

Big Tree for April 2008

Pin Cherry (*Prunus pensylvanica*)

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Thickets of pin cherry saplings that sprout straight up in sunny locations burst into blossom in early spring, adding unexpected beauty to the most mundane and neglected landscapes.

Trees that sprout and thrive in full sun - abandoned pastures and edges of fields, along highways, logging sites and disturbed sites in forests where the trees have been blown down, are called pioneer species because they prepare the way for the less sun tolerant but longer-lived trees that follow. This is the first phase in the process of forest succession. The pioneer species are intolerant of shade, and when they are shaded out by taller hardwoods their rapid growth slows and they die back. Along with pin cherry, birches and poplars, white pine and red cedar grow in similar open sites that often have poor soil. The pioneer trees also help to enrich the soil by adding a layer of humus or duff to the topsoil as the tree leaves, needles, twigs, branches and eventually the tree trunks fall to the ground and rot. Underground, the root systems loosen compacted soil and the continuously sloughed off roots become compost in the soil. The roots also take up water that helps to stabilize soil, an important function in preventing soil erosion in disturbed sites.

Pin cherry trees can survive in poor soils like the sandy soils common in NH because they tolerate drought surviving long dry spell without water. But because they are very intolerant of shade, they only live 30 - 35 years. Huge pin cherry trees are unusual. To compensate for their short lives, they begin to flower and produce fruit at a very young age, so even small saplings can be loaded with pretty blossoms. With this early start, pin cherries produce an enormous amount of seed during their short lifetimes. Birds eat the juicy cherries and spread the pits that pass through their digestive tract that drop to the ground under where they like to perch, often along the edges of fields.

The seed pits remains viable for many years – up to 50 to 100 years – longer than the life expectancy of the tree! This is why pin cherry is also called fire cherry. After a forest fire, the dormant cherry pits buried under years of accumulated forest floor litter and humus will sprout when light can again reach the forest floor. Talk about a unique and competitive survival strategy!

Two other cherry species grow in the wild in NH; black cherry and choke cherry. Their lovely white blossoms with five petals are very similar, but the trees differ in form and shape. Fast growing pin cherry has straight trunks, with a single leader that shoots straight up to the sun, with many branches loaded with leaves to catch the sun rays. Its distinctive bark is smooth, shiny, and reddish with horizontal lines or lenticels. Choke cherry is more shrub-like, and typically has multiple twisted trunks. Black cherry is the giant of the three and can grow very tall and survive for hundreds of years, developing dark scaly bark.

The sequence of blooming times is an aid in distinguishing the three cherry species apart - pin cherry blooms first. The clusters of pin cherry flowers open just as the leaves unfold. The other two cherry species bloom after their leaves

have started to open, with clusters of flowers that are more like tubes dangling from the twigs. Choke cherry blooms a week to ten days before black cherry. These three native cherry species bloom in sequence providing several weeks of beautiful clouds of blossoms in the NH woodland in the early spring.

All three have typical serrated oblong cherry leaves, but the pin cherry has the most slender and smallest leaf. Black cherry is a bit fatter and choke cherry is fatter toward the tip. The twigs are different: pin cherry has very tiny buds, while black and choke cherry twigs have bigger buds and an unpleasant taste and smell.

Its leaves turn a pretty yellow to orange providing great fall color. However the tree is not used in landscaping because of its short lifespan, and its susceptibility to pests and diseases. Eastern tent caterpillar makes webbing masses filled with larvae in forks and crotches of cherry trees in the spring, and the fall webworm makes cotton candy-like masses near the tips of cherry branches in the fall. Although not harmful to the tree, they are unattractive. The fungal disease black knot, causes disfiguring clumps of black growth on the branches and is also ugly.

The fast growing tree produces wood that is soft, porous and of no commercial value aside being mixed in with pulp wood. The trees don't get big enough for lumber, and the branchy form makes the wood full of knots. The wood can be used for firewood for home use.

Enjoy pin cherry in the wild while it blooms in April, transforming the bare thickets into clouds of white puffs. If you notice an unusually large pin cherry it could be a county or state champion. Because it is so short lived and tricky to identify it is difficult to keep accurate records. Presently, there is only one listed for all of NH, so it is the state champion at 58 feet tall.

To see the complete NH Big Tree list, visit the NH Big Tree web site at: www.nhbigtrees.org.

If you find a pin cherry or other species of tree that is larger than those on the list, contact the NH Big Tree State Coordinator, Carolyn Page, carolyn_page@hotmail.com, who will pass the information on to the appropriate county coordinator.

The UNH Cooperative Extension and the NH Division of Forests and Lands sponsor the NH Big Tree program in cooperation with the National Register of Big Trees through American Forests.