

Pest Update (May 13, 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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Plant development

It was a cold and either rainy or snowy Mother's Day across the state. The snow and wind has resulted in many defoliated or damaged trees. We needed the moisture, but several soft, soaking rains would have been nicer. The cold weather is going to stall some spring flowering. Lilacs (at least those not damaged by the cold) will be in bloom a little longer.

Pest treatments needed soon



Ash-lilac borer treatments should be done soon with an insecticide containing permethrin as the active ingredient. The adult ash borers are beginning to fly. Pupae skins left by the emerging adults can be found along trunks of declining ash. The adults (which resemble wasps) can now be found laying eggs on the lower trunks of trees. Ash trees, particularly the younger and stressed trees, need to have the trunks covered with the insecticide, usually up to a height of 10 to 15 feet. This is our native ash-lilac borer, not the emerald ash borer, an insect not yet identified in South Dakota.



Cedar-apple rusts will begin releasing spores from eastern redcedars and Rocky Mountain junipers within the next week or two. The telial horns are now beginning to swell and when we receive some rains, the horns will become gelatinous, turn bright orange and begin releasing spores. While the disease is rarely considered a problem on junipers, the bright orange spots and premature defoliation that occurs on infected hawthorns and crabapples does detract from the ornamental value of the trees. Treatment should start on the hawthorn or crabapple host in another week with fungicides having Chlorothalonil or Mancozeb as an active ingredient and a second application made about two weeks after that.



Tent caterpillars are beginning to hatch! Tent caterpillars, eastern, forest and western, are common defoliators of mountainash, cherry, crabapples and plums. If you look closely along the shoots in these trees right now you might see the beginnings of some very small nests. The caterpillars are not moving far from these nests yet so pruning and destroying these small nests will still work as a means of limiting defoliation of a plant.

Another option is to tear the nests open as this will expose the young larvae to predators and parasites and these insects can significantly reduce the population

(you can also use a toilet brush to push into the small nest, twist it a couple times and pull it out – you just made tent caterpillar cotton candy, not tasty but will get rid of the pest!). Insecticides containing Carbaryl or Malathion are effective, but should be applied in another week long before the larvae are fully grown. If you wait until the larvae are larger, more than 1 inch long, they will have completed most of their feeding by then and the benefit of the treatment will be limited.

Timely Topics

What will happen to freeze-damaged leaves?



Many trees in the Black Hills have already leafed out so this recent exposure to sub-freezing temperature may result in wilted foliage or foliage that turns brown or black along the margins. Affected trees may begin dropping their freeze-damaged leaves within the next week or two. The trees that are just leafing out, the hackberries and honeylocusts, will be most affected as the newly expanding foliage is the most sensitive to freezing temperatures. Trees that leafed out earlier, the crabapple, lindens and silver maples, may often suffer a few browning leaves as their older foliage is more tolerant of cold. The trees that will be least impacted by the cold will be those that have not yet leafed out. Bur oak is a native tree to the Black Hills and is also one of the last trees to leaf out. Bur oaks in high elevation locations are still in the bud stage and these trees will escape injury from this recent cold snap. However, most tree species, particular trees in the communities along the edge of the Black Hills, have leafed out and may be injured by the cold.

Fortunately, if a tree drops its leaves following this freezing weather, it may soon sprout new leaves from adventitious buds. These “reserve” buds are produced by trees for just this purpose, a weather event, such as extreme cold or wind, which results in the loss of the new foliage. The new leaves should be coming out during May. If the tree has not re-leafed by the beginning of June, it was probably too weak to recover and probably will not survive.

In the meantime there is little a tree owner can do to help the defoliated tree. Watering if conditions turn dry is probably the best treatment but do not overwater as saturated soils will reduce root growth. Fertilizing will not help and may even be detrimental for the recovery of these leafless trees. The best course of action is to wait it out and let freeze-damaged trees recover (or not) on their own.

Caring for young trees damaged by the recent storms



The recent West River snowstorm has left broken trees in its wake. Many young trees were bent under the weight of the heavy snow. A common reaction is to go out and try to knock off the snow with brooms and shovels to reduce the weight. This is not a good practice as these additional forces can result in branch breakage. It is best to let the snow melt and allow the tree and its branches to slowly resume its natural shape. The snow will be quickly melting away since the temperatures are expected to be in the 40s and 50s for the week.

Once the snow has melted, it is time to assess the damage to your trees. Young trees, those less than 15 feet tall, may be saved with corrective pruning if only a few limbs or the tip of the terminals were broken. If the tree is broken near the base or more than 1/3 of the limbs are broken it may be best to remove the tree and start over by planting a new one.

If the top of a young tree is broken from the heavy snow, prune it back to the highest upright branch that is at least half the diameter of the trunk. This limb will assume the role of a new leader. This technique works well for deciduous and evergreen trees as long as the snapped leader is less than about 3/4-inch diameter.



