

South Douglas News

South Douglas Conservation District

Spring 2023

Assisting cooperators to adopt, implement and promote conservation practices which encourage good land stewardship and the protection of natural resources.

TREE AND SHRUB SALE ON NOW!

The 34th annual Tree and Shrub sale is open now. Order by March 20 and pickup at the NCW Fairgrounds in Waterville April 1. Native and cold hardy evergreen and deciduous trees, shrubs and wildflowers are available. You can go to our website and see the catalog on line. Or call the office and we can mail one to you. We order from several nurseries based on their inventory and usually have everything available. Sometimes they sell out or have a crop failure. But there are always lots of plants to choose. And we have impulse tables if you miss the pre order deadline.



(Notice this is the Spring newsletter—this snow won't last forever)

Spring Chipping Day planned for May 23. If you live in South Douglas call for an appointment by May 1. We have chipped from Waterville to Badger Mountain to Rock Island. This programs is designed to promote fuels reduction to lessen fire danger in both rural and urban areas. Check the website to see how your piles should look. (No black locust or thorny plants) Call for more information.



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2023 Tree and Shrub Sale

WHY DIDN'T MY TREES LOSE THEIR LEAVES?

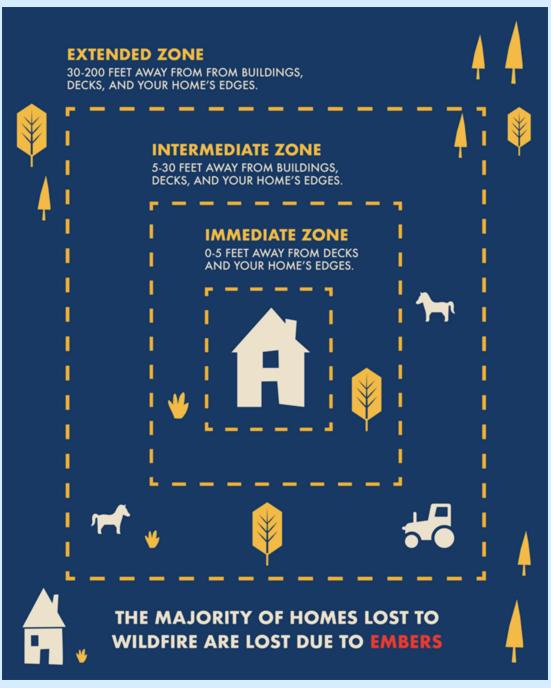
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Sometimes we plant a tree for its brilliant fall colors. The bright yellow or red leaves signal that fall has arrived. But this year many trees still have leaves on them at the end of February. What happened?

Was it an early cold snap or extra long warm spell that interrupted the change of colors and fallen leaves? As winter approaches, the leaves stop producing chlorophyll, the green pigment that gives leaves their color. That allows the other pigments like red, yellow and orange to be exposed. This allows the branches to develop their "abscission" cells that scissor off the dying leaves and seal up the stem attachments. But two things can happen to disrupt this cycle:

- 1. If we have an early cold snap, the leaves can die immediately and leaves turn from green to brown without any fall color. It also prevents the stems cutting off the leaves. This will not harm the tree. The leaves will eventually fall to the ground and new leaves will form in the spring.
- 2. It could also be a global warming effect. The cooler weather of fall reduces the amount of chlorophyll and the making of the abscission cells. Again the leaves simply remain on the tree without falling to the ground. The tree will start developing leaves in the spring.

One bad thing about the leaves hanging on the trees is they are not available for insects to overwinter under the fallen leaves. And if the leaves fall on the ice, it gives a false sense of security that the leaves are good for traction.



Wildfire Ready Neighbors

A new Washington State Department of Natural Resources program aimed at protecting property and people from wildfire has started in the state. We will work with Jake Hardt, who is based in Omak, to establish this program in our district.

Whether it is called Wildfire Ready, Firewise, Ready. Set, Go or any other program, the fact is wildfire can be a real threat to your home and community. Douglas County is revamping their Community Wildfire Protection Plan (CWPP) to concentrate on areas of concern in the county.

South Douglas CD hopes to present a series of short courses around the county to help neighborhoods protect their homes and property. Watch for announcements in future newsletters.

Fuels Reduction on Badger Mountain

We have been partnering with DNR on several parcels of land on Badger Mountain to thin stands of trees and reduce the amount of undergrowth that can encourage fire to run once it is present. We have several sites to work on this spring once the snow is melted. If you have acreage up there you want evaluated, please give the office a call. These are cost share projects and some have been 100% funded with no cost to the land owner. This is based on funding available.

What if Bees Disappeared?

