Beat The Heat
By Marge Grimes, Kingman Area Master Gardener

It is easy to predict the summer weather in Kingman. Hot, dry, and windy come to mind immediately. We adapt to these conditions by adjusting our outdoor activities.

But our outside plants are stuck, literally and figuratively.

Just as hot, dry winds cause moisture loss from our skin, hot, dry winds can cause moisture loss from plant foliage. The first symptoms are drying and browning at the tips and edges of older leaves. Tender new tip growth usually wilts.

Intense sunlight on our skin may inflict sunburn on us, but intense sunlight on plants may stunt plant growth. Yellowish, whitish brown spots can develop on the upper leaf surface of mature foliage.

We perspire and lose salt when it is extremely hot. Salt accumulation in the soil increases and plant growth will slow or become stunted. Browning at the tips and edges is a sign to notice.

What can we do to help our plants?

1. Perhaps it is feasible to move plants to an area where the sunlight is less intense. Fall is an ideal time. Make sure the plant has a ball of soil around its root system. Prune the top back by at least one-third.
2. Develop a good year-round watering schedule. Deep watering encourages deep roots. Wait as long as possible between waterings.

3. Deep watering will keep the soil salts washed downward and out of the root areas.

4. Don't water too frequently during the cooler seasons. Too much water held in the soil will encourage root rot. The root system suffers all year.

5. Apply organic mulch on the soil surface. A 2 to 3 inch layer shades and cools the soil temperature, reduces soil evaporation, and helps reduce soil salt build-up.

All of the above helps promote a healthy root system. This, in turn, enables the plant to tolerate the hot, dry summer weather.

6. Another important consideration is to replace plants with heat-adapted and drought-tolerant varieties.

If you do replace existing plants with desert plants, you have not eliminated the chore of watering them. Desert plant are experts at conserving and storing water. The secret is to give them just the right amount of water. Most people water too much.

There are variables that determine how much and how often plants need water. Soil, temperature, age, and size are things to consider.

**Soil:** Our soil here is usually clay, sandy, or a combination of the two. Soils with a high clay content will hold moisture well, sometimes too well for desert plants. Sandy soil allows the water to pass through
quickly. Therefore, it follows that you cannot water plants growing in these different soils with the same amount of water. Either soil can be amended with limited amounts of organic matter. Clay soil benefits with an addition of sand.

**Temperature:** Desert plants grow when it is warm. More water is needed in warmer months because of the high temperatures and high evaporation rate.

**Age:** All plants need more water when they are young.

**Size:** Small, immature plants are more stressed by heat and water loss.

All new trees and shrubs require regular, deep watering for one to two years.

The following is a general guide to watering new plants. Again, think about the soil, plant size, and plant age.

**WATERING SCHEDULE FOR YOUNG SHRUBS**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>1st year</th>
<th>2nd year</th>
<th>After 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>108 degrees +</td>
<td>every day</td>
<td>every 3 days</td>
<td>every week</td>
</tr>
<tr>
<td>100 degrees +</td>
<td>once a week+</td>
<td>every 10 days</td>
<td>every 2 weeks</td>
</tr>
<tr>
<td>90-100 degrees</td>
<td>every 10 days</td>
<td>every 2 weeks</td>
<td>every 3 weeks</td>
</tr>
<tr>
<td>75-90 degrees</td>
<td>every 2 weeks</td>
<td>every 3 weeks</td>
<td>every 4-5 weeks</td>
</tr>
<tr>
<td>-75 degrees</td>
<td>every 30 days</td>
<td>every 30 days</td>
<td>every 4-5 weeks</td>
</tr>
</tbody>
</table>
## WATERING SCHEDULE FOR TREES

<table>
<thead>
<tr>
<th>Temperature</th>
<th>1st year</th>
<th>2-5 years</th>
<th>After 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>108 degrees +</td>
<td>every 2 days</td>
<td>every 10 days</td>
<td>every 3 weeks</td>
</tr>
<tr>
<td>100 degrees +</td>
<td>once a week</td>
<td>every 10 days</td>
<td>gradually extend to 4 weeks</td>
</tr>
<tr>
<td>90-100 degrees</td>
<td>every 10 days</td>
<td>every 2 weeks</td>
<td>gradually extend to 6 weeks</td>
</tr>
<tr>
<td>75-90 degrees</td>
<td>every 2 weeks</td>
<td>every 3 weeks</td>
<td>water if no rainfall for 60 days</td>
</tr>
<tr>
<td>-75 degrees</td>
<td>every 30 days</td>
<td>every 30 days</td>
<td>water if no rainfall for 60 days</td>
</tr>
</tbody>
</table>

*Have a great summer! This goes for your plants, too!*  

For more information contact The University of Arizona Mohave County Cooperative Extension at 101 E. Beale Street, Suite A, Kingman or telephone 928-753-3788.

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