

Pest Update (May 28, 2014)

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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/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.

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Plant development (Phenology) for the growing season



Plant development. We are way behind in plant development from most years. This year the crabapples in Brookings are just now at full bloom, about a month behind normal. Trees are also late in leafing out. Kentucky coffeetree, one of the last trees to leaf out has just started to put out foliage. Catalpas, often the last tree to leaf out, have not even had the buds start to expand yet.

Tasks to complete now

You probably should have applied your second application of fungicide for apple scab by now. Remember most of our fungicides labeled for homeowner use are protectants; they provide a chemical barrier between the susceptible tissue and the organism. Once the fungus enters the leaf it is too late for control. This is the reason for beginning treatments as the leaves open and then continuing applications on a regular basis into the growing season.

Diplodia tip blight first application of a fungicide should be applied by now. Tip blight is probably the most common disease of pines, particularly Austrian pine. Symptoms in early summer are the new needles becoming brown and stunted. Twigs may be infected and become stunted and deformed. The treatment is a fungicide containing thiophanate-methyl, propiconazole or chlorothalonil (labeled for control of this disease) just before the buds sheaths have opened and should be happening soon. Timing is critical, once the bud sheaths have opened and the candle begins to form, it's a little late to begin the first application and this is the one that provides most of the protection.

Upcoming tasks

Clearwing ash borer treatment with an insecticide containing permethrin as an active ingredient can begin in another week or so. The bark must be sprayed to protect the tree as the insecticide will kill the adults as they are walking on the bark while laying eggs. The insecticide will also kill the newly hatched larvae before they burrow into the wood. Systemic treatments are generally ineffective so injecting a pesticide or pouring one around the soil are not practical means of managing this particular borer. The adults are usually out flying about a week or so after Vanhouttee spireas begin to bloom and the shrub should begin flowering in another week or so.

What is up with ash?



I have received lots of calls and pictures of declining ash trees. The looming threat of emerald ash borer is keeping this tree on everyone's mind. The most common concern is that many ash trees are having their leaves dropping, in fact some trees are almost bare now. There are two reasons for the leaf drop 1) the late April frost and 2) ash anthracnose. There is nothing that can be applied to correct either problem

now and most trees will recover just fine in another couple of weeks.

Many ashes were leafing out just as we experienced the late April cold snap. The emerging leaves were very tender and not tolerant of cold temperatures so temperatures in the mid-20°F resulted in brown foliage that quickly dropped. I have seen a few trees that the ground beneath them was littered with distorted and brown leaves. The other problem, ash anthracnose, is a fungal disease that causes the young leaves to become distorted and drop. The disease is usually only a problem if the spring is cool and moist, the conditions many areas of the state experienced this year.

