

Drought Gardening

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You may see the term “xeriscaping”, referring to dry climate gardening. Many often think just of deserts, and cacti and succulent plants, with this term. But with dry climates periodically in much of the country now, this term means much more and definitely does not mean "zero-scaping". Following some drought-wise garden water tips, you can have your water, and your garden too.

Watering

- If you have water restrictions in your area or town, find out just what they cover. If not too severe, they may just cover lawn sprinklers and not watering of gardens.
- Water in the early morning, when there is less heat and wind, and so less water lost to evaporation. Timers on automatic watering systems make very early watering much easier.
- Don't use overhead sprinklers, which may lose over half the water on a hot day to evaporation. Instead use manual watering, soaker hoses or drip systems. Soaker hoses are merely permeable hoses, often of recycled materials, that allow water to soak through them slowly. Placed on beds near plants, they allow water to slowly soak into the root zone. Cover these with mulch, and they lose even less water to the air, and are invisible.
- Water deeply and less often rather than for shorter periods more often. This allows water to penetrate deeper, and so encourages deeper roots which are more resistant to drought. Lawns and bedding plants should be watered to at least 6 inches deep. Perennials, shrubs and trees should be watered to at least 12 inches deep. Check your sprinkler or rainfall with a rain gauge, available from garden and hardware stores. One inch of water will wet a sandy soil to a depth of about 12 inches.
- Water established plants only if “really” needed and once they begin to wilt. Many perennials and woody plants may wilt, and not perform best if dry, but will survive. This is especially true if they were healthy and well-watered prior to drought conditions. Only a few perennials such as false spirea (*Astilbe*) have leaves that turn brown and don't recover if dry, but have to generate new leaves.

Collecting, Saving Water

- Repair leaks in hoses and fittings. This may be as simple as replacing the washers in hose fittings. A slow leak of one drip per second can lose 9 gallons of water a day, 260 gallons a month. A faster leak, filling an 8 ounce cup in 8 seconds, wastes 675 gallons a day, or 20,000 gallons a month!
- Collect wasted and “gray” water from the household. The latter is rinse water from washers, and from washing dishes. When adjusting the hot and cold in baths and showers, collect in a bucket the water that would normally go down the drain before the temperature is adjusted. Also collect and use water from dehumidifiers or window air conditioners.
- Collect water from downspouts of gutters, or divert these into flower beds.

Cultural Practices

- For flowers and vegetables, use wider spacing to reduce competition for soil moisture, mulching in between plants.
- Use 3 to 4 inches (after settling) of organic mulch (pine bark, straw or similar) to prevent soil from drying and losing moisture to the air. Keep such mulch away from trunks, and off the top of desirable perennials. Plastic mulches in vegetable and annual flower gardens in which plants are spaced regularly, or around shrubs, can help as well. Or use thick layers of newspapers in rows, covered lightly with mulch.

- Incorporate organic matter into the soil, which will aid in water retention. Compost also adds nutrients, but breaks down faster than peat moss—another common amendment. Peat moss lasts longer in the soil, at least a year or more, but adds few nutrients and acidifies the soil. Water absorbent materials (hydrogels) can help dry sandy soils.
- Fertilize less, both less in amount and less often, and avoid too much high nitrogen fertilizer. Too much nitrogen results in excessive growth, and need for water by plants. Organic fertilizers provide less, and over a longer period usually, and they help soil humus which helps hold water.
- Choose and place plants properly. Don't choose plants that prefer moist, and place them in a dry area. And choose plants more resistant to drought. As mentioned at the beginning, there are many other plants other than cacti and succulents such as those with deep tap roots (baptisia or false lupine), thick storage roots (daylilies), or those with waxy coated leaves (sedum). Perennial flowers need water when newly planted, but once established require much less water than annual flowers. Native plants may be a good choice as well.
- Don't apply pesticides that might cause injury to stressed plants, or in heat, or that need to be watered in.
- Avoid pruning when plants are stressed and not growing, and so unable to heal wounds quickly. Pruning also may stimulate side shoots and more growth, and so more need for water.
- For evergreens, use antitranspirant sprays on leaves that help prevent water loss. Or erect windbreaks around such plants, if they're small or new, and a windy area. Burlap strung between posts is effective. For routinely windy sites, consider planting a more permanent windbreak of spruces, firs or other evergreens to screen other plantings.
- Use hoeing and soil cultivation of weeds sparingly. Continually disturbing the soil surface will result in it drying out much faster. You may have to merely cut weeds off at the soil surface, or use contact or systemic herbicides, and save the cultivation until drought conditions ease. At least the bright side is that under drought, weeds wont grow as fast either! But keep weeds down, as they compete with more desirable plants for water.

Container plantings

- Move container plants to more shaded areas.
- Use pottery containers that are glazed on the outside, which prevents much water loss. Or use plastic containers, or set plastic containers if unattractive into more attractive outer pottery ones.
- Don't crowd too many plants into containers, or use large containers for large plants. This will help keep them from drying out so often, and requiring watering daily or more often.

Lawns

- Leave grass clippings to act as mulch and recycle nutrients and some moisture.
- If seeding lawn areas, or repairing areas, use drought resistant grass types such as fine fescues.
- If water is not available, allow grass to go dormant. Unless extreme conditions for a long period, it will usually begin growing again once conditions improve.
- Don't mow grass when it is dormant and not growing. Even when growing, set the mower height at 2 to 3 inches high. High mown grass develops deeper root systems that are better able to withstand drought.

If water is restricted or in short supply, give highest priority to the following:

- Newly planted trees, shrubs and perennials
- Newly seeded lawns or repaired lawn areas
- Plants on sandy soils or windy and exposed sites
- Vegetables when flowering