

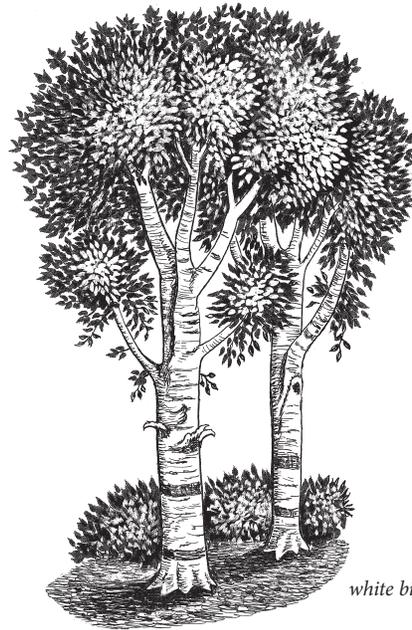
The trails are marked by blue blazes; double blazes signify a split in the trail. You will also find numbered stops corresponding to the notes included. The forest is a dynamic place, changing from season to season and week to week. We hope you take time along your walk to stop and listen and discover the beauty of the Massabesic Experimental Forest Southern Unit.



The Charles E Swett Trail is dedicated to a Forest Manager with the U S Forest Service, who was stationed at the Alfred Headquarters from 1948 until his retirement in 1983.

Charles assisted in marking all of the boundary lines and establishing research plots on this Forest during that 35 year period. He worked closely with Town Officials, the Maine Forest Service and individuals residing near the Forest to ensure that this land would always be open, and remain in a pristine condition for those who sought a "wilderness experience."

Charlie's comprehensive knowledge of the history and natural features of this forest, along with his enthusiasm for seeing that the forest be used to its fullest potential, continues to attract the attention of current land managers and most of the researchers wishing to use this forest.



white birch

***Thanks for exploring the forest, please visit again soon!***

Please respect our few simple rules:

- Do not park in front of the gates
- Do not pick/remove any plants
- Carry in, carry out - do not litter
- Clean up after your dog(s)

***Fires and camping are prohibited.***

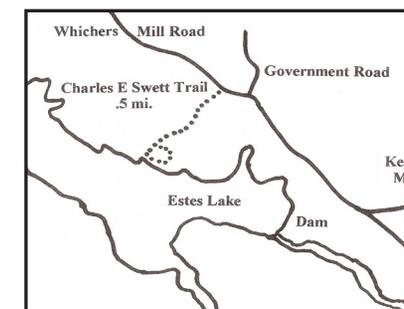
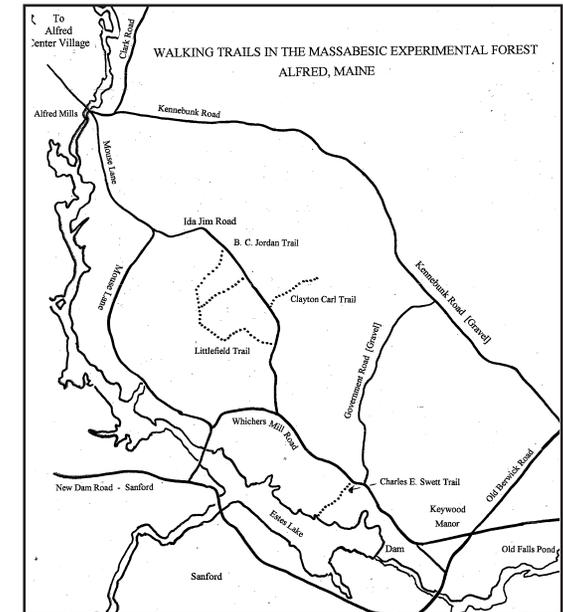
## Massabesic Experimental Forest



Ecology and Management of Northern Forests

USDA Forest Service, Northern Research Station

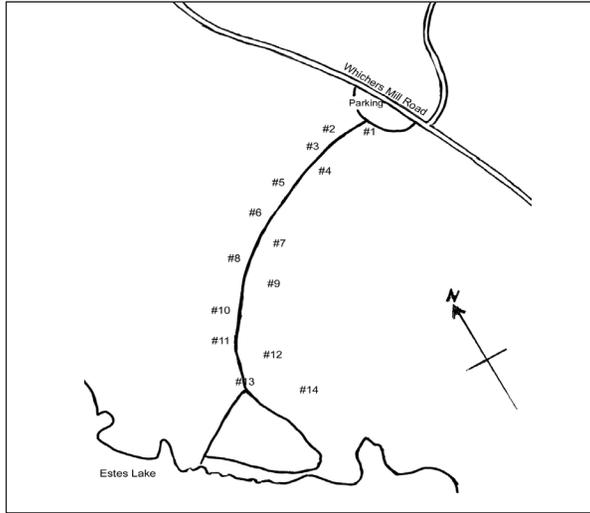
# Charles E Swett trail



Trail map provided by the Alfred Conservation Commission

# Charles E. Swett Trail

Numbered signs along the trail point out some interesting plants and other sites. Visit often to see seasonal changes!



