



The dry conditions have wreaked havoc on the landscape. The extent of the damage has been inconsistent. With some plants, the damage has been minor. With other plants, the extent of damage might not be fully realized until this later this spring or into the summer. Inspecting in on your trees and shrubs now can help to decide if your plants survived or if some new plant material is in your near future.

Being observant of plant material can help determine if the damage was minor or a little more severe. Brown or discolored foliage doesn't always mean the plants are on their way out or beyond the point of no return. In addition to dry conditions, winter desiccation can also cause many evergreens to change colors. Evergreen trees and shrubs are constantly losing moisture through their leaves during the winter. Winter desiccation happens when the root system can't absorb enough moisture to keep up with the amount lost by the leaves. It causes evergreens to have a brown or tan coloration at the ends of the needles. The damage usually occurs uniformly on the north or west sides of the tree or on the side that has a comprised root system. In most instances, supplemental water during the winter and spring can help to provide the much-needed moisture and help to alleviate the symptoms.

Determining whether the branch or plant is alive is the next task. There are a couple of options that you can use to test whether the twigs of a plant are alive. Take one of the plants' brown branches near the end and try to bend the twig. If the twig is still pliable and the buds are big, healthy, and green looking, the branch is still alive and moving nutrients throughout the plant. If the twigs snap off readily and the buds appear brown and shriveled, the twig may be dead. Another option is to scrape away the outer layer of bark on the twig to determine whether the branch is alive. A live branch will have a green cambium layer, which moves nutrients, underneath the bark while a dead branch will have a brown layer. The last way to determine the fate of your plant is to wait to see if leaves or new growth emerges. Once new growth or leaves have emerged, the branches without growth or those obviously dead can be pruned away.

Some plants will do well in Nebraska only for a little while. It takes a really trying year to find out which plants in our landscape are not extremely well-adapted to our growing conditions. Some of the plants that have fallen victim to Nebraska growing conditions this past year were the *Arborvitae* and poorly placed yews, *Taxus sp*. Both plants can work in Nebraska and become tolerant to dry conditions once mature, if they are placed in locations where they would receive a little more shade. If these evergreen shrubs didn't receive enough moisture during the growing season, they will turn brown or tan. Once these evergreens turn ever brown, they will not fully recover.

Even hardy, drought tolerant plants suffered this last year. Colorado blue spruce, *Picea pungens*, are known for being tolerant of a wide range of difficult conditions. This spring I have already noticed several spruce with either brown needles, or in one instance, no needles at all. Unfortunately, once the tree goes completely brown, it will not come back and should be removed.

Making sure drought stressed plants have enough water this spring is going to be critical. In the absence of rain, supplemental water may be necessary. Aim to apply enough water to moisten the top 8 to 12 inches of the soil. Monitor the soil moisture and only water when the upper few inches of soil are dry. A 2-to-3-inch layer of mulch will help to conserve soil moisture as well.

Being observant now can help to determine what plant material has handled the dry conditions well and which ones might need to be replaced. Hopefully we can get some more moisture soon, but until then, provide additional water to help trees and shrubs thrive this year.

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