

NATURE TRAIL GUIDE

- 1. Oak Canker**—This canker about three feet above the ground indicates decay in the heartwood of the tree. This area is weak and is susceptible to breakage from strong winds.
- 2. Norway Pine Grove**—Minnesota's State Tree—This stand "naturally seeded" from the virgin Norway Pine that originally inhabited this part of the state. Norway pine are high value trees used for lumber, posts, and pilings, and will live to 200-300 years.
- 3. Dead Norway Pine**—Three dead snags from lightning and insect damage. The trees are being used by wildlife and will eventually fall, decay, and enrich the soil.
- 4. Norway Pine Plantation**—Old decaying jack pine used to cover this site, but was harvested in the winter of 1996. The jack pine was used to make dimensional lumber and paper. The Norway pine seedlings were planted in the spring of 1997.
- 5. C.C.C. Plantation**—Norway and jack pine planted by the Civilian Conservation Corps, Washburn Lake CCC Camp, in 1936. Notice the old furrows. Furrowing is done to eliminate sod and plant competition until the seedlings become established.

6. Age and Growth of a Tree—These two trees were cut at the same age. The larger tree was grown in a managed forest with proper competition for sunlight, moisture, and nutrients. The smaller tree was grown in a forest where it had to compete with other trees for light, water, and nutrients. A properly thinned forest will produce larger, healthier trees. Count the growth rings.

7. Grandfather Jack Pine—This old-timer started life in 1891. Jack pine is generally a short-lived tree (usually reaches an age of 70 years). However, soil and moisture conditions are excellent here and this jack pine is doing quite well.

8. Pitch Pine Stump—Fire burned through this area in 1934, leaving stumps such as this. The pitch in this stump will burn very easily, even when wet.

9. Poison Ivy - DON'T TOUCH—Contact with this plant causes a severe rash and itching. Note the shiny leaves in groups of three. It has a white, berry-like fruit. Many forms of wildlife eat these berries during winter months.

10. Norway Pine Plantation—This plantation was hand planted in 1962. The distance between whorls of branches represents the growth of one year. To determine the age of a young Norway pine, count the whorls of branches, from 4-1/2 feet above ground level to the top of the tree, and add nine years. This will give you the total age of the tree.

BASS LAKE REST STOP This 106 acre lake is primarily a duck hunting lake. The maximum depth is only 12 feet. Minnows are seined from the lake, but few larger fish can survive here because it "winter kills" almost every year due to a shortage of oxygen. In the dry 1930s, hay was cut from what is now the lake bed.

11. Norway Pine Plantation—This area was machine planted in 1964. After the area was logged, the tops, slash, and stumps were piled in windrows to make room for a future crop of timber.

12. Tamarack Swamp—Tamarack is our only coniferous tree in Minnesota that loses all its needles each fall. It grows chiefly in bogs, along with black spruce, but is occasionally found on higher ground. Tamarack is used mainly for poles, fence posts, mining timber, pulp, and dimensional lumber.

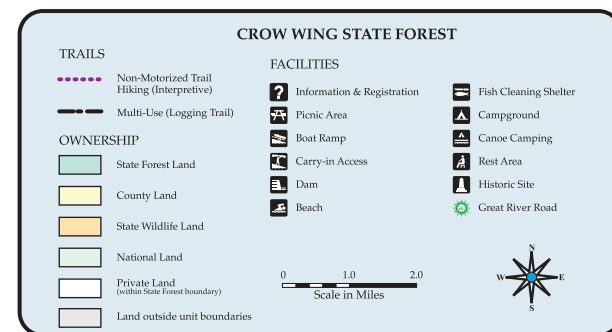
13. Norway Pine Plantation—This pine plantation needs to be "thinned". Thinning a stand involves removing individual or groups of trees to make room for the remaining trees. Poor form and quality trees, usually suppressed trees, are chosen to be removed. This allows more sunlight, moisture, and nutrients to reach the remaining trees, usually the dominate trees.

14. White Pine Weevil—Notice the tree about 40 feet behind the post. This is caused by the white pine weevil which kills the top shoot or leader and causes a side branch to become the new top shoot. This results in a crook in the trunk.

15. Paper Birch—Named for its white bark which peels off in papery layers. Indians used the bark for canoes, maple sap buckets, and drinking cups. The wood is also used for lumber, pulp, and fireplace wood.

16. Bur Oak—A member of the white oak family, bur oak is very dense, heavy wood and is used for furniture, heavy construction, ship building, and railroad ties.

17. Scrub Oak—Actually, this is a northern red oak, but of very poor quality because it is growing on a sandy site. Red Oak grows best on heavier soil. Good site red oak will grow to a merchantable size and is used for finished lumber in homes, furniture, and railroad ties.



See www.mndnr.gov/state_forests/facilities/cmp00010 for details on campground and recreation opportunities.