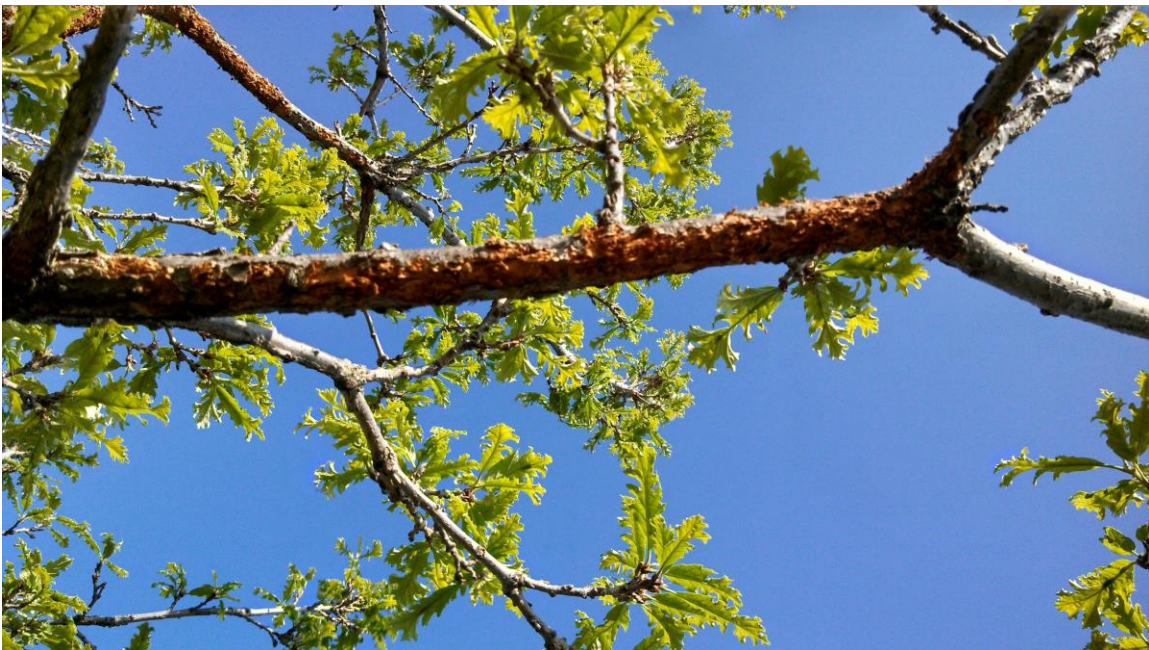


The second call is about the possibility of emerald ash borer. Tree owners have been noticing small holes in their dying ash trees and once the bark is removed also see tunnels in and on the wood (as seen in the picture to the left). The samples I have received and the site visits I have made during the past two weeks about these symptoms have all been due to the redheaded ash borer. It can be a difficult process to separate the two. The emerald ash borer creates a D-shaped exit hole about 1/8-inch wide while the redheaded ash borer exit hole is oval shaped and about 1/4-inch wide. A "D" and a "0" can look fairly close so you also need to examine the galleries, the tunnels that run beneath the bark.

Both the emerald ash borer and the redheaded ash borer create frass-filled (powdery dust) tunnels just beneath the bark but the galleries created by the emerald ash borer usually are more winding, S-shaped, while the redheaded ash borer galleries tend to be more meandering. The picture on the previous page shows the galleries of the redheaded ash borer in a dying ash in South Dakota. The picture to the right on this page shows the S-shaped galleries of emerald ash borer on a dying tree in Ohio (took the picture a week ago while there). Also the redheaded ash borer will also make tunnels deep beneath the bark so if you can crave deeper into the wood for the galleries or exit hole the insect is probably the redheaded ash borer and not the emerald ash borer. However, when in doubt, please call, email or send a picture to verify the pest.



Continuing problem with woodpeckers on oak



This year I have received numerous pictures of woodpecker damage on young oaks. This picture was sent to Aaron, the Aberdeen city forester, by someone out in Ohio that was seeing the same problem. Apparently this damaging is occurring far beyond the Northern Plains. The damage is often limited to the outer layer of bark but I have also seen the bark on young trees completely shredded off. The damage has become so common in some areas that people are considering not planting bur oaks.

E-samples



I had an ID question this past week. This shrub was found growing near White River and the sender knew it was not buck brush (*Symphoricarpos orbiculatus*) but though it looked close. This is white snowberry (*S. albus*), a very close relative. The fruit on the white snowberry occurs on the tips of the branches while the fruit of buck brush lines the twig. As the name implies, the fruit of white snowberry is white. However the fruit is often infected by a disease and becomes brown to red, not very attractive. Snowberries tend to produce rhizomes so it is common to find small thickets of these shrubs. They usually reach a height of three feet or so.



Calls and pictures of brown junipers (cedars) keep coming in. Generally we are not looking at the disease juniper twig blight. The symptoms for this disease usually occur a little later in the year. The browning is most winter injury. This past winter was particularly tough on evergreen and I have seen trees that have never had even a little brown in past winter turn completely brown this past spring. Some trees are so injured they will not recover. The best way to check is to strip a little bark from a brown twig. If the inner bark is white and moist, the tree will probably recover. If it's brown and dry the branch (or tree) is dead.



I received this picture of a declining blue spruce. At least one problem with this tree is cytospora canker. This canker is one of the most common diseases of spruce, particularly Colorado blue spruce, in our region. The disease usually is responsible for the dieback and death of the lower branches of mature (more than 20 years old) spruce. The disease development is stress-related, if these trees are planted on poor sites, too dry or too wet, the disease becomes aggressive and causes tree decline. The only means of combating the canker disease is to keep the trees healthy, provide supplemental irrigation during warm, dry summers and be sure to plant these trees on the best site possible – loam soils that are not poorly drained or droughty.

Samples received

Custer County

There are a number of pines that are declining around this home. The needle tips are discolored.

This involved a site visit and the shoot tips were showing common symptoms of Diplodia tip blight, stunted and discolored, but another important clue was the fruiting bodies found on the cones beneath the trees. The spores, conidia, are released from these bodies in the spring and early summer, and they also are an important identification clue for the presence of the disease. The disease was neither the only problem nor the most serious; I also saw injury from road deicing salts on these pines as well as the ones down the road. The dried salt can still be seen on the road (and that is the reason you have seen bison standing on the road licking the pavement).

Lyman County

What is this two-needled pine tree?

We have a number of two needled pines in our state, most commonly Austrian pine, mugo pine, ponderosa pines (which can be 2- or 3-needled) and Scotch pine. Only one of these trees has bluish-green twisted needles and that is Scotch pine (*Pinus sylvestris*). These are common trees in your county and mature trees can be easily identified by their orange upper bark. We have seen a number of these trees decline in this county and to the south due to pine wilt disease. The disease is becoming so common that Scotch pine is not recommended for further planting in your area.

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