

# HORTICULTURE NEWSLETTER

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## MANY TREES ARE UNDER STRESS

I have been busy evaluating many stressed and even dying trees in Saline and Ottawa counties, and the most common questions I hear is "What is causing such a quick decline in my tree?"

Accumulated stress is in many of these cases the likely reason for sudden death of the tree. In some cases the tree actually leafed out and then died, and in other cases the tree never leafed out at all.

The strange thing about accumulated stress is that it shows up in the tree much later than the time it actually occurs. For example, last fall much of the area was very dry, and so far this year we have seen variable weather from extremely dry to extremely wet with many large temperature shifts. Much of the damage I am seeing now is most likely a result of these factors and the stress that has built up over the last several years.

Many buds and new growth on trees have also been damaged, and this has resulted in leaves that have not been able to function properly during the windy and warm days of summer. In many trees the terminal growth dropped while the leaves were still green or turned a yellowish green color.

Many trees seem to have withered almost overnight. It seems that they had enough energy reserves to put out some leaves, but then depleted the reserves and died suddenly. It is important to rule out insects and disease problems on these trees, but in many cases stress looks to be the cause of the decline.

If you have a tree that is acting strange, here are some tips as you contemplate what to do.

-Before a tree is cut down, check the twigs. Dead trees will have brittle, dry stems that snap. Live stems may break, but they won't be dry. If the tree is alive, give it some time to see if it will put out a new set of leaves.

-Trees that lose individual branches should have those branches cut out to reduce the chance of disease and infection.

-Trees that are losing leaves through the loss of new growth or a general thinning should be fine. If the thinning is severe enough, the tree will grow a new set of leaves from dormant buds.

-If you suspect you have any stressed plants, water them if we do not receive rainfall. Trees should be watered every two weeks. Trees transplanted within the last couple of years should be watered every week. Water to a depth of 12 to 18 inches to reach the majority of tree roots. Check depth of watering by pushing a wooden dowel or metal rod into the soil. It will stop when it hits dry soil.

Evergreens are also struggling

Last fall's weather was also very hard on many Kansas evergreens including arborvitae, junipers, and cedar trees. The fall was extremely dry across much of Kansas. Winter also brought some very low temperatures. This combination hit evergreens even harder than deciduous trees because evergreens aren't dormant through winter.

Damaged evergreens don't grow back easily and if the damage is severe enough it may be best to remove and replace the plant. Often when evergreens trees and shrubs are hit hard with environmental stress it leads to other disease problems since the plant is in a weakened condition. This has been seen especially in arborvitae plants with the invasion of Seiridium canker. This canker disease is able to penetrate weak plants and cause branch dieback and can even kill the plant.

If you have an evergreen plant that has incurred branch dieback it is best to prune out the affected branches. Be careful to avoid wounding plants that are under stress since this will increase the chances of disease infection. Reducing stress by watering during dry periods is also recommended.