

Managing Lawn Problems in Texas

A "TAKE CARE OF TEXAS" GUIDE

Choose Your Turf

When properly maintained, turfgrass can have a positive impact on the environment. Turfgrass that is actively growing can be beneficial to your yard and the environment by helping to:

- stabilize soil;
- conserve water;
- filter air- and water-borne pollutants;
- suppress and control dust, glare, and noise; and
- dissipate heat.



Choosing the right type of turfgrass is an important first step in maintaining a healthy lawn. The most commonly used grasses in Texas are St. Augustine, Bermuda, buffalo, centipede, tall fescue, and zoysia, which are generally compatible with the state's climate conditions. Make sure you choose a turf that is right for your region and for your specific landscape. When choosing what type of grass to use, keep in mind its tolerance to shade, drought, traffic, cold, salinity, and disease. Properly adapted turfgrass will require less maintenance and smaller amounts of fertilizer and supplemental water.

For more information on selecting grasses, visit Aggie Turf, at <http://aggieturf.tamu.edu>.

Maintain Your Lawn

Building and maintaining a healthy turf will help you avoid many common lawn problems, as well as the need for many pesticides—including insecticides, herbicides, and fungicides. The following tips will help you keep your lawn healthy and beautiful:

- Choose the correct turf for your light conditions and lawn use.
- Establish an adequate depth of healthy soil (at least 6 inches under your turf).
- Aerate your lawn once a year to improve drainage and reduce soil compaction.
- Irrigate efficiently, making sure to:
 - water in the morning, before 10 a.m.,
 - wet the soil to a depth of 4–6 inches, and
 - allow the soil to dry out between watering.

- Mow properly, taking no more than one-third of the grass blade off with each mowing.
- Be careful not to overfertilize, which can weaken turf, as well as contribute to water pollution by causing excess nutrients to be released into rainfall runoff. Choose natural or organic fertilizers, such as compost, which typically slow-release their nutrients and can often be used in smaller amounts.
- Test your soil periodically to determine which nutrients are lacking, before you decide whether or not to fertilize.

Testing Your Soil

Grass and other plants can be weak and unhealthy for a variety of reasons, including over-application of fertilizer. The best and only sure way to know if the soil in your yard lacks sufficient nutrients is to get a soil test from a qualified soil lab. A soil test can tell you just what your soil needs, and how much of it.

A basic soil test covers soil hydrogen ion concentration (pH or acidity/alkalinity) and the primary nutrients: nitrogen, phosphorus, and potassium (NPK). For an additional fee, you can request testing for micronutrients, organic matter, and soil texture. Your county AgriLife Extension agent can help you get an inexpensive soil test, go over the results with you, and advise you on the best subsequent course of action. For information on your local AgriLife Extension office, visit <http://agrillifeextension.tamu.edu>.

If you do encounter a problem in your lawn, try solving it using natural, noninvasive methods.

Common Lawn Problems

Fungal Diseases



Take-All Patch

Take-all patch first appears as a yellowing of the grass and a darkening of the grass roots, followed by a thinning of the turf in irregular shapes. The darkening of the roots indicates rotting, and the roots can rot so extensively that the grass can be easily pulled up.

Infestation and Attack

Take-all patch most commonly affects St. Augustine, zoysia, and Bermuda grasses, and can rot roots so badly that it eventually kills the entire lawn. It spreads mainly during the fall, winter, and spring, when there is abundant moisture and cool or mild temperatures. However, the symptoms generally do not appear until the hot, stressful days of summer.

Prevention and Solutions

- Maintain good drainage in your lawn area.
- Avoid overfertilization of turf areas, as excessive nitrogen seems to promote take-all patch.
- Raise the mowing height on your mower to reduce stress to your turf.
- Avoid the use of broadleaf herbicides, which may weaken your turf.
- Avoid urea-based fertilizers.



Brown Patch

Brown patch first causes circular patterns of dead grass blades; in two to three weeks, new leaves may emerge in the center of the circular patch, giving diseased areas a donut-shaped appearance. The affected grass turns brown and grass blades rot and break off from the runners.

Infestation and Attack

Brown patch most commonly attacks St. Augustine grass and can spread in an area of 1 to 50 square feet. It occurs in late fall through early spring and is promoted by wet weather or frequent irrigation.

