

## Learning about Longleaf Pine *Pinus palustris*

The Longleaf Pine (*Pinus palustris*) is a native of the Southeastern United States and is typically found in Louisiana along the coastal plain of the Florida parishes. It is commonly known as the “southern yellow pine”. These trees provide homes in their trunks for the Red-cockaded Woodpecker, which is now an endangered species.

**Characteristics.** Longleaf Pine is a tall tree, reaching a height of 30-35 meters and 0.7 meters in diameter. It has thick, scaly, reddish-brown bark, with dark green, needle-like leaves, which grow in bundles of three. The needles can grow remarkably long, between 20-45 cm. The trees are resistant to fire and benefit from periodical underbrush wildfires, which eliminate other trees that would otherwise compete with longleaf pines for habitat. Longleaf Pine takes 100-150 years to mature and can live as long as 300 years. This species once covered 30-60 million acres of the southern coastal plain, but land clearing and logging by the forestry industry has greatly reduced its range.

**Seeds.** Being gymnosperms, the seeds do not develop in a flower, as in angiosperms, but are “naked”, and develop in cones. The male cones, called catkins, begin to form in July, and female cones form for a short period in August. The female cones are scaled, yellow-brown in color, and have sharp downward pointing spines on the middle of each scale.

**Geographic Range.** Longleaf Pine is native to the Southeastern United States ranging from east Texas to southeast Virginia, and down to northern Florida. It grows in well-drained, usually sandy soil, and sometimes in clay soil. Its habitat experiences temporary winter flooding, but the species is not “of the marshes” as suggested by its scientific name.

### Additional Information.

- It has the largest cone, 6-10 inches, in the eastern U.S.
- Longleaf Pine seedlings are appealing to feral hogs, which helped contribute to the species’ decline when settlers allowed hogs to graze in Longleaf Pine forests.
- Seeds of the longleaf pine are large and nutritious, making them a natural food source for birds.
- The Red-cockaded Woodpecker is now an endangered species due to a reduction in Longleaf Pine forests, which are the bird’s primary habitat.
- Longleaf Pine’s yellow resinous wood is used for lumber and pulp.
- Longleaf Pine grows slowly the first 5 - 12 years, after it goes through a vertical growth spurt.
- In the summer of 2007, a tree at the Weymouth Woods Sandhills Nature Preserve in Southern Pines, North Carolina yielded a 459-year tree-ring core.
- Longleaf Pine is currently considered a vulnerable species, the status right below endangered.

### References:

**Pinus Palustris**, by R. Karl, 1993, Flora of North America Editorial Committee, <http://www.conifers.org/pi/pin/palustris.htm>.

**Longleaf Pine**, no date, Florida Forest Trees, [http://www.sfrc.ufl.edu/4h/Longleaf\\_pine/longpine.htm](http://www.sfrc.ufl.edu/4h/Longleaf_pine/longpine.htm)

**The Longleaf Pine/Wiregrass Ecosystem**, 2000, U.S. Fish and Wildlife Services, <http://www.fws.gov/carolinasandhills/longleaf.html>

**Longleaf Alliance**, Teacher’s Guide to Learning About the Longleaf Fire Forest [http://www.auburn.edu/academic/forestry\\_wildlife/longleafalliance/teachers/teacherkit/guide.htm](http://www.auburn.edu/academic/forestry_wildlife/longleafalliance/teachers/teacherkit/guide.htm) [26 lessons appropriate for Grades 3-5.]



<http://www.conifers.org/pi/pin/palustris.htm>