

Pest Update (March 4, 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.

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Timely Topics

Reminder on upcoming emerald ash borer workshop

To assist communities, parks, and conservation districts in preparing for this pest, a one-day symposium on emerald ash borer and other exotic threats will be held on the campus of South Dakota State University Tuesday, March 10. The symposium, sponsored by South Dakota State University, the South Dakota Department of Agriculture and the South Dakota Arborist Association, will have

presentations from researchers and practitioners who are working with this insect in adjacent states. The registration for the one-day symposium is \$40 and includes lunch. For more information on the workshop and to register, please go online to <https://sdsuext-treethreats.eventbrite.com>. Registration must be completed before March 6.

TRAINING YOUNG FRUIT TREES



This is probably the most neglected aspect of growing fruit trees. Most people ignore the pruning needs of their young trees and instead wait until the tree is reaching maturity before beginning pruning. Once you have a mature tree it is very hard to restore it to a good fruit trees. The ideal period to train young trees is during the first five years after planting. Training young trees help to develop the desirable tree form and structure. This is the best time to establish the proper spacing and arrangement of the **scaffold limbs**. These are the permanent major branches that are directly attached to the trunk. Thinning out these branches while they are smaller diameter is much less harmful to the tree and will minimize the formation of decay.

Scaffold limbs must be properly selected to maintain an even distribution of limbs to ensure adequate light for fruit production. One of the most persistent training problems is the development of two main leaders rather than a single leader. This problem is most common with plums, but it will also occur with apples and pears among other fruit trees. These double leaders, also referred to as **codominant stems**, are weakly attached and are prone to splitting or breaking. Avoid the formation of codominant branches by eliminating one of the two upright stems. This should be done as soon as the formation is noticed and preferable before each stem reaches a diameter of more than ½-inch. Even the single terminal stem of the tree should be pruned to a side branch or limb at about 6 to 8 feet. This is referred to as the **modified leader system** of pruning where the terminal growth is redirected so the tree does not grow too tall. Pruning to 6 to 8 feet should only be performed on dwarf apples, cherries and plums. Pears should be allowed to continue to grow a taller stem.

Scaffold limbs should be spaced evenly along and around the trunk. As the tree matures and these branches increase in diameter, they can become too tightly spaced and begin to interfere with one another's development. Closer spacing may also result in rubbing or cracking and will also result in a dense canopy hence less fruit and what is produced will be lower quality. The spacing for scaffold should be approximately 8 to 14 inches apart with a radial distribution



around the trunk. The limbs selected for scaffold limbs should be form about a 60° angle to the trunk. The first scaffold limb should be at about 2 ½ feet above the ground. The highest limb should be at about 6 to 8 feet. This 2 ½ to 8 foot distance allows harvest without having to bend too low or reach too high. The picture to the left is the same trees shown on the first page but after pruning. The lowest limb is at about 2 feet and the terminal has been cut to a side branch at about 7 feet. The limbs are spaced about 1 foot apart. This is a tree that is on its way to be an excellent fruit bearing tree.

We are coming up to the best time to complete this training. The best time to prune fruit trees is in March, after the danger of extremely cold weather is behind us yet before the tree resumes growth in the spring. While the pruning can be done earlier in the winter, if we experience an abnormal cold snap in February or early March this might result in tip dieback and branch death. These branches should be removed before further training is done.

E-samples



We are seeing a lot of vole injury this winter, particularly West River. While there “runways” are common in lawns, voles are not usually a problem with woody plants unless they are short on food. This must be the case this winter as I have received numerous calls and emails about damage on the bases of small evergreens. The gnaw marks are irregular and at various

angle, quite different from rabbit which tend to cut everything off at a very regular angle. The best management tactic is to trap them out. There are repellents but these only provide short-term protection.

Samples received/site visits



Clay County **Here are some pine tips that appear to be pruned off cleanly at an angle. These have been falling off the tree, what could possibly be the problem?**

The problem is squirrels! They either chew off the tips of pine shoots or merely girdle them (see

attached photo). The ground in the spring can be littered with cut tips of ponderosa and Scots pines from this feeding damage. If they do not bite the shoot off completely, they girdle it and the tip beyond the girdle turns brown. Sometimes you can find large trees with browning and yellowing shoot tips throughout the canopy. No control other than a 22.

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