

Cypress are in the redwood family *Taxodiaceae*, which includes the redwoods and giant sequoias in the western United States.

Although cypress are conifers, they are unique because they are deciduous. This indicates that although Corkscrew is in a subtropical area, cypress originated as temperate plants where being deciduous was an advantage, and they spread south rather than originating as tropical plants and spreading north.

The oldest trees at Corkscrew are around 600 years old. The age was based on a core peat sample from the central marsh which indicated that approximately 600 years ago, a massive fire occurred. The carbon deposit was thick enough that the fire must have destroyed everything.

Cypress was and is heavily harvested because of its qualities: it is resistant to decay but it is soft, light, very durable, and doesn't warp easily. These qualities have made it useful as railroad ties, docks, bridges, silos, caskets, garden mulch, and in boat building. The U.S. Navy used cypress for hulls of its mine sweepers and P.T. boats in the 1940's and 1950's because metal hulls set off water mines while wood hulls did not.

Almost every swamp in Florida was logged between the 1800's and 1950's. Heavy logging began in the 1930's. Corkscrew was saved and is now the largest and oldest virgin bald cypress forest in North America. Other unlogged areas of cypress trees in South Carolina are older, but they are in what is a cypress-tupelo forest rather than a bald cypress forest.

Bald cypress produces seed every year, and good seed production occurs at intervals of about three to five years. Male cones appear on trees from December to March and give off pollen to fertilize the female cone. Male cones occur in tassel-like structures several inches



## Bald Cypress

*Taxodium distichum*

long and are usually near the tops of the cypress trees.

Female cones are mostly round and are usually in the lower portions of the cypress trees. They appear from March to April after pollination and reach maturity between October and December. Each cone contains from 18-30 seeds and usually breaks apart on the tree to disperse the seeds.

At maturity, parts of cones with their resin-coated seeds clinging to them, or sometimes entire cones, drop to the water or ground. The seeds are dispersed by water flow.

Seeds cannot germinate in water but can remain viable for up to 30 months under water. They need saturated but unflooded soil for a period of one to three months after seedfall for germination, so a dry-down is essential for their successful reproduction. When you see cypress growing in standing water, the ground had to be dry at the time the seed germinated.

After germination, seedlings must grow fast enough to keep at least part of the crown above water level for most of the growing season. Growth stops when a seedling is completely submerged and prolonged submerging kills the seedling.

Cypress can regenerate after wind or lightning damage as long as the root system and some of the living trunk is intact. Trees up to 60 years of age send up healthy sprouts; trees up to 200 years of age may also sprout but not very vigorously. Adventitious branching (sprouting from unusual or unexpected places) may occur after storm or fire damage.

The thin bark of cypress trees offers little protection against fire, but the trees are usually protected because fire burns out in the moist soils where cypress grow. During drought years when the soil is dry, a fire will usually kill the trees.

Cypress roots are widespread, shallow, and horizontal. Young trees send a tap root down, but because of the limestone base beneath the sand and peat in Corkscrew, the tap roots never develop. Cypress knees grow up from the roots and tend to be one to two feet above the highest water mark. Knees growing up through a dense matt of horizontal roots give the trees stability to withstand wind storms.

## Cypress Trivia

- DNA testing has confirmed that bald cypress and pond cypress are two distinct trees rather than one being a variation of the other; however, they can hybridize.
- The largest bald cypress by volume is in Cat Island National Wildlife Refuge near Baton Rouge. Its trunk is 17 feet in diameter and it has a crown spread of 85 feet.
- *Taxodium* is derived from a Greek word meaning "yew-like" and *distichum* means "two-ranked" referring to the way the needles are arranged in two ranks (exactly two rows on each side of the stem).

Reference: [www.na.fs.fed.us/spfo/pubs/silvics\\_manual/Volume\\_1/taxodium/distichum.htm](http://www.na.fs.fed.us/spfo/pubs/silvics_manual/Volume_1/taxodium/distichum.htm)