South Dakota State University Extension

Tree Pest Alert

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In This Issue

Samples

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of plants or insects from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem.

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 listing of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions as the label is the final authority for a product's use on a 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.

Reviewed by Master Gardeners: Carrie Moore and Dawnee Lebeau

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Plant development for the growing season

We have experienced quite a roller-coaster in temperatures during the past two weeks. Temperatures in Rapid City reached a high of 67ºF and a low of 0ºF. Sioux Falls temperatures oscillated from a high of 49ºF to a low of -12ºF.

The episodes of warm weather in West River were enough to push the accumulation of growing degree days (GDD base-50) up a little. Most East River locations did not accumulate any additional GDDs.

Here is the total GDD accumulation in 2025 for communities across the state.

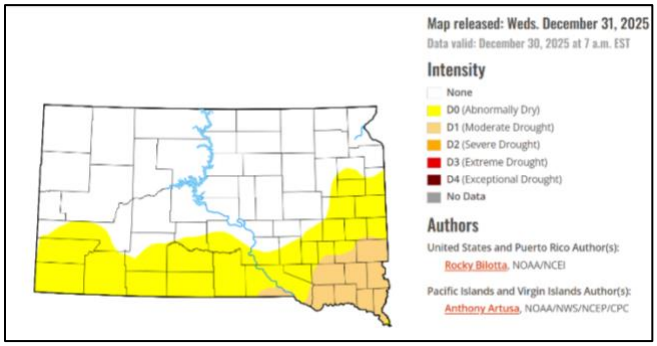
Aberdeen	3061
Beresford	3673
Chamberlain	3747
Rapid City	3120
Sioux Falls	3624

The earlier cold weather followed by a warming trend was enough to fool a few West River shrubs into breaking buds and unfurling leaves. This is a picture Annie at Corson County Conservation District sent in. This event has been rare and usually does not affect entire plant – just a few eager twigs. Most woody plants have not fulfilled their chilling requirements, which is the prerequisite for resuming growth.

Drought monitoring

About 60 percent of the state ended 2025 as drought free. This is better than last year when we ended 2024 with the entire state under some level of drought intensity. About 30 percent of the state is classified as “Abnormally Dry.” The southeastern corner of the state, about 8 percent, is classified as “Moderate Drought.”

Here is the current map from the National Drought Mitigation Center at the University of Nebraska-Lincoln.



Treatments to Begin Now

Recycling the Christmas tree

The holiday season is quickly fading, except for the credit bills to come. Now that the gifts have been returned and the Christmas paper recycled, it is time to take down the Christmas tree.

If it is an artificial Christmas tree, it just goes in the box for storage until next year. If it was a natural Christmas tree, then it is ready for recycling. There are many communities that have disposal sites open through early January to drop off trees (remember to remove the lights, bulbs, and tinsel first). These trees will be chipped to become mulches for tree planting, playgrounds, and foot paths.

Other communities and organizations are organizing drop-offs for the trees to become fish habitat. These trees will be hauled out onto the ice and weighed down so they sink when the ice melts this spring. The debris becomes a haven for small fish – great protection from predators – and excellent sites to lay eggs.

Timely Topics

Emerald ash borer update

We continue to monitor larval development of emerald ash borer (EAB) from Dakota Dunes to Milbank. Not that much will change until April or May. All the larvae examined are in their overwintering J-shaped form. We will not see any further changes until they start waking up next April.

Cleaning up fallen pines after the Black Hills windstorm

The 70 to 100 mph winds toppled and snapped pines and spruce from the central to the Southern Black Hills. This has generated lots of falling pine branches and pine with canopies filled with snapped or broken branches – a perfect recipe to trigger a pine engraver beetle (*Ips pini*) outbreak in the summer of 2026.

Pine engraver beetles are small bark beetles that feed in declining pine trees and in recently fallen branches. They need live inner bark tissue to feed their young larvae, but the adults do not colonize healthy pine unlike their close bigger cousin – the mountain pine beetle (*Dendroctonus ponderosae*).

The fallen branches (1/2-inch diameter and larger) and broken canopies may remain green enough to be attractive brood material for the engraver beetles this spring. This can create the perfect environment for a buildup of beetles which can attack standing pines. However, this still requires the pines to be stressed, with drought being the most common agent.

Pine engraver beetles successfully attack standing pine when the April to June precipitation is less than 75 percent normal. Of course, we will not know if we will have below-normal levels until summer, so it is best to prepare for the worst. This means proper brush disposal and protecting standing storm damaged pine trees.

The best approach for disposal of the fallen branches on forest land is by lopping and scattering the slash. This will dry out the wood so it will not be attractive to the beetles this spring. Chipping or mastication now will also dry the material.

What should not be done is piling the brush into small mounds – 6 to 8 feet. These piles will keep the woody debris in the center cool and moist – perfect breeding material for the engraver beetle this spring.

Green logs cut from fallen pine trees can also be attractive host material for the pine engraver beetle this spring. This wood should be cut into 2-foot lengths, if possible, and left in a sunny exposure to facilitate rapid drying.

High-value pines that were stressed by the windstorm – canopies with broken branches – should be pruned to remove the broken and hanging branches. These trees should also be treated with an insecticide – labelled for treating bark beetles – by April 1 to protect them from becoming colonized by the beetle this spring and summer. Pine tree owners should contact a professional company with sprayers with enough pressure to reach and coat the canopy with the insecticide.

E-samples

Damaged base to cherry tree – should it be saved?

This picture is the base of a 3-year-old chokecherry that has mechanical injury. The question was, should it be saved? My advice is to cut (no pun) your losses. The injury will be enclosed in several years, but the interior wound will remain. This will create a decay pocket that may result in the trunk failing. Since it is a young tree, planting a new one as a replacement makes sense.

