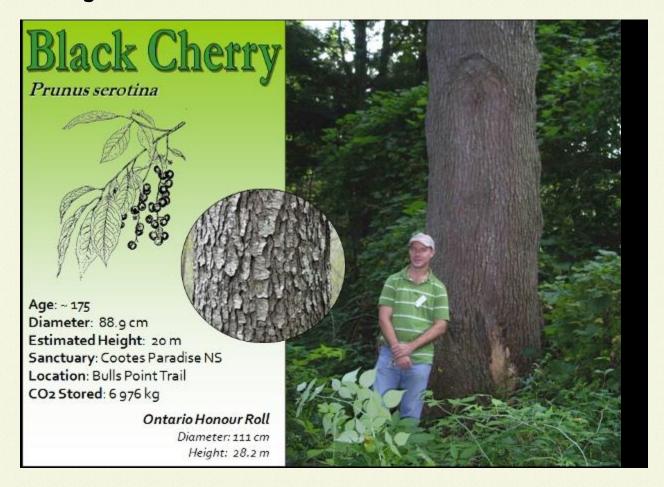


Heritage Trees



Heritage Trees and RBG's Forests

Our heritage trees are generally chosen for their old age and large size, but in some instances by their appearance or cultural significance. As a National Historic Site the Garden's properties protect many remarkable trees. The nature sanctuaries contain 400 hectares (1,000 acres) of forest, while the horticultural areas have over 500 specimens. The mature forest resides within the many deep ravines and represents both Carolinian and Mixed (mixed = deciduous and coniferous) forest types, with over 70 species and trees up to 1.5m (5ft) in diameter. On the plateaus, the forests are still young - cleared in the past and allowed to regenerate 60-70 years ago.

RBG's forest ecosystems are a priceless resource that we are committed to preserving. But, what if we could place a monetary value on them?

Forests hold a tremendous amount of value, providing benefits to all living organisms - including humans. These benefits are produced from the ecological functions of a healthy ecosystem and are known as ecological goods and services. Forest services include clean air; carbon sequestration; water filtration

and regulation; the generation of soil and vegetation; homes for wildlife, pharmaceutical and construction materials, and spiritual and psychological health. Ecologists and economists have found a way to assign monetary values to these goods and services. Using figures presented in "Ontario's wealth Canada's future – Appreciating the value of the Greenbelt's eco-services", published in 2008 by the David Suzuki Foundation: we calculate that every year, the forests of Royal Botanical Gardens generate \$2,165,600 in services. Now that's something worth remembering!

Table: Heritage Trees of Royal Botanical Gardens

Along with the size and location of the trees, we have listed the carbon storage and its equivalent released by the average North American car in kilometers driven.

Name	Location	Diameter (cm)	Estimated Height (m)	CO ₂ Stored (kg)	CO ₂ Equivalent (km)
Shagbark Hickory Carya ovata	Woodland Garden	71.1	19	9,116	41,679
Bitternut Hickory Carya cordiformis	Cherry Hill Gate Trail	79.0	20	11,562	52,864
White Ash Fraxinus americana	Ravine Road Trail	89.5	22	15,286	69,891
White Ash Fraxinus americana	Grey Doe Trail	104.5	24	21,620	98,853
Honey Locust Gleditsia triacanthos	Captain Cootes Trail	73.7	18	4,619	21,117
Black Walnut Juglans nigra	Hopkins Loop	100.5	24	19,902	90,994
Tulip Tree Liriodendron tulipifera	Ravine Road Trail	91.4	20	7,840	35,846
Cucumber Magnolia Magnolia acuminata	George North Trail	27.9	10	376	1,721
Eastern White Pine Pinus strobus	Captain Cootes Trail	95.9	20	3,275	14,974
Eastern Cottonwood Populus deltoides	Boathouse trail	99.1	22	14,396	65,822
Eastern Cottonwood Populus deltoides	Creekside Walk	119.4	24	20,079	91,807
Black Cherry Prunus serotina	Bull's Point Trail	88.9	20	6,976	31,898
Black Cherry Prunus serotina	Ravine Road Trail	91.4	20	7,421	33,930
White Oak Quercus alba	Bulls Point Trail	113.9	23	23,988	109,680
Northern Pin Oak Quercus ellipsoidalis	Princess Point Trail	104.5	23	19,410	88,745
Bur Oak Quercus macrocarpa	Borer's Creek Floodplain	146.1	24	24,335	111,265
Red Oak Quercus rubra	Escarpment Trail	100.0	22	17,463	79,844
Red Oak Quercus rubra	Princess Point Trail	111.2	23	226,694	103,762
Red Oak Quercus rubra	Princess Point Trail	115.3	22	15,286	69,891

See our heritage trees while exploring RBG's trails and gardens.

Join us for one of our public programs or visit on your own and experience the value our forests have to offer.

