



NORTH AMERICAN
NATIVE PLANT SOCIETY

*Dedicated to the study,
conservation, cultivation,
and restoration
of North America's
native flora*

Native Trees

Southern Ontario

By Tom Atkinson

Trees are a major component of the landscape and a crucial part of many ecosystems. They add height, shade and structure to a garden design, and provide cover and nesting sites for birds. Native trees support a much greater variety of wildlife than exotic trees, and because they belong in the local environment, they do no harm if they spread into surrounding natural areas, unlike invasive alien trees such as Norway maple. Native trees may supply nectar and fruit for wildlife. Some species have a specific association with specific native trees e.g. eastern swallowtail butterflies lay their eggs on tulip trees, which then provide food for the caterpillar when it emerges.

A tree is a long-term project, which is likely to grow for decades and may survive a century or more. It is tempting to plant a small sapling too close to a building. Choose trees carefully to ensure that you select one that will grow well in your conditions and which will not get too big for the space available. This is a guide to just a few of the beautiful native trees of Southern Ontario. For more selections, go to the Plant Database on the NANPS web site at www.nanps.org and select "Tree", or refer to the books, web sites and suppliers listed at the end of this information sheet.

The best time to plant a tree was 20 years ago. The second best time is now.

- Chinese Proverb

Birches - Yellow & Cherry (*Betula alleghaniensis*, *B. lenta*)

Unlike so many of the white birches that are plagued by bronze birch borer, the native specimens, like yellow and cherry, have great resistance.

The medium-sized yellow birch is found in nature under cool, moist conditions, but it can be adaptable. Flowers are the typical tiny female ones, and the male ones are catkins, which expand as spring warms the ground. Fruit is a flaky seed cone, which breaks apart over winter to disperse its seeds. Autumn leaf colour is a pleasant yellow. Bark is exfoliating, and a dark bronze colour. The tree is hardy to Zone 3. Some specimens in the north wilds are very large. The wood is hard, and the birch found in fine furniture will almost certainly be of this species.



Cherry birch is similar, with almost black bark that does not exfoliate. Twigs of this birch manifest a strong wintergreen fragrance when abraded (the "scratch and sniff" test). While not a sure fire test for this tree, that scent coupled with the bark are guarantors that you have a splendid tree on your hands. This birch is less hardy than the yellow, to Zone 5. One of the compensations is the superb autumn leaf colour.

Black gum (*Nyssa sylvatica*)

This tree, hardy to Zone 5, grows up to 20m. It can be very long-lived in the correct site, is spectacular in autumn, and is recommended unreservedly. Soil must be fairly acidic and moist to very moist, with abundant organic matter. Leaves are variable: in some sites, shiny dark green and thick, and in other locales, wider and more matte. Fall colour can be anything from yellow-orange to scarlet red; on female trees, the blue drupes are quite showy against the fall leaf colour. Aged trees display flat, square plates of bark. Many open-grown, or younger, trees have the look of a pin oak, with branches horizontal to slightly down-turned.

Chinquapin oak (*Quercus muhlenbergi*)

Never heard of it? Then prepare to be pleasantly surprised. A medium-sized oak, it grows rapidly even in acid or alkaline soil and flowers relatively early for an oak. The leaves are very attractive, with a shiny, dark green surface and whitish underside. The bark is patchy, alternating between light and dark hues. Male flowers are catkin-like and golden, and come out before the leaves unfurl. Blue jays and squirrels favour its small, colourful acorns. Fall leaf colour is a warm, light brown, with a touch of red on the leaf mid-rib. Hardy to Zone 5 and Zone 4 if properly sited, it will withstand quite wet conditions and summer heat and drought. An alternative is its sister, dwarf chinquapin oak (*Q. prinoides*), a much smaller tree, hardy to Zone 5, which prefers a drier, more acid soil.

Cucumber magnolia (*Magnolia acuminata*)

This is Canada's only indigenous magnolia and, in nature, is found just north of Lake Erie and in the Niagara Peninsula. It is a bit of a "wall flower" in comparison to some of its showy sisters. It has large, pointed, medium green leaves and attractive green-yellow flowers that deepen with time. The gherkin-like seed cones turn from green to red. When the seed cones are ripe, orange-coated drupes appear and dangle on silk-like threads, to be blown here and there by winds or consumed by birds. The first nations called it the "Shining Tree" after which NANPS' Shining Tree Woods is named. The tree is hardy to Zone 4. It is of medium stature.

