

Ten Common Conifers of the Tampa Bay Area¹

Andrew K. Koeser, Holly Finley, Gitta Hasing, Gary W. Knox, and Melissa H. Friedman²

Introduction

This article will assist you in identifying 10 conifers commonly found throughout Tampa Bay area of Florida. Though more species of coniferous trees are present in the Florida landscape, data from the City of Tampa show that these 10 species account for 100 percent of conifer species currently inventoried (see TampaTreeMap.org). As such, this guide serves as an efficient resource for master gardeners, novice tree inventory crews, 4-H forestry teams, and others interested in basic conifer identification. Conifers are cone-bearing trees that are often identifiable by their needle-like leaves, although some have very small scale-like leaves. In addition to their uses in the landscape, and commercially for lumber and paper, they are popular around the holidays as Christmas trees.

If you are interested in identifying trees beyond the conifers showcased in this article, a more comprehensive key and tree identification tool featuring 140 broadleaf trees, conifers, and palms is available through the UF/IFAS Communications field guide *Trees: North and Central Florida* (Koeser et al. 2014).

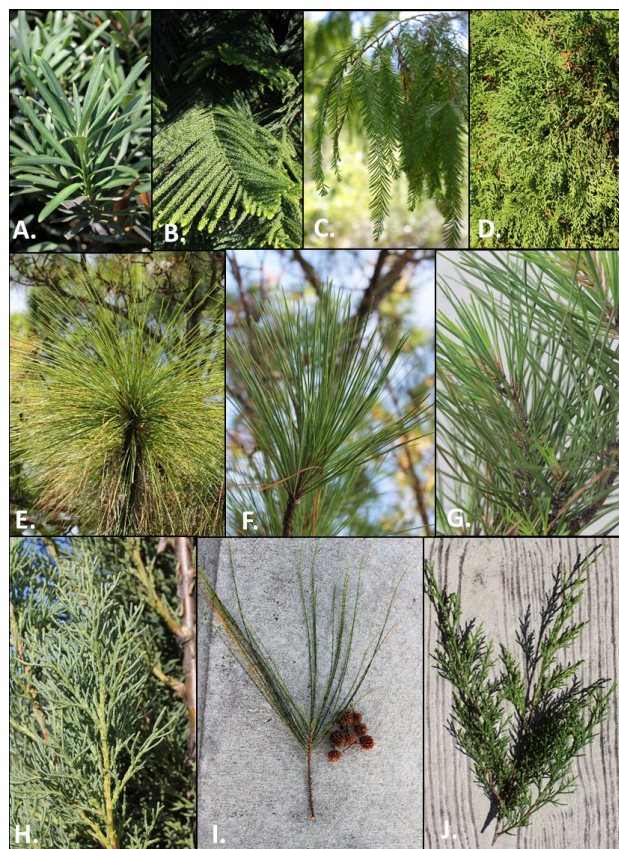


Figure 1. Leaf detail of Trees: A.) Yew Podocarpus (*Podocarpus macrophyllus*); B.) Norfolk Island Pine (*Araucaria heterophylla*); C.) Bald Cypress (*Taxodium distichum*); D.) Oriental Arborvitae (*Platycladus orientalis*); E.) Longleaf Pine (*Pinus palustris*); F.) Slash Pine (*Pinus elliottii*); G.) Sand Pine (*Pinus clausa*); H.) Italian Cypress (*Cupressus sempervirens*); I.) Australian Pine (*Casuarina spp.*); J.) Red Cedar (*Juniperus virginiana*).

Credits: Gitta Hasing

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2. Holly Finley, intern, CLCE, UF/IFAS Extension Gulf Coast Research and Education Center; Andrew K. Koeser, assistant professor, CLCE, UF/IFAS Extension Gulf Coast Research and Education Center; Gitta Hasing, senior biological scientist, CLCE, UF/IFAS Extension Gulf Coast Research and Education Center; Gary W. Knox, professor, UF/IFAS North Florida Research and Education Center; and Melissa H. Friedman, research and extension writer, Department of Environmental Horticulture, CLCE, UF/IFAS Extension Gulf Coast Research and Education Center; Gainesville, FL 32611.

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Norfolk Island Pine (*Araucaria heterophylla*)



Family: Araucariaceae, araucaria family

Florida Hardiness Zones: 10a–11

Height: 60–80'

Width: 12–20'

Leaf: Less than 2" long, simple, spiral, ovate, and needle-like when young and scale-like when mature. Leaves are bright green and are evergreen.

Bark: Gray-brown and smooth, becoming darker, rougher, and breaking into small, scaly plates with age

Young Cone: Male: 1½" long, yellowish to reddish-brown, hanging, and emerges in clusters. **Female:** tiny, green, broadly elliptic, and emerges at the tips of branches.

Mature Cone: 5" long, oval, spiny, and turns from green to brown with maturity but is rarely produced in cultivated specimens.

Native Range: Norfolk Island, Australia.

Habitat: Full sun, well-drained soil, high drought tolerance, and moderate aerosol salt tolerance.

