

## Bald-cypress

Bald-cypress (*Taxodium distichum*) is a native, deciduous conifer and is only one of five conifer species that sheds its needles in the fall (hence, its “bald” namesake). Typically found growing in saturated soils, seasonally flooded areas, swamps and stream banks, the natural range of bald-cypress extends from the Atlantic Coastal Plain in southern Delaware south to Florida, and then west along the lower Gulf Coast Plain to Texas. It naturally grows further inland through the Mississippi Valley to the southernmost reaches of Oklahoma, Missouri, Illinois, and Indiana.

Surprisingly, this native conifer exhibits urban toughness: tolerance to air pollution, poorly drained, compacted, and dry soils. This versatility and durability has led to its successful cultivation in landscapes, parking lots, and streetscapes.

### Mature Height/Spread

In the wild, bald-cypress can become a large tree attaining a height of 100 to 150 feet and a few hundred years of age. The largest known individual in SC is in Congaree National Park in Richland County where the “SC Champion” is 127 feet tall, 50 feet wide, and a circumference of 26 feet (July 2002 measurements). Other towering stands of bald-cypress can be found in the Francis Beidler Forest in Harleyville, SC.

Most landscape specimens tend to grow 50 to 70 by 20 to 30 feet high and wide. Young trees develop a narrow to broadly pyramidal crown; with age the crown becomes broad and flat-topped.

### Growth Rate

Bald-cypress (USDA cold hardiness zones 4a-11) grows moderately fast, generally 1 to 2 feet per year. Although it’s naturally found in floodplains,

river channels, and millponds, expect better growth in moist, well-drained soils in full sun.



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*Taxodium distichum* in Spartanburg, SC.  
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### Ornamental Features

Bald-cypress’s two-ranked needles (arranged in two rows on either side of a narrow stem) leaf out chartreuse in the spring and mature to light green in early summer. In the fall, the branchlets of stems

and leaves change to tan and then turn orange to reddish-brown before they are shed.



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*Taxodium distichum* in the fall in Easley, SC.  
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The gray-brown to red-brown bark exfoliates--peels away--in long, vertical strips. As a bald-cypress ages, its trunk becomes fluted and unusually thick or buttressed at its base. Its round, green cones ( $\frac{3}{4}$  to 1 inches across) are green in summer and then turn brown as they mature in fall and winter. Bald-cypress cones are reminiscent of the cones of the giant coastal redwoods of California (*Sequoia sempervirens*), which are members of the redwood family (Taxodiaceae).



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Closeup of leaves and cones of *Taxodium distichum*.  
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### Landscape Use

Bald-cypress and its cultivars make a fine stand-alone specimen or accent planting. They can be clustered together to create a grove or copse, planted near water features or along shorelines, planted as deciduous hedges or screens between properties, or in border plantings along driveways. Expect light, dappled shade from its delicate, feathery foliage.



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A screen of *Taxodium distichum* 'Peve Minaret' at Moore Farms and Botanical Garden in Lake City, SC.  
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Bald-cypress has been successfully used as a street tree and in parking lot plantings in many municipalities, including Mt. Pleasant, Sumter, Columbia, and Easley, SC.

Bald-cypress is relatively maintenance-free and requires pruning only to remove dead wood and unwanted lower branches which persist on the tree.

## Problems

Mites can be particularly troublesome in dry summers without irrigation; their feeding causes early leaf browning and needle-drop during mid- to late summer.

Cercospora needle blight, bagworms, and fall webworms are also potential problems on bald-cypress.

Healthy, well-maintained plants in the proper growing conditions usually have few problems.

In wet areas, bald-cypresses produce “cypress knees,” technically called pneumatophores. These peculiar 1- to 3-foot tall, pointed, cone-like root extensions look like bark-covered stalagmites. While their function remains a mystery, scientists believe that these “knees” provide structural support for growing in wet, swampy soils. Some have reported the occurrence of knees appearing in heavily irrigated lawns or low, waterlogged areas. While these knees may pose a mowing hazard, treat them as ornamental features by including them in mulched, defined beds.



