

Tree of the Month, September 2012: Kentucky coffeetree (*Gymnocladus dioica*)

The Kentucky coffeetree, so named because settlers used to roast the seeds to make a bitter coffee substitute, was part of a decades-long battle for status as the State Tree of Kentucky. The other contender was the tulip tree (*Liriodendron tulipifera*) and each tree had its advocates amongst the local politicians and newspapers. In 1976, the Kentucky coffeetree was officially declared State Tree, and it held that title until 1994, when the tulip tree was selected instead. To placate fans of the coffeetree, *Gymnocladus dioica* was then named the State Heritage Tree of Kentucky.

A member of the Pea Family (Fabaceae), Kentucky coffeetree has scaly gray bark and enormous feather-like, pinnate leaves up to a metre in length – the largest leaves of any deciduous tree in North America. It takes a long time for the tree to leaf out in spring and it sheds its leaves in early autumn. *Gymnocladus* means “naked branch”, and since the tree can appear dead in early spring before it finally leafs out, French Canadians call it *chicot Février*, which translates to “February snag”.

Found only in scattered sites in Eastern North America, this rare tree is an anachronism and may be a relic from a time when giant sloths, mastodons, and other megafauna roamed the continent, thousands of years ago. Scientists believe the large pod-like fruits of *Gymnocladus dioica* evolved to be eaten and dispersed by a giant mammal species that has since become extinct, and the tree has been struggling to survive ever since. The pods contain a sweet-tasting pulp that is toxic to the small and medium sized mammals, including domestic sheep and cattle, that occur throughout its present range but it is believed to be harmless to larger mammals, such as elephants. Since there are no elephant-sized mammals in North America today, seed dispersal now seems to occur primarily by water and many of the trees are found near rivers. However, this isn't the most effective method of seed dispersal because the heavy pods tend to sink unless the tough seed coat is broken and, as a result, germination is rare. Listed as endangered in New York State and rare throughout the rest of its range, the Kentucky coffeetree has an uncertain future.

At VanDusen, this tree can be found in the Eastern North America collection just to the right of the main path leading to Cypress Pond.