Today there are over 20,000 different known species of bees, most of them wild solitary bees who live alone and not in a hive. The honey bee evolved in Afro-Eurasia about 25 million years ago. Bees are found on every continent except Antarctica. Honey bees pollinate 85% of all flowering plants.

Since 2016, bees have been dying off at record rates. Colony Collapse Disorder (CCD) affects honey bee colonies and is characterized by sudden hive death and lack of healthy adult bees. While the exact cause is not known, multiple factors are suspected—loss of habitat, decline in biodiversity, pesticides and other agriculture chemicals, climate change, pests and parasites all influence the health of the hive. Wild bees live alone and are not affected by CCD, but the factors listed also impact their sustainability.



All pollinators are crucial for plant survival. Soil, water and sunshine are vital for plants but at least 30% of crops and 90% of all plants depend on pollination to spread and survive. Pollination allows plants to produce more plants. Without pollination plants would be slow to reproduce if at all. You can see the cycle. Bees pollinate, plants reproduce, animals and humans consume the plants or animals that have eaten the plants. Through photosynthesis, plants pull I carbon dioxide and use the sun's energy to convert it into sugars and release oxygen as a by-product. Without plants, carbon dioxide will not be consumed, oxygen will not be released and the earth's climate will change.

So what might happen?

- 1. Honey will disappear. Honey is the only food source produced by an insect that humans eat. Honey is used not only for food but also medical, cosmetic and other dietary uses. It takes 12 honey bees working their entire lives to produce one teaspoon of honey. Currently American bees supply only about 50% of our needs. The rest is imported. China honey has been tainted with chemicals and heavy metals. Other imported honeys are not honey at all but sugar water and sweeteners. Currently the 120,000 American beekeepers cannot keep up with demand.
- 2. Many fruits, vegetables and nuts would not longer be available. Or too expensive. One hundred crops supply 70% of the world's food supply and pollinated by bees. Roughly one third of those fruits and vegetables found in the grocery store would no longer be available. Almonds? Forget about it.
- 3. Pollination would have to be done by humans, robots, or drones. To pollinate the nations almonds by hand it would take tens of thousands of people at a cost of over 2.8 billion dollars. Research on pollination by robots or drones is being conducted. Let's just keep the bees.
- 4. What would we eat? Without bees, our diets would be mostly grains such as wheat, rice, corn and barley. Our vegetables would be potatoes, tomatoes, onions and carrots since they don't rely heavily on bees for pollination.
- 5. Without the biodiversity of plants that bees pollinate, it would be hard to sustain the human global population of 7.7 billion people. Loss of important vitamins and minerals plant provide, reduced medications from plants, economic decline due to reduced pollination with some industries disappearing completely

What can you do? You can become an apiarist (beekeeper) and raise healthy honey bees. You can grow plants that bees and other pollinators like to encourage diversity and honey and pollen production. Protect known bee habitat. Housing developments, highways and human involvement is destroying the environments that many solitary bees depend on for their homes.

*For further reading see the March 2023 issue of Bee Culture. This is an excellent monthly magazine for those interested in bees.

Cost Share Project Facts

Am I eligible?

Landowners who live within the South Douglas Conservation District are eligible to apply for cost share. We cost share on new projects, not on projects already started or implemented.

What BMPs/conservation practices are eligible?

A BMP is a Best Management Practice defined by the Natural Resource Conservation Service, a federal agency. Ideas:

- Brush Management—Fuels reduction in forest or shrub steppe
- ◆ Irrigation System—Micro irrigation
- ♦ Windbreak
- Wildlife habitat
- Livestock Water Facility
- Dams and Terraces
- Other projects may also be eligible. What did you have in mind?



How will I get paid for my project?

SDCD can pay up to 75% of the project. Our normal reimbursement rate is 50-75% depending on our funding sources. The

landowner must keep accurate records of costs and labor involved. Payment is on a reimbursement basis—the landowner will be paid after the project has been done and inspected or approved by the SDCD.



How do I apply?

Submit a cost share application. Available on our website or call the office to get one sent to you. We need photos, description of the project an estimated budget and any other documents that might help us decide on approval of the project.

What about the budget?

If you have a project that needs professional design, you will need to get an estimate before submitting the application. If you are providing labor, our rate is \$22/hour. If you are providing equipment we would need the going rental rate.

When can I start?

You can start as soon as approval of the project is completed at a supervisor meeting and cost share agreement is signed. You must be completed by June 15 and provide complete financial records at that time.

South Douglas Conservation District

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Please recycle.

2023 NCW Envirothon

South Douglas will be hosting the NCW Envirothon this year, April 27 at the Badger Mountain Ski Hill. Students from area high schools will be tested on Wildlife, Forestry, Soils, Water and this year's current topic—Adapting to a Changing Climate. If you would like to be involved, give the office a call. It is a good way to get outside and enjoying the kids and learning,