Australian Pine (*Casuarina spp.*)¹

Family: Casuarinaceae, beefwood family

Florida Hardiness Zones: 9b–11

Height: 70–90'



Width: 30–40'

Leaf: Tiny, simple, whorled, and scale-like. Leaves are gray-green, evergreen, and difficult to see with the naked eye. Leaves from the current year's growth form a band that encircles a joint, and with the previous year's growth form a structure that is needle-like in appearance.

Bark: Dark gray, fissured, and rough.

Flower: Male: tiny, yellow, and emerges on spikes at the end of the needle-like structure. **Female:** tiny, yellow, and emerges in clusters from leaf axils.

Flowering: Year-round, but most abundant in spring and late summer/early fall.

Fruit: Less than 1/2" long, oval or round, hard, spiny, brown, and cone-like.

Fruiting: Year-round, but most abundant in early summer and mid-winter.

Native Range: Australia, Southeast Asia, and the Pacific Islands.

Habitat: Full sun to partial shade, well-drained to occasionally wet soil, and high drought and aerosol salt tolerance.

¹Given the common name, form, leaf shape, and fruit shape of this species, it is often mistaken for a conifer (which is why it is included on this list). However, Australian pine is actually an angiosperm.

Italian Cypress (*Cupressus sempervirens*)

Family: Cupressaceae, cedar family

Florida Hardiness Zones: 8a–11

Height: 40–60'

Width: 3–6'



Leaf: Tiny, simple, whorled, and scale-like. Leaves are dark green and are evergreen.

Bark: Light brown to gray and smooth, becoming darker and flaky with age.

Young Cone: Male: tiny, yellowish, and oblong. **Female:** tiny and nearly round.

Mature Cone: 1/2–1", oval, brown, and hard.

Native Range: Southern Europe and western Asia.

Habitat: Full sun, well-drained soil, high drought tolerance, and moderate aerosol salt tolerance.

Red Cedar (*Juniperus virginiana*)

Family: Cupressaceae, cedar family



Florida Hardiness Zones: 8a–10b

Height: 25–45'

Width: 20–30'

Leaf: Tiny, simple, opposite or sub-opposite, and awl-like when young, becoming scale-like with maturity, with an acuminate tip. Leaves are paler green when young, become dark green with maturity, and are evergreen.

Bark: Reddish-brown to gray, thin, and peeling.

Young Cone: Male: small, yellow-brown, and emerges in clusters on the tips of twigs. **Female:** small, light blue-green, and emerges in clusters.

Mature Cone: 1/4", berry-like, fleshy, aromatic, and turns dark blue and glaucous with maturity.

Cone Maturation: Late winter to early spring.

Native Range: Eastern United States and southeastern Canada.

Habitat: Full sun to partial shade, well-drained soil, and high drought and aerosol salt tolerance.

Sand Pine (*Pinus clausa*)

Family: Pinaceae, pine family



Florida Hardiness Zones: 8a–10b

Height: 25–40'

Width: 15–25'

Leaf: 1 1/2–3"-long needles that typically are in groups of two per fascicle. Needles are green and are evergreen.

Bark: Reddish-brown to gray-brown, thin, and smooth, becoming predominantly gray, closely ridged, and breaking into small plates with age.

Young Cone: Male: yellow, cylindrical, and emerges in clusters at the ends of twigs. **Female:** yellow to purple.

Mature Cone: 2 1/2–3" long, reddish-brown to gray-brown, oval, and dry.

Cone Maturation: Late summer.

Native Range: Florida and southeastern Alabama.

Habitat: Full sun to partial shade, well-drained soil, and high drought and aerosol salt tolerance.

Slash Pine (*Pinus elliottii*)



Family: Pinaceae, pine family

Florida Hardiness Zones: 8a–11

Height: 75–100'

Width: 35–50'

Leaf: 6–12"-long needles, typically in groups of two per fascicle, but occasionally in groups of three. Needles are dark green and are evergreen.

Bark: Red-brown and furrowed when young, becoming platey with loose, thin, scales that flake off to reveal a dark orange color.

Young Cone: Male: red to yellow, cylindrical, and emerges in clusters at the end of twigs. **Female:** red to green, oval, and stalked.

Cone Emergence: Early spring.

Mature Cone: 2–6" long, elongated, oval, dry, hard, and brown.

Cone Maturation: Fall.

Native Range: Gulf and Atlantic coastal states from north-eastern Louisiana to the southern region of South Carolina.

Habitat: Full sun to partial shade, well-drained to occasionally wet soil, and high drought and aerosol salt tolerance.

Longleaf Pine (*Pinus palustris*)



Family: Pinaceae, pine family

Florida Hardiness Zones: 8a–10a

Height: 60–125'

Width: 30–40'

Leaf: 8–14" long needles, typically in groups of three per fascicle but occasionally in groups of two. Needles are bright green and are evergreen.

Bark: Orange, brown, gray, scaly, and develops flat plates

Young Cone: Male: long, yellow-red, and emerges in clusters. **Female:** oval and purple.

Cone Emergence: Spring.

Mature Cone: 6–12", oval, dry, hard, brown, and sits sessile

Cone Maturation: Fall.

