

HORTICULTURE NEWSLETTER

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HOT WEATHER IS AFFECTING PLANTS

It's not rocket science to figure out that heat affects plants, but many people don't realize how much plants really are affected by a relentless hot summer.

High temperatures (typically above 90 degrees) actually speed up the normal processes of plants to the maximum level. The higher the temperature, the more the plant suffers and the longer the high temperatures last, the greater the injury.

Soils are also affected by the summer heat, especially in containers. As the soil stores more and more heat, shallow rooted and container grown plants will begin to wilt during very hot afternoons-even if there is no shortage of water. This will in turn lead to foliage burn on the plant.

Wind is another factor that contributes to heat stress by evaporating vital moisture out of the plant faster than the plant can replace it. This also causes foliage to dry out and results in brown tips and foliage dieback. In a plant with a stressed root system even a soil with plenty of moisture won't remedy this problem.

All these factors lead to a stressed plant and the loss of plant foliage. This in turn can lead to a plant getting sunburned (yes it can happen to plants too.) Trees especially can experience sunburning on tender bark.

What to do?

One of the best ways to battle the heat is to plant native types of plants that are more adapted to handling high temperatures. Look for heat tolerant replacements for any plants that have been killed this summer.

Make sure to plant any landscape plants during times when roots can establish quickly. The old adage is true "grow the roots and the plant will take care of itself." Fall and spring are good times to establish plants.

Irrigation will be a must during high temperatures as well. Deep and infrequent irrigation is always preferred, but irrigation scheduling and amounts must be specific to the soil and site. Many container plants may actually need to be watered up to twice a day during very high temperatures. Even large trees that are under stress may need additional water. A thorough watering to at least 12" deep every two weeks will help get a weak tree through the summer. For new trees this watering should be once a week.

Be cautious with fertilizer during high temperatures. Fertilizers that are quickly taken up by the plant during a stressful period can lead to fertilizer burn. Use slow release fertilizers and fertilize with caution. It is better to fertilize more frequently with less fertilizer if fertilization must be done during summer heat. Fall makes a great time to fertilize many plants and help them recover from summer stress.

Organic mulches are always a good idea. A few inches of an organic mulch around the rootzone of a plant will shade the soil and prevent large temperature swings. It will also help reduce evaporation from the soil surface.

A stressed plant is always more susceptible to disease, so always monitor for pests that may pose a threat to gardens and landscapes. A watchful gardener will catch preventable problems before they create a damaging situation.