

Pest Update (November 18-25, 2015)

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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 products identified in this publication.

Timely Topics

Finding the perfect Christmas tree.....	1
E-samples	
Moving mountain pine beetle in firewood.....	4
Samples received	
Harding County (cottonwood borer).....	5

Timely topics

Finding the perfect Christmas tree

Real or Plastic? Christmas tree lots are already beginning to spring up around the state and Thanksgiving marks the start of the Christmas tree season with more than 36 million trees being sold between Thanksgiving and Christmas. About 50 million homes use artificial trees either for convenience or fire concerns. However, the traditional Christmas tree can be the environmental

friendly way to celebrate the holidays. The average artificial Christmas tree may have a life span of six years before it ends up in a landfill. The traditional Christmas tree, while used for only one season, can become valuable mulch, a winter bird feeder or even used as a fish habitat after the holidays.



Here are some tips on picking out the perfect tree. The best way to obtain the freshest tree is to harvest it yourself at a choose-and-cut Christmas tree farm. If cutting your own tree is not possible, here are some tips for checking freshness at a Christmas tree sales lot. First, give the tree a light but vigorous shake. Only a few interior needles should fall out of the tree if it is fresh. If a pile of brown needles appears on the ground after shaking, it

is not a fresh tree. Next, reach into a branch and pull the needles *gently* through your hand as you move out towards the tip. The needles should bend, not break, as your fingers run across them and the branch should only slightly bend to the touch. If the needles break off completely, this is another indicator that the tree has already dried out too much. Likewise if the branch is not flexible, but acts more like a dried stick, the tree has already dried out and is not worth buying



Regardless of whether you buy a tree from a lot or cut it yourself, once you get the tree home leave it outside in the shade while you set the stand up indoors. The choice of a stand is probably the most critical factor in maintaining the freshness of the tree once in the home. The stand should be able to hold one-half to one-gallon of water as the new Christmas tree may absorb this much water from the stand on the first day. A good rule-of-thumb is

a tree will use 1 quart of water per day for every inch trunk diameter at the base. If you have a tree with a 3-inch base, it may use 3 quarts of water per day.

Just before you bring the tree in the house cut the base between a half and one-



inch from the bottom. This will open the sap-filled pores that transporting water through the tree. The base cut does not have to be slanted; the angle makes little difference in the amount of water absorbed so cutting perpendicular to the trunk is fine. Do not drill holes into the trunk or whittle the trunk smaller, neither will improve water uptake. Also brush off any debris or dirt on the base before placing it in the stand.

Once the tree is in the stand add water and then *never* let the stand become empty. If the stand becomes empty for more than six hours, the tree's pores plug up again. Water uptake will be significantly reduced, the tree will dry out and the needles will soon begin to fall. If the tree stand does dry up for half a day or more there is nothing that can be done other than pull the tree out of the stand and recut the base – not a pleasant task once the lights and ornaments are already up. Nothing needs to be added to the water in the stand to improve needle retention. The commercial “tree fresher” products do not significantly increase the life of the tree and the home remedies such as aspirin, sugar, soft drinks and vodka do not work and may be harmful to pets that may drink from the stand.

Place the tree in a spot that receives only indirect light from the windows and not near any heat duct. This will reduce water loss from the tree and prolong its freshness. Another tip to prolonging freshness is to start out with a clean stand. Before setting up the tree stand wash it out with a solution of about a capful of bleach to a cup of water. This will reduce the growth of microorganisms that may also plug up the tree's pores.



Which is the best tree? Each species has its good points but the Fraser fir (pictured to the left) is probably one of the top favorites. The tree has a very pleasant scent, excellent needle retention - they will last the entire holiday season - and the branches are stiff enough to hold most ornaments (however if heavy ornaments are desired go with a spruce). The bright green needles are white on the underside and this makes a very

attractive display. Balsam fir, pictured to the left, is another good choice though the needles do not last as long and the branches are not quite as stiff. Canaan fir, another popular fir appears to have qualities similar to Fraser fir and is also becoming a popular Christmas tree.



Pines are very popular with Scotch pine, pictured to the left, probably the most popular tree in the country. It also has a pleasant scent, excellent needle retention and the branches are stiff enough to hold heavy ornaments. White pine is another pine commonly sold at Christmas tree stand. The needle retention is not quite as long as Scotch pine and the branches are very flexible meaning heavy ornaments may fall off. White

pine do have very soft needles and if you are going to run into the tree in the middle of the night this is the one!



Spruces are not as popular of Christmas trees primarily due to their relatively poor needle retention. If you want to have a blue spruce as your Christmas tree, you probably should wait until a couple of weeks before Christmas to set it up as the needles may only last that long. Once the needles begin to fall, blue spruce are about the worst tree in the house as the fallen needles are sharp and seem to find their way into socks and slippers. Blue

spruce, pictured to the left, has the best needle retention of the spruces – they may last a few weeks or more - but does not have much of a fragrance. The branches are very stiff, however, and can support the heaviest ornaments. White spruce, or Black Hills spruce is not a commonly available Christmas tree at lots though is used in the Black Hills where it is cut from the National Forest. It does make a nice tree, particularly when cut fresh, though needle retention is poor. The tree also does not have much of a fragrance and occasionally Black Hills spruce trees can produce a slight musky odor.

E-samples



Moving pine firewood in the Black Hills was a question this week. A homeowner in the Rapid City area was concerned that the firewood they were buying might be infested with beetles. The trees has been recently cut and were now being sold to them. They were worried that if the wood is infested, the beetles could attack their standing pines next summer. First, green wood does not burn very well. Firewood should be seasoned, wood split and stored off the ground for

several month or more until the moisture content is about 20 to 30 percent. Wood that is not seasoned will produce more smoke than heat.



Second, the concern for moving beetles is a valid one. The picture shows some small white larvae that appear from their size and galleries to be mountain pine beetles. While cutting infested logs into 2-foot lengths in the fall is a common means of reducing beetle populations in forests, some still will survive. I do not recommend infested wood be moved from the forest, but if it is then the bark should be completely removed. Since the beetles live

just beneath the bark, removing the bark down to the wood (but not into the wood) will remove and kill the overwintering larvae. The peeling should also be done where the trees were felled rather than moving the logs into town and doing it there.

Moving beetles is only a concern with trees that became infested this past summer. Trees that have been standing dead since last summer are not infested by the beetles. They also tend to dry out very quickly due to the bluestain and usually are dry enough to burn this winter.

Samples received/site visits

Harding County

What is in this cottonwood trunk?

This was a nice size sample! The 1- to 2-inchlong larvae were the cottonwood borer. This insect infests young cottonwood and is often responsible for these young trees snapping off near the ground. The insect can also infest older trees but usually are not tree-killer for mature cottonwoods.

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