are dying; the forest is being thinned naturally. The weaker, small-crowned trees that are being crowded by the dominant ones are those that will die.

If we were to manage this stand and thin it properly, we would focus on the removal of the smaller diameter, small-crowned suppressed trees, leaving the larger better developed trees with space around each crown so as to reach their full potential. Some say that to thin a forest you should take “out most of the big trees and leave the smaller ones to grow. The opposite should be done, as we outlined above, since the smaller trees will not recover from the years of suppression.

The hardwood competition that persistently tries to establish itself in the understory of the forest has been mowed to maintain the pure pine stand and the open, see-through appearance. On this rich, moisture-retentive, loamy soil, a hardwood forest is the natural succession to the present, white pine forest.



Maintaining white pine on this site requires intensive management. This begins with thinning the stand on bare ground during a natural, white pine seed year, which occur about every 3-5 years.

The seed released in September lands on the disturbed forest floor and has an excellent chance of germinating to a new, tiny seedling the following spring. These seedlings will develop into the next pine forest, if given enough light and periodic release from the large dominant trees overtopping them.

# 3

## Balsam Fir

*(Abies balsamea)*

### Distinguishing Characteristics:

- ▶ Needles: dark green, 1/2 to 1 inch long, flattened, one row on each side of the branch, and marked on the underside by two silvery-white bands.
- ▶ Cone: cylindrical, erect, and dark rich purple in color.
- ▶ Bark: on old trees is thick, rich brown and separated into scaly plates; on young trees often has resin blisters.
- ▶ Tree: has a symmetrical, slender, pyramidal crown that is quite dense, grows to 60 feet with a trunk diameter of up to two feet, has an average life span of 40-60 years, and is mature at 50 to 60 years.
- ▶ Wood: light, weak, soft, and coarse-grained.
- ▶ Application: construction lumber, pulpwood, and Christmas trees.



Balsam Fir (source: Wikimedia Commons)

