

Key to native/non-native status: NN= Non-native, NF= Native to the Northfield area (Rice County and surrounding counties), NA= Native to North America

- 1. Norway Spruce, *Picea abies*. Needles: 1/2-1", arranged singly, dark blue-green, 4-sided in cross-section, fragrant when crushed. Cones: 2-7". NN (North and Central Europe)
- 2. Star Magnolia, *Magnolia stellata*. Leaves: 4", oblong. Flower: 3-4", white, many-petals, and slightly fragrant. Note: Flowers bloom in spring before the tree leafs out. NN (Japan)
- 3. American Hornbeam or Blue Beech, *Carpinus carolinian*. Leaves: 2-4 1/2 ", long elliptical with a pointed tip, single or double sawtoothed. Bark: smooth and grey. NF
- 4. Hawthorn, *Crataegus crus-galli inermis*. Leaves: 2-4", oval, double-toothed. Bark: grey with red streaks, scale-like. Flower: five white/pink petals. NA (Southeastern Canada down the East Coast of the US). Flower: 1" white flowers found in clusters and often considered to have an unpleasant odor. Note: While native to North

America, the trees you see here have been developed for landscape purposes.

- 5. Redbud, *Cercis canadensis*. Leaves: 2-6", heart-shaped. Flower: bright purplish-pink. NA (Southern Midwest south to Southeastern US). Note: This tree flowers before leafing out in the spring
- 6. Pin Oak, *Quercus palustris*. Leaves: 4-6", lobed, pointed tips at terminus of each lobe. Fruit: acorns. NF. Note: This tree was planted in honor of Carleton President Steven R. Lewis, Jr.
- 7. Kentucky Coffeetree, *Gymnocladus dioicus*. Leaves: 12-36", double-compound with 2" leaflets. Fruit: 4-10" green pod that becomes brown, found only on female trees. NA (Southern Midwest)
- 8. White Cedar, *Thuja occidentalis*. Leaves: 1/16-1/18", evergreen and scale-like. Bark: red-brown and somewhat hairy appearance. NA (Northeastern US and Southeastern Canada and dispersed throughout the East Coast of the US). Note: White cedar silhouette vary greatly between trees planted for landscaping. The shape of this tree doesn't reflect that of wild cedars.

- 9. Bur Oak, *Quesrcus macrocarpa*. Leaves: 5-12", lobed, rounded tips at terminus of each lobe, clustered at ends of twigs. Fruit: acorn with hairy cap covering over half of nut. Bark: thick and deeply grooved. NF
- 10. Ironwood, *Ostraya virginiana*. Leaves: 2-5", elliptical and double saw-toothed. Fruit: seeds concealed in papery pouce, arranged on groups that resemble hops. NF
- 11. Paper Birch, *Betula papyrifera*. Leaves: 2-4", double-toothed, pointed tip, paler green on bottom. Bark: white and often curling off the trunk in sheets. Fruit in small caticins. NF
- 12. White Pine, *Pinus strobus*. Needles: 2.5-5", in bundles of five, blue-green. Bark: gray and scaly. NF. Note: While not native to Rice County, it is native to rocky river valleys nearby to the East.
- 13. Hackberry, *Celtis occidentalis*. Leaves: 1.5-2.5", oval and toothed with uneven base, shiny green above and pale below. Bark: knobby and ribbed, this is a very distinctive characteristic of the species. NF
- 14. Trembling Aspen, *Populus tremuloides*. Leaves: 1-3", almost round, finely-toothed with a pointed end and dull green underside. Bark: brown near base and white near top. NF
- 15. American Elm, *Ulmus americana*. Leaves: 3-6", oval with asymmetrical base and double-toothed edges. NF. Note: Many elms have been lost to the non-native Dutch Elm disease. This one is treated regularly to protect it from the fungus.
- 16. Sugar Maple, *Acer saccharum*. Leaves: 3-5", 5 lobes (occasionally only 3), pointy tips. Fruit: double seeds with propellers. NF. Note: There are many sugar maples around the bald spot.
- 17. Black Walnut, *Juglans nigra*. Leaves: 12-24", compound with narrow, widely spaced leaflets of 3-4". Fruit: 1.5-3" round green husk around a dark nut. NF
- 18. Green Ash, *Fraxinus pennsylvanica*. Leaves: 9-16", compound, 5-9 oppositely attached leaflets. NF. Note: Green Ash, one of the most common species on Carleton's campus, is under threat from the Emerald Ash Borer. a beetle that kills ash trees
- 19. Honey Locust, *Gleditsia triacanthos*. Leaves: 12-24", compound or double-compound, 1" leaflets. Fruit: 6-16" pods. NA (South Central US). Note: This tree holds its pods throughout the winter
- 20. Ohio Buckeye, *A esculus glabra*. Leaves: compound with 5 pointed leaflets 3-5" in length around a central point, green on top, hairy and pale on bottom, irregularly toothed. Fruit: spiny and round 1-2", light brown. NA (Southeastern Midwest)
- 21. Tamarack, *Larix laricina*. Needles: .75-1", soft and triangular in cross-section, deciduous. Cones: .5-.75". NF. Note: This is a deciduous conifer, which means that it drops its needles in the fall. North-field is at the very south end of the range for this species. Tamarack is more common north of this area.

## References

Tekiela, Stan. *Trees of Minnesota Field Guide*. Cambridge, MN: Adventure Publications, Inc., 2007.

Little, E. L. *The National Audubon Society Field Guide to North American Trees, Eastern Region.* New York, NY: Alfred A. Knopf Inc., 1980.

Smith, Welby R. *Trees and Shrubs of Minnesota*. Minneapolis, MN: University of Minnesota Press, 2008.

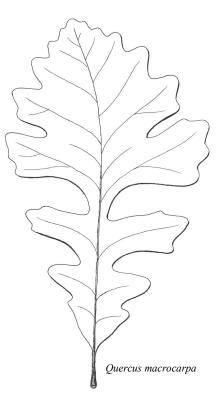
Levine, Jamie and Jason Mulvihill-Kuntz. *The Trees of Carleton College*. Northfield, MN: Carleton College ENTS Department,

This project was an update to the original tree guide created by Jamie Levine '01 and Jason Mulvihill-Kuntz '01. Thanks to Jay Stadler, Grounds Manager, for always being happy to talk about trees. Thanks to Wei-Hsin Fu , Instructor and GIS Specialist, for all of her help with ArcGIS. Finally, thank you to Nancy Braker, Arboretum Director, for inviting me to work on this and for answering questions along the way.

The oak leaf line drawing on the front cover is by Brendan Grant '12. The photograph on the back cover, taken by Joanne Bouknight, shows the Bur Oak that sits in front of Olin., and it is tree number 9 in this guide.



## **Trees of Carleton**



The goal of this map is to invite the reader to notice and enjoy the variety of trees on Carleton's campus and to perhaps entice the reader to venture out into the Arboretum. This is by no means a comprehensive list of trees on campus. Efforts have been made to include representative examples of each species represented on campus. Some trees that are less representative of those that might be found in the arboretum were chosen for their iconic presence on campus. Non-native trees are included for comparison and because many of them are beautiful and iconic trees. Landscaping throughout the years has left us with a remarkable assortment of trees that are native to the area, and trees from around the world that have been selected to decorate campus. Go ahead and pick a favorite.