

A QUICK GUIDE FOR HOMEOWNERS

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GLOSSARY

Evapotranspiration (ET): The process by which water is transferred from the land to the air through evaporation from the soil/surrounding surfaces and transpiration from plants.

Infiltration: The movement of water into the soil.

Licensed Irrigator: A professional licensed by the Texas Commission for Environmental Quality (TCEQ) to install, maintain, inspect, or design landscape irrigation systems.

Precipitation Rate: The speed at which water is being applied to a specific area. Typically described in inches over time.

Runoff: The movement of water and the substances carried in it off of an area. Lawns that are rich in clay, steeply-sloped or compacted are more susceptible to runoff.

Soil Compaction: Compression of the soil that restricts water, air and root growth.

Thatch: The layer of living and dead material between the leaves and the roots of your turfgrass.

Visible Wilt: Visual indicators of turfgrass stress including wilt and discoloration. When turfgrass does not "bounce" back quickly after being stepped on, this can also indicate drought stress.

MOWING

TASK

Mow at the upper end of the appropriate mowing height range for your species of turfgrass.

Follow the **1/3 Rule**.
Don't remove more than 1/3 of your total turfgrass height at one time.

EXPLANATION

Taller Grass = Deeper Roots.
 Deeper roots can improve overall water **infiltration** and access to water deeper in the soil.

Scalped grass is stressed grass.
 Stressed grass will be less tolerant to heat and drought, and more vulnerable to other pests or fungal pathogens.

RESOURCES & COMMENTS

For more information on appropriate mowing practices, download **Mowing Recommendations for Warm-Season Turfgrass** by visiting

the AgriLife Bookstore
<https://www.agrilifebookstore.org/>

OR the AggieTurf Website:
aggieturf.tamu.edu/publications

IRRIGATION

TASK

Water established turfgrass **deeply and infrequently**.
Try to water to a depth of approximately 6" each time you water.

Irrigate only in response to **visible wilt** OR to replace approximately **60% of evapotranspiration (ET)**.

Turn irrigation off when turfgrass is not actively growing (dormant).

Water early in the morning.
Typically between around 3am and 9am is ideal.

EXPLANATION

Watering deeply and less frequently (no more than 1 - 2x per week in the summer) promotes deeper rooting that improves turfgrass tolerance to stresses like drought and traffic.

To save water, irrigate only when you see visible wilt. Alternatively, irrigation can be programed based on weekly ET data for your region. On average, replacing 60% of reference ET will help to keep your warm-season lawn looking healthy. This amount can be adjusted some based on your species and use of the area.

Warm-season turfgrass lawns do not generally require irrigation during winter months when they are not actively growing. Watering during this time can be wasteful and can lead to weeds and disease that can harm your lawn.

Watering early in the morning will reduce evaporative losses, improve **water-use efficiency**, and reduce how long turfgrass is exposed to moisture which can help **prevent disease**.

RESOURCES & COMMENTS

Texas A&M AgriLife has several great resources for education and materials that promote **water conservation** and **ET-based irrigation** throughout the state.

Here are a few to check out:

The Texas ET Network:
<https://texaset.tamu.edu/>

Water My Yard
<https://watermyyard.org/>

Water University
<https://wateruniversity.tamu.edu/>

The Texas Water Resource Institute
<https://twri.tamu.edu/about/>

Want more information on turfgrass disease prevention? Visit aggieturf.tamu.edu/ AND the **Texas Plant Disease Diagnostic Lab** at <https://plantclinic.tamu.edu/>

IRRIGATION (CONTINUED)

TASK	EXPLANATION	RESOURCES & COMMENTS
<input checked="" type="checkbox"/> Monitor your irrigation system carefully throughout the year.	Broken or malfunctioning irrigation equipment can both waste water and create areas in your lawn that are too dry or too wet. Replace broken heads, and consider a routine irrigation audit by a licensed irrigator .	A catch can audit can be used to both evaluate irrigation system performance and determine the precipitation rate for your system.
<input checked="" type="checkbox"/> Learn the precipitation rate for your irrigation system.	Understanding your irrigation system's precipitation rate will enable you to water a known amount and follow recommendations for ET-based watering programs.	Check out AgriLife Water University's video on the Catch Can Method and try it for yourself at home! https://www.youtube.com/watch?v=1nlwZ_imn9w&t=2s
<input checked="" type="checkbox"/> Use the Cycle and Soak Method .	Because sprinkler precipitation rates usually exceed soil infiltration rates, cycle soaking improves soil water infiltration and reduces runoff by "pulsing" water onto the lawn in small amounts over several hours.	Find additional information on the Cycle and Soak method by visiting the Water University Website : https://wateruniversity.tamu.edu/irrigation/cycle-and-soak/
<input checked="" type="checkbox"/> Take advantage of rainwater.	<p>Rainwater harvesting can help you take advantage of natural precipitation and store it for later use when water is scarce.</p> <p>Don't forget to shut off irrigation systems both during and immediately following significant rainfall events.</p>	Check out these programs on rainwater harvesting, or contact your County Extension Agent for local resources: Healthy Lawns and Healthy Waters https://hlhw.tamu.edu/ Water University https://wateruniversity.tamu.edu/ AgriLife Extension's Rainwater Harvesting https://rainwaterharvesting.tamu.edu/

PLANTING AND CULTIVATION

TASK	EXPLANATION	RESOURCES & COMMENTS
<input checked="" type="checkbox"/> Select an appropriate turfgrass.	Different turfgrass species and varieties will each have their own strengths and weaknesses. Choose a turfgrass well-suited for your unique circumstances. Consider irrigation/precipitation, water quality, shade, average temperatures, and use.	Check out the publication Turfgrass Selection for Texas available for download from the AgriLife Bookstore: https://www.agrilifebookstore.org/
<input checked="" type="checkbox"/> Prior to planting new turfgrass, focus on good site preparation.	Strive to prepare a 6 to 12" root zone prior to planting new turfgrass. This may include soil cultivation (tillage), incorporation of soil amendments and pre-plant nutrients. In some cases, the addition of top soil material may be beneficial when root zones are shallow.	Turfgrass Establishment for Texas: http://gillespie.agrilife.org/files/2013/02/Turfgrass-Establishment-for-Texas.pdf Texas A&M AgriLife Extension Soil, Water, and Forage Testing laboratory: http://soiltesting.tamu.edu/
<input checked="" type="checkbox"/> Cultivate as-needed to promote infiltration and root health.	Cultivation practices including aeration and verticutting can help to manage excess thatch and soil compaction which can both affect water infiltration and root development.	Contact your local County Extension Agent for additional input. Some professional landscape companies will offer cultivation (aeration, dethatching) as additional services for a fee.

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