Pest Update (January 20-27, 2016) Vol. 14, no. 2 John Ball, Forest Health Specialist SD Department of Agriculture, Extension Forester SD Cooperative Extension

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Note: samples containing living tissue may only be accepted from South Dakota. Please do <u>not</u> 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.

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Timely topics

This is the time of year we are all tired of winter and thumbing through our gardening catalogs just to think of warmer days to come. This is also an excellent time to place an order with the local conservation district for bare-root trees and shrubs. Bare-root is one of the most cost-effective means to plant as you are not paying for any soil or a pot, just the plant. Planting bare-root also

has one of the best survival rates for most species. One of the biggest problems with planting in South Dakota is our clay loam to clay soils. Since this is a different soil texture than the growing medium in the pot, the newly planted potted tree often eithers "drowns" or "dries out" due to the interruption of water movement across this change in texture.



Bare-root is a great way to plant, but there is a narrow window for planting. It begins in the spring when the soil temperature are above 45°F and ends when the buds start to swell on the plant. If the bare-root stock is out-planted too early, the cold soil temperatures inhibit root growth so water uptake is minimal and the buds may desiccate in the dry early spring winds. Planted too late, the buds may open

before the roots develop and the new tender leaves wilt from lack of water.

This means bare-root planting requires some planning. Now is the best time to get your order into the conservation districts so you'll will have your plants at the right time this spring.

I have been receiving plant lists from a number of districts across the state and have been impressed with the diversity of plants offered. Not only trees and shrubs, but fruit trees, perennials, some vegetables and even ornamental grasses. The wide selection of tree species being offered is astounding and clearly the districts have learned the lesson from emerald ash borer – do not rely too much on any one species or genus as you never know when a new pest will appear. Ash was almost the perfect tree to plant in the 90s, adapted to a wide range of soils from wet to dry and fast growing. Unfortunately because of these characteristics it was overplanted and we will be paying for this mistake once emerald ash borer arrives in our state.

There are, of course, difference in offering across the state. Union County has bare-root eastern redbud (*Cercis canadensis*) for sale. This small flowering tree is really best adapted to the south half of the state and even there in the more humid locations. It is a great tree for Union County, it would be a nice stick in Harding.

Choosing a favorite tree is sometimes difficult considering the number being offered across the state (though I do like bur oak). Not every tree species is adapted to every county or soil type so local conditions dictate what can be planted. That said, here are a few of the trees I saw in a number of conservation district brochures that are among my favorites.

Kentucky coffeetree (*Gymnocladus dioica*): a tree that grows slow for the first five years or so but then seems to take off. I have seen mixed plantings of ash and coffeetree where both are the same height after 20 years. I have

seen this tree in many areas of the state, but probably best limited to the eastern half of the state and Black Hills communities.

- **Black cherry** (*Prunus serotina*): a valuable wood species in the East and the fruit is prized by birds and wine makers. I have seen windbreaks of this species as far north as Hwy 212 but probably best south of Hwy 14. One caution, the wilted twigs and leaves are deadly to horses so probably should not be planted near their pens and pastures.
- Harbin (Ussurian) pear (*Pyrus usseriensis*): a tough pear that is becoming a substitute for ash in some windbreaks. The tree does produce a pear, one you probably will not eat, but the wildlife like them. The trees are beautiful in bloom and the red autumn foliage color can sometimes be equally attractive. 'McDermand' is a seed-source cultivar of this species.

And I have also been impressed with the fruit tree selection and here again are a few favorites:

- **Chestnut crabapple** is a large (2-inch) crabapple with crisp, juicy flesh that has a nutty, sub-acid taste.
- **Zestar!**^R **apple** is one of the best early season apples. The flesh is a little soft (as with many early season apples) but the flesh is juicy and tart. The flavor is as good as many of our midseason apples.
- **'Camine Passion' and 'Carmine Jewel' cherry** are sour cherries developed from the University of Saskatchewan. While the name is sour, the fruit is very close to that of a sweet cherry and you can eat them right off the tree. The red fruit ripens in August and since the trees are usually less than ten feet at maturity, it's easy to pick (and net since the birds like the fruit as much as you do!).

Forcing spring shrubs to bloom indoors

I had a request for information and help on this topic last week. Since probably everyone would welcome some color, I thought this would be a good topic for the *Update*.



Spring flowering shrubs already have their flower buds formed, they did that last summer and fall, and now all they need to bloom is some warm weather. You have to wait until the plants have accumulated enough hours of cold weather (temperatures below about 40°F) before trying to force the blooms, but we reached that threshold back in mid-January.

