



earth-wise guide to

# Lawn Care

## in this fact sheet:

- Starting a New Lawn
- Choosing Turf
- Irrigation
- Mowing, Aerating and De-thatching
- Fertilizing
- Weeding



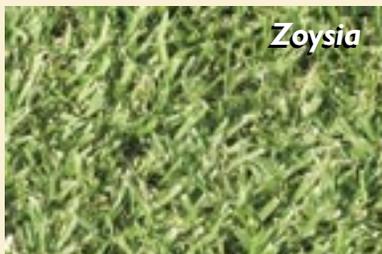
Bermuda



Buffalo



St. Augustine



Zoysia

grow green encourages the use of native and adapted, drought-resistant plants and grasses. these plants conserve water and protect water quality by requiring fewer pesticides and fertilizers.

## Starting a New Lawn

- **Minimize your total lawn area.** Consider lawn alternatives such as plant beds, mulched areas, wildflowers and native grasses to reduce water and fertilizer needs
- **Test your soil** to know how to prepare it for your new lawn. Look for soil test bags in the Grow Green display or contact the Cooperative Extension office at 854-9600
- Six inches of soil is the minimum necessary to grow a healthy lawn.
- Prepare the soil by removing perennial weeds and tilling in at least 2" of compost
- Level your lawn area to avoid low spots where water will pool

- Consider sun, shade and water needs in choosing the best grass for your location—look at the chart below for some suggestions
- Choose between seed, plugs, or sod, then keep soil moist until the lawn becomes established
- Avoid overwatering newly seeded lawn to prevent grass seed from washing away

## Caring for an Established Lawn

### Irrigate Efficiently

- Water in the early morning to help prevent fungal diseases
- Water more deeply and less frequently to encourage deeper roots
- Water so that the soil is wet to a depth of 4-6 inches. This takes 1/2 to 1 inch of water, depending on your soil type. To check on the amount applied, collect water from sprinklers in a small can or rain gauge

Grass	Drought Tolerance	Mowing Height	Sun Requirements	Start-up
Buffalo	Very High	(Mowing optional) 2- 3"	6 hours/day minimum	Sod, plugs, seed
Common Bermuda	High	1.5 - 2"	Requires full sun	Seed or sod
Zoysia	High	1.5 - 2"	Full sun to partial shade	Sod or plugs
St. Augustine	Low (Medium in shade)	2 .5" (sun), 3 - 3 .5" (shade)	Best for shady spots	Sod or plugs



- Because water is more likely to run off clay soils and sloping lots, it may be necessary to irrigate slowly or in multiple short cycles to prevent water run-off
- Allow soil to dry out between waterings
- Watering is seldom necessary during the dormant season (December-February)

### Mow Properly

- Mow grass frequently enough so that no more than 1/3 of the leaf blade is removed at one time
- Mow when the grass is dry to prevent spread of turf diseases
- Cut the grass higher in the summer to help establish a deeper root system
- Sharpen mower blades regularly, sharp blades do less damage to grass
- **Do not bag your grass clippings** and use a mulching mower if possible — cut grass left on the lawn returns 60% of the nitrogen and 100% of the phosphorus to the soil

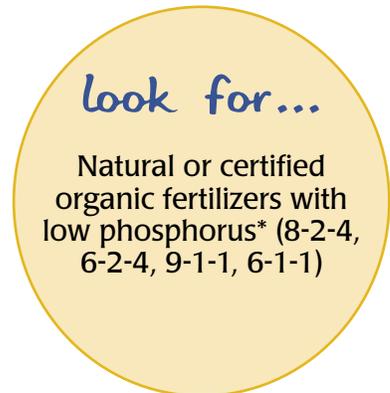
## Maintaining a Healthy Lawn

- Aerate your lawn at least once a year to improve drainage and bring more oxygen to the soil
- Moisten your soil the day before aerating to make the job easier and more effective
- Use a hollow-tined aerator that removes the plugs to increase water and oxygen to the soil
- After aerating, apply compost for added nutrients (Call 972-1954 for information on Dillo Dirt, an organic compost produced by the City of Austin’s Water and Wastewater Utility.)
- De-thatch your lawn every 1-2 years by raking up matted grass in excess of 1/2" (do not use a vertacutter or dethacher on St. Augustine)

### Don't Fertilize or Apply Herbicides Automatically

- Do not use “weed and feed” products; the time to use herbi-

- cides and the time to fertilize are different and many herbicides are harmful to the environment
- Test your soil (see above) and base your fertilizer purchase on the results



### Buy the Right Type of Fertilizer

- Choose natural or certified organic fertilizers that are low in phosphorus
- Utilize natural compost and fertilizer instead of synthetic fertilizer to improve soil pH, texture and fertility, and cause less leaching to groundwater
- Choose fertilizers based on the needs of your soil. Most lawns in Austin have more than enough Phosphorus (P) and Potassium (K), but are low in Nitrogen (N)
- Use the chart on the to calculate how many pounds of fertilizer you need.
- Save any excess fertilizer until the next proper time to fertilize. Never use more than you need “just to finish off the bag.”

