Coastal Landscaping in Massachusetts
Plant Highlights and Images: Trees

This PDF document provides graphics and additional information to supplement the Massachusetts Office of Coastal Zone Management (CZM) Coastal Landscaping Website.

The following list provides descriptions and photographs of some of the most common and useful deciduous and evergreen trees appropriate for coastal landscaping projects in Massachusetts. Unless otherwise noted, the listed trees are native to Massachusetts. For more coastal plants, see Plant Highlights and Images for PDF fact sheets on Grasses/Perennials and Shrubs/Groundcovers.

<table>
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<th>Evergreen Trees</th>
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<tbody>
<tr>
<td><strong>American Holly (Ilex opaca)</strong></td>
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<td>![American Holly](Photo: CZM)</td>
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<td>American holly is a long-living, pyramidal, broad-leaved, evergreen tree that ranges in height from 25 to 60 feet with dark green leaves and stiff, horizontal branches. The new growth in the spring pushes off the older leaves. Bright red berries ripen in October and persist through the winter (both male and female trees are necessary for cross pollination and berry production). American holly can tolerate both moist, fertile soils and dry, sandy soils, with the poorer soils leading to a smaller-sized tree. This tree can grow in shaded woods and stream banks, uplands or lowlands, and as an understory to other trees. American holly is useful as a screen, in mass plantings, or as a specimen tree. The dense growth provides good cover and nesting sites for birds and the berries attract many small mammals and birds (though the berries are poisonous to humans). The berries and evergreen leaves provide excellent winter color and are often used for cuttings and ornamental interest. (American holly does best when planted away from direct exposure to salt spray and wind.)</td>
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| **Atlantic White Cedar (Chamaecyparis thyoides)** |
| ![Atlantic White Cedar](Photo: Alexey Zinovjev and Irina Kadis, Salicicola)  |
| Atlantic white cedar is a tall, narrow, columnar, coniferous, evergreen tree that grows from 40 to 75 feet high. It has short, horizontal branches and blue-green, scale-like leaves that spread out in a fan-like appearance. At maturity, the branches are only present in the upper portion of the tree. The brown cones, which contain 1 to 5 winged seeds, mature in September and October at the end of the first growing season. Atlantic white cedar prefers moist, sandy soils and full sun, but is tolerant of a wide range of soils and conditions, including acidic soils, flood inundation, and saline soils. This tree is not tolerant of shade, needs to be protected from high winds, and needs sufficient moisture to become established. It usually grows in very dense, solid stands in and around swamps and bogs and is best known as the dominant tree in the Atlantic white cedar swamps along the Atlantic Coast. Its preference for wet sites makes it suitable for low, wet areas of yards and wetland or naturalized areas. The commercial availability of this tree is limited (various cultivars can be found more easily). (Atlantic white cedar does best when planted away from salt spray and wind.) |
Evergreen Trees

Eastern Red Cedar (*Juniperus virginiana*)

Eastern red cedar is a native evergreen that grows 10 to 40 feet high with a pyramidal shape that becomes rounder with age. It is tolerant of salt and dry soils and is good for both exposed areas and sheltered coastal areas. The light-blue berries are an important food source for many birds and large and small mammals. In addition, cedars provide important protective cover for nesting, roosting, and winter shelter. Eastern red cedar is excellent as a specimen planting and useful in masses for windbreaks and screening. The leaves, roots, and berries of the red cedar have been used by the Native Americans for centuries as a botanical cure for many ailments, including asthma, colds, fevers, and hyperactivity, and for general cleansing and healing.

Pitch Pine (*Pinus rigida*)

The native pitch pine is variable in form with short and poorly formed trees growing on dry, exposed sites and straight, medium-sized trees reaching 80 feet tall growing on protected, nutrient-rich sites. The evergreen needles are 2.5 to 5 inches long with three needles in a bundle. Cones mature in the fall and are often persistent for many years. The pitch pine occupies a variety of habitats from dry, acidic, sandy uplands to swampy lowlands and can survive in very poor conditions. This pine is also well known for its ability to survive fires. Since the trees will grow in dry, rocky, or sandy soils, they are often used for reforestation or stabilization where few other trees will grow.

