

Reversing Continued Tree Decline

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we started reporting on tree decline due to drought conditions in 2000. Since then, decline symptoms have increased in number and intensity. Different species have shown varying responses to the drought.

Spruces have suffered the most. Their needle drop is increasing, and in 2006, they produced a very heavy crop of cones (known as a “stress crop”). They have directed their energy from normal, life-maintaining functions to that of reproduction. This happens because they have become so stressed that reproduction becomes the main priority. Silver maples, elms and some other species are also having “stress crops” which has hurt leaf production.

Drought damage has played a big role in an increased susceptibility to fungal leaf spot diseases. This has caused early defoliation in ash, maples, hawthorns and crabapple trees. Increased wood-boring insect activity in oaks, ironwoods and evergreens has also occurred causing physical injury to the tree or even tree losses. Consecutive years of these stresses and drought are causing many trees to enter a “death spiral” from which it can be very difficult to recover.

This downward momentum is significant. Only proper care, applied **consistently** can hope to reverse it. It is necessary to first slow the tree decline, then stop it, and finally, reverse the loss in vigor. This is accomplished by controlling and/or removing the various decline agents and providing care matched to the tree’s requirements. Too often care is stopped at the first sign of improvement. This allows symptoms to recur because the tree still has not built up sufficient energy reserves for defense on its own. Depleted energy reserves (and declines) come from *years* of harmful stresses. Only **years of good growth** will restore these reserves. When stability returns to a tree’s condition, it will take less care to maintain that state, although periodic maintenance is still advised to promote health and defense to avoid problems.

We are concerned that the moisture we received during the last half of 2006 will give the impression that the danger is past. This is a misconception. Historically, trees take up to five years to recover from an extended drought.

Trees *can* be saved through consistent, superior care, which we can provide at Wachtel Tree Science & Service. Our recommendation is that your **tree care prescriptions** be carried out so insect and disease agents can be minimized and feeder root numbers increased. This will enable your trees to steadily make improvements and avoid removal due to death or loss of beauty.