

The Chestnut oak

By Ryan Cassin

The Chestnut Oak (Quercus Prinus)

The Chestnut Oak or commonly referred to as the rock oak, rock chestnut oak, or mountain oak. Many shorten this name and just call it the rock oak. The chestnut oak located in the oak group or the Quercus sect. The Chestnut oak is a medium sized tree with a straight trunk and narrow crown. Often the canopy of the Chestnut Oak is very dry. This tree is known to grow up to 80 feet tall.



The Bark

The Bark of the Chestnut Oak is a unique quality that separates it from all the rest of the oak family. The tree bark is very dark and also has a very rough texture with V-shaped shaped ridges separated by deep furrows.

The Chestnut oak's bark has been known to be one of the thickest of most of the other North American Oaks. The bark of the Chestnut oak first fissures into broad ridges with rugged branchlets. These branchlets are stout and small in size first with a brownish greenish taint but later they turn to a reddish brown in their pubescent stages. As the chestnut oak become fully mature its branchlets take on a dark gray or brownish color changed by production of tannic acid by the oak.

The bark of the Chestnut Oak is very durable and establishes a good base in the soil for the tree. The wood of the Chestnut Oak has many uses in our everyday life. The wood itself can be seen on many general construction sites for fencing and also be used for fuel. Also the tannic acid produced by the bark has a unique dark shade that can be used by many as wood finish for people's homes.

Buds

The Chestnut Oak has buds that are pointed and large.

The Leaves

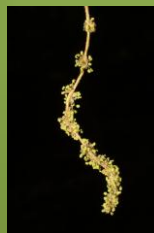
The Leaves of the Chestnut are alternative and are generally 5-9 inches long with widths of 3-4 inches. The leaves shape varies from obovate, oblong, and lanceolate wedged with a rounded base. These leaves are also pinnately lobed. The teeth of the leaf are coarsely serrated with a rounded or acute apex. In the beginning stages of the leaf the leaves come out of the bud convolute yellow green or bronze. When the leaves mature they turn to a thick firm dark yellow green. The Midribs of the leaves are yellowish green and have a very noticeable primary vein. The leaves underside is medium green rather than white like the white oak. Late into autumn most leaves have fallen off the canopy and have turned a light yellow to brownish shade.



The Flowers

The Flowers of the Chestnut Oak are Staminate flowers which are born in hairy catkins. The length of the flowers are 2-3 inches long. The Calyx of the flower is pale yellow, green small in size, hairy, and lobed. The flower has stamens that are 7-9 centimeters with bright yellow anthers. The Monoecious male flower is yellowish green with lengths of 2-4 centimeters. Female flowers are reddish and appear as single spiked. These female flowers appear most prevalently in mid-spring.

Male



Female



Twigs

The twigs of the Chestnut are medium textured, lack hair, orange brown or grayish color, narrow and long.

The Fruit

The Chestnut Oak has acorns that are 1-1.5 inches long and are oval shaped. When the cap of the acorn matures it turns a thin warty shaped with very thin edges. The Acorns matures in only one growing season in the fall. The acorns only become present on the oak when it turns 20 years old. The Chestnut Oak has only one heavy production of acorns every 4-5 years. The Chestnut Oak produces much fewer acorns than other oaks.



The Problems

Although the Chestnut Oak is free from many major pests and disease problem it will occasionally contract an array of pathogens and pests. The Chestnut oak is susceptible from fire damage and decay from other oaks. Also the Chestnut Oak is damage prone to invasive fungi gypsy moths, fall canker worms, forest caterpillars, timber beetles, and insect larvae.

The Climate

The Chestnut Oak is primarily found south and west facing ridges with dry and sandy to rocky shallow soils. The Chestnut Oak's ability to tolerate poor soils limits its completion with other oaks. The Chestnut oak can grow relatively pure with little ground vegetation. The Chestnut oak like humid to super humid climates and are usually found in the Appalachian Mountains. They must receive an average precipitation rate of 40-48 inches a year.

The Seeds

The Chestnut Oak starts producing seeds at age 20 but in some cases is able to produce them after 3 years. If the temperature drops below 61°F then the seeds will begin to go dormant and will return active in the summer months.