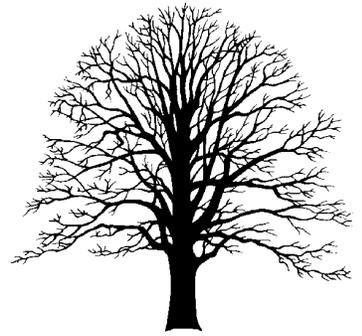




Great Trees on Mansfield Avenue

Burlington, Vermont

A self-guided tour of with interesting facts and tips on
identifying trees on Mansfield Avenue.



All trees included in this brochure were alive and well in Nov. 2013, but don't be alarmed if you can't find them all. Some may be lost to disease or storm damage in future years.

1. **Japanese Flowering Crab Apple** (*Malus flori-bunda*) A popular flowering crab variety originating from Japan and East Asia, listed as an invasive species. It is a small tree reaching 15-20 ft tall, with narrow leaves on arching branches. The red buds open into pale pink flowers which turn white as they mature. The fruit is yellowish with a red blush, and is attractive to birds. It is susceptible to apple scab and powdery mildew.
2. **Heritage River Birch** (*Betula nigra* 'Heritage') A popular ornamental tree native to the Eastern US. It is favored for its distinctive dark gray-brown bark that peels off in curly papery sheets. This tree can grow to 80 ft tall and tolerates wet soil conditions.
3. **Common Hackberry** (*Celtis occidentalis*) A native tree of the Eastern US with an increased urban presence replacing the elm. It is adaptable to urban conditions, surviving in poor, compacted and droughty soils. It can live for 200 years and generally reaches 60 ft tall, growing similar to an elm, but with an oval rather than vase shape.
4. **Pignut Hickory** (*Carya glabra*) A native tree of the Eastern US. It can reach heights of 80-120 ft. The compound leaves are feathery. It grows in moist, fertile soils. The 1¼ inch nut is peach-shaped. When split open, the inside of the nut resembles the snout of a pig (hence its common name).
5. **Butternut** (*Juglans cinerea*) A native tree of the Eastern US related to the black walnut. It has fernlike compound leaves. The greenish-yellow husk on the nut was used to dye Confederate uniforms. It grows up to 130 ft tall and lives 80 + years, but is susceptible to butternut canker, which kills trees by girdling the trunk & branches, blocking transport of water and nutrients to the leaves.
6. **Green Ash** (*Fraxinus pennsylvanica*) A native of the Eastern US and the most widely distributed ash species in this country. It was often planted in urban settings to replace elms. The leaves are compound in an opposite pattern. Each leaf has 7-9 leaflets. The bark is ridged and furrowed forming a loose diamond pattern. It is susceptible to attack by the Emerald ash borer (*Agrilus planipennis*), an exotic beetle now found in many states.
7. **American Hornbeam** (*Carpinus caroliniana*) A small native of the Eastern US. It has fluted branches with spiral ridges and smooth, slate gray bark. It is also called ironwood or musclewood for its dense wood, which was used for ox yokes and tool handles.
8. **Norway Spruce** (*Picea abies*) Also called the "cemetery pine", because it is often planted in grave yards. It is a symmetrical evergreen that can grow 60-80 ft tall in urban sites. It has the largest cones of the spruces, and limbs that swoop down and turn up at the tips on mature trees.
9. **Honey Locust** (*Gleditsia triacanthos inermis*) A native of Central North America. The thornless variety is a commonly planted urban tree because it can survive in very poor compacted soils. It is heat- and drought-tolerant and can endure air pollution, salt spray and root drenching. Locusts are legumes (pea family), producing seeds in pods. Cattle and horses feed on the pods, which helps to break down the seed coat and promote germination. It has delicate foliage, providing filtered shade.
10. **Hedge or Field Maple** (*Acer campestre*) A native of Europe and parts of Asia. This small to medium-sized tree reaches 35-55 ft tall. It grows well on dry soils making it a good choice for difficult city conditions. It has good yellow fall color.
11. **Blue Spruce** (*Picea pungens*) A native of the Rocky Mtns. but planted throughout the US. It has a pyramid form, reaches a height of 90 ft and can live 600 years. Its classic symmetrical cone shape makes it a favorite for large Christmas trees. This tree is identified by the blue hue of its needles.

12. **Silver Maple** (*Acer saccharinum*) A native tree of the Champlain Valley lakeshore and floodplain forests. This tree grows fast but is somewhat weak-wooded and tends to break apart in storms. It is very tolerant of wet and urban soils.