Native Range: Southeastern United States.

Habitat: Full sun, well-drained soil, and high drought and aerosol salt tolerance.

Oriental Arborvitae (*Platycladus orientalis*)

Family: Cupressaceae, cedar family

Florida Hardiness Zones: 8a–10a

Height: 15–20'

Width: 10–15'

Leaf: 1/16–1/8" long, scale-like, and pointed at the tip, with successive pairs closely overlapping along the branchlet and arranged in a vertically flat plain. Leaves are bright yellow-green when young, darker green when mature, slightly fragrant when bruised, and are evergreen.

Bark: Red-brown, fibrous, and peels in long, thin strips



Young Cone: Male: 1" long, pale yellow, catkin-like, cylindrical, and emerges in clusters. **Female:** Small and short stalk that emerges from leaf axils.

Cone Emergence: Spring.

Mature Cone: 1/2"-long, reddish-purple or bluish, fleshy, drupe-like aril that is only produced on female trees.

Native Range: Southern China and Japan.

Habitat: Full sun to partial shade, well-drained soil, and high drought and aerosol salt tolerance.

Bald Cypress (*Taxodium distichum*)



Family: Cupressaceae, cedar family

Florida Hardiness Zones: 8a–10b

Height: 60–80'

Width: 25–35'

Leaf: 1/2–3/4" long, needle-like, simple, alternate, and linear to lanceolate. Leaves are green, two-ranked and appear feather-like, turn yellow to copper in the fall, and are deciduous.

Bark: Gray and/or reddish-brown, smooth, and fibrous with extremely shallow or completely lacking furrows and with a buttressing base.

Young Cone: Male: tiny, green, and emerges on 4–5" long panicles. **Female:** small, green, and emerges near the end of branches.

Cone Emergence: Spring.

Mature Cone: 1/2–1", round or ovulate, resinous and green when young, then turns brown and hard with maturity.

Native Range: Southeastern United States, east Texas, and Atlantic coastal states as far north as Delaware.

Young Cone: Male: tiny and inconspicuous. **Female:** tiny, bluish-green, and emerges solitary near branch tips.

Mature Cone: 3/4" long, bluish-green, fleshy, and oblong or egg-shaped with 6–8 hard scales that each has a tiny, horn-like projection and turns brown with maturity.

Native Range: China and North Korea.

Habitat: Full sun to partial shade, well-drained soil, high drought tolerance, and low aerosol salt tolerance.

Yew Podocarpus (*Podocarpus macrophyllus*)



Family: Podocarpaceae, podocarpus family

Florida Hardiness Zones: 8b–11

Height: 30–40'

Width: 20–25'

Leaf: 1–5" long, simple, whorled, and linear or oblanceolate. Leaves are dark green on top, grayish underneath, and are evergreen.

Bark: Reddish-brown, shredding, and turns gray with age.

Habitat: Full sun to partial shade, wet to well-drained soil, high drought tolerance, and moderate aerosol salt tolerance.

Conclusion

For those interested in furthering their tree identification abilities, the UF/IFAS Extension and Center for Landscape Conservation and Ecology offers a comprehensive and densely photographed field guide featuring 140 trees and palms of North and Central Florida. Available as both a mobile application and printed book, *Trees: North and Central Florida* features a full dichotomous key (a step-by-step method for differentiating between species that, with practice, can be a very effective tool to identify an unknown organism) and accompanying glossary.

Reference

Koeser, A. K., G. Hasing, M. H. Friedman, and R. B. Irving. 2014. *Trees: North and Central Florida*. Gainesville, FL: UF/IFAS Communication Services.

Glossary

Acuminate—term describing leaves that taper sharply at their tip (apex).

Alternate—pertaining to bud or leaf arrangement, one leaf or bud at each node, situated at alternating positions along the stem. In this arrangement, the leaves are not directly across from each other.

Apex—the tip, end, or angular limit of an object; the tip of a leaf or shoot.

Awl-like—having a sharp, stiff point.

Deciduous—tree or other plant that seasonally sheds all or some of its leaves according to a genetically scheduled cycle as impacted by seasonal factors such as day length, temperature, and drought.

Entire—term describing a leaf margin without teeth.

Evergreen—tree or other plant that does not shed all of its foliage annually.

Fascicle—short shoot surrounding clusters of pine needles on a twig.

Lanceolate—shaped like a lance head; having a narrow oval shape tapering to a point at each end.

Leaf—primary photosynthetic organ of a plant that is connected to a stem by a petiole.

Linear—leaf which is very long and narrow in shape.

Needle—slender leaf of a conifer.

Oblanceolate—a lance-shaped leaf which is wider at the top than bottom.

Opposite—pertaining to leaf or branch arrangement, leaves or branches situated two at each node, across from each other on the stem.

Scale-like—having an overlapping structure that resembles scales.

Semi-evergreen—maintaining green foliage during part of the winter.

Simple—single-bladed leaf, not composed of leaflets.

Sub-opposite—nearly opposite leaf or bud arrangement.

Whorled—leaves, twigs, or branches arranged in a circle around a point on the stem.