**#1** Cavity Tree - Provides food for insects which in turn provide food for wildlife. Appears to have been struck by lightning. Dead, down, woody material will eventually decompose, providing nutrients to the soil for surrounding trees and vegetation.

**#2** Large Rock Outcrop (Quarry rock) - note several quarry rock sites along the trail. Note the drill marks. Rocks were drilled by hand and often times, the rock did not crack evenly and was left behind. Quarried rock has been used for foundations, buildings, boundary markers, etc.



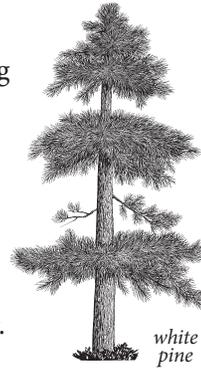
**#3** 1947 Fire Burn-scarred Tree - note charcoal and insect markings.

**#4** Dense young forest, approximately 40 - 50

years old. Overstocked, competing for sunlight. Note lower dead branches, no small plants or vegetation due to lack of sunlight. Too many trees in an area also compete for nutrients and water from the soil.

**#5** Wetland Habitat: sphagnum moss used for natural medicinal purposes. Indians once used sphagnum moss in diapers because it is so absorbent. Red Maple and Yellow Birch like wet areas. This area is very wet at certain times of the year and may be nearly dry in July and August. Due to high water table, trees tend to grow on hummocks. Note the Hemlock trees around the edge of wet area.

**#6** Pruned White Pine Stand  
Pruning is important for providing the best wood for building, etc. Knot free wood is more desirable than wood with many knots. Lower branches should be pruned up to 17 feet above ground level. Pruning should begin at about 30 years old or thirty feet tall and about 4 - 5 inches in diameter.



**#7** Blow-down Oak - A new tree was produced. Oak and other hardwoods are more likely to survive blow down damage and regenerate than softwoods like pine that would probably rot at the base. Note branch became a tree growing towards the sunlight.

**#8** Cord of Wood: 4 x 4 x 8 feet = 128 ft<sup>3</sup>. Traditionally wood is sold by the cord (or by the ton in some cases). 1 cord = 2.5 tons of dense hardwoods such as oak, rock maple and beech.

**#9** Old Stump - The trees in this area may have been salvaged after the 1947 fire. Stumps like other fallen- debris provide nutrients to sustain a forest.

**#10** Damaged White Pine - Note excess pitch-flow on the bark: This tree may have been weakened by the 1995 drought allowing increase of disease or insect damage.

**#11** Blow Down on right, many more blow downs behind you producing "mound/pit pairs" possibly from the 1954 Hurricane. Mound/pit pairs are mounds of dirt created by root balls torn from the earth, also leaving a pit.

**#12** Mixed Wood Forest note even distribution of hardwoods (red & white oaks) and evergreens (softwoods). Note also that more sunlight is filtering into this area than other areas of the forest.



**#13** Ax-Damaged White Birch - wounds in trees allows entrance of bacteria that can discolor and decay the tree. Bark is the protective layer of a tree.

**#14** White Pine Growing in Rock - A seed from another tree took root in a small crevice of the rock that may have had some humus material. The roots have followed the cracks and crevices of the rock for water and nutrients. Note lower dead branches: these branches are not getting enough sunlight. Also note the bark at the bottom of the tree is rough and ridged while the bark farther up is smooth. The bark at the bottom is older than the bark at the top.



The Massabesic Experimental Forest is a research forest purchased in the early 1930's by the USDA Forest Service to study eastern white pine. The largest blocks were obtained from Bates College, which in turn had received the land from the estate of Benjamin C. Jordan, an Alfred lumberman, around 1900. In 1947 approximately 150,000 acres in this part of Maine burned but small tracts like this survived, and are prime examples of what the forests might have looked like before the impacts of logging, farming, and fire.