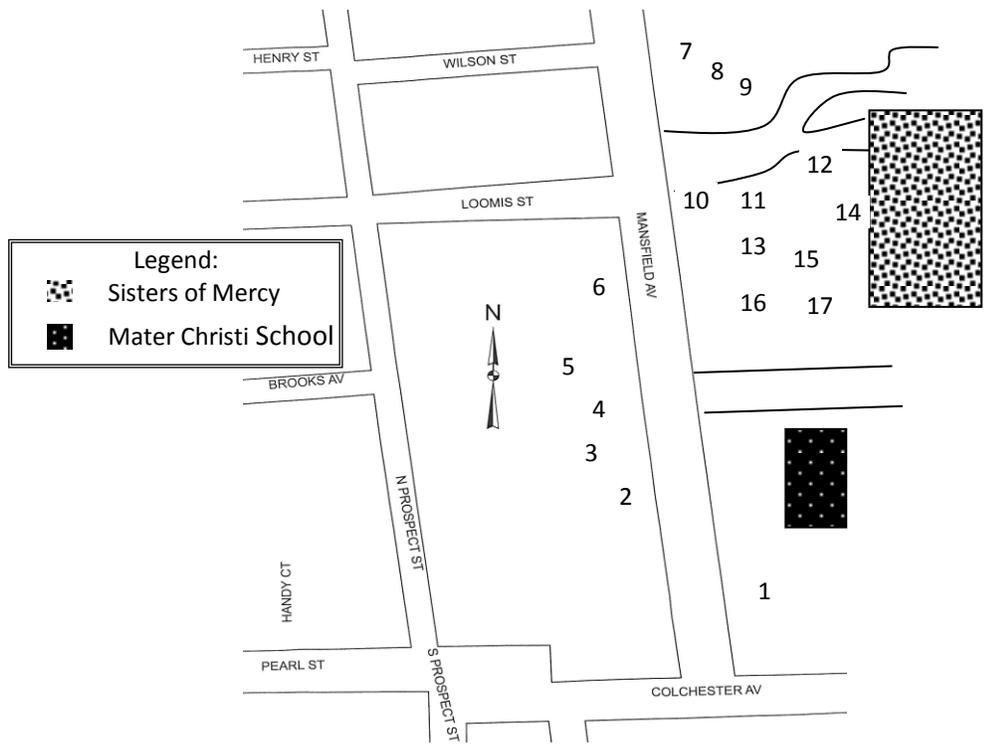
13. **Littleleaf Linden** (*Tilia cordata*) A linden species commonly planted in the urban forest. It grows to 60-70 ft in a pyramid form. It has sweet-smelling flowers that can be used to make tea. Watch out if you park a car under one in the summer. Aphids can infest lindens, dropping a sticky honeydew secretion on everything below which attracts bees and flies.

14. **Eastern or Canadian Hemlock** (*Tsuga canadensis*) An evergreen reaching a height of over 100 ft with a more rounded top than the spruces or firs. Needles are whitened beneath giving the

15. **Pyramidal Arborvitae** (*Thuja occidentalis 'pyramidalis'*) A fast growing evergreen tree which can reach 15-35 ft tall. It grows at a rate of about 1 ft a year. The foliage, when young, is bright green, which darkens as the tree ages.

16. **Princeton American Elm** (*Ulmus americana 'Princeton'*) One of several varieties that is resistant to Dutch elm disease. This disease killed many of the elms in the US. This variety and others are bringing back the majestic vase-shaped elm canopy to our streets.

17. **Sugar Maple** (*Acer saccharum*) Vermont's state tree. It grows slowly, reaching a height of 60-80 ft and lives up to 200 years. Due to a shallow root system, it is susceptible to injury from compaction and drought. It is threatened by the Asian longhorned beetle (*Anoplophora glabripennis*), an exotic invasive pest.



This tree walk was produced by volunteers of *Branch Out Burlington!*

and

Univ. of Vermont students George Faison and Nicole Robbins in cooperation with the Community-Based Natural Resource Management Program

With support and guidance from Warren Spinner, Arborist
Burlington Dept. of Parks & Recreation
And TD Green Streets



Our Mission: We are a group of volunteers who help plant and care for the trees of Burlington. Our goal is to promote a vision of a city graced with a variety of beautiful and healthy trees, and a citizenry actively involved with the perpetual expansion and preservation of our urban forest.

Want to get involved? Everyone is welcome at our monthly meetings. Call Burlington Department of Parks and Recreation at 862-8245 for the time and place. Tax deductible donations can be made out to *Branch Out Burlington!* and sent to 93 Howard St., Burlington, VT 05401.

Visit our website at www.branchoutburlington.org