What to do about spruce left leaning after the Black Hills windstorm

I received pictures of spruce left leaning after the recent windstorm in the Black Hills. Wind speeds that exceed 90 mph were common. Leafless deciduous trees survived the winds but not so with the large canopy sails of conifer crowns. Spruces, which are shallow rooted, were toppled throughout the region.

Not every affected spruce completely toppled. Many have become an arboreal Leaning Tower of Pica. However, unlike the real Tower, which has stood leaning since the 12th century, many of the leaning spruce trees are not as stable and should be removed.

There are no precise rules for deciding whether a leaning tree can be righted or should be removed. If the tree has a lean of 10-degrees or more after the windstorm – and its failure could injury people or damage property – the tree should be removed.

If lean is barely noticeable but there are a few soil cracks visible on one side, watering in the cracks to seal the soil may be all that is necessary. The more difficult decisions are trees with soil cracks on one side and a slight lean to the opposite side of the tree.

Some of these trees may recover from the root damage. They may be able to be righted or guyed for additional support. These decisions would be made in consultation with an arborist. A good place to start is to contact an International Society of Arboriculture (ISA) Certified Arborist from a commercial tree company. A list of certified arborists in a community can be found by using the search function at: https://www.treesaregood.org/findanarborist/findanarborist

Samples received/Site visits

Bon Homme County, NOT emerald ash borer

There was a message posted on a South Dakota State University Facebook page that emerald ash borer was established in Bon Homme County. The writer was finding it in ash logs. Since emerald ash borer (EAB) has not been confirmed in the county, this was worth a trip down to meet the person.

It was not EAB. While the logs were ash, the insects burrowing in the inner bark and wood were banded ash borers. The galleries are similar but banded ash borer galleries are more meandering rather than serpentine. They also frequently stop when the larvae back up to move in a different direction.

The logs came from old, declining ash in windbreaks. This is a common home for banded ash borers. They cannot survive in healthy trees. Instead, they infest dying trees or those that recently died.

This is a good opportunity to review how to report an EAB find in a county that is not under quarantine. The process for reporting the possibility of EAB is to contact me directly or through the SDDANR website at: https://emeraldashborerinsouthdakota.sd.gov/sight.aspx to report a sighting. We will review the information and respond. A forester will visit the site if it appears to be a possible EAB infestation.

If they find signs of EAB, I will visit the site to collect insect adult, larva, or pupa to confirm whether they are EAB. We need a live EAB life form to place a county under quarantine. Quarantines are an important part of the state's EAB management plan. They are aiding in slowing the spread of this insect across the state.

Custer County, Bleeding canker on quaking aspen

Cankers are easy to see during the winter, so this is when the calls come in. One that stands out is cytospora canker (*Cytospora chrysosperma*) on quaking aspen (*Populus tremuloides*). The cankers are also known as bleeding cankers as a yellow-orange stain will stand out against the creamy white bark of the tree.

This canker disease is a weak pathogen. The spores germinate in open wounds on the trunks such as those created by sunscald, fire, or mechanical injury. Once the fungus begins to grow, it will spread to infect the living sapwood surrounding the wound. This can eventually girdle the infected branch or trunk which results in dieback and decline.

Since the disease infects wounds, removing any dying and damaged branches will help reduce the infection. Also keeping urban aspen healthy by watering and mulching will help prevent an infection from becoming established.

Pennington County, Arborvitae split by windstorm

One casualty of the windstorm that swept the Black Hills was an arborvitae (*Thuja occidentalis*). The tree had formed two leaders many years ago and this defect was never corrected. This weak V-shape union compressed the two stems together making them susceptible to splitting when subjected to strong snow or wind loading.

The property owners – the tree was on one property but the split half fell on the neighbor's roof – wanted to know what to do. The best option is to hire a professional tree company to remove the entire tree. The split side must be cut from the roof, of course, but the other side still standing is too weak to support itself and should also be removed.

The first step should be to contact home insurance companies to see what will be covered. Some policies will cover only the cost of removing the split leader from the roof, not the standing one nor the cleanup. Most policies have a dollar limit or deductible for these claims.

Next contact tree companies to obtain quotes to do the work. Any quote should be in writing so you know what will be done, for example will the brush be hauled away or the stump ground out? Also ask what insurance the company has to protect you from any property damage or injury to their workers (workers' compensation).

Yankton County, Pine wilt symptoms appearing on infected Scotch pines

Scotch pines (*Pinus sylvestris*) can go through a natural color change in the winter. The needles turn from attractive bluish green to a sickly yellow green. While it is not attractive, it is not a concern as the color change is normal.

But if the needles have turned brown to tan and have become brittle, it is not the normal color change but pine wilt disease. This disease is frequently discussed in the *Pest Alert*. It is a lethal threat to Austrian (*Pinus nigra*) and Scotch pines. Mugo pines (*Pinus mugo*) – those taller than ten feet – may also become infected. The disease which was only found along the southern border of the state in the early 90s has now been confirmed statewide.

The disease, caused by the pinewood nematode (*Bursaphelenchus xylophilus*) and its associates, often kills its host within months of infection. Trees infected in the spring having their needles turn tan by early fall. The discolored needles and the attached twigs become brittle and snap at the slightest touch by early winter.

The infected trees are now dead – they are zombie trees. There is nothing that can be done to save them. But removing these infected trees and destroying the wood can reduce the risk of infecting any nearby healthy Austrian and Scotch pines.

The nematodes will move to the sawyer beetle (*Monochamus*) pupae that are also in the tree as the weather warms in March. The sawyer beetles emerge as adults and transfer the nematodes to healthy trees through their feeding or egg laying. Destroying the trees this winter can break the infection cycle.