


United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2)
	ASLBP #: 09-879-04-COL-BD01
	Docket #: 05200029 05200030
	Exhibit #: PEF610-00-BD01
	Admitted: 10/31/2012
	Rejected:
Other:	Identified: 10/31/2012
	Withdrawn:
	Stricken:

Fact Sheet ST-620
October 1994



Taxodium distichum Baldcypress¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

Narrowly to broadly pyramidal when young, Baldcypress, the state tree of Louisiana, eventually develops into a broad-topped, spreading, open specimen when mature (Fig. 1). Capable of reaching 100 to 150 feet in height, most landscape specimens are rarely seen in this open form because they are usually much younger and shorter. Trees grow at a moderately fast rate, reaching 40 to 50 feet in about 15 to 25 years. Although it is native to wetlands along running streams, growth is often faster on moist, well-drained soil. The pale green, needle-like leaves turn a brilliant coppery red in fall before dropping, but the bare branches and reddish gray, peeling bark provide much landscape interest during the winter. The trunk grows unusually thick toward the base, even on young trees. The small seeds are used by some birds and squirrels.

GENERAL INFORMATION

Scientific name: *Taxodium distichum*
Pronunciation: tack-SO-dee-um DISS-tick-um
Common name(s): Baldcypress
Family: *Taxodiaceae*
USDA hardiness zones: 5 through 10 (Fig. 2)
Origin: native to North America
Uses: hedge; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; screen; shade tree; small parking lot islands (<

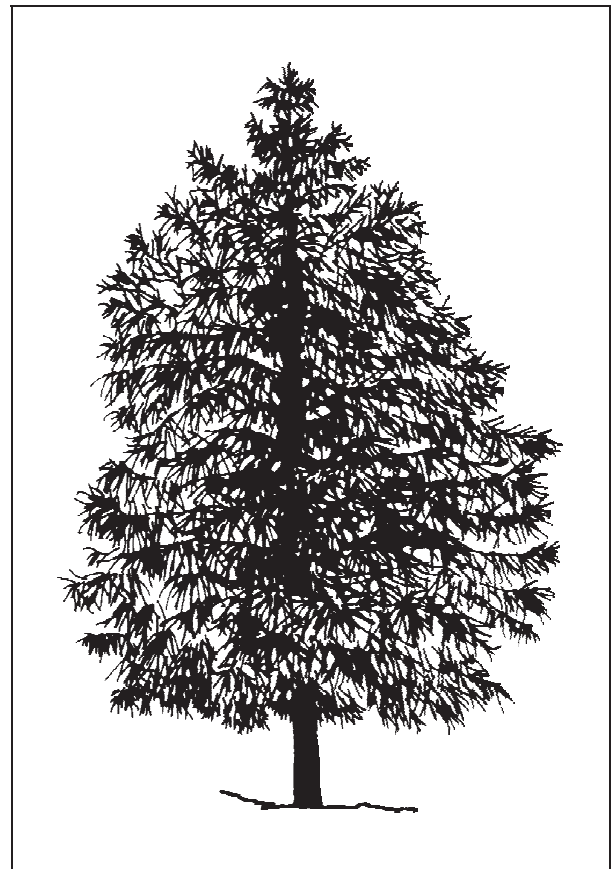


Figure 1. Middle-aged Baldcypress.

100 square feet in size); specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

