

Australian Pine

Casuarina equisetifolia

Order: *Casuarinaceae*

Family: *Casuarinales*

Description: The Australian Pine is not a pine tree at all. In fact, it is not even related to the pines. A straight, up-right tree capable of reaching 70 to 90 feet in height, the Australian pine has escaped cultivation and become naturalized. Propagating itself on barrier beaches, road sides, and in woods as if wild, the Australian pine tree is now outlawed in many parts of Florida due to its invasive nature and rapid growth rate.

Special Features:

- **Leaves** – The Australian Pine appears to have long, soft, gray-green needles, but these needles are actually multi-jointed branchlets. The true leaves are small, inconspicuous, tooth-like scales whorled at joints on the tree's slender, drooping branches. Leaf length ranges from 5-10 inches.
- **Fruit** – The fruit is tiny, one-seeded and forms in woody cone-like clusters.
- **Bark** – The wood is reddish brown to gray, rough and peeling.
- **Flowers** – Flowers are unisexual and inconspicuous with females in small axillary clusters and males in small terminal spikes.

Similar Species:

There are 45 species of the genus *Casuarina*, variously known as Australian pine, beefwood, forest oak, horsetail tree and iron wood. All are large evergreen trees resembling conifers, with a thin crown of drooping branches and leaves reduced to scales.

Range and Habitat:

Originating in Australia, South Pacific Islands and Southeast Asia, the Australian pine was introduced to Florida in the late 1800s. By the early 1900s, it was planted extensively in the Southern half of the States. It is found additionally in the West Indies, Mexico and

elsewhere in tropical America. In particular, the Australian pine flourishes in the warmest areas in South Florida on pine land and along exposed shores.

Reproduction:

The Australian pine reproduces with seeds, as many as 300,000, which are dispersed by birds, wind and water. Flowers are unisexual and inconspicuous with females in small axillary clusters and males in small terminal spikes.

Notes:

- **Ecological Significance** – With rapid growth, dense shade, dense litter accumulation, and other competitive advantages, the Australian pine is displacing and extremely destructive to native vegetation.
- **Erosion** – Originally planted extensively in the Southern United States to provide shade and protect against wind and erosion, the Australian pine can encourage beach erosion by displacing deep-rooted native vegetation.
- **Endangered Species** – Interferes with nesting of endangered sea turtles and the American crocodile.
- **Life History** – Not freeze tolerant; sensitive to fire. The Australian pine loses branches easily and topples in high winds because of its shallow roots. It can colonize nutrient-poor soils easily by using nitrogen-fixing microbial associations.
- **Allelopathy** (suppression of growth of one plant species by another due to the release of toxic substances) – The Australian pine produces compounds that inhibit the growth of native vegetation.
- **Related Exotics** – May be confused with other related exotics including *C. glauca*, which has 10-17 leaf scales per whorl, and *C. cunninghamiana*, which has 8-10 scales per whorl (the Australian pine has 6-8 scales per whorl).