

# SOUTHERN PINE BARK BEETLE



## WHAT IS THE THREAT:

Southern Pine Beetles (*Dendroctonus frontalis*), along with several other types of bark beetles, are known to attack and kill southern yellow pines during periods of environmental stress. These beetles bore into the cambium in large groups, and disrupt nutrient and water movement, thus killing the tree. Several of these species also introduce a fungus, known as blue stain, which may kill a tree by clogging its vascular systems.

## WHERE IS THE THREAT:

Pine bark beetle outbreaks are being fueled by drought conditions and other environmental stress factors such as wildfires and storms throughout the southeastern United States. The Southern Pine Beetle originated in the southeastern United States, but is now found as far north as New Jersey and as far west as Texas.

## SYMPTOMS:

These beetles will attack healthy pines, but severe environmental stress increases susceptibility. Individually attacked trees may look faded or have mixed tan and green needles progressing to red, followed by tree death over several weeks. Cream to red colored pitch tubes will be present in the lower bole of the tree. As water becomes limited, the pitch turns from cream to red and will be crumbly. Most of these beetles carry a fungus that serves as a food base for young larvae. The introduced fungus then adds to inhibited water transport ability and hastens tree mortality.

## WHAT TO DO ABOUT IT:

A trunk injection of TREE-äge® G4 will provide up to two years of protection against bark beetle damage. Preventative treatment is best, as trees with existing beetle infestations are less likely to survive. In areas where beetles carry the blue stain fungus, it is recommended that Propizol® systemic fungicide be added as a sequential treatment to eliminate additional stress from the fungus.



Jeffrey Pine Beetle pupa



Southern Pine Beetle; multiple generations of pitch tubes



Damage from Southern Pine Beetle

Header Image taken by: USDA Forest Service - Region 8 - Southern , USDA Forest Service, Bugwood.org , Jeffrey Pine Beetle taken by: tia smith, Bugwood.org , Southern Pine Beetle Pitch Tubes taken by: Arborjet, Inc., Damage from Southern Pine Beetle taken by: Arborjet, Inc.