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Drought Information

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July 7, 1989

Drought stress on trees

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Dry weather like the summer of 1988 will have a lasting effect on shade and forest trees. Add some of our variable Missouri weather such as the dry weather earlier in this growing season, and further stress on these trees will be apparent.

Drought stress on trees can manifest itself in many ways. Symptoms may develop quickly or take several years to become noticeable. You may notice premature leaf drop, curling and browning of leaves, dieback of branches, or a general thinning of leaves all over the tree. In many cases, roots were damaged during the drought, and the tree is compensating by a reduction of its' leaf surface.

Trees stressed by the drought are weakened, thus making them more susceptible to disease and insect attack. Other factors such as compaction of the soil over the roots, damage to roots or trunk because of nearby construction or any combination of factors can lead to serious damage to trees.

Improving the growing conditions for the trees, whether it be in the yard or the forest can improve the health of trees. In the case of shade trees, deep watering during times of prolonged dry weather can benefit the trees as can mulching around the base of trees.

In the forest setting, optimal spacing to reduce crowding for moisture and nutrients can help reduce damage by drought. Aiding nature's system of competition in the forest through thinning or a timber stand improvement program will improve the remaining trees' growth and reduce drought stress. Removing weak and dying trees in the forest can help prevent buildup of secondary insect and disease problems.

Selecting trees properly suited to the soil and site conditions of the timber plantation location can greatly improve the survival of the newly planted trees. This also applies to shade trees, although watering, mulching and more intensive care is possible in the home landscape.