



**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

Tree Pest Alert



September 23, 2026

Volume 24, Number 32

In This Issue

Plant Development.....	1
Treatments to start now	2
Removing tent caterpillar egg masses	2
Timely topic	2
Emerald ash borer updates	2
Fungus among us.....	2
E-samples	4
Splitting bark on young hybrid elm trunk	4
Treated ash tree infested by EAB	4
Sample received/site visits.....	4
Charles Mix County (Lecanium scales on elm)	4
Custer County (Chinese praying mantis).....	5
Grant County (Ash bark beetle in black ash).....	5
Lincoln County (Oak lace bug defoliating bur oaks).....	5
Minnehaha County (Woolly oak galls on bur oaks).....	6
Union County (Elm oyster fungus on boxelder).....	6

Samples

John Ball, Professor, SDSU Extension Forestry Specialist & South Dakota Department of Agriculture and Natural Resources Forest Health Specialist

Email: john.ball@sdstate.edu

Phone: 605-688-4737 (office), 605-695-2503 (cell)

Samples sent to: John Ball
Agronomy, Horticulture and Plant Science Department
Rm 314, Berg Agricultural Hall, Box 2207A
South Dakota State University
Brookings, SD 57007-0996

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

The South Dakota Department of Agriculture and Natural Resource and South Dakota State University are recipients of Federal funds. In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW Washington, DC 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

This publication made possible through a grant from the USDA Forest Service.

Plant development for the growing season

This past week's weather was cool and wet. All the rain we wanted this summer had decided to fall. The day temperature dropped from the 90s to the 60s during this same period. The weather has turned from summer to fall.

The cooler weather has slowed the growing degree days (GDD-base 50) accumulation. We only gained another 60 to 90 GDDs during the past week. Here are the total GDDs for communities across the state.

Aberdeen	2,801
Beresford	3,345
Chamberlain	3,371
Rapid City	3,053
Sioux Falls	3,330

We are starting to see fall foliage color among our trees. The color change is in response to the shortening days and cooler temperatures. Leaves stop producing chlorophyll (the green color) and some trees species begin producing anthocyanin (the red-purple colors).



Why trees spend energy to produce red pigment is not entirely clear. But a leading theory is that the added pigment acts as a sunscreen for the leaf as it extracts nitrogen and other resources before the leaf drops. Another theory is that red is protection from overwintering insects. Aphids, for example, avoid the trees that turn red.

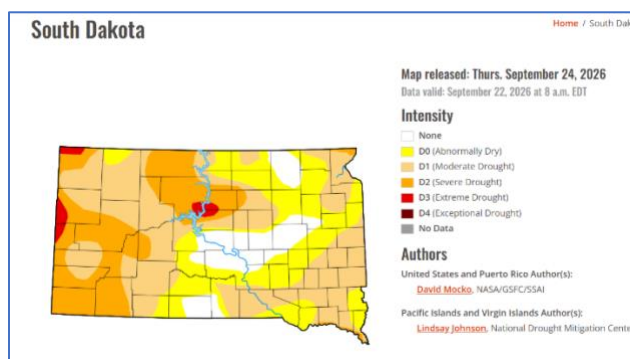
While the purpose behind the bright red fall foliage is not understood, we appreciate the dazzling appearance. Maples are the best known for a brilliant red foliage color. The first to turn red are the Freeman maple (*Acer x freemanii*) cultivars such as the one shown.

Drought monitor

The week's precipitation more than doubled the drought-free area of the state. But that is not saying much as we only went from 4% to 11% of the state classified as drought free.

We also saw the area classified as extreme drought drop to 2%. But we will need more precipitation to significantly improve the drought situation across the state.

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



Treatments to Start Now

Removing egg masses of the tent caterpillars

Now is also good time to get ahead of next year's pest problems. Tent caterpillars, the insects that create nests at the tips of the branches in the spring, are in eggs masses fused around the shoots of their favorite hosts. The egg masses appear as molten, dark brown to pale gray, shiny masses about 1/2-inch long.



The eggs were laid in August by the adult moths. An unusual characteristic of tent caterpillars is that the larvae have already hatched within the shiny spumaline, the protective covering of the eggs. They will remain within this protective cover until spring when they move out and begin forming a nest, the webbing we see around the branches.

If these masses are pruned off and destroyed before spring, it will eliminate the problem from the tree (assuming all the masses can be found). This is a task that can be easily accomplished in small apple, crabapple, and chokecherry trees. These three trees are among the favorites for tent caterpillars.

Timely Topics

Emerald ash borer update

The emerald ash borer galleries are becoming longer along with the tunneling larvae. The flat, cream-colored larvae are a little longer than an inch. These are the 3rd and 4th instar larvae.

The 4th instars are the final larval stage. These larvae feed until mid-October. Then they will burrow into the wood where they will spend the winter. They do not resume feeding in the spring but enter a resting stage (the pupa) before emerging as adults at the end of May.

Fungus among us

There is nothing like a little fall rain to cause the fungal fruiting bodies to appear. Here are several that I have seen in the past week. I have also received pictures via texts or emails by individuals in eastern South Dakota and western Minnesota of these fungi.