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“Cypress knees” of *Taxodium distichum*.  
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## Bald-cypress Cultivars

**‘Cascade Falls’:** This weeping bald-cypress has a serpentine growth habit that requires staking early in its development until it develops a central leader and upright-growing branches that no longer require support.



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*Taxodium distichum* ‘Cascade Falls’ on Furman University campus in Greenville, SC.  
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This cultivar is also available as a standard where the scion or “head” of ‘Cascade Falls’ is grafted at least five feet high up on *T. distichum* understock. When the trunk is thick enough to support the head, all of the side branches are removed. Either form allows its branches to arch downwards. Fall color is peachy-orange-brown.

**‘Falling Waters’:** This weeping bald-cypress will only grow as high as it’s staked. It can be espaliered against walls or draped over walls to allow its branches to cascade; 20 feet high and wide at maturity. Needles turn bronze in the fall.

**Green Whisper® (‘JFS-SGPN’):** Discovered in South Carolina, this vigorous cultivar has an upright to pyramidal form and grows 55 feet high and 30 feet wide in 20 years. Its feathery-looking bright green leaves turn rusty orange in the fall.

**Shawnee Brave™ (‘Mickelson’):** Strong narrow pyramidal to columnar form with a dense crown; 50 to 75 feet high and 15 to 20 feet wide. The parent is 75 feet high and 18 feet wide. Needles turn orangish-brown in the fall. Introduced by Earl Cully of Heritage® Trees, Inc. Jacksonville, IL.

**‘Pendens’:** Weeping pyramidal form has nearly horizontal branches with drooping or nodding tips.

**‘Peve Minaret’:** Although a dwarf cultivar with closely spaced dark green needles, it can grow to a height and width of 20 feet and 8 to 10 feet, respectively. This cultivar tolerates selective pruning that allows it to be “sculpted” into a variety of shapes and purposes. Excellent use in the Moore Farms Botanic Garden in Lake City, SC.

**Lindsey’s Skyward™ (‘Skyward’):** Dwarf, compact selection with a columnar habit that’s well-suited for small landscapes. Matures to a height of 25 to 30 feet and a spread of 5 to 10 feet. Green needles turn golden copper than bronze before being shed.

**Autumn Gold™ (‘Sofine’):** Has a compact pyramidal habit and sage-green needles that turn rust-orange in the fall. Expected height and spread is 50 to 60 feet and 20 to 25 feet, respectively.



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Closeup of *Taxodium distichum* ‘Peve Minaret’ at Moore Farms and Botanic Garden in Lake City, SC.  
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## Related Species & Cultivars

**Pond Cypress:** Pond-cypress or pond bald-cypress (*Taxodium ascendens*) is also native to the U.S. (USDA cold hardiness zones (4) 5-11), although it’s found in the southern portion of the range of bald-cypress from the southeastern Coastal Plain of NC to LA and southeast Texas. More tolerant of standing water, pond-cypress can often be found in blackwater rivers, ponds, bayous, and swamps.



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*Taxodium ascendens* at the SC Botanical Garden.  
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Pond-cypress has a smaller stature and is more slower-growing than bald-cypress, with a narrow more columnar habit and less dense crown. Along the length of its spreading branches are upright threadlike branchlets whose individual needles are awl-shaped or scalelike; they turn bronze to brown in the fall to reveal light brown, ridged branches that offer textural interest in winter. Expect pond-cypress to grow 60 to 70 feet high and 20 to 30 feet wide.

Some horticulturists view pond-cypress as more architecturally interesting than bald-cypress. Pond-cypress is found naturally in wet, boggy areas with standing or slow-moving water. It rarely produces knees in wet sites, which tend to be round-tipped instead of pointed as in bald-cypress.



