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Identifying pasture grasses

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Contents

Using this guide	2
Parts of a grass plant	4
How a grass plant grows	6
Is it a grass?	8
Seed and seedling indentification . . .	9
Large seeds ($\frac{3}{8}$ inch or larger)	10
Smooth brome grass	10
Medium seeds ($\frac{1}{4}$ inch)	11
Quackgrass	11
Perennial ryegrass	12
Annual (Italian) ryegrass	13
Orchardgrass	14
Tall fescue	15
Small seeds (smaller than $\frac{1}{4}$ inch) . . .	16
Kentucky bluegrass	16
Reed canarygrass.	17
Timothy.	18
Creeping foxtail	19
Barnyardgrass	20
Yellow foxtail	21
Green foxtail	22
Giant foxtail.	23

Vegetative grass and seed head identification	25
Sod—wide leaf blade (½ inch)	26
Smooth brome grass	26
Reed canarygrass.	28
Sod—medium leaf blade (¼ inch)	30
Quackgrass	30
Creeping foxtail	32
Sod—narrow leaf blade (less than ⅛ inch).	34
Kentucky bluegrass	34
Bunch—rolled leaf blade	36
Annual (Italian) ryegrass	36
Tall fescue	37
Timothy.	38
Bunch—folded leaf blade.	40
Perennial ryegrass	40
Orchardgrass	41
Grass management and descriptions	43
Kentucky bluegrass	44
Orchardgrass	46
Reed canarygrass.	48
Ryegrass, annual (Italian) and perennial	50
Smooth brome grass	52
Tall fescue	54
Timothy.	56
Species information	58

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Grasses are the base of Midwestern pastures. They can supply good yields of quality feed. This booklet identifies the 15 most common annual and perennial grasses in Midwestern pastures: the predominant seeded midwestern grasses, the most common native pasture grasses (quackgrass and Kentucky bluegrass), and a few annual weedy grasses. While many other grasses grow in the Midwest, they do not contribute significantly to the stand or yield.

This guide will help you identify grasses the first year, when you need to know whether a seeding was successful. It will also help you identify grasses in established pastures so you can make informed decisions about pasture management, fencing, and renovation.

This booklet is organized in three parts:

- seed and seedling identification for new plantings,
- vegetative identification (with seed heads) for established plants, and
- information about growth habit and management for each of the seeded grasses.

Using this guide

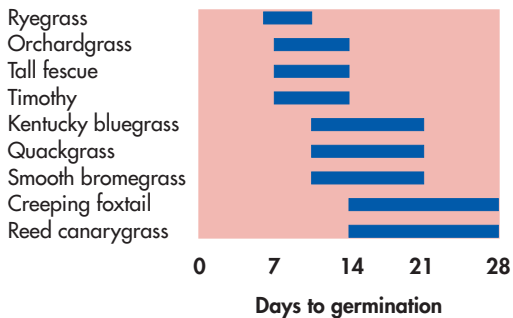
Before you plant

Before purchasing grass seeds, you may want to consult the grass management and descriptions section of this book. It describes the ideal uses for each species and outlines the best techniques for successful establishment, management, and harvest. The species information chart on page 58 summarizes seeding rates and relative tolerance for drought, traffic, and weed suppression.

Identifying seeds and seedlings

The best time to identify seedlings is when plants are at the 2- to 3-leaf stage. Grasses usually reach this stage 1 to 4 weeks after germination, depending on the species. Germination time (shown below) can sometimes help determine grass type.

Germination time



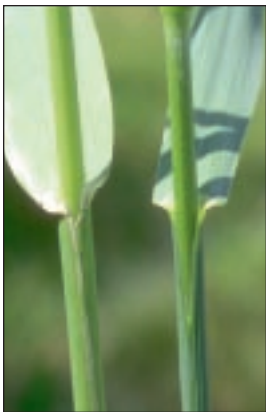
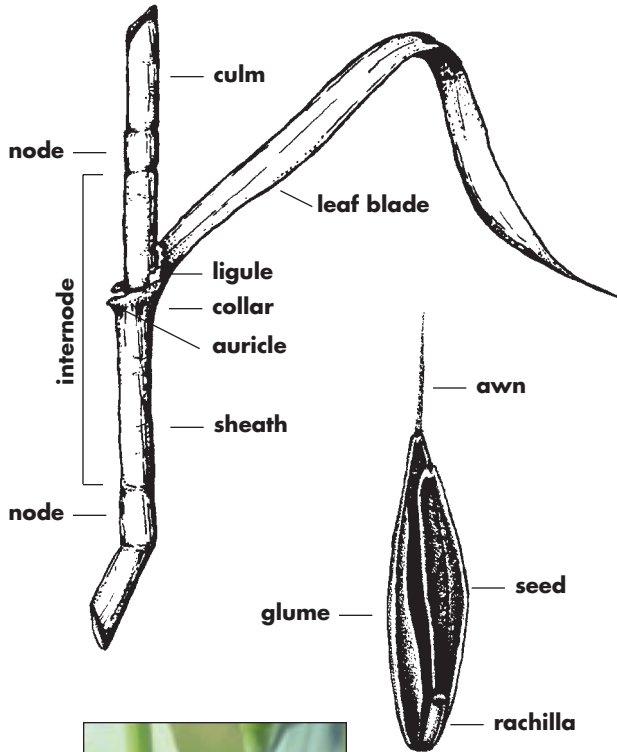
At the 2- to 3-leaf stage, use the “pull test” to determine whether the grass seedling is a perennial or an annual. An annual grass will pull easily and will have many short roots. A perennial grass will be harder to pull and will have at least one long root that may break off when you pull the seedling.

We’ve organized the grasses in the seed and seedling section by seed size. When you pull the seedling, look for the seed, which will often still be attached. Measure the longest dimension of the seed to determine which category (large, medium, or small) it fits in. Then page through the appropriate category to match the seed and seedling to the photographs and descriptions. The seeds are enlarged to show detail; for actual size, refer to the description at the top of each page.

Identifying vegetative grasses and seed heads

To identify grasses in established pastures, first check to see whether the grass is sod forming (spreading) or bunching (forms clumps). If you’re examining a sod-forming grass, the next step is to look at the width of the leaf blades ($\frac{1}{2}$ -inch wide, $\frac{1}{4}$ -inch wide, or less than $\frac{1}{8}$ -inch wide). If you’re looking at a bunch-type grass, check to see whether the unemerged leaf blade is rolled or folded. Once you’ve keyed these two items, turn to the appropriate category to identify the grass.

Parts of a grass plant



Overlapping (left) and fused (right) sheaths.

Glossary

Auricle A short extension of the leaf blade that wraps partway around the stem.

Awn A stiff, hair-like extension on some glumes.

Collar A light-colored band of tissue opposite the ligule, on the outer side of the grass leaf.

Culm The jointed stem of grasses.

Glume A tiny leaf-like structure enveloping the seed.

Internode The area of the stem between the nodes.

Leaf blade The flat, expanded portion of the grass leaf.

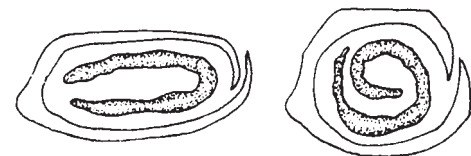
Ligule A membrane or series of hairs on the inner side of the grass leaf where the blade joins the sheath.

Node The place on the stem where a leaf attaches.

Rachilla The point of attachment of a seed to the seed head or to another seed.

Sheath The part of the leaf that wraps around the main stem.

Cross-section of a shoot (showing unemerged leaves)



folded

rolled

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