Dogwood - Alternate-leaf dogwood (*Cornus alternifolia*)

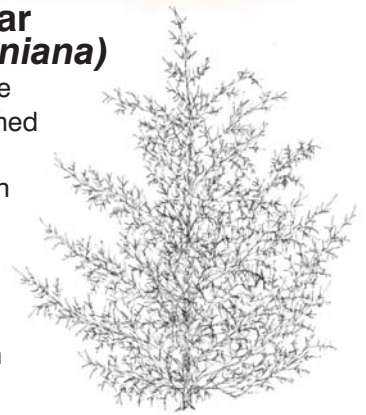
Very small in stature and elegant, its winter silhouette is what one might expect to see adjacent to a Japanese pagoda. Each year, before the lead branch starts to grow upward, the other branches shoot out laterally, resulting in an almost artistic layered look. The cream-coloured flowers are clustered upright. If the tree is grown in sun, the flowers are more copious. Its masses of dark blue drupes are enjoyed by squirrels and birds. This shade-tolerant tree can be grown in an understory and has a hardiness of Zone 3. Its fall leaf colour varies from dark burgundy to a dull red.



Though only hardy to Zone 5, an alternative is flowering dogwood, (*C. florida*) with its showy white flowers, red berries, and "alligator" bark.

Eastern redcedar (*Juniperus virginiana*)

The Acadians who were exiled to Louisiana named the local version of this tree "red stick" or baton rouge. This very small tree, which requires sun and is tolerant of quite dry conditions, is hardy to Zone 3. It can become majestic in appearance, almost a very large "bonsai" analogue to the west coast redwoods. Foliage is dark green and on female trees the fruit is a small berry-like sphere which is dark blue but with a whitish powder or bloom. Bark is reddish-brown and fibrous.



Hackberries

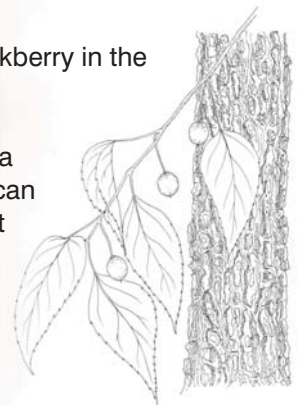
There are two types of hackberry in the region:

Celtis occidentalis

is the common hackberry, a vigorous, fast grower that can be grown from dry to moist conditions. It is a large tree, and a good choice for those who would like an elm, but are fearful of the dreaded Dutch elm disease. Its bark seems to exfoliate.

The leaves feel rough and fall colour can be close to non-existent. The fruit is a small, colourful drupe with a sweet, edible seed coating.

C. tenuifolia, or dwarf hackberry, is a much smaller version that's found peppered through the region but never abundant in one place. It does not exfoliate; rather, it forms plates which are in some ways reminiscent of black cherry bark. The dwarf hackberry is not at all fussy about the soil, pH or moisture regime. A great choice for smaller gardens where a tough tree is desired.



Hickories (*Carya species*)

There are several hickories that are native to the region, and some favour dry, almost xeric, conditions:

Shagbark hickory (*Carya ovata*)

is medium-sized with shaggy looking bark. Strips

of it peel away at either end, giving it a distinctive, unkempt appearance which is surprisingly captivating. There are five leaflets with a gold autumn colour. The nuts are large and edible by humans and squirrels.

Bitternut hickory (*C. cordiformis*), another Zone 3 dweller, has smoother bark, a more walnut-like leaf, sulphur-yellow buds, yellow autumn leaf colour, and a smaller, bitter nut. Both trees are hardy to Zone 3. The bitternut is less choosy about its preferred soils.

Pignut or red hickory (*C. glabra* var. *odorata*) is an excellent choice for really dry sites. The bark is tighter than that of a shagbark, and the fall leaf colour is reputed to be the best of these three hickories. Nuts are swollen at one end, like a tiny pear.

Mountain maple (*Acer spicatum*)

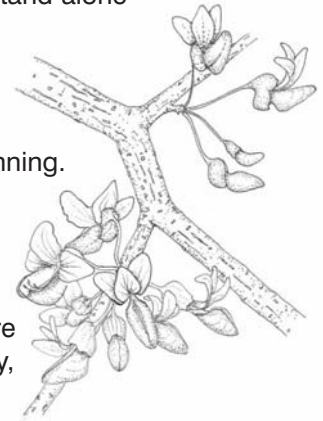
If you dwell near shaded, steep valleys, with seepage slopes or rivulets, you will find mountain maple as an understory tree. It is similar to many of the Japanese maples, with small, yellow-green leaves, delicate, upright flowers, and reddish bark on the young trees and the branches. The keys are small, and autumn leaf colour varies from orange to a glowing orange-red. The tree is happiest as an understory specimen, though it can grow in the open once established. An alternative is striped maple, *Acer pensylvanicum*, which is similar, but with white stripes on green bark. This tree needs to be in the understory, and requires more acid soil. Both are hardy to Zone 2.

