

# AMERICAN CHESTNUT

## *Castanea dentata* (Marsh.) Borkh.

OTHER COMMON NAMES: Chestnut.

FORM: Once grew to 60-80 feet tall, sometimes reaching a height of 100 feet or more with a diameter of 10 feet, commonly 3-4 feet in diameter. The chestnut blight removed this stately tree from the Alabama forests, except for reoccurring sprouts from old tree stumps.

BARK: Deeply fissured on old trunks, commonly 1-2 inches thick, dark brown, divided by shallow irregular and often interrupted fissures into broad flat ridges, separating on the surface into small closely appressed scales.

TWIGS: Stout, smooth, greenish to brown, round or angular, swollen at the nodes.

LEAVES: Alternate, simple, oblong-lanceolate, sharp-pointed at apex, cuneate at base, coarsely serrate, dark green above, pale yellow beneath.

FLOWERS: Appear late June or July; monoecious; staminate crowded in clusters along ament, 6-8 inches long; pistillate appear in globular involucre at the base of the upper androgynous aments; ovary B-celled, with 6 white linear styles with stigmatic surface.

FRUIT: Matures in September and October; a globose, prickly burr; opens by 4 valves exposing 1-3 edible nuts.

WINTER BUDS: Terminal bud absent, lateral buds ovate, acute, divergent, about 1/4 inch long, with thin dark chestnut-brown scales.

WOOD: Light, coarse-grained, rather weak, yellowish-brown, splits easily, rich in tannic acid, very durable in contact with the soil.

USES: Historical uses: Lumber, poles, posts, coffins, interior finish, tannin.

HABITAT: Wide variety of sites and soils, avoids limestone and wet soils.

DISTINGUISHING CHARACTERISTICS: Sprouts readily from stumps; durability of the wood and wide variety of uses; the burr-like fruit.

DISTRIBUTION IN ALABAMA: Common in most parts of the state except the southernmost counties; almost exterminated by the fungus *Endothia parasitica* (Murr.) A. and A. The fungus persists in living stumps and eventually kills the larger sprouts.

### EXPLANATION OF PLATE

- |                              |  |
|------------------------------|--|
| 1. A fruiting branch         | 6. A seed  |
| 2. An involucre spine        | 7. End of a young branchlet with unfolding leaves, stipules, and and partly grown aments |
| 3. A nut                     | 8. A winter branch   |
| 4. A nut                     | 9. An axillary bud end and leaf scar   |
| 5. Vertical section of a nut |  |



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