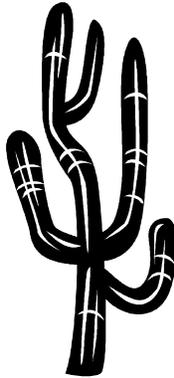


Irrigating Native Southwest Trees and Shrubs

Although native southwest plants have developed mechanisms for conserving and storing water, none have given up the need for water entirely. Plant root systems have a great capacity for compensatory growth. In areas of soil where conditions are favorable, the root will proliferate, compensating for areas that are less favorable. There are many variables that determine how much and how often plants need supplemental irrigation.



Southwest native trees include such trees as: Arizona cypress, desert willow, New Mexican locust, Pinyon pine, and Ponderosa pine.

Some examples of Southwest native shrubs are: turpentine bush, rabbit brush, 4-winged saltbush, desert zinnia, butterfly milkweed, sand cherry, Apache plume, cliffrose, Mormon tea, native sages, agave, cactus, and yucca.

Many low-water-use shrubs that are not Southwest natives do well with these irrigating guidelines. Some examples are: rosemary, lavender, Russian sage, and Autumn sage.

Soil

Soils with a high clay content hold moisture well, sometimes too well for native plants. A cubic foot of clay soil will hold 1 to 1 2/3 gallon(s) of water, compared to a sandy soil, which holds only 1/3 to 2/3 gallon of water per cubic foot of soil. High-clay soils can be amended with a limited amount of organic matter. Most soil, however, should not be amended. Native plants will adjust better in native soil.

Temperature:

Most native plants grow when it is warm. Active growth coupled with high evaporation rates means that more irrigation is needed in warmer months.

Age and Size

All plants, even native plants, need more frequent irrigation when they are young and when they have been recently transplanted.

Trees and shrubs require regular, deep irrigation for the entire first one to two years after transplanting. This is true regardless of the size of the plant when it was transplanted.

Irrigating New Trees and Shrubs

The following is a general guide for irrigating new plants. For your own yard, take into consideration the soil, plant size, and plant age. Watch the plants carefully. If they wilt, begin to lose their leaves, or have stunted growth or leaves look dull, you may need to increase irrigation.

Small plants, such as those from 1-gallon containers, need to be irrigated twice a week when temperatures are over 100°. When temperatures are over 105°, keep a close watch on newly transplanted plants. Smaller plants may need to be irrigated every day, or at least every other day.

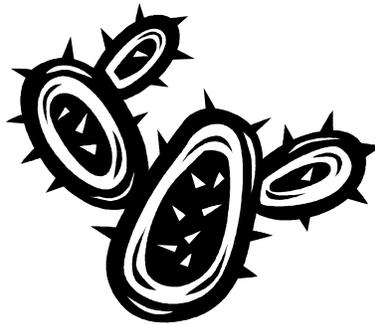
Drip Irrigation

If you are using a drip irrigation system, be sure that the system runs at least two hours for each irrigation. This will ensure that the plant is being watered deeply. About every fifth irrigation, let the drip run for 8 to 10 hours. This will leach away any salts that have accumulated around the plant.

Irrigating Schedule for Shrubs			
Temperature	1st Year	2nd Year	After 2 Years
Over 108°	Every day	Every 3 days	Every week
Over 100°	Once a week	Every 10 days	Every 2 weeks
90° - 100°	Every 10 days	Every 2 weeks	Every 3 weeks
75° - 90°	Every 2 weeks	Every 3 weeks	Every 4-5 weeks
*Below 75°	Every 30 days	Every 30 days	Every 4-5 weeks

Irrigating Schedule for Trees			
Temperature	1st Year	2nd Year	After 2 Years
Over 108°	Every 2 days	Every 10 days	Every 3 weeks
Over 100°	Once a week	Every 10 days	Gradually extend to every 4 weeks
90° - 100°	Every 10 days	Every 2 weeks	Gradually extend to every 6 weeks
75° - 90°	Every 2 weeks	Every 3 weeks	Water if no rainfall for 60 days
*Below 75°	Every 30 days	Every 30 days	Water if no rainfall for 60 days

* Applies year round (including winter months if temperatures are above freezing).



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 Adapted from Desert Botanical Garden, 1993

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