

American Beech (*Fagus grandifolia*)

The American Beech is often the most distinctive tree in the forest because of its massive, smooth, grey trunk. The hollows of these large trunks often provide shelter for various animals. Triangular beechnuts, enclosed in a bur, are a favourite and important source of food of birds, squirrels, chipmunks and mice. First Nations people would eat the nuts raw, cook them into a soup or mush, or boil them to make high quality oil. The inner bark is also nutritious and flavourful and was used as a protein source in soup or bread. The tough, strong wood of this species is ideal for flooring, furniture and other woodenware. American beech became relatively more abundant

when early loggers neglected it in favour of maple, birch or white pine. In recent years it has suffered from beech bark disease, initiated by an insect that attacks the bark and makes it susceptible to bark canker fungi. The disease, first seen in North America in 1920, has spread slowly northward and has been observed on beech trees in the West Island since 2007.



Sugar Maple (*Acer saccharum*)

This tall handsome maple, which adds dramatic colour to our forests every fall, is one of the most common tree species on the West Island and one of the most useful to people. Its wood has been used for everything from furniture to musical instruments and it is, of course, the source of maple syrup. First Nations people developed the technology for tapping the trees early in the spring to catch the first, and sweetest, flow of sap. Sap was also used as a beverage, fresh or fermented into a kind of beer. The sugar maple has two seeds attached to two large papery wings in a horseshoe

shape, called a double samara, which can be carried 100 m by the wind. The trees are very sensitive to air pollution and to drought and the anticipated climate change is a major concern for this species. The leaf of the sugar maple is known internationally as it is the centrepiece of the Canadian flag.



Butternut (*Juglans cinerea*)

A close cousin of the black walnut, the butternut produces large nuts that are popular with humans and animals. Enclosed in a sticky, yellow-green husk, the kernel of the nut is sweet, oily and edible and was once very important in the diet of native peoples. Settlers prized the wood for cabinetwork and furniture, and made syrup from the sap but yields were lower than for sugar maple. The butternut does not survive in a shaded understory and grows best on well-drained sites. In order to reduce competition from other plants growing around it, the butternut produces a substance in its root tissues called "juglans" that is se-

lectively toxic. Homeopathic medicine uses a tincture from the bark of the roots for various maladies related to skin and headaches. Unfortunately, a fungal disease (Butternut Canker) has recently threatened this handsome species and has killed many trees in the southern part of its range.



Bitternut Hickory (*Carya cordiformis*)

The northernmost of hickories, this is a small tree in the understory of the forest that was well used by early bitternut hickory inhabitants of the West Island. The round, bitter nuts, inside a yellow-green husk with a pointed tip, are eaten by wildlife but their high tannin content and extreme bitterness make them unpleasant eating for humans. However, early settlers used oil extracted from the nuts for oil lamps and believed that the oil was valuable as a cure for rheumatism. The Iroquois used the oil mixed with bear grease as an insect repellent and used the bark for furniture and snowshoes. Hickory has tra-

ditionally been very popular as a fuel wood because it burns evenly, and produces long-lasting steady heat and the charcoal gives food a hickory-smoked flavour. The generally low percentage of hickory in many forests may be due in part to the selective cutting of hickory to be used for fuel.



American Elm (*Ulmus americana*)

This tall, stately tree was once a familiar site in local forests and on city streets. In earlier times, the elm was valued for its interlocked grain that is difficult to split. This was an advantage when bending of the wood was needed in making barrels, baskets, and wheel hubs. The inner bark is tough and can be twisted into long fibres and it is possible that native peoples used this rope to attach the poles that supported the structure of longhouses. However, the elm has been all but wiped out by Dutch elm disease, a fungal disease spread by beetles. The disease was first introduced to North America in 1930 via a shipment of infected elm from Europe that evidently

contained both the fungus that causes the disease and the European elm bark beetle, the preferred method of transportation of the fungus. The ability of the fungus to hitchhike from tree to tree on both the European and the native elm bark beetle hastened the spread of the disease. By the 1970's most stands had been devastated and there are only scattered trees left.



Black Cherry (*Prunus serotina*)

The largest of the wild cherries, the black cherry has a rich, red-brown wood that is highly valued for cabinets and fine furniture. Black cherry fruits are an important source of food for many species of birds and mammals, and numerous migratory birds feed on the cherries as they migrate south in the fall. The leaves, twigs, bark and seeds are poisonous to livestock because they contain a cyanide compound that breaks down during digestion and becomes toxic. Nevertheless, fox, squirrels, rabbits, and native deer are unaffected by

the cyanide and commonly consume the cherries. Unlike domestic cherry trees, which flower before the leaves appear, the black cherry flowers when the leaves are nearly fully-grown. These beautiful flowers are unmistakable in late spring.

