

Lawn Care in the Desert

Your lawn provides an attractive recreational area and helps keep your house cool. It can, however, require considerably more water and care than desert-adapted plants, so consider limiting the size of your lawn. Follow the easy, practical advice offered below to help you maintain a healthy, beautiful and water-efficient lawn.

Mowing

Proper mowing is essential for maintaining a healthy lawn. Avoid mowing too closely (scalping). Grass that is too short uses more water. Adjust your mower so the grass height is maintained within the ranges listed below:

Common Bermuda	1 ½ - 2 inches
Hybrid Bermuda	½ - 1 inch
Perennial / Annual rye	1 ½ - 2 inches

Mowing Schedule During Peak Growing Season

Height (inches)	Frequency (days)
½	2 – 3
1	4 - 5
2	7 – 10

Tips

- Don't remove more than one-third of the grass at a time. If you can't mow frequently, increase your mowing height
- Keep mower blades sharp
- If you mow frequently and do not over-water or over-fertilize, you shouldn't need to bag your clippings.
- Avoid following the same pattern each time you mow.
- Increase the mowing height by 25% in shady areas.
- Use a reel-type mower when mowing grass at a height of one inch or less.

Fertilizing

Regular fertilizing is essential for proper growth and good color during the growing season. However, an over-fertilized lawn will require more water and more frequent mowing. Follow the directions on the fertilizer bag carefully – more is not necessarily better.

If there are no directions on the bag, look for the nutrient analysis. These three numbers represent the percentages of nitrogen (N), phosphorous (P), and potassium (K) in the formula. Phosphorous and potassium are needed by some plants, but seldom have much effect on established lawns in Arizona.

A good general rule is to apply ½ lb. of nitrogen per 1,000 square feet each month between April and September for Bermuda grass lawns. Apply ½ - ¾ lb. per month to established ryegrass lawns. Avoid fertilizing ryegrass in late spring and early summer.

Tips:

- Avoid applying nitrogen fertilizer at the end of the growing season.
- Use “slow release” fertilizers. Although they cost more, they release nutrients more efficiently and can be applied less frequently.
- Fertilize in the evening or early morning and water the lawn thoroughly.
- For more even application, apply half of the recommended amount in one direction and the other half in the opposite direction.
- Iron helps keep grass green during the late summer and fall. Use formulas with ferrous sulfate or iron chelates (water soluble).

Water

When to Water – Water during the cool morning hours to minimize evaporation. The peak water consumption hours (4 – 9 p.m.) should be avoided.

How Often to Water – The time between irrigations will depend on the weather, the type of turf and the soil type. Water lawns no more than every three days during the summer. An established ryegrass lawn should be watered about once a week during the winter and about every three days during the spring.

How Much to Water – Plant water use varies greatly throughout the year. Adjust your watering times accordingly. Consult the Lawn Watering Guide on the weather page in the newspaper to find out how much water your grass is using or consult the AZMET page on the internet. <http://ag.arizona.edu/AZMET>

Tips

- If water runs off your yard, irrigate more often for shorter periods of time
- Install sprinkler heads vertically and flush with the soil surface. Make sure grass is not blocking the spray.
- Adjust sprinkler heads so they don't spray walls, driveways or sidewalks.
- Hand water dry areas rather than increasing overall watering time.
- Replace broken and missing sprinklers immediately.
- Consult an irrigation supplier for information about the most efficient types of sprinklers and irrigation control clocks.
- Water shaded about 30% less than sunny areas.
- If it has rained, reduce irrigations accordingly.

Signs of Under-watering:

- Bermudagrass turns bluish-grey and doesn't spring back after you step on it.
- The soil is too hard to push a screwdriver into.
- The turf still feels warm in the evening after the sun has gone down.

Signs of Over-watering:

- Water is constantly puddled in areas.

- Turf has a musty odor.
- Soil is extremely soft or mushy.
- Moss, or mushrooms are present.

Aerating

Hard, compacted soil inhibits root growth and can cause puddling or runoff. Aerating your soil will help relieve these problems. Core aerating, a process where plugs of soil are pulled out of the ground, helps air and water penetrate the soil. The best time to aerate Bermuda grass is in May or June, when the grass is growing quickly. Aerate the day after and irrigation or a rainfall when the soil is soft. Manually operated aerators are adequate for small lawns. Mechanical ones are available at equipment rental companies for larger areas.

Dethatching

Thatch is a mat of plant material consisting mainly of grass stems and roots. A thin layer is good because it acts as a mulch, which reduces evaporation. Too much will repel water, cause shallow roots and make the grass less resistant to drought. Excessive thatch is usually caused by over-watering or over-fertilizing. If thatch is over one-half inch, it should be removed with a vertical mower or a power rake. Both are available from equipment rental companies.

Dethatch during the hot summer months so Bermuda grass can quickly recover. After dethatching, apply fertilizer at a rate of $\frac{1}{2}$ - $\frac{3}{4}$ lb. of nitrogen per thousand square feet and water the grass well to speed recovery. Do not dethatch your winter lawn if you have one.

Weed, Disease and Insect Control

A lawn that is not maintained and watered properly may be more susceptible to weeds, diseases and pests. If your lawn shows signs of these problems, contact your local nursery or the Maricopa County Cooperative Extension. They can help you identify the problem and offer advice.

Weeds – It's best to pull weeds out by hand if you don't have too many. The University of Arizona Cooperative Extension has information available on-line at <http://ag.arizona.edu/urbanipm/weeds/weeds.html>

Diseases – Chemical treatments can complement sound horticultural practices. Always take extreme caution and follow the directions when using chemicals. The University of Arizona Cooperative Extension Karsten Turf Research facility has information available on-line at <http://ag.arizona.edu/turf/tt.htm>

Insects – The Cooperative Extension Master Gardener Manual has an entire chapter on insect control <http://ag.arizona.edu/pubs/garden/mg/entomology/index.html>