Shaggy Mane mushrooms (*Coprinus comatus*) seem to appear overnight if we have some light rain and that has been the case in eastern South Dakota. The mushroom has a shaggy, scaly, white cap about 1 to 2 inches wide and 2 to 6 inches tall. The gills on the underside are white but turn black and inky within a few days.

The mushrooms do not last long, and the caps soon turn gooey. The stems last for a few more days after the cap has disintegrated. Then it also falls and all that remains is slightly gooey debris.



I have received numerous pictures of gelatinous, gooey blobs, about one to two inches across, on dead trees and logs. These are jelly fungi, a group of fungi in several genera, e.g., *Ductifera*, *Exidia*, *Tremella*) that have a similar appearance. The fruiting structure looks like rubbery, translucent blobs about one to three inches across.

They swell up to this jelly-like mass during the rains only to shrivel as hard, dry flakes when the weather turns dry. They are easy to overlook in their dry stage, but add a little rain and presto, a blob appears! These fungi do not harm living plants.



Stinkhorn mushrooms are appearing on lawns. The four to six inch tall, distinctly phallic structure with a thimble-like slimy cap covered with flies is hard to miss in a lawn. They seem to appear overnight, especially with a little rain.

They do pop-up over night from a below-ground “egg.” When found, most people do not even connect it with the stinkhorn. The fruiting body begins as a white to pink

egg-shaped structure about two inches in diameter. In the inside of this “egg,” there is a gelatinous layer and a green spore mass along the stalk and cap of the mature stinkhorn.



These eggs are found at or near the soil surface. When conditions are right – wet – the eggs rupture and the stinkhorn expand like a stalk very quickly, developing in an hour or two!

Stinkhorns live off organic matter so are often found around bases of dead trees. They can also be found in old wood mulch. The fungus does not harm live plants.



This is the giant puffball (*Calvatia gigantea*). It is the largest puffballs – often more than one foot across in the fall. One was found in Minnesota years ago that was more than two feet high and weighed more than forty pounds!

I found this puffball, along with a few others, in Hole-in-the-Mountain County Park in Lake Benton, Minnesota. They are about one foot across and bright white. They stood out against the dark brown litter on the forest floor.

Puffballs are white and smooth while they are young, but as they age, they turn brown and collapse. The torn liner allows the spores to disperse.

Young puffballs are edible. They are delicious when sliced and fried. But only harvest ones that are white and solid inside. Also, my standard recommendation is to go with an experienced mushroom hunter on your first trip to collect these from the woods. Mushroom hunting – if you plan to eat them – is best taught in-person, not from a picture.

E-samples

Splitting bark on young elm

Hybrid elms are known for their fast growth. Young trees can grow three to five feet per year during the first few years after establishment.



The diameter growth can be equally fast. The rapid expansion of the young trunks can result in the outer, older, layer of bark splitting away. This separation reveals the smoother, younger bark. This is a normal process and not a concern.

Treated ash tree infested by EAB

These are two green ash trees that were injected with emamectin benzoate for control of emerald ash borer. The injections were performed this summer. One tree looks fine; the other is already presenting the thinning canopy of a recent EAB infestation.

I had looked at these trees prior to the injection. A few trees in this area of Milbank were already showing signs of being infested. This one tree was infested already or became infested this summer.

I have seen this before, all the way back to the year EAB was confirmed in Sioux Falls. That year commercial applicators were treating trees that were already infested but not yet showing signs of the infestation. Some of these trees showed canopy thinning that first year.

Ash are tough trees. I have seen trees with 30% canopy decline recover once injected. The reason not to wait that long to treat is the dead branches do not come back to life, just the tree, so someone must prune off the dead wood.

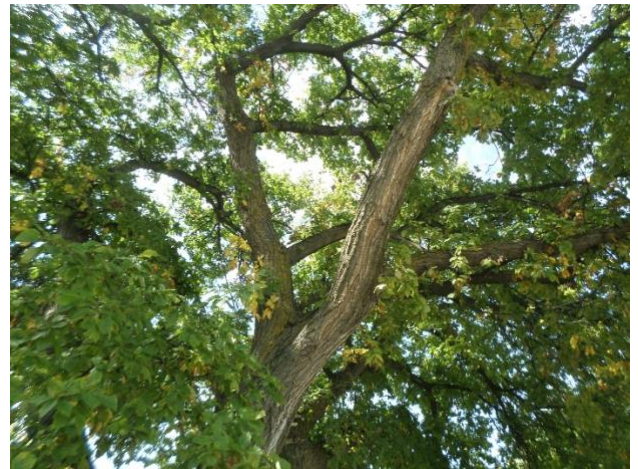


This tree (to the right) is just showing some minor dieback and canopy decline. It should make a full recovery by next spring. It was treated in just the nick of time!

Samples received/Site visits

Charles Mix County, Lecanium scale on American elm – not DED

Dutch elm disease has been in the *Pest Alert* several times this year (see last issue). It is a bad year for the disease. But not all the yellowing leaves on American elms (*Ulmus americana*) are from this wilt disease.



