**Yankton County Conservation District Newsletter**

**Why are all the evergreens “dying”?**

Dr. John Ball

I have been receiving numerous calls and pictures of dying evergreens. Most of the callers (or texters) mention the tree looked fine last year and turned brown this spring. They want to know what to spray to save their trees. Vic, from Warne Chemical in Rapid City, is receiving the same question. As Vic mentioned in our conversation, he could be selling a lot more pesticides but knows there are no treatments for winter injury.

We are seeing many evergreen pest problems this spring and they have all been discussed in the Update – Diplodia, Dothistroma, Pine wilt, Spruce needlecast among others. But the most common condition cannot be traced to a pest but the weather.

There are two primary causes for the winter injury, desiccation and freezing. While these are different disorders, the symptoms are similar. Pine foliage turns brown to tan starting at the tips often with distinct bands of discoloration along the needle. Pine foliage may turn shade of brown or even become bleached. Affected spruce needles may turn reddish brown to purple.

Winter desiccation injury has already been discussed in several recent Updates. This injury occurs when we have warm spring days, but frozen or cold soils. During the warm days, conifers are transpiring, releasing water vapor to the atmosphere, through their needles but this foliage dries out as the water cannot be replaced quick enough from the cold soils.

Winter freeze injury occurs when water in the cells freezes. This often occurs in the fall. Woody plants go through a process in the fall called acclimation where the free water in cells is reduced and replaced with a natural antifreeze. While decreasing day lengths are the trigger for this process to begin, a gradual drop in temperatures also ensures this process is completed by winter.

But a gradual drop in temperatures is not dependable characteristic in South Dakota, a land defined by extremes in weather. We had a relatively warm fall last year. Rapid City saw an October where the average maximum was 51°F and the minimum a mild 26°F. October 25th the high was 66°F but about 6 am, October 30th, it dropped to -10°F. Eastern and Central South Dakota also experience temperature fluctuation, though not quite the extreme as the western part of the state.
2020 District Prices
& Services

**Hand Plants**
Bareroot Conifers
$2.00 + tax/ bundle of 25

**Styro**
$2.25 + tax/ #10 plug
$2.50 + tax/ #20 plug

**Tall**
$4.00 + tax/ 3-4’ tree
$4.50 + tax/ 4-5’ tree
$5.00 + tax/ 5’ tree

**Pot**
$2.00 + tax/tree for 2”x 3”

**Potted**
$8.50 + tax/ #300 pot (1 gal)
$10.00 + tax/ #400 pot (1.5 gal)

**Fruits, Vines, & Shade Trees**
Anywhere from a $1.00 to $45.00 + tax depending on the species.

**Tree Planting**
$5.00/rod row for shrubs
$4.50/rod row for trees
(Minimum of $300.00)

**Cultivation/Chemical Application**
$300.00/acre (includes chemical)
(Minimum of $300.00)

**Grass Drilling**
$25.00/acre
(10 acre minimum)

**Pheasants Forever Drill Rental**
$20.00/day for Members
$80.00/day for Non-Members

**Products:**
**Live Traps**
$55.00 + tax - 12” square x 36”
$62.00 + tax - 16” square x 36”

**Fabric Staples**
104 + tax each

**Fabric**
60¢ + tax – 3 ’ x 3’ sheets
$60.00 + tax – 3 ’ x 300’ roll
$105.00 + tax – 3 ’ x 500’ roll

**Tree Tubes**
$3.50 + tax – 36” tall
$4.50 + tax – 48” tall

**Marking Flags**
$6.00 + tax – Bundle of 100

This abrupt change caught many trees, including junipers, pines and spruce, not fully acclimated yet for winter. The freezing temperatures resulted in ice rupturing cells in the needles. These dead cells resulted in needles with brown tips, banding, and green bases – symptoms that present with many conifer diseases. We can find black dots, fungal fruiting bodies, on these damaged needles but the fungus is not a pathogen, but Cladosporium, a mold fungus.

Trees affected by winter freeze or winter desiccation injury may lose many of their damaged needles and these trees will appear sparse until new needles expand. These trees will also be more susceptible to pests due to their weakened condition.

