



## Cooperative Extension Publications

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## Native Trees and Shrubs for Maine Landscapes

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### Gray Birch

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#### *(Betula populifolia)*

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*Developed by Marjorie Peronto, associate Extension professor, University of Maine Cooperative Extension; and Reeser C. Manley, assistant professor of horticulture, University of Maine.*

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#### Go native!

This series of publications is the result of a five-year research project that evaluated the adaptability of a variety of native trees and shrubs to the stresses of urban and residential landscapes in Maine. Non-native invasive plants pose a serious threat to Maine's biodiversity. Plants such as Japanese barberry, shrubby honeysuckle, and Asiatic bittersweet, originally introduced for their ornamental features, have escaped from our landscapes, colonizing natural areas and displacing native plants and animals. By landscaping with native plants, we can create vegetation corridors that link fragmented wild areas, providing food and shelter for the native wildlife that is an integral part of our ecosystem. Your landscape choices can have an impact on the environment that goes far beyond your property lines.

### Description

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**Form:** a narrow, columnar tree with open branching

**Size:** 35 to 50 feet in height, 20 to 35 feet in width

**Ornamental characteristics:**

- smooth, chalky white bark with prominent, black, triangular patches where branches intersect the trunk

Photo by Reeser C. Manley

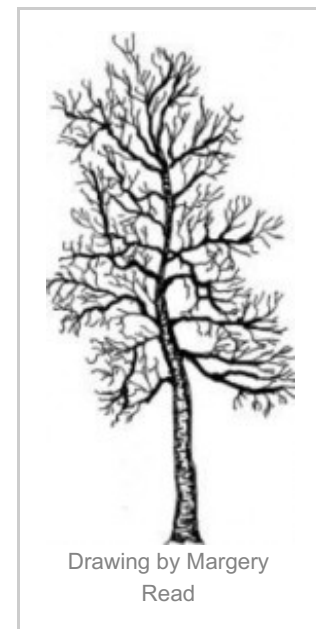
- yellow autumn foliage



## Landscape Use

Gray birch is a pioneer tree, springing up in clear-cuts and burned areas and providing shade for emerging seedlings. It is often found growing with other pioneers such as quaking and bigtooth aspens (*Populus tremuloides* and *P. grandidentata*) and paper birch (*Betula papyrifera*).

As a landscape plant, gray birch offers a welcome alternative to the too frequently used paper birch. Its tolerance for many stresses, including soil compaction and drought, makes it suitable for difficult sites where other trees would fail. Among our native birches, it offers the greatest resistance to bronze birch borer and suffers only occasional leaf miner damage. 'Whitespire' is an exceptional cultivar with whiter bark than the species. It is especially attractive as a multi-trunk tree.



## Culture

**Hardiness:** USDA zone 4a

**Soil requirements:** tolerant of a wide variety of soils

**Light requirements:** full sun

**Stress tolerances:**

soil compaction—tolerant  
pollution—intolerant  
deicing salts—tolerant  
urban heat islands—tolerant  
drought—tolerant  
seasonal flooding—tolerant

**Insect and disease problems:** infrequent

## Wildlife Value

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Gray birch is host to caterpillars of several species of butterfly, including Eastern and Canadian tiger swallowtails, white admiral, mourning cloak, Compton tortoiseshell, and dreamy duskywing. Juncos, blue jays, titmice, chickadees, waxwings, and other birds eat its flower buds and seeds.

## Maintenance

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**Irrigation:** During the establishment period, defined as one year after planting for each inch of trunk diameter at planting time, water your trees regularly during the growing season. Give the root zone of each tree 1 inch of water per week; in general, a tree's root zone extends twice as wide as its canopy. After the establishment period, provide supplemental irrigation during periods of severe drought.

**Fertilization:** Landscape trees and shrubs should not be fertilized unless a soil test indicates a need. Correct soil pH, if necessary, by amending the backfill soil. No nitrogen fertilizer should be added at planting or during the first growing season.

### To learn more about native woody plants

Visit the Eastern Maine Native Plant Arboretum at University of Maine Cooperative Extension's Penobscot County office, 307 Maine Avenue in Bangor. Established in 2004, the arboretum displays 24 different native tree and shrub species that can be used in managed landscapes.

*Reviewed by Cathy Neal, Extension professor, University of New Hampshire Cooperative Extension.*

*Photos by Reeser C. Manley.*

*Illustration by Margery Read, Extension master gardener.*

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