Pest Update (April 23, 2014)

Vol. 12, no. 6

John Ball, Forest Health Specialist SD Department of Agriculture,
Extension Forester SD Cooperative Extension

Email: john.ball@sdstate.edu
Phone: office 605-688-4737, cell 605-695-2503
Samples sent to: John Ball
Plant Science Department
rm 230, Agriculture Hall, Box 2207A
South Dakota State University
Brookings, SD 57007-0996

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/conservation-forestry/forest-health/tree-pest-alerts/

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.

Timely Topics

Winter may be mostly behind us now but it is looking like we are in for a late spring. The buds are just beginning to open on the corneliancherry and forsythia in Brookings similar to what we saw for the cool springs of 2011 and 2013. Unless it warms up very quickly we might see everything start just a little late this year.

Tasks to complete

Pruning trees should be completed by now. Generally you want to avoid pruning trees while the leaves are expanding. We are also at the end of the time period for pruning live branches from elms and oaks as fresh pruning wounds can attract the insects that carry Dutch elm disease and oak wilt.

Remove tree wrap from tree trunks. These are no longer needed and they serve as egg-laying cover for ash borers and other insects.

Spruce needleminer larvae will begin moving onto the foliage to create their webbed nests and resume feeding. A spray of high-pressure water will knock them off the tree and you can rake up the fallen needles (and larvae) after the spray. The other approach is spraying an insecticide with the active ingredient of carbaryl to kill the larvae as they begin moving out onto the foliage. Remember to spray inside the canopy, not just the exterior.

Tent caterpillars can be treated right now by pruning out the egg masses. Tent caterpillars, eastern, forest and western, are common defoliators of mountainash, cherry, crabapples and plums. If you look at these trees right now you might find these globs of what appears to be molten glass around the twigs. These are the egg mass to the tent caterpillar (see picture). If these egg masses are pruned off and destroyed (don't just throw them on the ground, unless the mice eat them, the eggs will still hatch) you'll save the tree from defoliation. The new egg masses do look like molten glass, very smooth and shiny. If instead, the egg masses are a gray to white and have lots of holes in them, they are last year's egg masses and not a threat to your tree.

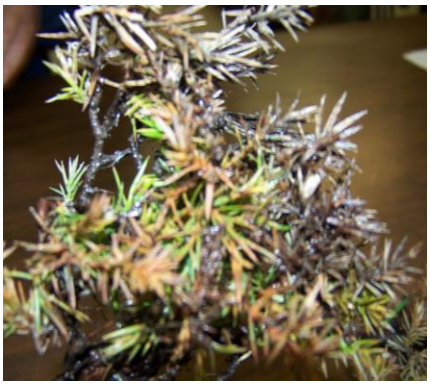
Current concerns

Winterburn appearing on evergreens

Winterburn is showing up on evergreens across the region. The symptoms are appearing to come on "suddenly." The damage may have occurred earlier but the symptoms only noticed once spring arrives (a good example, the Christmas tree I set out in the yard after Christmas just started to turn brown). The warm,

windy weather and cold or frozen soils is also causing some browning as the trees cannot replace the water lost by the needles. There is not much that can be done for this problem as this time. If the soil is still frozen, any water you add will just puddle rather than being absorbed. If the soils are warm enough to have water infiltrate, then watering can be beneficial. Most trees will recover from this injury once the buds open and the tree puts out new needles. Tree owners concerned about their winter burned evergreens should check the buds at the tips and if these are soft, the buds are fine and will open as normal. If the buds are brittle or break off, then the buds were also killed and the tree may not recover this spring. Regardless, do not prune out winter burned branches just yet. Wait till May to see if the tree recovers.

An interesting weed



I am receiving calls about a strange lawn weed people are noticing in the last week. The darker green "fuzzy" growth stands out against the light green lawn at this time of year. The weed is juniper; the common juniper, Rocky Mountain juniper or eastern redcedar. These evergreen trees and shrubs are frequently "planted" by birds or just fall to the ground near the parent plant. If it is mowed off frequently, they will creep along the ground and except for the difference in texture, will go unnoticed during the growing season.

How many trees do I have to plant to have fruit?

