

Common name: **Tuliptree**

Genus Species: ***Liriodendron tulipifera***



Photo credit: Bonsak Hammeraas, Bioforsk
Norwegian Institute for Agricultural and Environmental Research, Bugwood.org

Description: Tuliptree is a deciduous tree growing 80 to 160 feet tall, or more. The large, showy flowers are light greenish to yellow with orange markings and have both male and female parts. Flowering begins when the tree reaches maturity at 15 to 20 years of age.

Habitats: Tuliptree grows on moderately moist, deep, well-drained, loose-textured soils, and along streams, bottom lands, and moist slopes, rarely on dry or wet sites. The species is sensitive to high ozone concentrations.

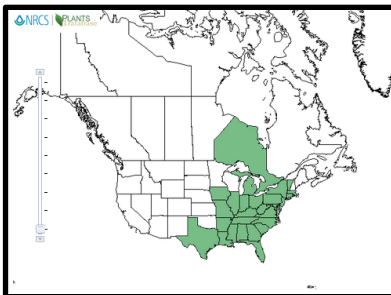
Phenology highlight: Two large large duck-bill-shaped scales cover the terminal bud at the end of each branch in spring.

Species facts

- Tuliptree flowers are insect- and self-pollinated.
- Squirrels eat the fruits in late fall and winter months, and the white-tailed deer often browse on the twigs.
- Native Americans used the inner bark as worming medicine, anti-arthritis, cough syrup and cholera remedy.
- The wood is used for pulpwood, cabinets furniture, musical instruments, toys, gunstocks, and particle board; historically, it was used for carriage bodies, shingles, saddle frames, and woodenware.



Photo credit: Karan A. Rawlins, UGA, Bugwood.org



Why observe this species? Tuliptree is a USA-NPN regional plant species. Regional species are ecologically or economically important. NPN integrates these observations to understand plant responses within the different geographic regions of the nation. In addition, this species is an allergen. Phenology observations provide valuable information to people with allergies and the public health community.

Tip for observing this species: Bring binoculars! The large tulip-like flowers can easily be missed because they may be up 50 feet or higher in the tops of trees.

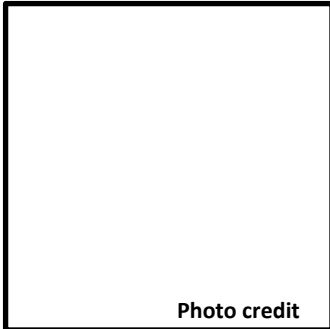
Map credit: USDA, NRCS. 2014. The PLANTS Database <http://plants.usda.gov>, 01 September 2014). National Plant Data Team, Greensboro, NC 27401-4901 USA

For more information about phenology and the New York Phenology Project (NYPP), please visit the NYPP website (www.nyphenologyproject.org) and the USA-NPN website (www.usanpn.org).



Tuliptree (*Liriodendron tulipifera*)

Note: leaf, flower and fruit phenophases are nested so you may need to record more than one phenophase for each; for example, if you record Y for "open flowers" you should also record Y for "flowers or flower buds."



Breaking leaf buds

One or more breaking leaf buds are visible. A leaf bud is "breaking" once a green leaf tip is visible at the end of the bud, but before the first leaf from the bud has unfolded to expose the leaf stalk (petiole).



Leaves One or more live unfolded leaves are visible. A leaf is unfolded once its full length has emerged from the bud so that the leaf stalk (petiole) is visible at its point of attachment to the stem. Do not include fully dried or dead leaves.

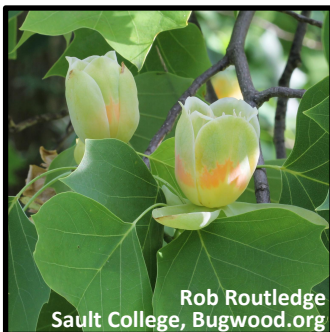


Increasing leaf size

A majority of leaves on the plant have not yet reached their full size and are still growing larger. Do not include new leaves that continue to emerge at the ends of stems throughout the growing season.



Colored leaves One or more leaves (including any that have recently fallen from the plant) have turned to their late-season colors. Do not include fully dried or dead leaves that remain on the plant.



Flowers or flower buds

One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds that are still developing, but do not include wilted or dried flowers.

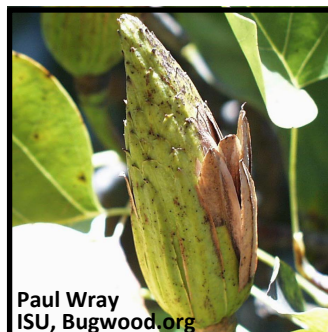


Open flowers One or more open fresh flowers are visible. Flowers are "open" when the reproductive parts (male stamens or female pistils) are visible between open flower parts. Do not include wilted or dried flowers.



Fruits

One or more fruits are visible on the plant. Tuliptree fruit is a winged seed, tightly grouped with many others into a cone shape. Individual seeds are green when unripe. Do not include empty cones.



Ripe fruits One or more ripe fruits are visible on the plant. Tuliptree fruit, a winged seed, is ripe when it has turned tan or brown. Do not include empty cones that have already dropped all of their fruits.

Phenophases not pictured: **Falling leaves; Recent fruit or seed drop**