Pest Update (April 18, 2018)
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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.

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 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 products identified in this publication.

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Plant Development

Five years ago, we experienced a major snow storm which was just a continuation of a long, cold winter. I took a picture of a Dolgo crabapple in McCrory Gardens then and contrasted it with one taken in 2012.
This year the snow is so deep I could not repeat taking the picture. This winter weather must end soon!

**Timely Topics**

**Two great upcoming educational opportunities for professional grounds personnel**

**Tree Injection Workshop**
9 am to noon, May 10, 2018
Tuthill Park, Sioux Falls, SD

*Treatments for Emerald Ash Borer, Bur Oak Blight and Pine Wilt Disease*

Emerald ash borer, bur oak blight, and pine wilt disease are all current or looming threats to trees in South Dakota. Fortunately, there are effective treatments for all these problems and ones that do not involve spraying. Instead, trunk and soil injections are the new approaches to combating pest problems in trees.

**Thursday, May 10, from 9 am to noon, there will be a workshop for commercial pesticide applicators to demonstration all the latest injection technology by the companies that provide equipment and pesticides to applicators.**

Chip Doolittle (Arbor System), Jeff Palmer (Arborjet), Zachary Stewart (Rainbow Treecare Scientific), and Victor Gust (Warne Chemical) will all be on hand to discuss and demonstrate new technology for treating these three key pests. You will be able to see the different injection methods for treating emerald ash borer, bur oak blight, and pine wilt disease as well learn about the appropriate timing and use of pesticides for these problems.

The workshop will be held at Tuthill Park, 3500 South Cliff Avenue, in Sioux Falls. The group will meet at the upper picnic shelter for a discussion on these pests – the symptoms and how they injury trees - then walk to trees where soil and tree injections will be demonstrated. The event is being held *rain or shine* so come and take advantage of this great opportunity to see how you can manage these pest problems!
This event is sponsored by the South Dakota Cooperative Extension Service, the South Dakota Department of Agriculture, and the South Dakota Arborist Association. There is no fee or registration for the workshop – just show up!

Any questions please contact John Ball, Extension Forestry Specialist/Forest Health Specialist by email: john.ball@sdstate.edu, phone/text to 605.695.2503, or by mail, room 230 Agricultural Hall, SDSU, Brookings, SD 57007.

**Altec Knuckle Boom Mounted Grapple Saw Demonstration – Date Change**

**Thursday, April 26, 2018**

McCrory Gardens, Brookings SD

Everyone has heard about the speed and versatility of this revolutionary technology for tree removal. Shortening day jobs to hours! The knuckle boom mounted grapple saw combines elements of a crane with a grapple and a chain saw, a perfect blend of equipment that allows a single operator to dismantle a large tree at almost lightning speed! Plus, since the operator is guiding the entire operation with a joy-stick, they have significantly reduced their exposure to the many hazards of tree removal.

We have two large declining cottonwoods to use as the demonstration and you do not want to miss this opportunity to see the boom in action! Lance Wallace, from Wallace Tree and Landscape, Inc in Wisconsin, will show how this equipment can make your work more efficient and safer.

The demonstration is from 9 am to 11 am, *rain or shine*. There is no fee or registration. Please park in the McCrory Gardens parking lot, 631 22nd Avenue, in Brookings and come in to the Visitor Center. We will walk over to the site from there. Please bring a hard hat and safety glasses if you have them on hand, otherwise we will provide them as necessary.

This event is sponsored by the South Dakota Cooperative Extension Service and the South Dakota Arborist Association. For more information, contact: John Ball, Extension Forestry Specialist/Forest Health Specialist by email: john.ball@sdstate.edu, phone/text to 605.695.2503, or by mail, room 230 Agricultural Hall, SDSU, Brookings, SD 57007.
Bronze poplar borer (*Agrilus liragus*, sym *A. granulatus liragus*). I received this picture of serpentine galleries in a dead cottonwood. The galleries were made when the tree was still alive. These most likely are the tunnels made by the larvae of the bronze poplar borer. This is a very common insect in South Dakota and I can find it throughout the state in declining aspens, cottonwoods, and poplars. It is a close cousin to the bronze birch borer, a native borer that infests birches, and the emerald ash borer which is an introduced borer that attacks ash.

While the emerald ash borer attacks healthy and dying ash in this country, our native *Agrilus* can only succeeds in declining trees. The adults are out during the summer and lay eggs on declining hosts. The eggs hatch in about two weeks and the larvae tunnel through the phloem making serpentine galleries. The insect pupates just beneath the bark in late spring and emergence of the adults through D-shaped holes occurs in summer.

The best management is to keep the tree healthy and remove over-mature trees.

Hail injury on a plum. I received this picture from a homeowner in the Black Hills who was wondering what “disease” caused this welts on her tree. This wounding pattern is commonly associated with the mechanical injury of hail and when questioned the sender mentioned a major hail event a year ago. The wounding can be extensive enough to girdle the stem or can serve as entry ways for diseases.

Bacterial diseases generally need a wound to gain entry in to a tree (though some can also enter through the flower so may be carried by pollinators). Bacteria spot (*Xanthomonas*) on stone fruits such as plums are a serious disease in the South and East but not common here. The most common disease associated with hail injury is fire blight (*Erwinia*) on apples and pears. Trees that suffer injury in a late winter/early spring hail storm may be treated with a copper fungicide (copper has some action on bacteria) right after the storm. Copper should not be used after the buds begin to open.
Samples received/Site visits

Dickey County North Dakota  Can you identify this apple? The tree is about 35 years old and produces great cooking apples that store well.

This is Northwestern Greening. It is an old cultivar coming from Wisconsin in the late 1800s. It is a large (4 to 5-inch diameter) green to yellow apple with a few raised brown lenticels. The flesh is a light yellow with a little green. The fruit is tart, a slight tint of pear to the taste. It is best known as a cooking apple. It is also a good storage apple, as were many older cultivars that were used before refrigeration was common. It’s a late season apple with the fruit maturing in early October. While it has been around for more than 125 years, it is still popular today and is available through many fruit tree catalogs.

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