





# Blue Beech, *Carpinus caroliniana*

Birch Family (*Betulaceae*)

*Natural distribution:* New England to Minnesota, south to Texas and Florida.

*Natural habitat:* an understory tree of rich, usually moist, woodlands.

*Height:* 20 to 30 feet; rarely to 40 feet.

*Shape:* rounded when growing in the open without other trees planted too closely; narrower under forest conditions. May reach a spread of 15 to 20 feet.

*Texture:* foliage texture medium.

*Bark:* gray, smooth, and firm; trunk and older branches display some striation which gives them a sinewy or "muscular" appearance.

*Twigs:* slender and round; pale green when young, becoming orange-brown and lustrous.

*Buds:* ovoid, pointed, about  $\frac{1}{8}$  inch long, with chestnut-brown scales.

*Foliage:* leaves oblong to narrowly ovate, usually 2 to 4 inches long, with somewhat long-pointed tips; sharply toothed, with straight impressed veins; leafstalks about  $\frac{1}{3}$  inch long. Notable autumn color, an attractive yellow-orange, tending to be more yellow when shaded by large trees.

*Density of its shade:* medium to dense.

*Flowers:* male catkins approximately  $1\frac{1}{2}$  inches long when fully grown, with green and red scales; female catkins  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long, with hairy green scales.

*Fruit:* a nutlet  $\frac{1}{3}$  inch long, located at the base of an enlarged flat leafy bract which aids wind dissemination of the fruit.

*Root system:* spreading and somewhat shallow.

*Exposure:* Although it grows in shade in its natural habitat, it is tolerant of sun.

*Moisture requirements:* average.

*Soil:* rich.

*Wind resistance:* good.

*Planting suggestions:* spring or fall.

*Growth rate:* slow.

*Hardiness:* hardy to and including Zone 2.\*

*Problems:* essentially none.

*Availability:* not commonly available.

*Area of adaptability:* suburban, rural.

*Uses:* specimen tree; foundation and border plantings; densely shaded sites.

*Location in the Arboretum:* immediately east of the Arboretum Center building; in the meadow east of the Arboretum greenhouse; along Oakwood Loop Return north of the large Scotch pine planting; along the Joy Path south of Thornhill.

\*Hardiness Zone based on Plant Hardiness Zone Map prepared jointly by the U. S. National Arboretum in cooperation with the American Horticultural Society. U.S.D.A. Misc. Pub. #814, May, 1960.