Ohio buckeye (*Aesculus glabra*)

Buckeyes get their name from the white ellipse on the bottom of each of their nuts, reminiscent of the eye of a male deer, or buck. Ohio buckeye, considered a small tree, is hardy to Zone 5, and is the only member of the genus which is native to Ontario. It has a palmately-compound leaf, with five leaflets, dark green above and paler beneath, and is rather rough. Fall colour is anything from orange to fiery red, with the occasional golden specimen. Flowers are yellow; in cool springs, returning hummingbirds will thank you for their presence. The fruit husk is a spiked sphere. Though the nuts are not edible by humans, squirrels delight in them. Bark on the tree is fibrous and soft on young trees. Ohio and other buckeyes are North American relatives of the European horse chestnut, and have the advantage of being less susceptible to the leaf scab or “rust” which blights the exotic species.

Redbud (*Cercis canadensis*)

Redbud is a very small, adaptable tree, not terribly fussy as to soil, and can be grown as an understory tree or as a stand-alone specimen. In spring, before leaf-out, the tree is a mass of deep pink, pea-like flowers. En masse, the image is stunning. As flowers wane, heart-shaped, eye-catching leaves wax, turning a lovely yellow colour in autumn. Mature bark has a distinctly flaky, rufous colour. Redbud is hardy in Zone 5, even to Ottawa if seed from selected northern trees is selected.



Sassafras (*Sassafras albidum*)

Sassafras is colloquially known as the “mitten” tree as it has three leaf shapes: no lobe, one lobe, and two lobes. All these pleasant, soft-green leaves will be on a single tree at the same time. Sassafras is dioecious, with male and female trees. The latter produces dark blue drupes after flowering. Each drupe is presented in upright stance by a chalice-like red stem or pedicel. Flowers are very small and yellow, and appear in abundance before the leaves, with a gorgeous, almost mist-like yellow suffusion of colour in the spring. Branches have the horizontal, wind-swept look similar to white pine. Bark is slightly spongy. Sassafras can be suckering and almost shrub-like, or a small tree. It is hardy to Zone 5 and prefers moist, slightly acidic soil. If you are fortunate, fall leaf colour can be a dazzling red, though trees vary from yellow to shades in between.

Sycamore (*Platanus occidentalis*)

In nature, sycamores are floodplain denizens. Hardy to at least Zone 5, they require a large space, with moist to wet soil. Growth is rapid, and all facets of the tree are of interest. The leaves are huge, and must be seen to be appreciated; think of a jumbo maple leaf with no upper lobes and one huge lobe at the bottom. Bark is plated and flaking on the trunk; on upper branches, the bark will drop off at times in



sheets, leaving a smooth, white sheen to the branches. Fall leaf colour is a chestnut brown. Fruit consists of hanging spheres composed of a mass of seeds with a furry tail. When leaves fall, the bud for next year's growth is found under where the leaf petiole was joined to the branch.

Tulip tree (*Liriodendron tulipifera*)

This large, quick growing tree will reward the grower in just over a decade with its lovely yellow-green tulip-shaped flowers with an orange ring near the base.

The leaves look as if a gardener has taken scissors and cut the tip off. A relative of magnolias, it prefers moist, slightly



acidic soil, but is adaptable once established. After pollination, a collection of samaras is formed. In autumn, they dry, separate, and rain down to the ground, leaving an outer ring of samaras. After a light snow fall, the now filled samara rings coat the tree in tiny, "vanilla ice cream cones". The tree is hardy to at least Zone 5, and specimens have been grown well outside its natural range.

Tom Atkinson is an amateur naturalist and tree propagator living in Toronto. He may be reached at asimina@sympatico.ca.

Illustrations drawn by Brigitte Granton, who creates oil and acrylic paintings of landscapes and flowers. <http://www.brigittegranton.com/>

References

Trees in Canada by John Laird Farrar, ISBN 1-55041-199-3

Trees of Ontario by Linda Kershaw, ISBN 1-55105-274-1

Trees of the Carolinian Forest by Gerry Waldron, ISBN 1-55046-404-3

NANPS web site: www.nanps.org. Look for "Plant Database" and "Commercial Growers".

Ontario Trees web site: www.ontariotrees.com

University of Waterloo Tree List:

<http://www.adm.uwaterloo.ca/infowast/watgreen/nativetrees.html>

Government of Ontario Tree Atlas:

<http://www.mnr.gov.on.ca/en/Business/ClimateChange/2ColumnSubPage/267027.html>

Where to Buy

NANPS Spring Plant Sale

(Check www.nanps.org for date and location)

Guelph Arboretum Fall Plant Sale

(Check <http://www.uoguelph.ca/arboretum/> for date and location)