**Why are my broadleaf trees “dying”?**

Dr. John Ball

Last week I covered the issue of winter-burn and freeze injury on conifers. This week it is time to cover broadleaf trees. I am also receiving calls and pictures of what appears to be dying broadleaf trees. Most of the callers (or texters) mention the tree looked fine last year and now are leafing out slowly or not at all. Many of these same trees had leaves clinging on them for most of the winter. That is a clue to the problem – this is winter-kill due to the fall freezing temperatures.

Winter freeze injury occurs when water in the cells freezes. Despite the word ‘winter’ this injury often occurs in late fall, not mid-winter. Woody plants go through a process in the fall called acclimation where the tree water in cells is reduced and replaced with a natural antifreeze. While decreasing day lengths are the trigger for this process to begin, a gradual drop in temperatures also ensures this process is completed by winter.

But a gradual drop in temperatures is not dependable characteristic in South Dakota, a land defined by extremes in weather. We had a relatively warm fall last year. Rapid City saw an October where the average maximum was 51°F and the minimum a mild 26°F. October 25th the high was 66°F but by 6 am, October 30th, it dropped to -10°F. Eastern and Central South Dakota also experience temperature fluctuation, though not quite the extreme as the western part of the state. It was still cold with Sioux Falls reaching 40°F in early November.

This abrupt temperature change caught many trees not fully acclimated yet for winter. The freezing temperatures resulted in ice rupturing cells in the shoots and buds. These dead cells resulted in shoot dieback and slow leaf out as the new leaves are being produced from new shoots arising from adventitious buds.

The injury is not uniform across all species. Some trees exhibit determinate growth. They produce all their growth in spring and regardless of the weather during the summer and early fall they do not continue to grow. Trees with preformed growth include ash and oaks. These species were not affected by freeze injury.

Other tree species exhibit indeterminate growth. They continue to extend shoot growth as long as the weather is favorable. Trees with sustained growth include elms and hackberries. These trees are “fooled” by a warm early fall and are susceptible to abrupt cold snaps. This is one reason (the other is our spring frost) that these trees look sparse this spring. They were caught by the
sudden cold snap at the end of a mild October. This was an unusual, but not unprecedented, event. We suffered far worse tree injury in past winters. Two weather events that resulted in the loss of thousands of trees, mostly elm, were the Halloween freeze of 1991 and the Armistice Day blizzard of 1940. These dates are remembering for their mild temperatures (60 to 80°F) that quickly turned extremely cold. There are Great Plains forestry reports from both periods that noted Siberian elms by the thousands were killed or suffered extensive dieback. This spring was also hard on elms and hackberries. They were leafing out about the same time we had frost in early May. Trees that leafed out earlier, ash, had the leaves harden enough they survived the cold. Other trees, oak, had not leafed out yet and were spared. We are seeing the same problem with spruce.

FSA News

Farmers and Ranchers in South Dakota Can Now Apply for Financial Assistance through USDA’s Coronavirus Food Assistance Program

Agricultural producers can now apply for USDA’s Coronavirus Food Assistance Program (CFAP), which provides direct payments to offset impacts from the coronavirus pandemic. The application and a payment calculator are now available online, and USDA’s Farm Service Agency (FSA) staff members are available via phone, fax and online tools to help producers complete applications. The agency set up a call center in order to simplify how they serve new customers across the nation.

Applications will be accepted through August 28, 2020. Through CFAP, USDA is making available $16 billion for vital financial assistance to producers of agricultural commodities who have suffered a five-percent-or-greater price decline due to COVID-19 and face additional significant marketing costs as a result of lower demand, surplus production, and disruptions to shipping patterns and the orderly marketing of commodities.

We also want to remind producers that the program is structured to ensure the availability of funding for all eligible producers who apply.

In order to do this, producers will receive 80 percent of their maximum total payment upon approval of the application. The remaining portion of the payment, not to exceed the payment limit, will be paid at a later date nationwide, as funds remain available.

Producers can download the CFAP application and other eligibility forms from farmers.gov/cfap. Also, on that webpage, producers can find a payment calculator to help identify sales and inventory records needed to apply and calculate potential payments.

Additionally, producers in search of one-on-one support with the CFAP application process can call 877-508-8364 to speak directly with a USDA employee ready to offer assistance. This is a good first step before a producer engages the team at the FSA county office at their local USDA Service Center.

