

Bald Cypress (*Taxodium distichum*)

By Hannah Beckett

If you have ever walked along the water's edge, you may have come across a grove of particular-looking trees. Their bark is rather shaggy and peels off in strips. Their leaves are soft and feathery, and they have strange cone-shaped growths surrounding the trunk. These trees are known as Bald Cypress (*Taxodium distichum*).

The Bald Cypress is a large, slow-growing, and long-lived tree. It can reach heights of up to 120 feet with trunks up to 7 feet in diameter. Their needle-like leaves are light green during the growing season, but in autumn, they turn a beautiful russet-red.

Those strange growths jutting from the ground around the tree are called cypress knees. The knees project up from the submerged roots of the Bald Cypress tree's extensive root system. Originally, scientists thought the cypress knees helped provide oxygen to the roots since the water in swamps is often oxygen deprived. However, evidence for this theory is lacking. In fact, when the knees of swamp-dwelling specimens are removed, oxygen content in the roots does not decrease and the trees continue to thrive.

Another possible function of the knees is structural support and stabilization. Bald Cypress trees grow in flood-prone sites, so the ground is often soft and muddy. The extra support may provide additional resistance to strong winds that would otherwise topple them over. Even hurricane force winds rarely overturn these trees.

This species of tree is capable of adapting to a wide range of soil types. It is most abundant in wet, swampy soils of floodplains and riparian corridors of the southeast US. Their native range extends as far north as New Jersey, all the way down to Florida, and west into Central Texas.

The Bald Cypress tree is a deciduous tree. They are among the first trees in Texas to lose their leaves in the fall and the last to bud in the spring. Hence why they are called "bald" cypress. The Bald Cypress produces both male and female cones on the same tree. The purplish pollen-producing male cones cluster at the end of branches, and disperse pollen via the wind. Female cones produce seeds when pollinized. A single cone contains between 2 to 34 seeds, but the average is about 16 seeds.

After sprouting, seedlings must grow fast to avoid being drowned by seasonal floodwaters. Seedlings may reach heights of 30 inches their first year. Height growth has largely ceased by the time the trees are 200 years old. The average lifespan is 600 years, but some individual trees may survive for over 2,000 years. The oldest known Bald Cypress still living today is "Old Dan". It is located in Florida and is estimated to be 2,704 years old.

Bald cypress trees are a valuable part of many Texas waterways. They aid in diffusing and slowing floodwaters to reduce flood damage. Their roots trap sediments and pollutants and help stabilize water edges from erosion. Birds will nest in its branches or in cavities of rotting knees, and many animals eat the seeds.

One of the most notable features of a Bald Cypress is its rot-resistant heartwood. This resistance to decay has earned the title "Wood Eternal." Native American tribes would use the Bald Cypress to make houses and canoes. Throughout the southern United States, the wood was

valued by colonists for its resistance to water, making it ideal for use wherever the wood is exposed to the elements.

Even today, Bald Cypress wood is used for heavy construction, including docks, boats, and bridges. Fence posts, doors, flooring, and a number of other items are also common uses for the wood. With a weather resistance that helps ensure long life, the Bald Cypress is a strong and resilient pillar for both wildlife and humans.

Photo: Bald cypress *Taxodium distichum* trees on the White River in Arkansas

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