

# *Ostrya virginiana*: American Hophornbeam<sup>1</sup>

Edward F. Gilman and Dennis G. Watson<sup>2</sup>

## Introduction

This shade-tolerant tree slowly grows to 50 feet in height with a 25 to 30-foot spread but is often 25 to 40 feet tall, forming an oval or round canopy. Hophornbeam has a lovely yellow fall color, and the small nutlets, which ripen in summer and fall, are used by birds and mammals during the winter. Bark is an attractive orange or grayish brown peeling off in longitudinal strips. The finely-textured crown casts a medium or dense shade in full sun, but is more open in the shade casting a light shadow.



Figure 1. Middle-aged *Ostrya virginiana*: American Hophornbeam  
Credits: Ed Gilman

## General Information

**Scientific name:** *Ostrya virginiana*

**Pronunciation:** OSS-tree-uh ver-jin-ee-AY-nuh

**Common name(s):** American Hophornbeam, Eastern Hophornbeam

**Family:** *Betulaceae*

**USDA hardiness zones:** 3A through 9A (Fig. 2)

**Origin:** native to North America

**Invasive potential:** little invasive potential

**Uses:** container or planter; street without sidewalk; deck or patio; screen; specimen; reclamation; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; urban tolerant; highway median; shade

**Availability:** somewhat available, may have to go out of the region to find the tree

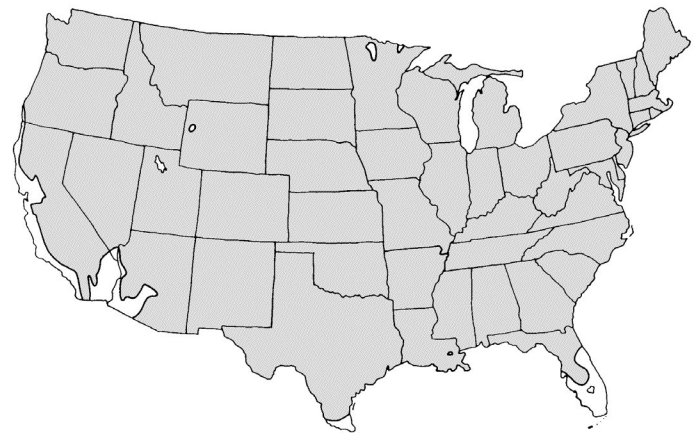


Figure 2. Range

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## Description

**Height:** 30 to 40 feet  
**Spread:** 25 to 30 feet  
**Crown uniformity:** symmetrical  
**Crown shape:** oval, round  
**Crown density:** moderate  
**Growth rate:** slow  
**Texture:** fine

## Foliage

**Leaf arrangement:** alternate (Fig. 3)  
**Leaf type:** simple  
**Leaf margin:** double serrate, serrate  
**Leaf shape:** ovate, elliptic (oval)  
**Leaf venation:** pinnate  
**Leaf type and persistence:** deciduous  
**Leaf blade length:** 2 to 4 inches, 4 to 8 inches  
**Leaf color:** green  
**Fall color:** yellow  
**Fall characteristic:** showy



Figure 3. Foliage

## Flower

**Flower color:** brown, green  
**Flower characteristics:** showy

## Fruit

**Fruit shape:** elongated  
**Fruit length:** 1 to 3 inches  
**Fruit covering:** dry or hard  
**Fruit color:** green, brown  
**Fruit characteristics:** attracts birds; showy; fruit/leaves not a litter problem

## Trunk and Branches

**Trunk/bark/branches:** branches droop; showy; typically multi-trunked; thorns  
**Pruning requirement:** little required  
**Breakage:** resistant  
**Current year twig color:** brown  
**Current year twig thickness:** thin  
**Wood specific gravity:** unknown

## Culture

**Light requirement:** full sun, partial sun or partial shade, shade tolerant  
**Soil tolerances:** clay; sand; loam; alkaline; acidic; well-drained  
**Drought tolerance:** high  
**Aerosol salt tolerance:** none

## Other

**Roots:** not a problem  
**Winter interest:** yes  
**Outstanding tree:** yes  
**Ozone sensitivity:** tolerant  
**Verticillium wilt susceptibility:** resistant  
**Pest resistance:** free of serious pests and diseases

## Use and Management

This is a rugged tree, tolerant of poor soil conditions found in urban areas and should be grown and planted more. Can be purchased as a single or multi-trunked specimen. Multi-stemmed trees have a dramatic impact in the landscape with bright bark and wonderful form. Great for climbing.

Hophornbeam has a shallow root system and will grow in most soils except those that are wet. It is well adapted to downtown city plantings provided soil drainage is good. Often found on dry, rocky slopes with little soil, Hophornbeam is quite tolerant of drought and needs little care once established. Locate it close to people so they can enjoy the wonderful bark and foliage.

## Pests

No pests of this tree are usually serious.

Two-lined chestnut borer may infest Hophornbeam. Keep trees healthy by regular fertilization and irrigate soil around tree during drought periods to reduce susceptibility to borer attack.

Scales are usually controlled with horticultural oil.

Basswood leafminer may cause some leafmining damage to foliage.

Orange-humped mapleworm may be found feeding on *Ostrya* north of Pennsylvania.

## Diseases

No diseases of this tree are usually serious.

Canker diseases can cause dieback of individual branches or entire trees. Prune out diseased branches, fertilize regularly, and water during dry weather.

Leaf blister causes blistered or deformed leaves but is not something which needs control.

Leaf spots are generally not serious. Rake up and destroy infected leaves at the end of the growing season, if you wish.

Powdery mildew makes a white coating on the leaves but is otherwise harmless.