Cypress, Bald (spp.)

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Taxodium distichum

Bald Cypress, Baldcypress, Common Bald Cypress

Cupressaceae (Cypress)

Type Tree, woody plant

Hardy range 4A to 10B
Height 50' to 75' / 15.20m to 22.80m
Spread 25' to 35' / 7.60m to 10.60m
Growth rate Fast
Form Pyramidal and upright or erect
Exposure Partial shade or partial sun to full sun
Persistence Deciduous

Bloom Color Brown
Bloom Time Spring

Leaf Color Green
Fall Color Copper and yellow
This plant has attractive fall colors.

Leaf Identification

Type: Simple
Arrangement: Alternate
Venations: None
Margins: Entire
Shapes: Lanceolate and linear

Fruit Color Brown and green

The fruit is dry, cone shaped, oval and round.

Environment

This plant tolerates drought, flooding and some salt.
This plant will grow in very dry to wet or submerged soil.
Suitable soil is well-drained/loamy, sandy or clay.
The pH preference is an acidic to slightly alkaline (less than 6.8 to 7.7) soil.

Landscape Uses

- Screen
- Street tree
- Massing
- Specimen

Attributes and Features

- Pest tolerant
- Wetlands plant
- Attracts butterflies
- Inconspicuous blooms
- Inconspicuous fruit
- Fruit is edible by birds
- Fruit attracts animals
- Ozone tolerant

Native Habitat

Eastern North America through Florida along water coarses and in swamps and bogs typically at elevations below 100 feet. Occasionally found in estuaries provided the salt percent is less than 0.89. Can grow in areas that are periodically flooded with up to 10 feet of standing water once trees are established.

Native to the following North American locales: Alabama, Arkansas, Delaware, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia

Crown, Branch and Twig

This plant is symmetrical with a fine texture and has a dense crown.
This plant's bark is showy.
Branches or twigs are thin.

This plant typically grows with one trunk.
Little pruning is required.
This plant is very flammable.
National champion is 83 x 85 feet in Louisiana.

Culture Notes

Baldcypress is ideal for wet locations, such as its native habitat of stream banks and mucky soils, but the trees will also grow remarkably well on almost any soil, including heavy, compacted, or poorly-drained muck, except alkaline soils with a pH above 7.5. Some trees may tolerate zone 4 conditions.

This is the state tree of Louisiana.

Baldcypress is relatively maintenance-free, requiring pruning only to remove dead branches and unwanted lower branches which persist on the tree. It maintains a desirable straight trunk and a moderately dense canopy and does not form double or multiple leaders as do many other large trees. Not unlike some of the pines, the canopy on trees in native habitat slowly develops a more open, spreading habit as it ages with large diameter branches spaced along the top have of the trunk. Trees can be pruned to maintain a specified height and spread (see photographs). Trees tend to have a low failure rate meaning that branches break from these trees less often than from some other trees.

Pondcypress is found in stagnant pools of water whereas Baldcypress tends to be more common along stream banks. Both grow in water or on more well-drained soils. They tolerate drought better than could be expected for a tree so common to wet soils. In fact, trees grow faster in a well-drained, moist soil than they do in a wet site. It appears as though in nature they simply out-compete other trees in wet soil rather than prefer wet soil. Although tolerant of drought, some trees in the woods and some planted trees died back in the southeastern US as a result of the 1998-2000 LaNina weather event that caused severe drought. This was an exceptional weather event. The large buttress trunk is thought to develop in response to the instability of the root system inherent to trees growing in soft submerged soil.

They are well adapted to planting in downtown areas where there is little exposed soil. It has been successfully used as a street tree in some communities and is being use more for this purpose. Trees are spaced apart 18 to 20 feet in some of the nicest street tree plantings. They are also useful on roadsides in ditches and other wet areas. They make a wonderful vertical statement in the landscape and can be used as Lombardy poplar was used in cooler climates before disease ravaged Lombardy poplar, or Italian Cypress in the warmer climates. Roots are able to grow beneath sidewalks and pavement with little trouble.

Trees planted in wet sites develop above-ground root extensions called `knees', referred to as pneumatophores by scientists, that can make mowing operations difficult near the tree. 'Knees' are thought to aid in gathering oxygen. These `knees' usually do not form in well-drained soils, although I (Dr. Gilman) have seen cases where they have developed. Despite their tolerance to flooded soil, trees establish very slowly when planted in water, but they do establish. Chlorosis can develop on soils that are highly alkaline.

Wood weighs about 46 pounds per cubic foot.

The cultivar 'Sofine' (trademarked as Autumn GoldTM by Plant Development Services, Loxley, AL) should be more uniform with a tight crown.

Maintain adequate mulch area

Be sure to clear all turf away from beneath the branches and mulch to the drip line (the edge of the branches), especially on young trees, to reduce competition with turf and weeds. This will allow roots to become well established and keep plants healthier. Locate the tree properly, taking into account the ultimate size, since the tree looks best if it is not pruned to control size. The tree can enhance any landscape with its delightful spring flush of foliage. It can be the centerpiece of your landscape if properly located.

