

LESSON 4: IRRIGATION PART I

SUMMER PLANTING WITH CALIFORNIA NATIVE PLANTS

Yes, you can plant California natives in the summer! However, it can prove more challenging than planting in fall and winter due to the added stresses of summer conditions. Realistic expectations and an understanding of your plants' basic needs are the keys to successful summer planting.

Let it be noted that in coastal gardens it is easier to plant most native plants any time of year. Farther inland, summer transplants require special attention, especially with watering.

Plants

Most native plants are adapted to wet winters and dry summers, yet in order to establish new plants in the summer, they must be watered more regularly. For this reason, the easiest plants to get established in summer are those that tolerate year-round moisture. This includes **riparian** (streamside) plants and many species of **grasses**. In general, shade lovers can also be planted safely during the warm months. Desert plants are accustomed to highly unpredictable summer rainstorms and they, too, can be planted at this time.

Certain plants can be difficult to establish in summer, particularly in inland gardens. If you are new to gardening with natives, you may want to wait until fall or winter to plant the following: *Arctostaphylos* (manzanita), *Ceanothus* (California lilac), *Fremontodendron* (flannel bush), *Romneya* (Matilija poppy), and *Trichostema* (woolly blue curls). These plants are especially sensitive to summer watering.

Watering

Deep and infrequent watering is advised at all times of year. Roots need both water AND air, so give new plants water periodically, but do not keep the root ball continually wet (unless it is a plant that requires constant moisture, such as *Erythranthe cardinalis*). Check soil moisture periodically by probing carefully with your finger or hand trowel near the plant's root ball, since you may find that this area dries out faster than the surrounding native soil and, once dry, is extremely difficult to rewet. Water only if the root ball is dry 3"-4" (1-2" for plants that were transplanted from 4" pots) below the surface. Soak it and the surrounding soil thoroughly. The crown of the plant is particularly sensitive to long periods of moisture, so keep mulches away and allow this area to dry out between watering.

How often you water will depend upon the weather, the plant, and the soil in your garden. There is no formula for watering, and different techniques work for different people. The first summer, you may find yourself watering anywhere from twice a week (for very sandy soils) to once a month (for very heavy soils).

About clay soil: Clay soil can be a blessing or a curse. On one hand, it means less frequent watering (you may need to water new plantings only once every 2-4 weeks in summer). On the other hand, it is easy to over-water. Clay soils are made up of very fine particles that absorb water slowly, let in very little air, and stay wet for long periods of time, so always check the soil moisture before and after watering. Inland gardeners with clay soil will want to choose plants carefully and consider waiting until fall to plant all but desert and riparian plants and grasses.

Tips for Summer Watering

- Water in the early morning. If inland, it is also okay to water at night.
- Avoid watering on extremely hot days. Instead, water on days before or after an expected heat wave.
- Let the top 3"-4" of soil dry out between watering (see note above about smaller plants). Do not water if the surface is moist.
- With new plantings, be aware that the potting soil the roots came in may dry out more quickly than the surrounding soil. Until the roots move into the surrounding soil, you will need to check both soils and make sure the original root ball is adequately wetted.
- If stem tips are wilting and the soil is moist, your plant is most likely responding to heat, not drought. If your plant is properly placed (for example, a full-sun plant in a full-sun spot), it will probably adapt to its new setting within a few weeks. Temporarily shading plants from intense western or southern sun can help.
- Plants in sandy soils will need to be watered more often than plants in heavy soils.
- New plantings will need to be watered more frequently than established plantings.
- Keep an eye on new plantings during the first few weeks after installation, especially smaller sized containers, which will dry out very rapidly before rooted into the soil.
- Except for plants that naturally grow in or near a year-round water source, native plants are adapted to winter rains and summer drought. During dry winters, it's important to give plants supplemental irrigation **in winter** to fortify them for the rest of the year.
- Beware of watering established *Trichostema lanatum* (woolly blue curls) and *Fremontodendron* (flannel bush) during the hot months. These plants dislike ANY summer water. For this reason, they can be very difficult to establish in spring and summer.
- A "nurse rock"—a softball- sized or larger rock placed on the southwest side of the crown of the plant—will shelter the crown and roots from heat, help the soil retain moisture, and function as a natural drip system as your plant gets established.

Signs of Stress

- **Heat Stress:** Intense heat can cause tender new growth to wilt even when the plant has been watered well. Shading plants temporarily can help reduce stress. Make sure that you have chosen the appropriate spot for your plant. If it is in a spot that is too sunny, you may see yellowing or burning of the leaves, or wilting that persists after temperatures have cooled.
- **Under-watering/Drought Stress:** Symptoms of under-watering vary. On *Ceanothus* and *Arctostaphylos*, look for brittle yellow leaves that fall off easily. On *Salvia*, look for curling, upturned leaves. On *Sphaeralcea* and *Erigeron*, look for wilting. If your plant is wilting during the heat of the day and perking up as temps cool in the evening, check your soil—it may not be necessary to water. Again, temporary shade can help.
- **Over-watering:** Symptoms of over-watering can be similar to those of under-watering and often do not appear until it is too late. Look for dull and/or drooping leaves (especially new growth) and *damp* soil around the base of the plant. It is not water itself that kills the plant, but rather soil pathogens activated by warm, wet conditions. To prevent disease, allow the top 3"-4" inches of soil to dry out between watering and maintain a thick layer of mulch around plants (except desert plants) but not touching their stems and crowns