

Water-Conservation Tips for a Difficult Time

Neil Sperry, Neil Sperry's GARDENS Magazine



We never know how long a drought will last, and we never know when the next one is going to start. Water conservation is everyone's responsibility, and to that end, I've prepared a list of water-saving tips (along with some related good gardening practices). Other specialists in related industries will be joining us, so that you will soon see a united coalition of industry leaders trying to protect landscapes and gardens while, at the same time, conserving every possible drop of valuable water.

Sprinkler Systems

- Work with a licensed irrigation contractor for all new installations, as well as repairs to existing systems.
- It's best to water deeply, then let the soil dry before watering again. That encourages deeper, better root development on all plants.
- Learn to recognize signs of dry plants (subtle changes in color, wilting, folding or rolling of leaves). Wait until you see those symptoms before allowing sprinklers to run. We Texans have historically overwatered our landscapes and lawns.
- Your licensed irrigator may suggest bubblers, low-angle and other water-conserving options. New concepts in water conservation are being developed constantly, and you may want to retrofit your old system to include them.
- "Smart" controllers do conserve a significant percentage of water used in irrigating landscapes and lawns – if they are installed by a licensed irrigation contractor, if their operation is explained to you, and if the systems are maintained properly. They are definitely worth considering.
- Conduct an irrigation audit. Have someone advance your system station-by-station as you check all heads for proper operation.
- Heads, plants, exposure and soils vary within the same landscape. Adjust your system so that all stations will dry out at approximately the same rate. This will require periodic changes in the time settings. It is quite likely that each station will run for a different length of time in order to water to the same depth.
- Watering frequency will vary greatly from season-to-season. It is very likely, for example, that you may not have to run sprinklers at all during normal winters. Do not leave sprinkler timers set on regular intervals ("every day," "every two days," etc.). It would be better to leave them in the "Manual" mode, so that you can determine when they need to run.
- If a station appears to have very low water pressure, it is likely that there is a broken pipe or head that is allowing most of the water to leak. Check all of the heads on that station, and make any necessary repairs.
- Sprinkler heads that are not spraying evenly may be partially or totally clogged. Unscrew the head and rinse out its filter/strainer. Be sure the head is properly aligned as you reassemble it.
- Trim grass, shrub or groundcover growth away from heads that are partially blocked. If necessary, raise the heads by installing short extenders.

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- If you find wet spots in your lawn or landscape days after you water, there is probably a valve that is not closing completely. The leak will be slow, and it will be from the lowest head on the station. (Note: the valve at fault may be at some distance from the wet spot.)

Turf Management

- Choose a drought-tolerant type of turfgrass. Bermuda and buffalograss are equally drought-tolerant. However, bermuda is the more dominant grass of the two. If bermuda is being grown in, or is native to, your neighborhood, stick with it. You'll end up with it eventually anyway.

- Note that bermuda requires 6 to 8 hours of direct sunlight daily. If you have only 4 to 6 hours, St. Augustine would be your alternative. While St. Augustine does use water more liberally than bermuda, most people apply much more than it really needs. If St. Augustine is your only alternative due to shade, learn to water it prudently.

- Learn to recognize signs of dry turf. Bermuda will turn olive-drab in hot, sunny locations. Its blades will roll. Zoysias react similarly. St. Augustine will turn to a darker, dull and glossy green shade, and its blades will fold. If you leave "footprints" in the turfgrass blades as you walk across the lawn, the grass is dry.

- Increasing mowing heights by one notch can help your turf survive dry conditions better. Don't raise the mower too high, however, or you'll end up with weaker grass that is more prone to invasion by weeds.

- Use labeled herbicides to reduce populations of water-consuming weeds. Your Texas Certified Nursery Professional can advise you of the best types for your weeds. Some types can be removed manually.

- Water your lawn in the early morning. Winds are lightest then, so coverage will be most uniform. Humidities are higher, so less water will be lost to evaporation. Evening waterings have most of those same benefits, but leaving turf wet overnight may lead to diseases.

Landscaping

- Choose water-conscious plants. That doesn't necessarily translate into "native" plants. It's best to ask your certified nursery professional for plants that are adapted to your locale and your specific landscaping needs, regardless of where they are native. Concentrate on plants that are able to withstand periods of drought without excessive consumption of water.

- Reduce the percentage of your landscaping footprint that is planted into growing plants by use of mulched beds, decorative stones and other hard surfaces. The final look can be just as appealing, but water consumption can be cut.

- Use gray water (from the clothes washer, for example) to irrigate landscape plants whenever possible. Rain barrels and cisterns can help by capturing rainfall, although it may take several/many vessels to provide a meaningful supply.

- Prepare the planting soil carefully, especially for plants that will be comparatively small at maturity (annuals, perennials, groundcovers and low shrubs). Ask your Texas Certified Nursery Professional to help you choose the best amendments to improve your soil, allowing better water penetration into clays and better moisture retention in sands.

- Create a water basin around each new plant. That will allow you to soak the plant's soil by hand-watering with a garden hose, since all of the plant's roots will be in that original soil ball initially.

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- Mulch landscape beds with 2 to 3 inches of organic mulch (compost, bark, shredded tree leaves, etc.). Mulches reduce soil-to-air interfaces. They slow runoff, and they moderate rates at which soils heat up in summer. They also retard germination and growth of weeds, eliminating water the weeds might consume.
- Fertilize landscape plants during spring and fall of dry years, just to keep them healthy and reasonably vigorous. This can be done as you feed your lawn, or you can make separate applications to landscape beds. Use a quality plant food, with half or more of its nitrogen in slow-release form. In periods of extreme drought and water curtailments, reduce recommended rates of application by half.
- Trees compete with turfgrass and shrubs for available water whenever they share the same soil. If, however, you feel that you need to provide water to large trees, do so with a soaker hose. Most of their roots will be in the top foot of soil, so soaking surface applications are best. The roots that will be most efficient in taking up the water will be near the outer edges of the foliar canopy (drip line).
- Young trees (less than two or three years in your landscape) can be watered via soaker bags placed around their trunks, or you can leave the retention basins in place and fill them as needed.
- Sprinkler irrigation alone will not be adequate for new landscape plants. Supplement sprinkler irrigation by hand-watering their soil balls for the first year. During water curtailments, hand-watering alone will keep the new plantings alive.
- Established landscape shrubs and groundcover beds will dry out more quickly than large trees, and their cumulative value can be significant. However, just a few waterings per summer can save them. They may not grow vigorously given the reduced watering plan, but they can hold their own until better times return. Drip irrigation, soaker hoses or bubblers are efficient ways to deliver the water to them.
- Weeds are notorious wasters of water. Hoe them out, apply a suitable herbicide according to label directions, and mulch to discourage them.

Signs of Over-watering

Ever lose a plant and wondered if you might actually have kept it too wet? Probably not. Sure, it does happen occasionally, but not as a norm. Plants that are kept too wet, as well as plants that have stood in wet soil for many days after a rain, often wilt overall, even though their soil is still very moist to the touch. It's best not to water any plant that is wilted if its soil is still wet. It wastes water, and it may be the final blow to the struggling plant.

It's critical that each of us conserve every possible drop of water, whether during droughts or coming out of rainy weather. We never know when the next drought may begin. If we join together, we will be able to enjoy the world's greatest hobby as we keep our cities attractive and inviting.

For ongoing tips about gardening and water conservation, subscribe to Neil Sperry's free e-gardens newsletter by visiting www.neilsperry.com.