Prevention and Solutions

- Avoid overfertilization or overwatering of your lawn.
- Aerate your lawn once a year.
- At the first sign of the disease, apply a fungicide to the affected area.

Lawn Stresses



Shade Stress

Turf grass that is affected by shade stress (lack of sunlight) thins and disappears, leaving bare patches of soil or areas of weeds.

Infestation and Attack

Buffalo and Bermuda grasses do not grow well in shaded areas—these grasses are the most susceptible to shade stress.

Prevention and Solutions

- For planting in shady areas, choose shade-tolerant groundcovers or shade-tolerant turf grasses (such as St. Augustine or zoysia).
- Thin out branches of trees a bit to “brighten” shady areas.
- Raise the mowing height on your mower to allow more grass blade to capture sunlight.



Iron Chlorosis

Iron Chlorosis causes the blades of the grass to develop green and yellow stripes, or to turn completely yellow. It occurs in alkaline (high pH) soils with high phosphorus levels, and under cool and wet soil conditions.

Infestation and Attack

St. Augustine grass is most susceptible to Iron Chlorosis.

Prevention and Solutions

- Do not use fertilizers that are high in phosphorus.
- Topdress your turf with 1/4- to 1/3-inch of compost.
- Aerate your lawn once a year.
- For temporary relief, try adding iron supplements to your lawn.



Drought Stress

Grass affected by drought stress looks blue-green or silverish, and individual blades curl. Footprints remain in the lawn after you step on it. The soil under the lawn is dry.

Tolerance to Drought

All turf can survive some drought stress, although some types of turf require less water than others.

- *St. Augustine*: drought tolerant in shade only
- *Bermuda*, *zoysia*: drought tolerant
- *Buffalo*: very drought tolerant

Prevention and Solutions

- Choose drought-tolerant turf grass.
- Irrigate efficiently.
- For sloped areas, consider alternatives to turf.

Weeds

The two most common types of weeds are:

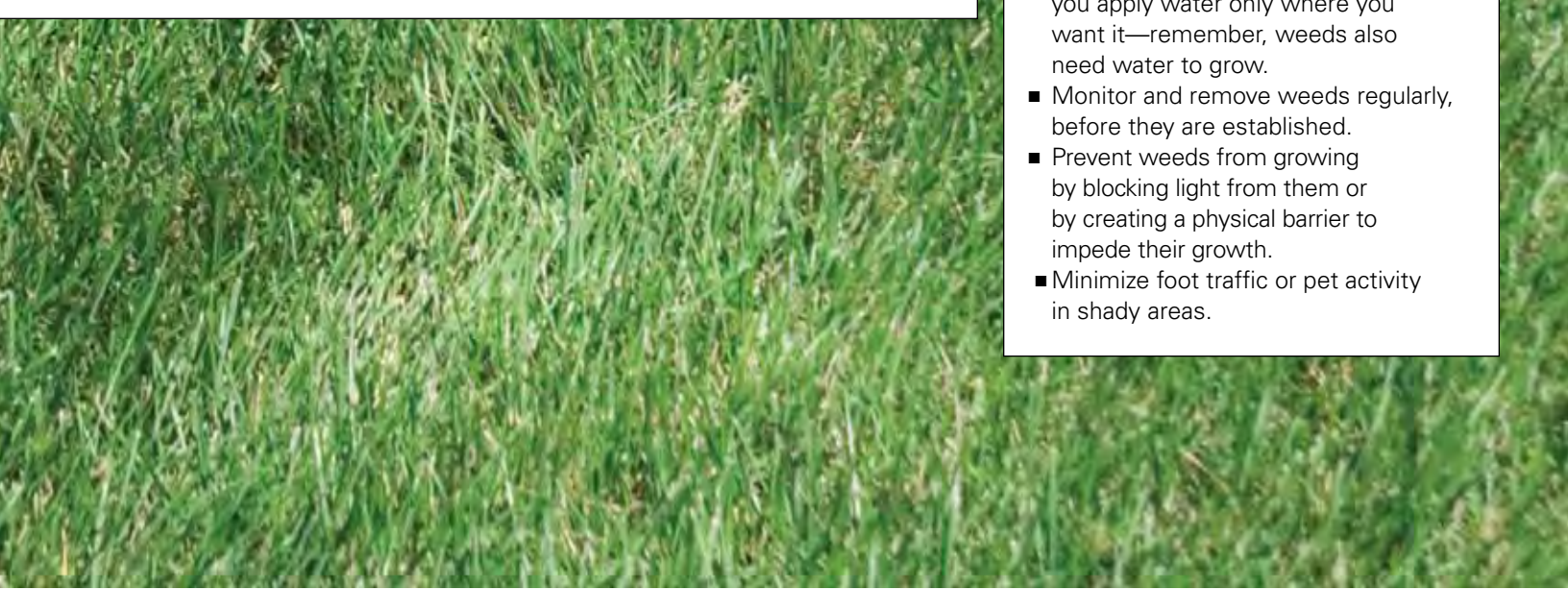
- *Grassy*. Grassy weeds have jointed, hollow stems. Their leaf blades have veins parallel to the margins and are several times longer than they are wide. Their roots are fibrous and multi-branching and their flowers are usually inconspicuous.
- *Broadleaf*. Broadleaf weeds often have showy flowers. Their leaves have a network of veins at diverse angles to one another. Their stems are often pithy and they usually have a taproot.

