Introduction
Chestnut oak is a deciduous, native tree which reaches 50 to 60 feet in height with an equal spread when grown in the open. It is capable of reaching to 100 feet in the woods. The glossy, green, 4- to 8-inch-long by 1.5- to 3-inch-wide leaves turn to yellow-brown or red-brown in fall before dropping. The large, 1.5-inch-long acorns which fall in October are particularly sweet-tasting, and are relished by many forms of wildlife, such as the grey squirrel, black bear, and white-tailed deer. The attractive dark brown to black bark is deeply ridged and furrowed.

General Information
Scientific name: *Quercus prinus*
Pronunciation: KWERK-us PRY-nus
Common name(s): Chestnut oak, rock oak, basket oak
Family: Fagaceae
USDA hardiness zones: 5A through 9A (Fig. 2)
Origin: native to North America
Invasive potential: little invasive potential
Uses: street without sidewalk; shade; parking lot island > 200 sq ft; tree lawn > 6 ft wide; highway median
Availability: somewhat available, may have to go out of the region to find the tree

Description
Height: 50 to 60 feet
Spread: 40 to 60 feet

Figure 1. Middle-aged *Quercus prinus*: chestnut oak
Credits: Ed Gilman, UF/IFAS

Figure 2. Range
Crown uniformity: symmetrical  
Crown shape: round  
Crown density: dense  
Growth rate: moderate  
Texture: coarse

**Foliage**
- Leaf arrangement: alternate (Fig. 3)
- Leaf type: simple
- Leaf margin: crenate, undulate
- Leaf shape: obovate, oblong
- Leaf venation: pinnate
- Leaf type and persistence: deciduous
- Leaf blade length: 4 to 8 inches
- Leaf color: green
- Fall color: yellow, red, copper
- Fall characteristic: showy

![Foliage Image](image)

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

**Fruit**
- Fruit shape: oval, round
- Fruit length: .5 to 1 inch, 1 to 3 inches
- Fruit covering: dry or hard
- Fruit color: brown
- Fruit characteristics: attracts squirrels/mammals; not showy; fruit/leaves a litter problem

**Trunk and Branches**
- Trunk/bark/branches: branches don’t droop; showy; typically one trunk; thorns
- Pruning requirement: little required
- Breakage: resistant
- Current year twig color: brown, gray
- Current year twig thickness: medium
- Wood specific gravity: 0.66

**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: no
- Outstanding tree: no
- Ozone sensitivity: unknown
- Verticillium wilt susceptibility: resistant
- Pest resistance: resistant to pests/diseases

**Use and Management**
Chestnut oak has been used for planting in parking lots and could be tested and used more for planting along streets and as a shade tree. The crown is dominated by one central trunk with lateral branches developing good attachments with little pruning. Be sure to allow plenty of room for trunk expansion and root flare since this oak grows quite large.

Chestnut oak is naturally found on poor, dry, sandy, or rocky landscapes. Well adapted to planting along highway roadsides or in other areas where there will be no maintenance but not suited for clay soil or poorly-drained sites. The wood is very durable and hard.

*Quercus michauxii* (swamp chestnut oak), a closely related species, is lumped together by some botanists with *Quercus prinus* although they look quite different. Swamp chestnut oak grows taller, with platey, light grey bark and has similar cultural requirements.

Propagation is by seed.

**Pests and Diseases**
No pests or diseases of major concern other than gypsy moth. Variable oak and oak slug caterpillars can infest the tree although natural enemies usually provide control. Fall cankerworm has been a problem in some years. There are many other potential problems, although none serious.

Chestnut oak is susceptible to oak wilt.