

Pest Update (January 23, 2013)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent from any location – please provide a picture!**

Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

Current Concerns

- Is this cold weather going to harm trees?..... 1
- Gold in them thar trees..... 2

E-samples

- Yellow foliage on Scotch pines..... 3

Samples received

- Harding County (blue spruce)..... 3



Is this cold going to harm the trees? This is a common question when the mid-winter temperatures start to approach or dip below the minus 10°F mark (something we did not see last year). Much of the state is experiencing temperatures in the -1° to -10°F this week and while these temperatures are hard on people, livestock and cars, they are not a problem for most of our trees and shrubs. Many of our woody

plants have hardened to tolerate temperatures to at least -30°F by this time and some can tolerate temperatures as low as -60°F in mid-January. Much of our typical “winter” injury is not due to cold temperatures in mid-winter but unseasonably cold temperatures in late autumn or early spring. Our cold weather injury occurs in October as woody plants are beginning to prepare for winter or in March as they coming out of dormancy. At these times many plants are not able to tolerate temperatures even in the single digits.

The one exception to mid-winter temperatures not being harmful is when we look underground. Most tree and shrub roots cannot tolerate temperatures of even 10° or 15°F in midwinter. A winter with little snow cover and dry, so the ground is cracked, allows cold temperatures to penetrate deep into the soil. The cold doesn't have to penetrate very deep as most of the tree and shrub roots are in the upper foot or two of the soil. Usually the soil temperatures in this zone stay in the upper teens or even twenties but bare dry soil and no snow, a combination that is present in some new windbreaks, particularly in the southeast, may result in root-killing temperatures for these young trees and shrubs. Woody plants that have roots killed or injured by cold temperatures often break bud in the spring and begin normal growth but then stagnant and wilt as the injured root system cannot keep up with the water demands of the new leaves and shoots.



There's gold in them thar tree. Once when trees were being removed from a shelterbelt or yard they were cut, piled and burned; but no longer. There is an expanding market in South Dakota for wood products made from these discarded trees. I have seen Amur maple, green ash, hackberry, bur oak, Russian-olive, American elm and even *common buckthorn* used to make cabinets, tables, and cutting boards. Some of the beauty of these woods

would surprise you; I could not believe how attractive of a table top can be made from buckthorn.

To take advantage of this demand, a number of small mills have started operating in the eastern part of the state over the past couple of decades. These mills are typically part-time operations with most only cutting less than ten thousand board feet per year. The operators typically work on shares – you get half the boards cut from the logs you bring to the mill, the operator keeps the other half to use or sell. Some operators will also arrange for the harvest of the trees or come out to cut them themselves. However, most expect the landowner to bring the logs to their mill.

Not all trees are equally valuable to these local mills. The less valuable trees are cottonwoods, pines and spruce. Most of the mills have an abundant supply of logs from these trees and are not interested in working on shares; you'll have to pay to have these logs cut into boards. Ash is a valuable wood but many



operators are not interested in looking at mature trees pulled out of belts as many of these trees have extensive decay in the lower trunks and are not worth milling. Silver maple and hackberry are in demand but the prized trees are American elm, bur oak, honeylocust and black walnut. Logs from these trees are being sold anywhere between \$3 and \$6 per board foot (a board foot is 1 inch thick, 1 foot wide and 1 foot square) depending on the

quality. Walnut logs, 2 feet in diameter and 12 to 14 feet long have sold for as much as \$2,000 this past autumn.

While the market is in its infancy, it is clear that in the future piling and burning trees may be the equivalent of burning money.

E-samples



Scotch pines are turning color throughout the state and while this may appear alarming – it's normal. Scotch pine foliage often turns a yellowish green during the winter, but they will green up this coming spring as the warm weather returns. Christmas tree growers avoid this problem by spraying green dye on their Scotch pines at harvest, a little impractical for homeowners and their 40' trees!

Samples received

Harding County

Two Colorado Blue Spruces, about 8 feet tall, are starting to have their needles turn brown. The producer did water this fall.



I am seeing drought-related symptoms on these samples; much reduced shoot extension for this past year (2012) and the previous (2011). The current year's needles are also much shorter than the previous years and they are also discolored. The sample also had a cone attached to one of the branches submitted and cone production on a young tree is often associated with stress, generally transplant-shock or drought. Pines are tougher,

particularly the ponderosa pine, and these should be planted rather than Colorado blue spruce in harsh, dry sites (though Colorado spruce is considered the most drought-tolerant spruce). Watering now, if the soil and tree trunk is not frozen, can help as the trees will transpire water from their needles if the air temperature is above freezing. However, if the trunk is frozen the water that is added will not move up to replace the water lost through the needle thus you will probably still see some winterburn.