



# Project BudBurst

A National Phenology Network Field Campaign for Citizen Scientists



www.budburst.org

**Common Name:** Longleaf pine  
**Scientific Name:** *Pinus palustris*  
**Plant Family:** Pinaceae



Photograph by Erica Asai @ USDA-NRCS PLANTS Database

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## Phenological observation:

Budburst/First Leaf, Full Leaf, First Flower, Full Flower, End of Flower, Seed Dispersal

## Identifying Characteristics:

**Size:** Medium to large, 30 to 36 meters (100 to 120 feet) tall, coniferous, evergreen tree.

**Leaves:** Needles are in bundles of 3 they are shiny, dark green, and 20 to 38 cm (8 to 15 inches) long. Budburst is defined as when new needles are longer than the length of the old bud scales, full leaf is defined as when needles reach mature length.

**Flowers:** Male flowers (catkins) are purple and are mostly in the lower crown of tree, female (conelets) form on upper part of tree. First flower is defined as when you first see pollen on the male strobil (structures that produce spores), full flower is when >50% of the branches have catkins with pollen, and end flower is when you no longer see pollen on the catkins.

**Fruits: (Cones)** The cones are 15 to 20 cm (6 to 8 inches) long. Its seeds are the largest of all southern pines. Seed dispersal is defined as when cone scales turn brown, and open scales, usually mid-September to late October.

**Bark:** Scaly bark orange brown to gray, developing flat plates.

**Habitat:** Longleaf pines grows best in a warm, wet, temperate climate with an annual precipitation range of 114 to 177 cm (45 to 70 inches). It is common on wet poorly drained flatwoods and swamps to dry rocky or sandy soils, mostly below 198 meters (660 feet) elevation.

**Bloom time:** First flower varies from February in the south to April in the north and generally lasts 1 to 3 weeks.

Information sources:  
USDA ([plants.usda.gov/plantguide](http://plants.usda.gov/plantguide))



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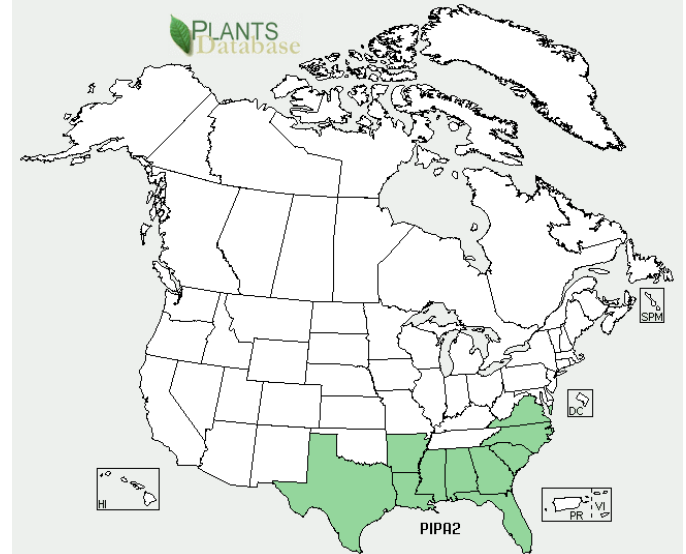
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**Did you know?** Longleaf pine needles are used extensively for mulch. In pre-settlement times it was a major source of timber and naval stores (for resins) it covered over 60 million acres, or most of the southern coastal plain. Now fewer than 4 million acres have these valuable pines.

## Distribution Area:



Map courtesy of USDA-NRCS PLANTS Database (plants.usda.gov)