Deciduous Trees

Black Cherry (*Prunus serotina*)

Black cherry is a deciduous tree with a dense oval crown and pendulous branches. This rapid-growing tree reaches from 60 to 90 feet tall and 35 to 50 feet wide. In the spring, black cherry produces fragrant white flowers on pendulous stems. The berry-like fruits mature in the late summer. This tree prefers deep, moist, fertile soil, but is tolerant of salt and drought and thrives in full sun to part shade. Black cherry is one of the most valued cabinet and furniture woods in North America. The fruits are important food for numerous bird species and mammals, including the red fox, black bear, raccoon, opossum, squirrel, and rabbit.
## Deciduous Trees

### Black Tupelo (*Nyssa sylvatica*)

Black tupelo, or black gum, is a slow-growing, deciduous tree that grows from 30 to 60 feet (occasionally up to 90 feet) tall with dense foliage, horizontally spreading branches, and a conical or sometimes flat-topped crown. The green leaves are leathery, glossy, and densely clustered and turn a brilliant yellow, orange, or scarlet color in the fall. The small, greenish-white flowers bloom in early spring and are an excellent source of nectar for bees and other pollinating insects, which in turn attract many species of birds that feed on the insects. The small, blue, sour-tasting berries are also an attraction for birds. Tupelo grows best on well-drained, light-textured soils but is tolerant of both wet and dry sites and can even grow in standing water. This tree is also tolerant of various acidity levels in the soils and is moderately tolerant of salinity. Because of its adaptability to wet sites, this tree is useful in low areas of the yard that are subject to periodic flooding or in rain gardens. It can also be used as an ornamental shade or street tree. The nectar of the tupelo tree is valued for honey production by bees.

### Downy Serviceberry/Shadbush (*Amelanchier arborea*)

Downy serviceberry is a deciduous, shrub-like tree reaching heights of 10 to 25 feet. The oval leaves emerge a downy gray and mature to a dark green in the summer. The fall foliage is showy with orange, gold, red, and green. The clusters of white flowers grow at the branch tips before the leaves appear. Downy serviceberry grows in a variety of habitats, including swamps, dry woods, sandy bluffs, rocky ridges, forest edges, and fields. Many bird species (such as cardinals, cedar waxwings, towhees, and Baltimore orioles) and mammal species (such as rabbits, mice, fox, black bears, and deer) eat the fruit. The fruits taste similar to but slightly tarter than blueberries. Downy serviceberry is often confused with shadblow serviceberry (*A. canadensis*), which is multi-stemmed and more shrub-like and tolerant of wet soils.

### Gray Birch (*Betula populifolia*)

Gray birch is a small to medium, fast-growing, deciduous tree that reaches 20 to 40 feet in height with a 10 to 20 foot spread. Gray birch is native to the northeastern United States and can be found growing on sandy soils or as an early colonizer on nutrient-deficient and dry sites. The tree often has multiple trunks branching off a main trunk. The dark green summer foliage generally leafs out early and is yellow and showy in the fall. The bark is reddish brown when young and transitions to a grayish-white color with black triangular patches where the branches meet the trunk. Gray birch is a useful tree for difficult sites or in naturalized areas. The birch seeds provide food for birds, such as goldfinches and other small-seed eaters.
### Deciduous Trees

**Green Ash (Fraxinus pennsylvanica)**

Green ash is a hardy, fast-growing, medium-sized deciduous shade tree that grows from 50 to 75 feet tall with an open, spreading form and a rounded-to-irregular crown. The green leaves that are opposite and pinnately compound turn yellow in the fall. The fertilized flower clusters (of the female tree) that bloom April to May are followed by drooping clusters of dry, winged samaras in the fall that may persist through winter. Green ash prefers consistently moist, loamy soils, but can grow in a wide range of soils and growing conditions. It will tolerate seasonal flooding, but is intolerant of shading. This ash is typically found in low woods, floodplains, and riparian areas. Green ash can be planted as a windbreak or as a lawn, street, or shade tree on difficult growing sites. (Green ash does best when planted away from direct exposure to salt spray.)

