



American Chestnut (*Castanea dentata*) - Once Majestic Hardwood



Did you Know?

- The American Chestnut is the only native species of chestnut native to Canada.
- They were once a prominent tree in the forests of Southern Ontario.
- Chestnut trees do best in areas where they experience frost and snow and are able to lie dormant for periods.

Photo: Allison Watt

Habitat - Grows among other broadleaf tree species on well drained sandy soils. They prefer hillsides facing south and east.

Height - Can grow up to 35 metres tall.

Blooms - Mid June to early July.

Range: Before the American chestnut was devastated by the chestnut blight it was widespread in eastern North America. It could be found in most forests, from southern Ontario, east to the Atlantic coast and south to Alabama and Carolina. In Ontario's Carolinian forest zone the species was once dominant in many areas, today there a fewer than 200 trees left.

Status - S2/ Endangered ([what does this S-rank mean?](#))



Identification:



Bark: Smooth when young separating into broad, flat topped ridges as it ages.

Leaves: Simple, yellowish-green leaves with prominent teeth ending with a short, curved bristle. Leaf veins run to each tooth. Leaves are arranged alternately along the twigs.

Flowers: Pollen flowers are 12-20 cm long catkins in leaf axils. Seed flowers are small bur-like structures appearing at the base of the catkins. Both flowers are present on the same tree.

Fruit: Small, ovoid, brown nuts are surrounded by a prickly husk that splits into four parts when the nut is ready to be released.

Photo: Allison Watt



Leaves, nuts and husks

Photo: Wikipedia Commons



Bruce Trail
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Interesting Facts:

In the late 1800's Chinese Chestnut trees were brought into the United States for experimental plantings. Unfortunately the imported trees carried a fungus which the American Chestnut trees had no resistance. The result was that the American Chestnut died off throughout its range as the fungus quickly spread from tree to tree leading to the death of 99% of the population. It is estimated that three billion American chestnut trees died within a thirty year span after the introduction of the chestnut blight.

In 1987, the American chestnut was designated as a threatened species by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and in 2004 was re-designated as endangered. It is also listed as endangered on the Species at Risk in Ontario (SARO) List and receives protection under the *Endangered Species Act, 2007* (ESA).

The nuts from the chestnut were once an important resource. They have been used as a source of food from before European settlement by Native Americans and have continued to be a favorite during the Christmas season as we are all familiar with the smell of " chestnuts roasting on an open fire" .Nuts from the European Sweet Chestnut are now sold instead.

There are many efforts being done to try and bring back the Chestnut to its former glory. The Canadian Chestnut Council is an organization attempting to reintroduce the trees in Canada, primarily in Southern Ontario. In the United States The American Chestnut foundation is also trying to re-establish the species in its former range. Recovery efforts are attempting to identify blight resistant trees of the species as well as crossing the American Chestnut with the blight-resistant Chinese Chestnut in the hopes of recovering the American Chestnut growth characteristics and genetic makeup. Other efforts have focused on genetically modifying the species to resist the fungus.

American Chestnuts on the Niagara Escarpment

Evidence of these once mighty trees can be seen along the Niagara Escarpment and the Bruce Trail as several small saplings have been identified on several BTC owned and managed properties especially in the southern sections. Some larger specimens have also been found at other sites in Conservation Areas, provincial parks and on private lands.

The BTC monitors the locations of trees on their properties and keeps records of the health and growth of the individual specimens. Once a tree survives past a certain diameter it may be possible that it is resistant to the Chestnut Blight. Any trees found or surviving to a diameter at breast height of 10 cm or more are recorded and the information sent to a recovery program led by the Ontario Soil and Crop Improvement Association where they are attempting to revive the species.

The Bruce Trail Conservancy is continually protecting land along the Niagara Escarpment in an effort to protect species like the American Chestnut and the habitats on which it depends for survival.