

On Gardening: As drought drags on, here's how trees will suffer

By Elinor Teague Special to The Bee

“June drop” on citrus, “July dieback” on redwoods, and “summer/sudden limb drop” (SLD) on large healthy trees are natural occurrences in the plant world. But with this fourth drought year, the severe crop loss of June drop, the amount of redwood dieback and the frequency of sudden limb fall may increase significantly as trees struggle to deal with limited water supplies to their roots and with high transpiration rates during the hottest months.

- **Citrus trees**, as well as other fruit trees, commonly set much more fruit than the tree and its branches can hold. In June, citrus trees shed the excess immature fruit, all at once. Overnight, the ground is littered with tiny fruit as well as a good amount of leaves and some twigs.

Lack of sufficient irrigation is the most common cause of crop loss in fruit and nut trees. If your citrus trees continue to drop immature fruit, if the leaves curl up (a moisture conservation reaction) or if leaf fall is heavy, consider increasing irrigation. Sprinkler water will not soak the soil to the necessary depth of at least one foot. When the top three to four inches of soil is dry, use soaker hoses or a bubbler attachment on a hose to slowly soak the soil for several hours. Plan on weekly irrigation; more often when temperatures are high in July. Supplement irrigation with shower bucket water as needed.

- **Redwoods** are native to cooler coastal regions with high rainfall amounts and foggy nights and mornings; our high summer temperatures combined with dry air and dry soil really stress redwoods. In summer, the interior needles often turn brown and fall and branch tips may also turn brown. There have been many reports of severe tip dieback on redwood tree tops during this prolonged drought.

Redwood roots form a shallow mat that lies just under the canopy. The feeder roots that draw up rain water and fog condensation droplets lie at the outer edge of the canopy. Supplemental slow irrigation by soaker hoses, drip emitters or bubbler attachments should be placed at the drip edge and the soil should be soaked to a depth of one foot. Allow the fallen needles to remain under the tree as a water-conserving mulch and do not cut off lower branches that shade the tree roots.

- **Summer/sudden limb drop** on large, healthy trees often has no obvious causes. No signs of disease, rots, or insect problems in the broken limbs. A sudden cracking on hot windless days is followed by a deep thud when the limb falls. Common observations of fallen limbs show several probable contributing factors to limb fall. Improper pruning, especially over thinning, which removes most interior secondary branches, leaving all the weight concentrated at the end of the branch can be one factor. Weak branch structure can be another. Limbs can also break off if the tree has produced an extra heavy seasonal load of flowers and seed pods, as often happens with Southern magnolia trees.

Because SDL is more common during drought years and hot weather it is thought that the movement of water within a mature tree somehow becomes unbalanced and that that imbalance causes large limbs to fall.

Send your plant questions to Elinor Teague at etgrow@comcast.net or features@fresnobee.com (“plants” in the subject line).