### Apply Fertilizers Properly

- To improve BOTH soil texture and soil nutrient levels, apply 1/4” compost to the top of your lawn INSTEAD of fertilizer
- Sweep any fertilizer granules that land on sidewalks and driveways back onto your lawn
- After fertilizing, carefully water

How much fertilizer do you need? <i>All soil in Austin is high in phosphorus and potassium, therefore fertilize based ONLY on nitrogen needs.</i>		
Soil test results:	Application Rate:	Application time:
Low to Very Low Nitrogen	1/2 pound of nitrogen per 1000 square feet of lawn area applied TWICE per year (total of one pound per 1000 square feet per year)	mid-spring AND fall
Moderate Nitrogen	1/2 pound of nitrogen per 1000 square feet of lawn area applied ONCE per year (total of 1/2 pound per 1000 square feet per year)	mid-spring
High Nitrogen	DO NOT FERTILIZE! Excess nitrogen promotes shallow rooting and some disease and insect problems	

the area to help fertilizer soak in, but avoid over-watering and washing fertilizer off of your lawn

- NEVER FERTILIZE BEFORE A RAIN

*avoid combined products...*

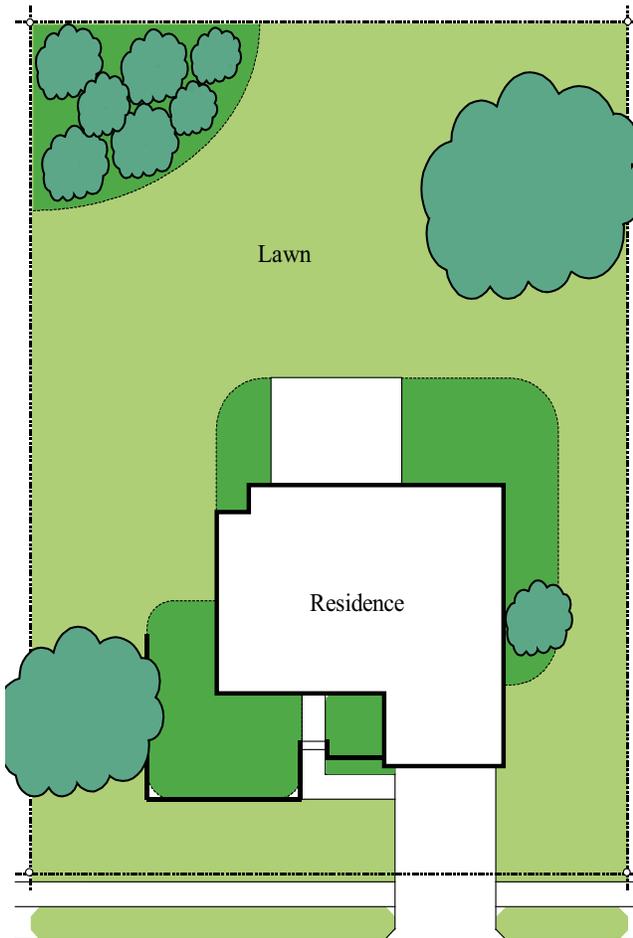
such as weed and feed. They do not necessarily target specific problems at the appropriate time

### Weed Appropriately

- Tolerate low levels of weeds; as you develop a dense, healthy turf most weed problems will go away
- Avoid using herbicides. The most effective, least toxic way to remove weeds is pulling them by hand
- Do not let weeds bloom and release their seeds! One plant can send hundreds of seeds into your yard
- Fill in bare spots in your lawn with grass plugs or seed
- If you decide to treat chemically:
  - Identify your weeds to ensure that you choose the most effective product
  - Start with the least toxic product (for product ratings, see the back page of this factsheet)

*did you know?*

Chemicals commonly found in lawn care products are found in most of the springs in the Austin area.



When calculating how much fertilizer to apply, be sure to take into account only the lawn areas that you will be treating. Subtract house, driveway, walkways, and beds from the total area of your property.

If you have left-over or banned chemicals in your garage, please take them for safe disposal to a household hazardous waste facility. In Austin call 974-4343 for information.

