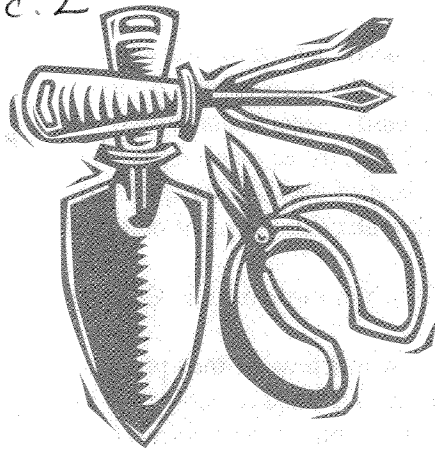


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Home Landscape Watering During Drought

no. 7.240

by J. Klett¹

Quick Facts...

Follow watering programs encouraged or mandated in your community.

Landscaping increases property values by 10 percent to 15 percent so proper maintenance of existing landscapes during drought is critical.

Xeriscape® principles can help keep landscapes attractive and water efficient.

Water your landscape according to its needs and at night, not during the heat of the day.

Trees should be given highest priority during drought.

Soaker hose or drip irrigation is a more efficient way to deliver water near roots.

Landscaping that includes trees, shrubs, lawns, gardens, and flowers improves our quality of life. It enhances our homes and businesses, and helps the environment by cleaning the air, controlling erosion, and providing shelter to wildlife.

Quality landscaping increases property values by 10 percent to 15 percent. It is expensive to replace existing landscapes and new landscapes need water to become established. Therefore, proper maintenance of existing landscapes during drought is critical.

Besides adding economic value to your property, landscapes improve air and water quality. Trees help remove carbon dioxide from the air and turf helps reduce the heat island effect by transpiring moisture. Trees shade your home and healthy turf helps reduce the cost of home cooling.

Most of Colorado is semiarid and periods of drought are common. Growing landscape plants is difficult even in normal years, and especially during drought years. If you're installing a new landscape or retrofitting an existing one, Xeriscape® principles help keep the landscape attractive and water efficient. The following suggestions can help keep a landscape attractive and water efficient.

- **Shrub and Mulch Beds.** Enlarge beds under trees to drip lines and beyond if possible. Use organic mulch such as bark or wood chips. Mulched shrub beds can extend outward along the edge of the house to reduce the total amount of turf area.
- **Soil Amendments.** Add organic matter to the soil before planting trees and shrubs to help retain moisture, improve texture, and add essential nutrients.
- **Irrigation Systems.** Make sure your irrigation system works properly and consider redesigning it to become more efficient. Installing drip irrigation to apply water directly to the soil wastes less water.
- **Proper Plant Selection.** If you're replacing existing landscape plants, choose plants appropriate to the site. There are many attractive dryland landscape plants that are low water users once established.
- **Mulching.** Use organic mulch such as woodchips, bark, dried leaves, or evergreen needles to retain soil moisture. Mulched areas under trees, shrubs or perennials can reduce water use by as much as 50 percent compared to maintaining a bluegrass lawn on the same area. A 4-inch layer of mulch helps regulate soil temperature. This ultimately results in less stress on plants between hot summer days and freezing winter nights. Mulch also results in less weed growth and easier weeding of landscape beds.

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Water Wisely and Efficiently

- Water your landscape according to its needs. Check the soil moisture before you water. One simple way to do this is to insert a 6-inch screwdriver into the soil. If it goes in easily, water is not needed.
- Water at night, between 6 p.m. and 10 a.m. (or as otherwise mandated by local restrictions), not during the heat of the day. Set sprinklers to water only the landscape and not sidewalks, driveways, or other paved surfaces.
- Skip watering on days following 1/2 inch or more of rain. On cloudy, cool days plants use less water.
- Check your sprinklers to determine how much water they place in the landscape. Place shallow containers, such as tuna cans, in various spots under the sprinklers. Measure the water depth in the cans after a specified time period to determine how long you should water.

Trees

During drought, trees should receive the highest priority since it takes years to replace them.

- Trees obtain water best when it is allowed to soak into the soil slowly to a depth of 12 inches. Methods for watering trees include: deep-root fork or needle, soaker hose, or soft spray wand. Apply water to many locations under the dripline and beyond if possible. If you use a deep-root fork or needle, insert no deeper than 8 inches into the soil.
- Apply 10 gallons of water per inch of a tree's diameter (measured at knee height). For example, a 2-inch diameter tree needs 20 gallons of water.
- During fall and winter (October thru March) water one to two times per month when no lawn watering is allowed. In spring and summer (April thru September) when no turf watering is allowed, water weekly to two times per month depending on the size of tree, weather, watering restrictions, temperature, and soil conditions. Visit www.watersaver.org for specific amounts and times.
- Proper maintenance of trees can help them survive during drought. Don't fertilize trees that are stressed, since fertilizer salts may burn roots when there is not sufficient soil moisture present.