![Green Ash](image)

**Red Maple (Acer rubrum)**

Red maple is a wide-ranging, native, deciduous tree that typically grows from 40 to 70 feet tall but can reach heights of more than 100 feet. The shape of red maple becomes more rounded or oval with age. Red maple is often one of the first trees to change color, with colors that vary from greenish yellow to vibrant scarlet to burgundy. The flowers, which bloom in late March or April, can also be red or orange. The fruit, or winged seeds known as samaras, are one of the smallest of the native maples at less than an inch in length. Red maples are relatively fast growing, tolerant of many conditions, and adaptable. They do best in full sun but can tolerate partial shade; they prefer moist, acidic soils and tolerate occasional flooding and wet soils. Red maples are useful as shade trees, for wet sites, for their striking fall foliage, and for their wildlife value—their seeds provide food for squirrels and birds.

![Red Maple](image)

**Sassafras (Sassafras albidum)**

Sassafras is a deciduous tree that grows from 35 to 50 feet high with an attractive, horizontal-branching pattern and an interesting, ridged, red-brown bark. The bright green leaves, which are variable in shape (ovate; two-lobed, oval, and mitten-shaped; or three-lobed) turn a bright-yellow or reddish-orange color in the fall. The green twigs and leaf stalks have a pleasing and spicy aroma. The fragrant flowers that bloom before the leaves appear in the spring attract birds, bees, and butterflies. In late summer and fall, the female trees produce small, dark blue, oval fruits that are readily eaten by wildlife. Sassafras does best in moist, fertile soils in partial to full shade, but can tolerate a wide range of soils, including dry, sandy soils. Sassafras can spread by roots to form large thickets and is therefore useful for erosion control or on disturbed sites. If roots suckers are cut, sassafras can also be planted as a low maintenance specimen tree. Sassafras has been cultivated since 1630 for its leaves, bark, and wood for medicinal uses and for items such as soaps, perfumes, and teas—however, the commercial availability of this tree is limited.

![Sassafras](image)
Deciduous Trees

White Oak (*Quercus alba*)

White oak is a large, durable, and long-living deciduous shade tree that can grow over 100 feet tall and up to 60 to 80 feet wide. White oak has a broad, round crown and wide-spreading branches with dense foliage that turns an attractive red-violet color in the fall. This oak has a deep root system, which makes it fairly tolerant of a range of soil conditions and fairly drought resistant when well established. White oak performs best on coarse, moist, well-drained, slightly acidic soils with medium fertility. White oak is moderately resistant to salt spray and even temporary salt-water submergence. The acorns are a food source for many small mammals and birds. The high-grade wood of this oak is used for furniture, flooring, interior woodwork, and even shipbuilding. White oak needs room to grow and has a low tolerance for soil compaction and changes in soil levels.

A *native plant species* is a plant that is considered indigenous and naturally occurring to the region since pre-Colonial times (before 1500) or arriving more recently without human intervention. For purposes of this plant list, a native plant is one that occurs naturally in eastern Massachusetts.

A *non-native plant species* is a plant that is non-indigenous and not naturally occurring to the region. (For purposes of this plant list, the region is eastern Massachusetts with an emphasis on the coastal environments.) When non-native species enter into an ecosystem, they have the potential to disrupt the natural balance, reduce biodiversity, degrade habitats, alternative genetic diversity, and transmit exotic diseases to native species. However, not all non-native plants are invasive. Non-native plants that are not considered invasive are those that generally do not rapidly disperse, become established, or create self-sustaining or dominant populations that would be disruptive to the natural ecosystem. CZM recommends the use of natives wherever possible but has included certain non-native species in this list that have specific coastal landscaping advantages and no known environmental impacts.

Photographs and data courtesy of: