The "Take Care of Texas" Guide to Yard Care

Do your part for the environment, starting in your own yard. The *"Take Care of Texas" Guide to Yard Care* will help you maintain a healthy yard, save money, and take care of our state's varied landscapes.

Why Take Care of Texas?

Texas is a beautiful state rich in diverse resources. As Texans, it is our job to make sure our state remains a beautiful and healthy place to live. To accomplish this goal, all Texans need to do their part. The Take Care of Texas campaign is designed to involve all Texans in simple changes that will help keep our air and water clean, conserve water and energy, reduce waste, and save individuals a little money in the process. For more information, please visit <TakeCareOfTexas.org>.

Water Conservation

Lawn and garden watering make up nearly 40 percent of total household water use during the summer. Finding ways to use less water will not only help conserve this precious resource, it will also save you money on your water bill.*

Irrigate Efficiently

Much of the water applied to lawns and gardens is never absorbed by plants. The greatest waste of water results from applying it too rapidly or too often. Water applied too rapidly is lost as runoff, which may carry polluting fertilizers and pesticides to streams and lakes. Some water evaporates when it's applied to bare, unmulched soil, or in the hot afternoon.

Sprinkler systems offer an effective method for irrigation, if used properly. Make sure that sprinkler heads are adjusted to avoid watering sidewalks and driveways. Also, a properly adjusted sprinkler head sprays large drops of water instead of a fine mist, which is more susceptible to evaporation and wind drift.

Drip irrigation and soaker hoses offer an efficient method for watering vegetables, ornamental and fruit trees, shrubs, vines, and container-grown plants. Drip irrigation slowly applies water to the soil by flowing, under low pressure, through emitters, bubblers, or spray heads placed at each plant. Water applied by drip irrigation is not likely to evaporate or run off.

Soaker hoses require less equipment and are easier and less expensive to install than drip irrigation. A soaker hose is a porous hose that can be connected to an outside faucet, a garden hose, or a rain barrel and laid out along the base of the plants. The hose allows water to seep out along its length.

For more information on irrigation practices, see *Landscape Irrigation: A "Take Care of Texas" Guide* (GI-409) at <www.tceq.texas.gov/publications/gi/gi-409.html>.

Avoid Overwatering

Watering too heavily or too often weakens your lawn and causes erosion and runoff pollution. Excess irrigation can also leach nutrients deep into the soil away from the plant roots, increasing the chances of polluting the groundwater. Similarly, runoff caused by excess irrigation can carry polluting fertilizers and pesticides to streams and lakes.

Most lawns receive twice as much water as they require for a healthy appearance. Water should be applied to lawns infrequently, yet thoroughly. To know when it's time to water your lawn, simply observe your grass. Wilting and discoloration are signs of water stress. At the first sign of wilting, you have 24 to 48 hours before damage to your lawn occurs. A general rule is to

**Always comply with your water system's water-use restrictions.*

water one inch, once a week.* An easy method for watering one inch is to place an empty 6-ounce tuna can on your lawn and stop watering when it is full.

Watering infrequently but thoroughly also strengthens root systems, helping your lawn to efficiently use the water that's stored in the soil.

Water in the Morning

Watering in the morning will save water from being evaporated by the midday heat. Watering in the morning will also help your plants stay healthy, since watering late in the evening or at night keeps leaves wet for an extended period of time, which increases the chances of disease and some pests.*

Practice Grasscycling

Grasscycling refers to the practice of leaving grass clippings on the lawn to decompose into soil. Grasscycling will not only cut down on your watering needs, it will make your turf greener and tougher by preventing common turf diseases and reducing the need for lawn fertilizer. The key to grasscycling is to mow at the proper height and disperse the grass clippings evenly, so that they can work their way down to the soil. Mowing grass too short causes stress, discourages deep root growth, and results in rapid loss of soil moisture.

Mow often enough so that each mowing removes no more than one-third of the grass blade. For example, if you set your cutting height at 2 inches, you should cut your grass before it's more than 3 inches tall.

When the mowed grass clippings remain on the yard, they can act as a slow-release lawn fertilizer, while also helping to retain soil moisture. This reduces the need for watering and can eliminate the need for fertilizer. This, in turn, helps to keep fertilizers out of storm drains and, as a result, out of rivers, lakes, and bays.

Try Composting and Mulching

Yard trimmings make up 20 percent of the waste generated by Texans each year. Instead of throwing them out with the garbage, recycle these materials by composting or mulching them.

Mulch can consist of wood chips or shavings, leaves, or grass clippings, and serves to retain soil moisture, prevent erosion, suppress weeds, and protect plants from temperature changes. Composting is the controlled, accelerated decomposition of organic material such as yard trimmings, kitchen scraps, wood shavings, cardboard, and paper. Compost provides valuable nutrients when mixed into the soil, and can also make good mulch.

By using mulch and compost on lawns and gardens, Texans could reduce the need for outdoor watering by 30 to 60 percent.

For more information, see *Mulching and Composting: A "Take Care of Texas" Guide* (GI-36) at <www.tceq.texas.gov/publications/gi/gi-036.html>.

Collect and Use Rainwater

By collecting rainwater and using it on your lawn, plants, flowers, trees, and shrubs, you can save water and money. In fact, by collecting rainwater from just 10 percent of the residential roof area in Texas, we could conserve up to 27 billion gallons of water annually. Using collected rainwater has three major advantages: it reduces runoff pollution, it can reduce your utility bills (the water is free!), and it is healthier for plants than treated water.

Systems for harvesting rainwater can be as simple as placing a barrel beneath a gutter downspout to collect a small amount of water for use on gardens and plants. Rain barrels are simple to install and can be made easily at home. For instructions on how to make your own rain barrel, see *Rainwater Harvesting with Rain Barrels: A "Take Care of Texas" Guide* (GI-383) at <www.tceq.texas.gov/publications/gi/gi-383.html>.

To collect more rainwater, consider installing a large system using cisterns, which can collect thousands of gallons of water. For information on constructing a larger rainwater-harvesting system, see *Rainwater Harvesting* (GI-404, reprinted courtesy of the Texas A&M AgriLife Extension Service) at <www.tceq.texas.gov/publications/gi/gi-404.html>.

Keep Our Water Clean

The quality of water is improving statewide, thanks to efforts by cities, industries, and individuals. However, we all need to do our part to help keep our lakes, rivers, and streams clean for their intended uses—whether it's for swimming, fishing, or drinking.

Reduce Runoff

Rainfall runoff pollutes water by carrying soil, fertilizers, and pesticides to nearby streams. Composting and grasscycling are both great ways to help reduce runoff pollution, because they prevent erosion, increase your soil's ability to absorb and retain water, and reduce the need for fertilizers.

Use Fewer and Better Pesticides and Fertilizers

Perhaps assuming that more is better, residential users apply more pounds per acre of synthetic pesticides and fertilizers than farmers do. However, more is *not* better, since overwatering (or a rainstorm) can wash fertilizer away—wasting your money and contaminating nearby waterways with pollution. There are less toxic, even natural, substitutes that are just as effective.

If you do choose to use pesticides and fertilizers, however, it is very important to your health and the environment to always apply the product according to the label's directions, use only the recommended amount, and adjust your watering accordingly.

**Always comply with your water system's water-use restrictions.*

Keep Our Air Clean

Despite having the fastest growing population of any state in the country, Texas has seen significant improvement in air quality over the last ten years. We all need to continue to do our part to keep our air clean, and a great place to start is in your own yard.

Many people who use power lawn equipment contribute to air pollution unintentionally, by handling fuel carelessly and by maintaining their equipment improperly. By adopting simple, common-sense practices, consumers can help reduce emissions and keep our air clean.

Avoid Spilling Gasoline

To prevent spills and overfills, try the following tips:

- Use a gasoline container you can handle easily and hold securely. When you pour, do it slowly and smoothly.
- Use a funnel or spout with an automatic stop device to prevent overfilling. Keep the cap or spout and the vent hole on gasoline containers closed tightly.
- Transport and store gasoline and power equipment out of direct sunlight, in a cool, dry space.
- At the gas station, use caution when pumping gasoline into a container.

Maintain Your Equipment

Follow the manufacturer's maintenance guidelines, including the following practices:

- Change the oil and clean or replace the air filters regularly. Make sure you recycle your used oil at a collection center. To locate a center near you, go to <www.tceq.texas.gov/p2/hhw/hhw.html>.
- Use the proper mixture of fuel and oil in equipment with two-stroke engines.
- Get periodic tune-ups, maintain the mower's blades, and keep the underside of the mower's deck clean.
- Protect your equipment from the elements when not in use.

Reduce Mowing Time

Use low-maintenance turf grasses or grass-and-flower seed mixtures that grow slowly and require less mowing. Check with your local Texas A&M AgriLife Extension Service office or retail lawn and garden center about what is appropriate for your region.

Consider replacing turf-grass with native and adapted trees, shrubs, and flowers. Doing so reduces the energy needed to heat and cool your house, and provides habitat for wildlife. Native wildflowers and plants require little or no maintenance after planting.

