

## Early Fall for Tulip Poplar

By Susan Camp

We need rain on the Middle Peninsula and throughout southeastern Virginia. What began as an unusually wet summer that brought luscious green hues to the landscape has devolved into a crispy, dry, brown early fall, especially for some species of trees. The first trees on our property to show the effects of sparse rainfall are the otherwise hardy tulip poplars (*Liriodendron tulipifera*). The large, four-lobed leaves shrivel and change from their customary bright green to brown-edged, paper-dry shapes. Tulip poplars are not drought tolerant.

Tulip or yellow poplars, along with white pines, once were the tallest native trees in eastern North American forests. Native Americans built dugout canoes from the straight trunks and European settlers harvested the trees to build log cabins. Today tulip poplar wood is used to manufacture plywood, veneer, flooring, furniture stock, and paper pulp.

The tulip poplar is a member of the magnolia family. The fast-growing, deciduous tree reaches a height of 60 to 90 feet with a spread of 35 to 50 feet in cultivation. In the forest, tulip poplar can reach a height of 150 feet or more. Tulip poplar makes an excellent shade tree in the right location, but because of its height, it is not a desirable street tree. It should not be planted under or near power lines. The immature tulip poplar has a pyramidal shape, becoming more oval as it ages. In the forest, it develops the characteristic, long, straight trunk with few side branches and a high leaf canopy.

The yellow-green, tulip-shaped flowers bloom between April and June. A band of light orange at the base of each petal attracts nectar seekers, especially bees. Tulip poplar honey is a gourmet treat. Hummingbirds also sip tulip poplar nectar. After the flowers drop, cone-shaped fruit, filled with winged seeds called samsaras, develop. The seeds provide winter food for squirrels, and deer munch on the twigs. The dry cones remain on the tree, providing visual interest.

Tulip poplar thrives in USDA Zones 4 through 9. The tree requires full sun and moderately moist, well-drained soil with a pH of 4.5 to 7.5. It has shallow roots, which may contribute to its difficulty in withstanding long, hot, dry spells. Tulip poplar wood is weak, and branches frequently break during high winds or icy conditions.

On the bright side, tulip poplar is subject to few serious insect pests or diseases. Aphid infestation produces sticky, sweet honeydew on the leaves, leading to sooty mold. The yellow poplar weevil can invade, leaving oblong feeding holes in the leaves. The black weevils resemble ticks, and property-owners may become alarmed about an invasion of “flying ticks.” *Verticillium* wilt, mildew, and fusarium and necrotic cankers are diseases that can affect tulip poplar. A positive aspect of tulip poplar is that it is not a preferred host of the gypsy moth caterpillar.

Virginia Cooperative Extension (VCE) Publication 450-237 “Problem-Free Trees for Virginia Landscapes” provides basic information on several popular, relatively disease and insect pest-free native and exotic trees. The USDA Natural Resources Conservation Service Plant Fact Sheet “Tulip Poplar: *Liriodendron tulipifera* L.”, the Missouri Botanical Garden publication “*Liriodendron tulipifera*”, and the University of Kentucky Department of Horticulture article “Tulip Poplar -- *Liriodendron tulipifera*” offer further details on growing and maintaining this majestic native tree.

It is too late this year for our local tulip poplars to turn their clear, golden, autumn color. The long, hot spell has taken its toll on the leaves, and most of them will be crunched under our feet, dry, brown, and brittle. This is not an unusual occurrence for our region, just a little more pronounced this summer. The tulip poplars are hardy trees and the lack of rain won't destroy them. In the spring, the lovely, nectar-filled blossoms and bright green leaves will reappear and we will once more enjoy their unique beauty and the shade they provide.

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