

Maintaining a Lawn

Prepare Soil Before Seeding or Installing Sod

A new lawn can fail if you overlook proper soil preparation. Add organic matter (such as high-quality compost) and deep-till to loosen tight clay soils and promote root growth. Find local compost sources at the [Composting Council](#) website.

Sandy soils tend to hold very little moisture and drain quickly. Add high-quality compost to improve moisture retention in the root zone, promote a healthy lawn and reduce irrigation frequency. See the [Selecting a Lawn](#) section for more soil preparation tips.

Use Proper Mowing Height

For healthy and resilient grass, mow your lawn 2 ½ to 3 inches high. Grass growth should reach 50 percent of the total mowed height between cuttings.

You should never remove more than one-third of the total grass height during a single mowing. If your grass gets too tall, increase mower height and remove grass during several cuttings to reduce lawn stress.

Fertilize, Aerate and Top-Dress Lawn

Fertilize and core aerate to maintain a healthy lawn. Your grass needs fertilizer to remain healthy and out-compete weeds. Core aeration will break up thatch and compacted soil, allowing water and air to penetrate deep into the root zone. Aerate your lawn during spring (you may also aerate in autumn). Core aerate heavy clay soils twice a year.

Top-dress an established lawn with compost after aerating to improve the lawn's water infiltration rate.

Control Weeds, Pests and Diseases

A thick, healthy lawn helps crowd out and control weeds, resist insect damage and disease. Follow all manufacturer guidelines when applying herbicides or pesticides.

Lawns and Grasses in the Conservation Gardens

See examples of healthy lawns and grasses in the Conservation Gardens. Roll your cursor over the Conservation Gardens illustration on the right side of this page for more information about the sections below:

Bluegrass Review

This section of the gardens compares fully irrigated and deficit irrigated plots of 40 Kentucky bluegrass varieties.

Tall Fescue

This section of the gardens compares fully irrigated and deficit irrigated plots of 21 tall fescue varieties.

Alternative Grass Mixes

This section of the gardens compares water use for eight grass mixes to determine which are suitable for turf applications while achieving lower water use.

These mixes are comprised of various grass species in commercially available mixes sold by local seed distributors. Several have a high percentage of fine fescue and a smaller percentage of Kentucky bluegrass or perennial ryegrass. One plot consists of buffalo grass and blue grama, the only native grass mix in the study.

Native Grasses

This section of the gardens demonstrates plots of warm and cool season native grasses chosen for their turf potential. All are indigenous to the Western United States; some are native to Eastern Colorado. The grasses are planted at turf quality

rates and maintained in mowed and un-mowed condition. The plots are irrigated with subsurface drip irrigation.

Line Source Irrigation

The gardens' line source irrigation study demonstrates high turf quality can be maintained at lower irrigation rates. The irrigation system applies a gradient of water, from full irrigation to almost none, to each of the grasses in the plot. You can visually compare the turf quality at different irrigation levels.

Roll your cursor over the **Soil Revitalization Demonstration** and the **Soil Preparation Study** green shaded areas of the gardens illustration to learn how the different soil types and soil amendments affect lawn growth.

Find More Information

Visit this website for information on more than 500 horticultural topics, including lawn and plant maintenance:

[Plantalk Colorado \(Colorado State University Extension, Denver Botanic Gardens, Green Industries of Colorado, Inc\)](#)