

Living in Nebraska, I know that spring is unpredictable. Between the snow and the thunderstorms, it's hard to know what's coming next, but I think it is safe to say that spring is officially here for the year. Now, I'm not saying we won't have another snowstorm, but we can start doing our spring related garden activities, while keeping an eye on the weather. Unfortunately, Nebraska winter is not always kind to our plants, and can cause injury due to how cold and dry our winters can sometimes be.

One of the most common winter injuries that I see is frost cracking. This occurs as a result of rapid drop in temperature. The outside bark will expand at a different rate than the wood on the inside of the tree due to the outside bark experiencing more of the heat and the sudden change of temperature. As the outside bark expands more than the inner wood, it will cause strain and will eventually crack. If you have ever been outside during the winter and heard a loud snap, this was more than likely a frost crack forming in a nearby tree. These frost cracks can change size depending on the season as the wood expands and contracts with the temperature changes. During the summer the heat will cause the wood to expand, making the frost crack smaller, and the cold will contract the wood, making the crack larger. Unfortunately, there isn't much that can be done for these trees, other than to maintain their health to not open them up to other health problems, such as insects and disease. But on a better note, frost cracking in a tree won't kill a tree, it just affects how it looks.

Sunscald is another very common injury that is noticed in early spring. This is also a result of rapid change in temperature, but this occurs mostly in the outer bark, and on the south or southwest side of a thin barked tree, such as a maple. It is typically the south side because that side of the tree receives the most sunlight. The outer bark is warmed by the sun, and when the sun goes down, the temperature drops rapidly, potentially killing off the inner bark because it doesn't have enough time to adjust to the abrupt change in temperature. It is generally noticed in spring because the bark will start to peel on the south side where the injury has occurred. The risk of sunscald can be lowered by using wraps on susceptible trees starting in the late fall. But if tree wraps are left on too long in the spring they can also cause injury to the tree.

The last type of injury that I'll look at today is called winter desiccation. Desiccation simply means drying out. Because of the dry winters here and the steady wind, it can cause plants to lose moisture faster than their roots can replace it. This is why it is typically recommended to water your trees during the winter on days that are above freezing. Winter desiccation is generally seen on evergreens, both broadleaved and narrow leaved. A minor desiccation injury is a browning of needle tips. A more serious injury can cause entire needles to turn brown and drop off the tree. It is typically seen on the side of the tree that the wind comes from during the winter. Depending on the severity of the injury, winter desiccation will more than likely not kill your tree.

Nebraska winter can be dry and have some abrupt temperature changes, both of which can cause issues for your plants. But if you see these injuries on your plants, you can know that it will affect how the plant looks, but it won't kill your tree. If you have any questions or would like to suggest a topic for me to write about, feel free to contact me at the Buffalo County Extension Office, at 308-236-1235, or mearnest2@unl.edu.