Prioritizing Watering Needs

- **Newly transplanted trees** (top priority) and young trees (1- to 7-inch diameter) have a limited root system and need supplemental water even when not experiencing drought conditions. Generally it takes one full year per inch trunk diameter for trees to become established.
- **Trees growing in a restricted root zone**, such as those in landscape strips between sidewalk and streets, also need higher priority.

Flower Gardens

- **Prepare the soil before planting.** Add organic matter or compost 1 to 2 inches deep and till in to a 12-inch depth. This aides in maximum water efficiency and growth.
- **Mulch.** Add 1 to 2 inches of organic mulch between flowers to reduce evaporation and control weeds.
- **Select plants and flowers by their specific water and sunlight needs.** Gray-leaved annuals and perennials are often more drought tolerant. Spring bulbs are drought avoiders as they complete their life cycle prior to the onset of hot weather.

- **Newly Planted Flowers.** Check and water flowers daily (if allowed by water districts), if needed, for the first two weeks after planting. Gradually reduce watering to twice weekly.
- **Method of Watering.** Soaker hoses or drip irrigation is more efficient since it delivers water near roots. Hand watering is another alternative that maximizes delivery of water to soil and roots.

Vegetable Gardens

An adequate supply of water during the growing season is directly related to produce quality and yields. Unlike bluegrass and some landscape plants, vegetables cannot go dormant when water supply is inadequate. For productive vegetable gardens that need less water, consider the following:

- Amend the garden with organic matter.
- Practice efficient irrigation—drip, trickle, or soaker hose is ideal.
- Check soil moisture between watering to avoid over-application.
- Know critical watering periods for your specific vegetable crops.
- Mulch to minimize evaporation of water from soil surface. Grass clippings make an excellent mulch in thin layers (less than 3 inches) for the vegetable garden.

For more drought information visit the following Web sites:

- www.ext.colostate.edu
- www.watersaver.org
- www.greenco.org

Fruit Gardens

- Use mulch around grapes, raspberries, strawberries, and fruit trees. Consider using a drip irrigation system. Drip is more efficient than over-head spraying.
- Fruit trees—water as described for trees.

Lawns—January to June Care

- **Fertilizing.** March to June fertilization is recommended, using a mixture of quick and slow release nitrogen.
- **Aerating.** Highly recommended spring lawn care practice.
- **Mowing.** Set mowing height at 2 1/2 to 3 inches and mow at the same height all season. Do not remove more than 3/4 inch of grass at any single mowing. Recycle grass clippings into the lawn.
- **Weed Control.** Use pre-emergent herbicides for prevention of crabgrass, foxtail, and other grassy weeds. Water in pre-emergent herbicide with at least 1/2 inch of water as soon as possible after application.

Watering the Lawn

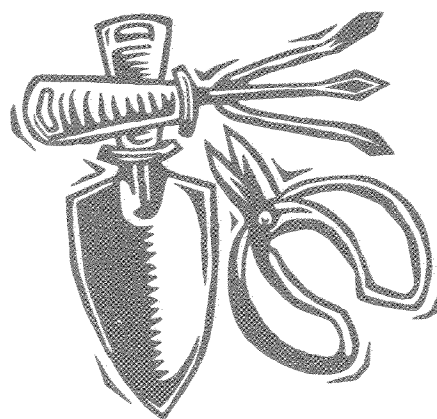
- Follow watering programs encouraged or mandated in your community.
- Begin irrigating the lawn as soon as it is allowed in the spring.
- Refresh your understanding of your irrigation system and control clock. Set clocks to water between 6 p.m. and 10 a.m.
- On watering day, apply 3/4 to 1 inch water, slowly enough that runoff and puddles do not occur.
- Cycle through irrigation stations by applying smaller amounts and repeating cycles to allow water to soak in more thoroughly.
- Hand water small or isolated dry spots where sprinklers don't overlap.
- Wetting agents specifically designed for use on turf can temporarily reduce the occurrence of water repellent conditions in lawns.

For lawn recommendations during other times of the year (July thru December), visit <http://csuturf.colostate.edu>.

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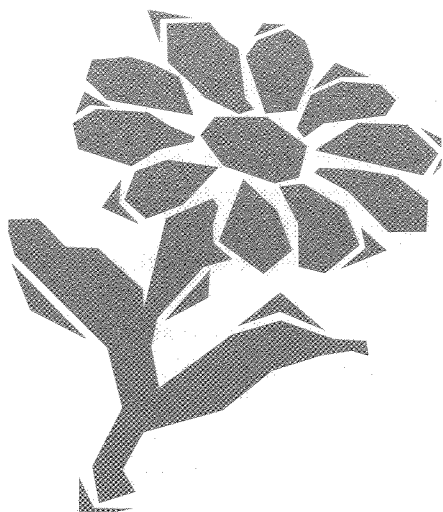


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