

LAWN CARE

The care and maintenance of lawns has spawned whole industries: grass seed and sod farms, lawn care equipment manufacture, lawn care services, fertilizer and weed suppression manufacture, lawn irrigation services, and more.

Whether you are a professional or an amateur, accurate information from a reputable source is key to creating a healthy and beautiful lawn. There are many sources of lawn care information available. Here are some places to get started:

[US National Arboretum Turfgrass Q & A](#)
[Best Turfgrass varieties by State](#)

[Michigan State University Turfgrass website](#)
[Penn State University Turfgrass website](#)
[University of Tennessee Turfgrass Weeds website](#)
[Auburn University Home Lawn Tips](#)

[The UC Guide to Healthy Lawns](#)

Check [this list](#) for turf information available from university extension services in your state.

Apps: [North Carolina State University Lawn Care App](#)

Grass Anatomy

Grasses belongs to the plant classification [Monocotyledon](#), due to characteristics related to grass seeds, leaves, roots and growth habits. This means that although there are thousands of grass species, all grasses have basic anatomical features in common:

- Narrow leaves
- Parallel veins
- Inconspicuous flowers
- Nodes (bulges) where leaves join stems



Lawn mower advertisement - Curtis's Botanical Magazine vol. 102 (1876). Source: WikiCommons, 4/17/13.

Also, most grass stems are hollow, except at the nodes.
Here is an [interactive view of typical grass structures](#).

To identify a specific type of grass, it's helpful to use a [dichotomous key](#). Keys are developed by botanists to walk observers through a plant's anatomical features, making distinctions that eventually lead to species identification.

Identification tools specific to turfgrasses:

[Turfgrass Species Tour](#)

[Turfgrass ID tool](#)

Grass Pests, Diseases and Weeds

Grasses are plants, and like all living things are susceptible to disease and suffer from pests. But plants that humans take an interest in can also be said to suffer from a third problem – weeds.

When we cultivate plants for food, as forage for our animals, or for use in gardens and landscaped green spaces, all three of these natural biological processes are threats. As a result, the pests, diseases and weeds of grasses have long been a subject of great scientific interest.

The resources below give an overview of the most common grass pests, diseases and weeds.

Pests

From the UC Guide to Healthy Lawns:

- [Insects and other invertebrates](#)
- [Plant-parasitic nematodes](#)
- [Gophers, squirrels and other vertebrates](#)

Diseases

[MSU Turf Diseases ID tool](#)

[The UC Guide to Healthy Lawns: diseases](#)

Weeds

[MSU Turf Weeds](#)

[The UC Guide to Healthy Lawns: identification key to weeds](#)

“Cool” versus “Warm” Grasses

Grasses, like all other forms of life, are sensitive to the temperature around them. They thrive in some temperature ranges, and go dormant in others. All grasses fall into one of two groups — warm-season grasses or cool-season grasses.

Cool-season grasses are active primarily in the spring and fall, when average daytime temperatures are cool (between 65°F and 75°F) and there is a good amount of precipitation. They go dormant in the hot, dry conditions of summer and freezing cold of winter.

Some well-know cool season grasses are:

[*Poa pratensis*](#), commonly known as Kentucky Bluegrass

[*Festuca arundinacea*](#), commonly known as Tall fescue

[*Lolium perenne*](#), commonly known as Perennial ryegrass

Warm-season grasses become active in mid-spring, thrive in the hot, dry weather of mid-summer, and go dormant in the winter. Some well-known species of warm-season grasses are:

[*Stenotaphrum secundatum*](#), commonly known as St. Augustinegrass

[*Cynodon dactylon*](#), commonly known as Bermudagrass

[*Paspalum notatum*](#), commonly known as Bahiagrass

[*Zoysia*](#), a genus of grasses native to Asia

[*Buchloe dactyloides*](#), commonly known as Buffalo grass

These grasses can be used for lawns, but caution is warranted because they are also considered invasive weeds in some regions.

There are also cool- and warm-season [ornamental grasses](#)

Decisions, decisions...

When establishing lawns and gardens, the choice between a cool-season grass or a warm-season grass can have a direct effect on irrigation, fertilization requirements, and other environmental considerations.

[Choosing Between Cool and Warm Seasons Grasses | The Lawn Institute](#)