Tree establishment specifications

Choose good quality trees for planting. The most common cause of young tree failure is planting too deep. In most instances, the point where the top-most root in the root ball originates from the trunk (referred to as the root flare zone or root collar) should be located just above the soil surface. You may have to dig into the root ball to find the root flare. If there is nursery soil over this area, scrape it off. Never place ANY soil over the root ball. The planting hole should be at least twice the width of the root ball, preferably wider because roots grow best in loose soil. In all but exceptional circumstances where the soil is very poor, extensive research clearly shows that there is no need to incorporate any amendments into the backfill soil. Simply use the loosened soil

that came out of the planting hole. Simply planting with the topmost portion of the root ball slightly higher than the surrounding soil might still install the tree too deep - be sure to locate the root flare.

Weed suppression during establishment is essential. Apply a 3-inch thick layer of mulch to at least a six-foot diameter circle around the tree. This area should be at least two feet in diameter for each inch of tree trunk diameter and maintained during the establishment period. Apply a thinner layer of mulch directly over the root ball but keep it at least 10 inches from the trunk. This allows rainwater, irrigation and air to easily enter the root ball and keeps the trunk dry. Placing mulch against the trunk and applying too thick a layer above the root ball can kill the plant by oxygen starvation, death of bark, stem and root diseases, prevention of hardening off for winter, vole and other rodent damage to the trunk, keeping soil too wet, or repelling water.

Regular irrigation after planting encourages rapid root growth that is essential for tree establishment. Trees provided with regular irrigation through the first growing season after transplanting require about 3 months (hardiness zones 9-11), 6 months (hardiness zones 7-8), or one year or more (hardiness zones 2-6) per inch of trunk diameter to fully establish roots in the landscape soil. Trees in desert climates may take longer to establish. Trees that are under-irrigated during this establishment period (and most trees are) often require additional time to establish because roots grow more slowly. Be prepared to irrigate through the entire establishment period, especially during periods of drought.

Irrigation also helps maintain and encourage the desirable dominant leader in the tree canopy on large-maturing trees. Instead of a dominant leader, trees that are under-irrigated during the establishment period often develop undesirable, low, co-dominant stems and double leaders that can split from the tree later.

Unlike established plants, which do best with deep, infrequent irrigation, research clearly shows that recently transplanted trees and shrubs establish quickest with light, frequent irrigation. For trees planted in spring or summer, provide one (cooler hardiness zones) to three irrigations (warmer hardiness zones) each week during the first few months after planting. Daily irrigation in the warmest hardiness zones provides the quickest establishment. Following the initial few months of frequent irrigation, provide weekly irrigation until plants are fully established. With every irrigation, apply one (cool climates) to two (warm climates) gallons of water per inch trunk diameter (e.g. 2 to 4 gallons for a 2-inch tree) over the root ball only. In most landscapes that receive more than 30 inches of rain or irrigation annually, if the mulch area is maintained weed-free, irrigation does not need to be applied outside of the root ball. Never add water if the root ball is saturated.

In cooler hardiness zones, in all but the driest years, irrigation of spring- and summer-planted trees usually can be discontinued once fall color has begun. Irrigation of fall planted trees, however, should be continued until foliage has dropped from the deciduous trees in the region. In warmer climates, irrigate fall-and winter-planted trees as described for the spring- and summer-planted trees.

In drier, desert climates there is benefit to be gained from applying additional irrigation outside of the root ball area. This is best done by making a large diameter berm four to six inches high, then filling it with water so it percolates into the soil. For the first two years, irrigate twice each week through the spring, once per week in summer provided monsoons arrive, and twice each week again in fall if it remains warm. Taper off watering to once or twice each month in winter and resume twice weekly next spring. For years three to five, water twice per month in spring, summer, and fall and once or twice per month in winter. During years five through seven, water once every three weeks in warm weather and once every six weeks in winter. After this, the drought-tolerant desert trees should be able to survive on natural rainfall.

Trees with good, strong structure need no pruning at planting, except to remove broken twigs. Do not remove branches to compensate for root loss - research has shown that this can be detrimental to establishment.

Spring transplanting best

Balled-and-burlapped and bare root trees recover best when transplanted in late winter or early spring in the cooler portions of North America. This usually corresponds to the initiation of root growth.

Trees in one study in NY had trouble recovering from bare-root transplanting.

Pests, Diseases and Damaging Agents

Pests: Bagworms and spidermites. Mites can be particularly troublesome in dry summers without irrigation, causing early leaf browning and defoliation in mid to late summer. Potentially resistant to the Asian Longhorn Beetle. Formosan termites can feed on live, healthy trees. Cypress leaf beetle, fall webworm and scale can cause some problems.

Diseases: Twig blight is caused by a weak pathogen and is usually present on dead or dying tissue. Over-mature trees are often attacked by a fungus called *Stereum taxodi* causing brown pocket rot know as pecky cypress. Needle blights can defoliate.


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