

# *Quercus austrina*: Bluff Oak<sup>1</sup>

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean<sup>2</sup>

## Introduction

This North American native oak reaches 40 to 60 feet in height and makes an attractive shade tree, with handsome scaly gray bark. The green, lobed leaves are deciduous but do not change color before dropping in fall. The insignificant, green, spring flowers are followed by small acorns, less than one-inch-long. The trunk often grows straight up through the crown with little pruning, and branches are well spaced along the trunk. This is one of the oaks which is not currently available in most nurseries, but it should be. Urban tree managers will want this oak once they find out about it.

## General Information

**Scientific name:** *Quercus austrina*

**Pronunciation:** KWERK-us oss-TRY-nuh

**Common name(s):** Bluff oak

**Family:** *Fagaceae*

**USDA hardiness zones:** 8A through 9B (Figure 2)

**Origin:** native to Atlantic and Gulf coastal states from southern Mississippi to southeastern North Carolina

**UF/IFAS Invasive Assessment Status:** native

**Uses:** reclamation; street without sidewalk; shade; specimen; parking lot island > 200 sq ft; tree lawn > 6 ft wide; highway median



Figure 1. Full Form—*Quercus austrina*: bluff oak

1. This document is ENH-700, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 1993. Revised December 2006 and December 2018. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.
2. Edward F. Gilman, professor emeritus, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department; Ryan W. Klein, graduate assistant, Environmental Horticulture Department; Andrew K. Koeser, assistant professor, Environmental Horticulture Department, UF/IFAS Gulf Coast Research and Education Center; Deborah R. Hilbert, graduate assistant, Environmental Horticulture Department, GCREC; and Drew C. McLean, biological scientist, Environmental Horticulture Department, GCREC; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.



Figure 2. Range

## Description

**Height:** 40 to 60 feet  
**Spread:** 35 to 50 feet  
**Crown uniformity:** symmetrical  
**Crown shape:** oval, round  
**Crown density:** open  
**Growth rate:** moderate  
**Texture:** medium

## Foliage

**Leaf arrangement:** alternate  
**Leaf type:** simple  
**Leaf margin:** lobed, entire  
**Leaf shape:** obovate  
**Leaf venation:** pinnate  
**Leaf type and persistence:** deciduous  
**Leaf blade length:** 1 to 6 inches  
**Leaf color:** dark green and shiny on top, paler green underneath  
**Fall color:** copper, yellow, orange  
**Fall characteristic:** showy



Figure 3. Leaf—*Quercus austrina*: bluff oak

## Flower

**Flower color:** brown  
**Flower characteristics:** not showy

## Fruit

**Fruit shape:** round, oval; oblong  
**Fruit length:** ½ to ¾ inch  
**Fruit covering:** dry or hard acorn; cap has tight brown scales, is bowl-shaped, and covers the top ⅓–½ of the shiny nut  
**Fruit color:** tan or brown  
**Fruit characteristics:** attracts squirrels/mammals; not showy; fruit/leaves a litter problem  
**Fruiting:** mid to late fall

## Trunk and Branches

**Trunk/branches:** branches don't droop; showy; typically one trunk; no thorns  
**Bark:** whitish, scaly from about ⅓ of the way up the trunk and above, and with broad ridges  
**Pruning requirement:** little required  
**Breakage:** resistant  
**Current year twig color:** green, brown  
**Current year twig thickness:** medium  
**Wood specific gravity:** unknown



Figure 4. Bark—*Quercus austrina*: bluff oak  
 Credits: Gitta Hasing

## Culture

**Light requirement:** full sun  
**Soil tolerances:** clay; sand; loam; acidic; well-drained  
**Drought tolerance:** high  
**Aerosol salt tolerance:** unknown

## Other

**Roots:** not a problem

**Winter interest:** yes

**Outstanding tree:** no

**Ozone sensitivity:** unknown

**Verticillium wilt susceptibility:** resistant

**Pest resistance:** resistant to pests/diseases

## Use and Management

It would be well suited for planting in parking lots or along streets and boulevards where there is plenty of space for crown development. A row of bluff oaks planted on 30-foot centers lining each side of a street make a wonderful site. The medium-textured leaves make this oak stand out from other oaks. Upright to horizontal branching habit make this an easy tree to prune for vehicular clearance beneath the canopy.

Bluff oak should be grown in full sun on well-drained soil, and has good drought-tolerance.

*Quercus durandii* var. *austrina* is a synonym.

Propagation is by seed.

## Pest and Diseases

No pests or diseases of major concern.

## Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. Gainesville: University of Florida Institute of Food and Agricultural Sciences.