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Closeup of *Taxodium ascendens* upright leafy branchlets.  
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Site this species and its cultivars on the edges of streams, lakes, or ponds; however, it will also prosper on higher, drier sites. Similar to bald-cypress, pond-cypress is relatively care-free. It tends to produce a relatively straight trunk without pruning. Occasionally it will be necessary to remove dead branches.

**Debonair™ ('Morris')**: Columnar pond-cypress with narrowly pyramidal, slightly weeping form and whose long green needles droop down from reddish-brown stems. Needles turn russet-red in fall. Expect a mature height of 50 and a spread of 12 feet.

**'Nutans'**: First described in 1926, it's considered one of the best forms with short, very horizontal branches and dense, airy needles. In autumn needles change from russet to golden brown. Mature height and spread is 50 feet and 16 feet, respectively.

**'Prairie Sentinel'**: Narrower than the species, this cultivar should be used to create a vertical accent in the landscape. It's considered the "gold standard" of columnar (fastigiated) forms of pond-cypress.

**Fox Red™ ('Red Fox')**: Narrow, conical selection introduced by Bartlett Tree Experts in Charlotte, NC with an expect height and spread of 60 feet and 15 feet. Its bright green needles turn bronzy-red in some years.

**Montezuma-cypress**: Montezuma-cypress or Mexican swamp cypress (*Taxodium mucronatum*) was first described in 1853. This native to Guatemala, Mexico, and the southern tip of Texas is

an evergreen to semi-evergreen in its native habitat. It is best suited for USDA zones 8b and warmer. Tripp and Raulston wrote that Montezuma cypress held its sandy gold fall color late into December in Raleigh, NC.

Montezuma-cypress tends to be more compact and have shorter leaves and smaller cones than bald- or pond-cypress. Although it does not grow as tall and bald-cypress, it compensates for its lack of height with girth. (See the famous Cypress-of-Tule or "El Gigante" Montezuma-cypress).

**Canton water pine**: Canton water pine or Chinese swamp cypress (*Glyptostrobus pensilis*) is native to the subtropical regions of southeastern China, portions of Vietnam and eastern Laos. Considered a bald-cypress lookalike, Canton water pine is a deciduous conifer that prefers wet to moist areas near streams and river banks. Experts suggest a mature height of 30 feet in the Southeast.

For best growth and appearance, it must be planted in permanently wet conditions or shallow water in full sun. It is intolerant of dry soils, unlike *Taxodium* spp. It perhaps is best suited as a collector's plant, because it lacks qualities that garner mainstream interest.

**'Woolly Mammoth'**: 'Woolly Mammoth' is a cultivar of Canton water pine introduced by Rob Means of Yadkin Valley Nursery in Yadkinville, NC; it has a better form than the species and slightly bluer new growth.

#### Sources:

1. Arnold, M. A. 2008. *Landscape plants for Texas and environs*. 3<sup>rd</sup> ed. Stipes Pub., Champaign, IL.
2. Burns, R. M. and B. H. Honkala. 1990. *Silvics of North America*: 1. Conifers; 2. Hardwoods. Agriculture Handbook 654. U.S. Dept. of Agriculture, Forest Service, Washington, D.C.  
[http://www.na.fs.fed.us/spfo/pubs/silvics\\_manual/table\\_of\\_contents.htm](http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm)
3. Cox, T. and J. M. Ruter. 2013. *Landscaping with conifers and ginkgo for the southeast*. University Press of Florida, Gainesville, FL.
4. Dirr, M. A. 2009. *Manual of Woody Landscape Plants*. 6th ed. Stipes Pub., Champaign, IL.

5. Head, B. H. 2006. *Hutchinson's tree book: A reference guide to popular landscape trees*. Hutchinson Pub. Corp., Taylors, SC.
6. Shelburne, V. *Champion trees of South Carolina*  
(<http://www.clemson.edu/public/champtree/index.html>).
7. Tripp, K. E. and J. C. Raulston. 1995. *Year in trees: Superb woody plants for four-season gardens*. Timber Press, Portland, OR.

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