Broken branches on tree should be cleanly pruned back to the larger limb or trunk to which they are attached. This pruning can be accomplished with a hand-pruner for small branches, less than 1/2 inch diameter, or a hand saw for larger branches. When using a hand-pruner, prune with the blade side closest to the larger limb or trunk. Do not leave a stub nor cut into the limb as you close the blades. Making the proper cut is the best means of protecting the tree from decay, tree paints or wound dressings do not protect against decay and can even increase the possibility of decay by keeping the interior too moist.

What to do with mature trees damaged by the spring storms

The recent snowstorm West River and the thunderstorms East River have resulted in broken mature trees. There are many trees that have broken branches or have trunks that are split. If the tree is deeply split, where an open crack is visible where two upright branches meet, the best option is to remove the tree. Attempting to restore the tree by tying together the split will generally

just delay the death a few years as the tree becomes strangled by the ties. Valuable trees that have been split can be repaired by being pulled back together and then held in place by tree support systems. These should be installed by trained arborists who have the knowledge and experience to build cable and brace systems that will safely support the tree. Tree support systems are costly and a homeowner should expect to pay anywhere from several hundred to several thousands of dollars to have one installed in their tree.



If the mature tree has the top 1/3 of the canopy broken out or more than 1/2 of the limbs broken, it may be better to remove the tree rather than save it. This also applies to trees with large wounds from broken limbs peeling off the trunk. These damaged trees may survive the loss but their ornamental and shade value will be much reduced. The tree will also be more susceptible to decay and may have a much reduced life span as more branches and limbs break due to decay.

Use caution when removing storm-damaged trees



Tree work is among the highest risk professions in the United States. The combination of working at heights, with heavy loads, and power equipment creates an environment where incidents are common. Homeowners should also use extreme care when attempting to clean up broken trees and branches that occurred during the weekend snow and wind storms. Some fallen branches are pinned to the ground under the weight of other limbs. Cutting a pinned branch may result in releasing the pressure creating what is known as a “spring pole,” as the bend branch springs back to its original position and strikes the person or their saw, in the process.

Chainsaw injuries are also a common occurrence when tree owners attempt to do storm clean-up themselves. If operating a chainsaw all the personal protective equipment should be used and this includes a helmet, hearing protection, eye protection and cut-resistant chaps. Sturdy, cut-resistant boots and gloves are also necessary. It is strongly advised that tree owners limit their tree pruning to hand tools and remain on the ground.

Homeowners should consider hiring professional arborists to do the major clean-up effort as these individuals have the training and equipment to work safely in this hazardous environment. When hiring a company to prune or remove your

damaged tree, make sure to hire a professional. After a storm it is common for homeowners with damaged trees to have workers stop by and offer to do clean-up. Many times these individuals have little or no experience in doing tree work and may either injure themselves or damage the tree further. Tree owners should hire only companies that have worker compensation insurance for their employees and general liability insurance. It is also a good practice to hire companies that have arborists certified by the South Dakota Arborist Association or the International Society of Arboriculture.

E-samples

Sapsucker injury to lindens



I received two pictures of sapsucker damage on lindens during this past week. Sapsuckers are birds, not borer, and their oval holes made in almost perfect rows circling around the trunk of a tree are easy means of identifying their damage. While the holes are highly visible, the damage to the tree is usually minimal and no cause for concern. The sapsucker is searching for sap, not insects, as do other woodpeckers, and do not create many holes in lindens as the sap is not that sweet. Birch, maples, pines and walnut are species that are often repeatedly drilled for their “tastier” sap and the numerous rows of holes can girdle young trunks. If control is needed, the

simplest solution is to wrap burlap over the holes to discourage the activity but do not tightly tie the burlap on or this can girdle the tree. Tanglefoot[®], a sticky repellent, may be applied over the holes and this can also discourage further damage from occurring. It is illegal to shot sapsuckers.

Winter-kill on shrubs



There are lots of deciduous shrubs that are leafing out only on scattered branches or just near the base of the plant. This is a combination of the winter cold, the dry fall and winter and the lack of snow cover. We usually get enough snow to cover and insulate these shrubs from the cold and if the plants do not go into winter drought-stressed then the cold is not a problem. However this past

winter we has drought-stressed plants that were not fully acclimated to the cold and no snow to protect them so bud and shoot damage is occurring on spireas and other small shrubs. The roots were not damaged so if the shrubs are pruned back to about 2 to 3 inches tall, new shoots should arise and grow this spring and by summer the plants will have recovered.

Samples received/site visits

Faulk County

What is wrong with this seedling?

This is an eastern redcedar and clearly it is dead. The foliage is completely brown as well as the sapwood. I do not know why the plant died (but it is not a fertility issue) but will do further investigation and get back to you.

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