The first clue that Dutch elm disease was not the causal agent was that the fallen leaves were tacky. They also had a dusty, black powder on the foliage. The other clue was the yellowing leaves on the ground and in the canopy were not wilting, just turning color.

The problem for this elm was lecanium scales (*Parthenolecanium*) on the twigs and shoots. These were the small reddish-brown bumps lining the blackened twigs. Lecanium scales are soft scales. They suck up the contents of the inner bark tubes (sieve cells) that carry the sugars from the leaves to the branches, trunk, and roots.



As they feed on this sugary fluid, they excrete honeydew. This leaves a film on the leaves. The film becomes infected with a sooty mold fungus that leaves the black powder on the foliage and shoots.

The scales are sessile at this time of year. Early summer eggs will hatch beneath the shells. This occurs at about 800 GDD, when catalpa blooms. Systemic insecticides can be injected in the trunk by a commercial application in the spring to kill the young scale crawlers as they begin to feed.

Custer County, Chinese praying mantis

This picture is a Chinese praying mantis (*Tenodera sinensis*) in the Black Hills. This is a common mantis in the state as well as the European praying mantis (*Mantis religiosa*). There are no native mantises in South Dakota, though a few reach Nebraska.



The European mantis is the smaller of the two, about 2 to 3 inches, while the Chinese is 4 to 5 inches long. The Chinese mantis is more colorful with vertical stripes on the head and a strip along the edge of the forewing. The European mantis has a "bullseye" on each foreleg. The native mantises in Nebraska, the Carolina mantis (*Stagmomantis carolina*) are even smaller, about two inches long.

They do not like our winters and frequently die when the temperatures become cold, but the egg cases may survive the winter to hatch as young mantises in the spring. I find them more often in the southern Black Hills than anywhere else in the state. The winters are a little warmer here.

So why do they keep showing up here despite the overwintering mortality? It is gardeners putting out the eggs masses they purchased. Why would anyone buy an egg case to hatch mantises? They are often sold as biological controls for garden pests. The praying mantis is a stone-cold killer and will attack and eat anything about the same size or smaller, even other praying mantis (so not a good party guest).

They usually feed on caterpillars, crickets, grasshoppers, and moths. But they feed on everything, even frogs (as well as each other). They also do not reproduce very quickly and with caution as the larger female may make the suitor the dinner.

Grant County, Ash bark beetles

The tree owner had noticed some small bb size holes in the shoots of a black ash (*Fraxinus nigra*). Once we cut away some bark it revealed the tiny gray-brown adult ash bark beetles (*Hylesinus aculeatus*) burrowing into the wood.



The adults are active now, burrowing into the wood to spend the winter. They are attracted to stressed ash for these overwintering sites. Black ash is a particular favorite. We have very few black ashes left in the state. They began dying from necrotic canker (*Nectria*) about 15 years ago. This tree was also infected. Ash has more problems than just emerald ash borer!

Lincoln County, Oak lace bugs defoliating bur oak

We are seeing more bur oak blight this year, but it is not the only problem our native oak trees are experiencing in

the eastern edge of South Dakota. The bronzing leaves that are covered with small flecks are infested by the oak lace bug (*Corythucha arcuata*).



If you turn over an infested leaf, you will notice the flat, dark insects with clear lacy wings. The wings are difficult to see they are so tiny. These insects are surrounded by their dark peppery fecal pellets.



The lace bugs have been feeding all summer by sucking sap from the foliage. They have several generations per year. The adults and their nymphs can be found feeding together during the summer – it is a big picnic.

But now it is just the adults. They will drop with the falling leaves and spend the winter in the litter layer of the soil. The adult will return to the young leaves in the spring to lay eggs and the cycle begins again.

Any treatments applied now are more for revenge than control. If treatments are warranted, they are applied in the spring as the eggs hatch and the first-generation nymphs begin to feed.

Minnehaha County, Woolly oak galls on bur oak

The one inch or smaller woolly “growth” on the bur oak leaves are due to the feeding activity of the larvae of a small cynipid wasp. There are several different species of these little wasps, but they are all responsible for the galls on oak leaves.



The tiny female wasp lays eggs on the expanding oak buds. The young larvae feed on the tender leaves. As they feed, they secrete a chemical that causes the leaf to form a gall around them. The larvae live in the spongy center of these galls happily munching away while protected from predators.

This wasp does not sting people, nor do the galls harm the tree. They are more of a curiosity than a problem. There are no effective controls as the life cycle of these gall forming insects is poorly understood.

Union County, Elm oyster mushrooms on boxelders

The smooth, white mushrooms were emerging from old branch stubs in a grove of boxelders. The landowner said they appeared overnight last week. These are the elm oyster mushrooms (*Hypsizygus ulmarius*).



This is a wood decay fungus that appears in early to mid-fall, usually after a period of heavy rain. The appearance of the mushrooms indicates that there is extensive heartwood decay in the tree.

There was nothing that needed to be done nor could be done. The fungus cannot be eliminated from the host. It is a grove away from the house and the decay can take decades to cause tree failure.