This chart shows how many pounds of fertilizer to apply per thousand square feet of lawn area, based on the percentage of nitrogen in the product at an application rate of 1/2 pound nitrogen per thousand square feet.

<b>Fertilizer Ratio:</b> <i>Comparison of Nitrogen (N) to Phosphorus (P) to Potassium (K)</i>	<b>Fertilizer Analysis:</b> <i>Percentage of each ingredient in the product (%N-%P-%K); this is the number written on the bag</i>	<b>To apply 1/2 pound of nitrogen, apply the following amounts:</b>
21-0-0 →	21-0-0	2.5 lbs./1000 sq ft.
4-1-2 →	8-2-4* 16-4-8 20-5-10	6 lbs./1000 sq ft. 3 lbs./1000 sq ft. 2.5 lbs./1000 sq ft.
3-1-2 →	6-2-4* 12-4-8 15-5-10 21-7-14	8 lbs./1000 sq ft. 4 lbs./1000 sq ft. 3 lbs./1000 sq ft. 2.5 lbs./1000 sq ft.
9-1-1 →	9-1-1*	5.5 lbs./1000 sq ft.
6-1-1 →	6-1-1*	8 lbs./1000 sq ft.

\*best choices for Austin's soils

# product toxicity comparisons\*

(not for endorsement purposes)

## Hazards:

**Toxicity/Threat:** ○ low ○ low to moderate ● high ● highest  
N/A not applicable ? unknown toxicity

human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
acute	chronic				

least toxic

most toxic

CedarCide Lawnsafe Chemical Free Weed and Feed (corn gluten)	○	○	○	?	?	○
Concern® Weed Prevention Plus™ (corn gluten)	○	○	○	○	?	?
Concern® Fast Acting Weed Killer™ (ammoniated soap of fatty acids)	○	?	○	○	○	○
EcoEXEMPT™ HC (2-phenethyl propionate, eugenol)	○	○	?	?	?	?
CedarCide Ridaweed (acetic acid/horticultural grade vinegar)	●	○	○	○	○	○
BurnOut (acetic acid/horticultural grade vinegar)	●	?	○	○	○	○
Green Light® Com-Pleet® Systemic Grass & Weed Killer (glyphosate)	○	?	○	○	○	●
Round-Up Weed and Grass Killer (glyphosate)	○	?	○	○	○	●
Scythe® (pelargonic acid)	○	●	○	?	?	○
Hi-Yield® MSMA Weed Killer (MSMA)	○	●	○	○	○	●/○
Hi-Yield® POAST® (sethoxydim)	○	?	○	○	○	○
Hi-Yield® Crabgrass Control (benefin, trifluralin)	○	○	○	○	○	○
Scotts® Turf Builder® with Plus 2™ Weed Control (2,4-D and mecoprop/MCPP)	○	○	○	○	●	○
Vigoro® Weed & Feed (2,4-D, mecoprop/MCPP, dicamba)	○	○	○	○	●	○
Uniroyal Turfcide® 10% Granular (PCNB)	○	○	○	○	○	●
Image® Weed and Grass Killer (imazaquin)	○	?	○	○	●	○
Ortho® Brush-B-Gon® Ready to Use (triclopyr)	○	?	○	○	●	○
Green Light® WIPE-OUT® Broadleaf Weed Killer (mecoprop/MCPP, 2,4-D, dicamba)	○	○	○	○	●	○
Ortho® Weed-B-Gon® Weed Killer2 concentrate for Northern and Southern lawn grasses (mecoprop/MCPP, 2,4-D, dicamba)	○	○	○	○	●	○
Ortho® Weed-B-Gon® Lawn Weed Killer Ready-to-Use (mecoprop/MCPP, 2,4-D, dicamba)	○	○	○	○	●	○
Green Light® Grass & Weed Killer (sodium cacodylate, dimethylarsinic acid)	○	○	○	○	○	●/○
Hi-Yield® Atrazine (atrazine)	○	○	○	○	●	○
Vigoro® Ultra St. Augustine Weed and Feed w/ Atrazine 29-3-5 (atrazine)	○	○	○	○	●	○

\*Texas Cooperative Extension and the City of Austin provide this information as a comparative reference only. Listing of a specific product trade name does not constitute an endorsement of its use. Many pesticides and pesticide products other than those listed in these tables are available and may be suitable for use.

Products rated by the Washington Toxics Coalition. Contact Philip Dickey at 206-632-1545 for rating information, or see the Grow Green Products fact sheet.

[www.growgreen.org](http://www.growgreen.org)

**Grow Green encourages least toxic solutions**



854-9600



**Watershed Protection  
Development Review**

974-2550

08/03