



# Nursery Cooperative MANAGEMENT ALERT 2013 - 01

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## CHECK FOR FREEZE INJURY

Last Wednesday (Nov 13) and Thursday (Nov 14) while we were having our annual Advisory Meeting in Auburn, many nurseries in the region were experiencing record low temperatures. A year ago, on November 25, 2012, a rapidly moving cold front blew through our region for one night pushing low temperatures in many regions to the mid-20s. This one freeze event resulted in numerous documented freeze events on southern pines. This year, an even earlier cold front moved through the region pushing temperatures for two nights to record low temperatures. In some areas, the temperatures hit close to 20°F. According the NOAA web site, on Wednesday morning, November 13, 2013, 13 locations in the southern region tied previous low temperatures and 12 locations hit new record lows. On Thursday, November 14, 2013, 31 locations in the southern region tied previous low temperatures and 36 locations hit new record lows.

With temperatures this low this early in the season there is a good probability of freeze injury and now is the time to check your seedlings.

**When to check** – Now and over the next week.

**What to check** – Your most freeze-sensitive families. Choose any coastal seed lot; 7-56 is very sensitive to freeze and a good indicator of possible injury. Longleaf is more susceptible than loblolly. Roots are more susceptible than the stem.

**How to check** – With your fingernail or knife, remove just the bark from the stem around the root collar and continue into the root region. If you saw foliar injury, you may want to remove the bark above the root collar. You are looking for brown tissue just below the bark. Be sure to remove all the bark since it is very common for the brown streak indicating freeze injury to be located on just one side of the stem. (See photos below.)



**For future reference:** We have recommended irrigating if at all possible prior to a freeze event. This is especially important if mild weather has preceded the freeze event. The longer the injured seedlings can stay in the nursery, the greater the chance of them growing out of the freeze injury if weather conditions in the nursery allow for continued seedling growth.