

INSIDE GRUNDY COUNTY
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Have you noticed your conifer (evergreen) needles turning brown? If you have, you are not alone. According to Christine Engelbrecht, Iowa State University Plant Pathologist, the Plant Disease Clinic at Iowa State has received several samples of white pines and other conifers that are turning brown. In my travels around the county and elsewhere, I have noticed evergreens that have turned brown as well.

The main reason for the needles turning brown has to do with “winter browning”. Evergreens continue to produce energy from sunlight throughout the winter which requires water. If these trees did not have enough water stored up to get through the winter then the needles may dry out and turn brown. Other factors that contribute to this browning (needle drying) include frequent freeze/thaw cycles, cold temperatures and rapid temperature changes. You are more likely to see this browning on the sunny sides of the trees (south and west). Late winter and early spring are when signs of winter browning become most visible.

While many people attempt to water their trees heavily just before the ground freezes in the fall, as has often been recommended, research shows this single watering is not enough to protect conifers from winter browning. Trees actually need the extra water during the dry period of late summer and early fall to prevent drought stress and to ensure they have enough water stored up to last through the winter. Preventing drought stress in late summer is more effective at minimizing winter browning than one watering in the late fall. Also, do not prune off brown branches as they may still have viable buds.

Other causes of evergreens turning brown could be exposure to road salts that can happen to those trees that are near the road. Some infectious diseases, such as *Rhizosphaera* needle cast of spruce, can cause browning of the needles. These symptoms often appear in the spring or summer although people may not notice them until winter.

If you have questions about trees, gardens, plants, insects, etc., give our hortline a call at 319-824-6979 on Thursday afternoons from 1:00 p.m. to 3:00 p.m. and talk with one of the Grundy County Master Gardeners who are there to answer your horticulture questions. At other times or for other questions, be sure to contact the Grundy County Extension Office at the same number.