Consider Cleaner Options

For each hour of operation, one typical gas-powered lawn mower emits 11 times more air pollution than a new car. Forty million American lawn mowers consume 200 million gallons of gasoline per year, and gas-powered garden-tool emissions account for an estimated 5 percent of the nation's air pollution. When it's time to replace your lawn equipment, ask your dealer about the new, cleaner-operating equipment entering the marketplace.

Use Manual Tools

Tools without motors—electric or gasoline—are especially handy for small yards or small jobs. Hand tools—like shears, edgers, and push reel mowers—are lightweight, quiet, easy to use, and do not generate emissions.

Landscape Design

Creating a healthy, low-maintenance landscape starts with a well-planned design that offers many benefits to you and the environment. Sketch your yard with locations of existing structures, trees, shrubs, and grass areas. Then consider your landscaping requirements, limitations, and considerations regarding budget, appearance, function, maintenance, and irrigation.

Take note of slopes, and consider including buffer zones of turf grass or other thick vegetation to absorb runoff from buildings and patios, and to reduce runoff into driveways and streams. Including lawn edging and hard surfaces between turf and other landscape features also discourages weeds and reduces the need for trimming and herbicides.

Group together plants that have similar watering needs, to prevent overwatering and excessive plant growth.

For more information on landscape design, visit <earthkind.tamu.edu>.

Plant Selection and Care

Using native and well-adapted plants is one of the easiest ways to create a low-maintenance and environmentally sound yard. Plants that are native or well adapted to your area will:

- use less water,
- reduce the need for soil modification,
- require little or no fertilizer,
- be less susceptible to pest problems, and
- be more tolerant of stressful environmental conditions, such as drought.

Incorporate a variety of plants to provide food and cover for a variety of living things. Diversity also minimizes damage from pests, because many of them attack only one plant species. Dense plantings can provide shade that keeps out invading weeds.

Avoid frequent or deep cultivation, which can damage plant roots, dry out the soil, disturb healthy soil organisms, and bring weed seeds to the surface where they can germinate. Cover all bare soil between plants with a solid mulch layer.

Consider planting deciduous trees on the south and west sides of your house and around your air conditioner. Because deciduous trees lose their leaves in the winter, they can save you energy by keeping your home shady and cool in the summer, yet allow the sun to shine through windows to warm your home in the winter.

Grass Selection and Care

Turf grasses require more frequent watering and maintenance than most other landscape plants. Select grass carefully according to its intended use, planting location, and maintenance requirements, and make sure to choose turf that is compatible with your region and environment.

St. Augustine and Bermuda grasses are most often used for lawns in Texas. Zoysia, buffalo, and centipede grasses are used less often but are also good options.

In most landscape areas, turf grasses have the highest water demand and the highest maintenance requirements of all plants. Planting the lowest-water-use turf grass adapted to your region is an effective way to reduce the need for landscape irrigation. Also, mow grass at the proper height to both conserve water and strengthen grass roots.

Avoid narrow strips or odd shapes of turf grass that will be difficult to irrigate without wasting time and water. Other forms of ground cover or alternative plant areas can also reduce your ongoing expenditures of time, energy, water, and money.

Additional Resources

General Information

Texas Commission on Environmental Quality
www.tceq.texas.gov

Texas Water Development Board
www.twdb.texas.gov

Texas A&M AgriLife Extension Service
agrilifeextension.tamu.edu

Yard Care Resources

Texas A&M AgriLife Extension, EarthKind
earthkind.tamu.edu

For more information, contact:

Pollution Prevention and Education, MC 108
Texas Commission on Environmental Quality
PO Box 13087
Austin TX 78711-3087
512-239-3143
www.tceq.texas.gov

The *"Take Care of Texas" Guide to Yard Care* is meant to be a general overview of ways you can help to Take Care of Texas in your own yard. For more detailed information, see the following other TCEQ "Take Care of Texas" guides at <TakeCareOfTexas.org/news-publications/publications>:

- *Mulching and Composting* (GI-36)
  www.tceq.texas.gov/publications/gi/gi-036.html
- *Rainwater Harvesting with Rain Barrels* (GI-383)
  www.tceq.texas.gov/publications/gi/gi-383.html
- *Managing 10 Common Texas Yard Pests* (GI-405)
  www.tceq.texas.gov/publications/gi/gi-405.html
- *Managing Lawn Problems in Texas* (GI-407)
  www.tceq.texas.gov/publications/gi/gi-407.html
- *Landscape Irrigation* (GI-409)
  www.tceq.texas.gov/publications/gi/gi-409.html

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