Infestation and Attack

Weeds are often the result of poor-quality turf, rather than being the cause of it. Weeds are aggressive and reproduce quickly, enabling them to invade areas of thin, weak turf.

Prevention and Solutions

- Keep plants healthy—this will help them outcompete weeds.
- Do not let weeds flower or go to seed—this will greatly increase their potential population.
- Do not bring soil with weed seeds or weed roots on-site.
- Use drip irrigation in beds so that you apply water only where you want it—remember, weeds also need water to grow.
- Monitor and remove weeds regularly, before they are established.
- Prevent weeds from growing by blocking light from them or by creating a physical barrier to impede their growth.
- Minimize foot traffic or pet activity in shady areas.



FREQUENTLY ASKED QUESTIONS

What can I do to make sure my soil is healthy?

A soil test is the best way to find out which nutrients your soil lacks. Contact your local AgriLife Extension office for assistance in obtaining a test.

In most cases, compost is the best soil additive you can use. Compost contains micronutrients—such as iron and manganese—that are often absent in synthetic fertilizers. Compost also balances both acidic and alkaline soils, bringing pH levels into the optimum range for nutrient availability.

For more information, see *Mulching and Composting: A “Take Care of Texas” Guide* (GI-36).

Is it okay to use some pesticides?

Synthetic chemical pesticides can be effective at wiping out pests, but rarely provide long-term solutions, and may create additional problems by wiping out beneficial plants and animals along with the pests. Ensuring that your lawn and soil are healthy, as well as using native and adapted

plants, will help you reduce the need for pesticides.

If you decide to use pesticides:

- Look for the least-toxic products that will do the job, and make sure they target the particular pest you’re facing.
- Read the label first, including all precautions and restrictions, and then follow the directions carefully.

How frequently should I fertilize my yard?

The best times to apply fertilizer, if it’s needed, are at the beginning and end of the growing season, which will vary according to the temperature range in your region. To prevent runoff, do not overwater after applying fertilizer and avoid fertilizing just before a rainstorm.

What are some tips for mowing?

- Avoid cutting too short. Mow often enough that each mowing removes no more than one-third of the grass blade. For example,



if you set your cutting height at 2 inches, then cut before the grass is more than 3 inches tall.

- Keep your mower’s blades sharp and clean, and mow when the grass is dry.
- Mow over leaves, so that they will decompose along with the grass clippings.
- Consider cleaner options. Emissions from lawn mowers and other outdoor equipment can contribute to air pollution. Try using electric equipment, which is cleaner than equipment powered by gasoline engines. Hand tools, such as push reel mowers, are lightweight, quiet, and easy to use and generate no emissions.

Managing Lawn Problems in Texas complements the “Take Care of Texas” *Guide to Yard Care*, which is meant to be a general overview of environmentally friendly practices for your yard. For more detailed information, see the following other TCEQ “Take Care of Texas” guides at <www.takecareoftexas.org/publications>:

- *The “Take Care of Texas” Guide to Yard Care* (GI-28)
- *Mulching and Composting* (GI-36)
- *Rainwater Harvesting with Rain Barrels* (GI-383)
- *Managing 10 Common Texas Yard Pests* (GI-405)
- *Landscape Irrigation* (GI-409)