1. This document is adapted from Fact Sheet ST-620, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

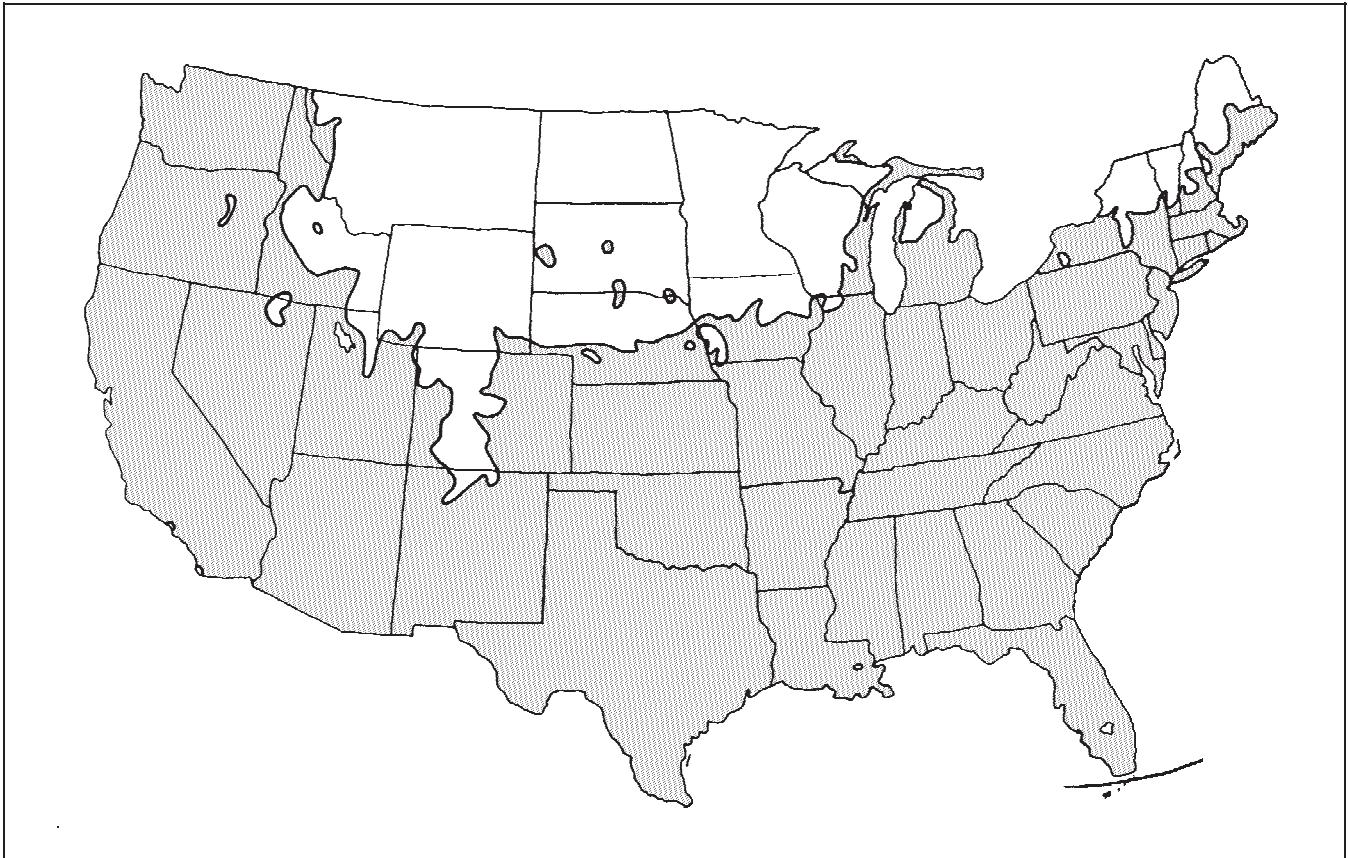


Figure 2. Shaded area represents potential planting range.

Availability: generally available in many areas within its hardiness range

Fall characteristic: showy

DESCRIPTION

Height: 60 to 80 feet

Spread: 25 to 35 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: pyramidal; upright

Crown density: dense

Growth rate: fast

Texture: fine

Flower

Flower color: brown

Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: oval; round

Fruit length: 1 to 3 inches; .5 to 1 inch

Fruit covering: dry or hard

Fruit color: brown; green

Fruit characteristics: attracts birds; attracts squirrels and other mammals; inconspicuous and not showy; no significant litter problem

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: entire

Leaf shape: lanceolate; linear

Leaf venation: none, or difficult to see

Leaf type and persistence: deciduous

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: copper; yellow

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns

Pruning requirement: needs little pruning to develop a strong structure

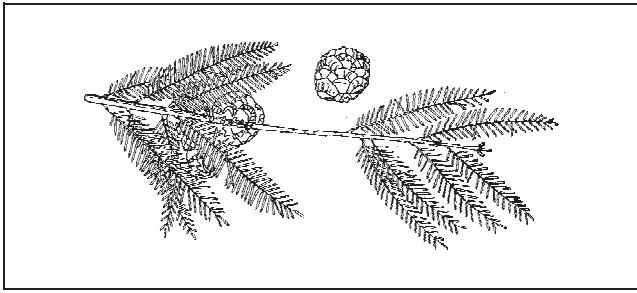


Figure 3. Foliage of Baldcypress.

Breakage: resistant

Current year twig color: green

Current year twig thickness: thin

Wood specific gravity: 0.46

Culture

Light requirement: tree grows in full sun

Soil tolerances: clay; loam; sand; slightly alkaline; acidic; extended flooding; well-drained

Drought tolerance: high

Aerosol salt tolerance: moderate

Soil salt tolerance: moderate

Other

Roots: surface roots are usually not a problem

Winter interest: tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

Outstanding tree: tree has outstanding ornamental features and could be planted more

Invasive potential: little, if any, potential at this time

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

Although often seen at water's edge where it will develop "knees", or root projections, that will extend above the water, Baldcypress can also be grown in dry locations and makes an attractive lawn, street, or shade tree. Cypress knees do not generally form on these drier sites. Cities from Charlotte, NC, Dallas, TX to Tampa, FL currently use it as a street tree and it should be used more extensively throughout its range in urban landscapes. It provides a good vertical accent to the landscape and should be used more often in urban areas. Baldcypress can be clipped into a formal hedge, creating a wonderful soft screen.

Surprisingly, the roots do not appear to lift sidewalks and curbs as readily as some other species. Its delicate, feathery foliage affords light, dappled shade, and the heartwood of Baldcypress is quite resistant to rot. However, most lumber available at lumber yards today is sapwood and is not resistant to rot.

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. Locate where the sun will strike the tree on all sides for best symmetrical development. Baldcypress is relatively maintenance-free, requiring pruning only to remove dead wood and unwanted lower branches which persist on the tree. It maintains a desirably straight trunk and a moderately dense canopy and does not form double or multiple leaders as do many other large trees.

The cultivar 'Monarch of Illinois' has a very wide-spreading form and 'Shawnee Brave' has a narrow, pyramidal form, 15 to 20 feet wide. 'Pendens' has drooping branchlets and large cones. *Taxodium distichum* var. *nutans* (*Taxodium ascendens*) is native to wet, boggy areas with standing water, whereas *Taxodium distichum* is more common along streams.

Propagation is by seed.

Pests

Bagworms can defoliate portions of the tree. Mites can be particularly troublesome in dry summers without irrigation, causing early leaf browning and defoliation in mid to late summer.

Diseases

Twig blight is caused by a weak pathogen and is usually present on dead or dying tissue. When the tree is stressed the fungus can kill branch tips. Dead tips can be pruned off. Do not let dead or diseased branches remain on the tree. Keep trees healthy with regular fertilization.