This is the question I receive every spring so here are the pollination requirements for the fruit trees we plant in South Dakota.

Self-fruitful – these fruit trees and shrubs are able to pollinate themselves and you only need the one plant to have fruit set.

European plums ('Stanle'y and 'Mount Royal', note: limited hardiness)
Sour cherries
Apricots (except for the two cultivars 'Sungold' and 'Moongold')
Peaches and nectarines
Strawberries
Raspberries

Currants (except black)
Gooseberries
Grapes

Self-sterile – these fruit trees and shrubs will not accept their own pollen and must be pollinated by a different cultivar of the same species, not just a different plant of the same cultivar. Just having two 'Haralred' apples, for example, will not result in fruit. The trees must be two *different* cultivars, 'Haralred' and 'Sweet Sixteen' for instance. The two trees should also be within 50 feet of one another. While two different cultivars are required, not every combination of cultivars will yield fruit. 'Haralson' apples, for example, cannot serve as a pollinator for 'Haralred' apples, as the two cultivars are closely related. Some cultivars are pollen sterile, meaning they do not provide pollen for other trees. Two examples of pollen sterile trees are the South Dakota pear cultivars 'Gourmet' and 'Luscious'. They will accept pollen from other trees but not produce viable pollen of their own so a third cultivar such as 'Parker' must be planted to ensure fruit on all three pears. Finally some self-sterile cultivars many produce some fruit even if grown alone. You might find that a 'Honeycrisp' apple tree still produces a few apples even if there are no other apples or crabapples nearby.

Apple and crabapples (they can serve as pollinators to each other)
Pear
Hybrid plums ('Toka' is a great pollinator)
Apricots ('Moongold' and 'Sungold', other cultivars are self-fruitful)
Sweet cherries (very limited hardiness)
Blueberries (require acid soils)
Nanking cherry

This does not mean all these fruit trees and shrubs will grow throughout South Dakota. Sweet cherries have limited hardiness and except for some of the zone 5a locations in the state, are not reliable producers. The same is true for peaches and nectarines. Blueberries may be hardy, at least the cultivars out of Minnesota such as 'Northblue', but they are demand an acid soils and perform very poorly on sites with a pH above 6.5.

And be careful what fruit trees and shrubs you buy

This last weekend I found the following fruit trees for sale, none have much of a chance of surviving our South Dakota winters in much of the state. These fruit trees include 'Bartlett' pear, 'Elberta' peach, 'Winesap' apple, 'Yellow Delicious' apple and 'Red Delicious' apple. While some of these cultivars may survive in the few areas of South Dakota with mild winter weather; Yankton, Sioux Falls,

Hot Springs, as examples, most of these trees will die before the end of their first winter. Many of the chain stores buy nationally and, unfortunately, ship plant materials that are not reliable hardy to our state. Buyers should use caution when selecting plants from these seasonal gardening departments and check to be sure the plants they are selecting are hardy to USDA Hardiness Zone 4.

E-samples

Spruce tree losing bark. I got two picture of a spruce that is losing its bark. The owner was concerned that there was a pest problem associated with the shedding. This is a normal process in many trees and on white spruce the thin, scaly bark often sheds in the spring. Some year the shedding is very noticeable, other years you might see only a few flakes near the base of the tree. The new bark is just beneath the scales and once the scales are shed you are still looking at bark, rather than into the wood.

Flatheaded appletree borer in maple. I also received these pictures of a silver maple that is obviously declining. The close-up picture shows galleries of an insect. I do not have the insect and identification from galleries and exit holes is often difficult or a guess at best but this looks like the flatheaded appletree borer (*Chrysobothris femorata*). Despite the name apple tree, maple is one of the most common hosts. I occasionally see this insect in the southern part of the state and it is usually associated with declining trees but the reason for the decline is often related to an environmental stress, e.g. drought, winter injury, rather than the insect.

Samples received

Hughes County FL1400002
What is the growth on the tips of these branches?

This is a branch from the American arborvitae (*Thuja occidentalis*). The small “bumps” at the tips of the branches are the male (pollen) cones.

These begin to form very early in the spring and the branch tips can be covered with them. The female cones are the oblong, woody cones that mature later in the year.

This publication made possible through a grant from the USDA Forest Service.