The technique to forcing is relatively easy, but you have to be able to identify the plant in winter and also know where on the cane is the end of the past year's growth. It also helps if you can identify the difference between buds that will become leaves and those that



form flowers. You do not want to select for forcing canes (stems) that put out too much growth last year as these often have only vegetative rather than flower buds. Look for canes on the shrub that had normal growth, maybe 6 to 18 inches rather than 24 to 36 inches. Also check to see if the buds attached to the cane have at least some flower buds. Flower buds may be identified by their size and shape. Flower buds are typically rounder and plumper

than vegetative buds which are often slender and pointed.

Once the cut canes are brought into the house, place them completely in a tub of water for several hours if the outdoor temperatures are extremely cold. This helps the canes thaw better and prevents the flower buds from bursting. If the outdoor weather is not too cold, you can skip this step and begin to force the flowers.

Start by placing the canes in a vase that will hold them upright. Add warm, about 100°F water, enough to cover about 2 to 4 inches of the cane. Allow the canes to stand for a half hour or so then fill the container with more water and add a flower preservative. The flower preservative is not a requirement but the addition may prolong the blossoms once they open. If you cannot find a commercial preservative you can make your own by adding



a ½ teaspoon of household chlorine bleach and a couple of teaspoons of white vinegar to a quart of water. Some people suggest you also add a teaspoon or two of sugar to this mix.



Place the vase in a cool (65-70°F) room with only indirect light. Leave the vase in this location, adding water as needed, until the buds begin to expand. Once this occurs, move the container to a location with bright light. However, do not place in direct sunlight as this may result in the blossoms fading in a day or two.

Now is a good time to cut some canes for forcing. Pussy willow are an old favorite and if you follow these forcing instructions it will be about two weeks from cutting to blooming. Some other good choices are flowering almond, about three weeks, and forsythia, about two weeks. Lilac can also be forced, but the process may take four weeks or more.

E-samples



Why are the woodpeckers after my tree? I received these pictures last week which initially caused me some concern until I read the location of the sender and tree, upstate New York. The tree is an ash, you can tell by the diamond shaped furrows and the woodpeckers are beginning to shred the bark. This is a common early indicator that emerald ash borer might be in the tree. Infested ash trees larger than eight-inches in diameter

often have the bark stripped from them along the trunk or branches as the woodpeckers search for the larvae. Emerald ash borer

spends the fall through spring living just beneath the bark so they are relatively easy for the woodpeckers to reach. This stripping, also known as flecking or blonding, is from the woodpeckers pecking through the bark in their search. These activity is always worth investigating as it is one of the first symptoms of an infestation, however I have also seen woodpeckers do this same damage while searching for our native redheaded and banded ash borers.





Why is the ground covered with the tips of my pine tree? I have received a number of emails with this question and pictures. Finding the ground beneath a mature spruce or pine littered with shoot tips is a common occurrence at this time of year. If you look closely at the fallen tips you'll find the 4 to 6 inch tips neatly cut, almost as though someone climbed the tree and cut the tips with their hand pruners. They were pruned, not by

people, but squirrels. If you look even closer at the severed tip you'll probably notice the buds are gone or chewed, that's what they are after. They may also just strip the twig's base to feed on the 'sweet' inner bark of pines. Squirrels being squirrels don't just climb the tree and feed on the buds and twigs there. No, they have to cut the tip off and then take them apart on the ground. There are three tactics for this problem; 1) accept this as sharing nature and realizing squirrels have to eat too, 2) place out sunflower seeds or other tasty treats as a bribe to the squirrels, 3) use a patched 32 caliper round ball to remove the squirrels (this last option may also find you removed from the neighborhood).

Samples received/site visits

Gregory County

What tree is this long pod from?



This is a catalpa (*Catalpa speciosa*) pod. The tree is known (or hated) for these long, cylindrical pods that hang from the tree all winter before falling and littering the ground. This tree is also noted for its large white flowers in early summer and its "elephant ear" shaped leaves. The tree is native to scattered locations from Arkansas to Illinois and is commonly planted in the southern half of our state. It grows tallest in the southeast, south of I-90 and

east of Hwy 281, where the humid climate is more favorable. While the pods are an annoyance to some they also provide a cheap means of propagating this tree. You can start a tree now in the house by breaking open a pod, it just takes a little twisting, and removing the seeds. These are long, papery and almost wafer-like. Place three of these seeds in a cup fill with potting soil and add a thin layer of soil over them, about 1/4 inch at the most. Place the cup in a warm room with some sunlight and in about two or three weeks or so you find that probably find that at least one of the seeds germinated. I have grown catalpa from seed to a height of 15 feet or more (and flowering) in five year. This pod was already split and the seeds scattered to the wind so you'll have to find another, unopened, pod to try growing the tree from seed.

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