

# Pest Update (March 20, 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.

## Timely topics

Pine engraver beetles.....	1
Fertilizing seedling trees.....	2

## E-samples

Bronze birch borer.....	2
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## Samples received

Pennington County (spruce losing needles).....	3
Yankton County (banded ash borer).....	3

## Pine engraver beetle

The mountain pine beetle is not the only threat to the pine forests in the Black Hills and surrounding forests. The pine engraver beetle *Ips pini* is another native bark beetle to the Black Hills, but it usually attacks only recently dead trees or branches in the tops of dying or hail-damaged trees. However, the beetle can become a tree-killer during periods of drought which weakens trees defenses.



The insect can also be found in logging slash as evident by the small piles of power along the branches as seen in the picture.

Unlike the mountain pine beetle which will not emerge from beneath the bark of its dead host until July, the pine engraver beetle is already an adult, found either beneath the bark of trees and logging slash or in the duff on the forest floor.

The adults will be flying this spring and many people are moving up spraying their high-value pines to prevent attacks from this insect as well as the mountain pine beetle. One application of an insecticide labeled for bark beetle control, applied at the proper rate, will be sufficient to protect pine trees from both bark beetles.

The pine engraver beetle generally begins flying in mid-April to May depending on location, usually appearing first at lower elevations in the southern Black Hills and later in the higher elevations of the northern Hills. The cold weather the Black Hills is experiencing (though almost “tropic” compared to the rest of the state) is cold enough to keep the adults from flying. They generally begin their flight when we have day temperatures staying in the 60° and 70°F.

## **Fertilizing seedling trees**

I had a question about fertilizing soil where tree seedlings will be planted this spring for a belt. Actually it was two questions. Is it needed? If so, what and what rate? First, generally this is not necessary. Trees are very conservative in their use of elements and do not require the fertility needed for row crops. If the soils contain at least 40 lbs/acre of available phosphorus (Bray test) and 150 lbs/acre of available potassium (ammonium acetate test) then these elements need not be applied. Nitrogen may be of benefit but the rate is about 60 to 100 lbs per acre and half this should be in a water-insoluble form (slow release). Adding elements beyond the level needed can increase soil salts to harmful amounts to seedlings. Fertilizing is generally of more value after the seedlings become established, usually a year after transplanting. The first year weed control and irrigation are the primary concerns.



## **E-samples**

I had a question about treating birch for bronze birch borer. This is a picture of a declining birch tree and they were wondering if it was worth treating for the borer. The bronze birch borer *Agrilus anxius* is a close relative to the emerald ash borer but the bronze birch borer is a native insect while the emerald ash

borer is from East Asia. The bronze birch borer is generally not a serious problem on our native paper birch, unless the tree is stressed by drought, but it is a threat to exotic birches such as the European white birch and its cut-leaf variety (pictured on the previous page). These trees have few defenses against this borer since each occurred on different continents (similar to the problem with emerald ash borer which is not a serious threat to ash in China but is deadly on our native ash in North America). I generally find treatments are effective, either trunk sprays, soil drenches or trunk injections, unless the tree has dieback to the point that there are several large dead branches or more in the canopy. Usually by that point, the tree has been infested so much that the injury is extensive enough that the tree cannot recover even if the borer is eliminated. This looks like a good candidate for further treatment assuming the tree leafs out as much as it did in this picture that was apparently taken last summer.

## Samples received

Pennington County FL1300002

**What is wrong with my spruce? The needles are dropping off from the interior of the tree and the bark is shedding. The branches also look deformed.**

This is a Colorado spruce, often referred to as a blue spruce. The loss of the interior needles is common as the tree grows older and is usually attributed to the shading. Trees in dense stands where the branches are touching one another or trees on the north sides of building tend to shed more interior needles than isolated trees out in the open. The “thinning” of the interior of the trees seems to begin occurring when the tree is about 15 to 20 feet tall. The bark submitted appears to also be normal shedding. The platy bark on spruce often sheds, not a cause for alarm.

Yankton County

**What is this insect coming out of the firewood we are bringing into the house?**



This is the banded ash borer *Neoclytus caprea*. It is one of the first of the longhorned beetles to emerge in the spring and emergence is even sooner if the wood is brought into a warm house! This insect can be found in dead or dying ash as well as oaks, elms and a number of other tree species. The insect is distinct in that the back is marked with four yellowish bands with the first two joined to form loops. This insect is not a threat to your healthy trees nor will it do any harm inside. Probably will just spend its short life on your sunny south windows enjoying the warmth.