Nominations Open for the 2020 County Committee Elections

The U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) encourages all farmers, ranchers, and FSA program participants to take part in the Minnehaha County Committee election nomination process.

FSA’s county committees are a critical component of the day-to-day operations of FSA and allow grassroots input and local administration of federal farm programs.
Committees are comprised of locally elected agricultural producers responsible for the fair and equitable administration of FSA farm programs in their counties. Committee members are accountable to the Secretary of Agriculture. If elected, members become part of a local decision making and farm program delivery process.

A county committee is composed of three to 11 elected members from local administrative areas (LAA). Each member serves a three-year term. One-third of the seats on these committees are open for election each year.

County committees may have an appointed advisor to further represent the local interests of underserved farmers and ranchers. Underserved producers are beginning, women and other minority farmers and ranchers and landowners and/or operators who have limited resources.

All nomination forms for the 2020 election must be postmarked or received in the local USDA Service Center by Aug. 1, 2020 (or next business day). For more information on FSA county committee elections and appointments, refer to the FSA fact sheet: Eligibility to Vote and Hold Office as a COC Member available online at: fsa.usda.gov/elections.

New DC in Yankton County

Dan Mehlhaf of Menno started as the new District Conservationist for USDA-NRCS in Yankton County.

Dan comes to Yankton county with 30 years of experience as a conservationist working for USDA. Dan grew up on a diversified crop and livestock farm near Menno in Hutchinson County where his family still farms today. After high school, Dan attended SDSU, receiving a BS in Ag Extension with minors in Soils, Agronomy and Animal Science. Dan began his career in Pierre in 1990 and has since worked in Canton, Tyndall, and Webster before working the last 24 years in Salem as the District Conservationist. Dan has extensive experience working with cover crops, soil health, crop rotations, range management and shelterbelt establishment.

Dan’s family includes his wife Christie of 27 years and 2 children, Breanna and Mitch, and daughter-in-law Amy. Dan is active in his home community serving as a volunteer firefighter, church council member and as a board member on several other community organizations. Dan enjoys camping, hunting, classic cars and a little farming on the side.

We Have Traps!!

The district sells live traps made in the state prison. They are well built and easy to use traps for a reasonable price. If interested contact Cassie at (605) 665-6704.

HUGE Thanks to:

Dave Rye & Mike Vyborny

Thank you for all your help!!!
The Yankton County Conservation District planted 3 acres of trees this spring and had 162 acres of CRP/Non-CRP grass drilled. If you are planning on putting in a shelterbelt in 2021, please give the office a call & someone will be able to assist you with a tree plan. You will need to have your ground tilled up by the following fall. There are possible cost share opportunities that might be available to help support you financially.

Reminding folks that if they’d like to order trees for spring of 2021, you can start picking up order forms November thru February 28th. Order Forms must be in by February 28th.

Are you interested in Native and Garden Perennials? There’s availability of those as well for 2021.

Those of you that have planted trees/shrubs in tree fabric the past 5 years, or more should check to make sure the fabric isn’t girdling your trees. If trees are close to the fabric make sure to cut the fabric back. If the fabric is girdling the tree it could possibly kill it.

It helps to fertilize trees in spring & fall with 10-10-10 or 12-12-12. Make sure to water them regularly the first 3 years to get a good establishment.

“I hope you all have a safe and blessed summer!”

Your District Manager, Cassie

Mmm...Mmm...

Good Recipes

Shipwreck Casserole

Ingredients:
1 lb. ground beef
1 sm. chopped onion
1 cup chopped celery
1 can dark red beans, not drained
1 can cream of mushroom or chicken soup
1 can tomato soup
peeled & sliced potatoes to fill bowl
salt & pepper

Directions:
1. Brown and drain beef, add to bottom of a large casserole.
2. Layer onion, celery, beans, and tomato soup over beef.
3. Fill casserole with sliced potatoes, salt & pepper to taste and add your cream soup over the top.
4. Bake 1 hour at 375°.
5. Loosely covered then uncover and bake until the potatoes are done (30 minutes) more.

Serves 6-8
“Have a Safe, Blessed Summer!”

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RETURN SERVICE REQUESTED

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To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SD, Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382.

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