

What's Growing in



Revisit and adjust forage plans regularly.

by **Barb Baylor Anderson**, field editor

Do you know what's growing in your pastures? Do you have the best mix of grasses and legumes for your herd? Are you growing too many weeds amongst your forages?

If you have to think about your answers to these questions, you are overdue for completing a pasture inventory and revisiting your pasture plans. That process begins with the right mind-set.

"Many cattle producers grow grain. They spend a lot of time choosing crop varieties. Forages are no different. Forages are crops, and should be treated like crops," says Roger Staff, grassland and grazing specialist, Natural

Resources Conservation Service (NRCS) in Greenville, Ill.

Your pasture preparation primer begins with some basics. Staff encourages producers to take soil tests first and then inventory pastures as to forage species available. You also should determine the amount of any legumes present. Staff adds a local NRCS office representative can provide and assist you with completing the Pasture Condition Scoring Form as a review.

"Extension specialists, land-grant university researchers, and small-seed or forage representatives also are capable of helping you determine which forages to



plant," says Staff. "The NRCS is a good source, too. The scoring form can help you evaluate what forages you grow, how they are grazed, and the forage and pasture rotations you use. With good management and a regular inventory, you should get many years of use out of your pastures before reseeding is necessary."

Once you have an idea of what forages might perform well and have soil tests done, analyze soil samples for pH levels. You may need to apply lime, especially for legumes, which are more sensitive to pH. Check potassium and phosphorus, as well. If you plan to plant alfalfa, you will want to manage micronutrient needs, including a check as to whether you need to add boron.

"Soil pH will direct you to the types of legumes, such as clovers, that can be frost-seeded," he says. "You can expect an economic return. If you spend a dollar on clover, you will get a \$3-\$4 return in nitrogen. You will have a more balanced nutritional stand and fix nitrogen for grasses."

Maintain pastures for maximum lifespan

Natural Resources Conservation Service Grassland and Grazing Specialist Roger Staff reminds producers that proper care leads to longer pasture lifespan.

- ▶ Forages are a crop, so treat them as such.
- ▶ Have a minimum of five pastures for rest/rotation.
- ▶ Allow a minimum of 30 days' rest for grasses/legumes in a rotation.
- ▶ Control seedheads and keep forages vegetative.
- ▶ Allow animals to get a full bite — forages should be a good vegetative height before grazing — 8-10 inches (in.) for cool-season grasses and 12-16 in. for warm-season grasses.
- ▶ Don't overgraze forages. Keep 3-4 in. of cool-season grass stubble and 8-10 in. of warm-season grass stubble after grazing.
- ▶ Walk, evaluate and measure pasture forages.
- Control weeds. Treat the problem, not the symptom.

Your Pastures?

Tried-and-true options

Staff suggests producers walk across pastures and identify any openings in the forage canopy or bare soil patches. Those spots should be filled in with legumes or grasses. In fact, Staff advises that between 30% and 40% of your stand in dry-matter weight should be legumes.

Staff often recommends orchard grass and tall fescue in pastures with clover for producers in southern Illinois. Orchard grass is good for both hay and grazing, as long as producers choose rust-resistant varieties. Tall fescue can take more abuse from trampling. He suggests planting non- and/or friendly endophyte varieties that are more durable and have softer leaves. Tall fescue is a good candidate for stockpiling during the winter, as well.

“While this offers a good combination for your pasture, cows will selectively graze the plants,” he says. “You want cows to graze uniformly. If they don’t, the plants they don’t eat will be taller and coarser the next grazing cycle. Increase the stock density for more uniform consumption, or clip any of the uneaten plants so the pasture is all growing at the same rate/stage of production.”

Jointed grasses like timothy and smooth brome grass must be managed more closely, he adds.

“As these jointed grass plants get taller, they are harder to maintain if clipped or grazed below the growing point,” he says.

As a general rule of thumb, cool-season grasses and legumes do well when temperatures are in the 60s to 80s. Cool-season grass varieties slow growth when temperatures exceed 80° F, although Staff says they will come back in the fall if you leave 3-4 inches (in.) of residual forage for the root systems. Warm-season perennial grasses will offer good forage from late May to September, but they stop growing in the fall.

“Warm-season grasses require more management, and a 6-8 inch minimum grazing height versus 3-4 inches minimum on cool grasses and legumes,” he says. “During hot, dry summers, perennial warm-season grasses should be no more than 20%-25% of total pasture. Rotate in warm-season annual varieties, too, and keep legumes in the mix to get the most pounds of dry matter.”

If you’ve not had legumes in your pastures in recent years, Staff says include an inoculant on the seed to put bacteria on the roots that will promote nitrogen fixation in legumes. Weeds such as thistles can be managed



chemically. Staff recommends a herbicide that does not kill grasses.

Finally, he suggests no-tilling pastures in spring to thicken stands.

“If you get a good grass stand, let pastures rest and they will thicken on their own,” he says. “Let pastures rest 30 days between grazing rotations in season to keep legumes in the stand, recoup grasses and control weeds.”

Producers should consider dividing a pasture into five areas or smaller pastures, and move cows from one to the next every week as long as water is available. “That gives pastures 28 days’ rest,” he says. “You may need to bribe cows at the first move, but after about three weeks of moving to new areas, they will recognize they get better eating when they move to the next pasture.”

Many options to meet needs

While Staff has his go-to recommendations for Illinois pastures, here are some of his other observations about popular grasses and legumes often found in the pasture-establishment mix.

Cool-season grasses

- ▶ Kentucky bluegrass is persistent and high-quality, but low-yielding. If you have only Kentucky bluegrass in the pasture, interseed with higher-yielding species more frequently. It is not suited for hay.

- ▶ Endophyte-infested tall fescue is productive and persistent, but quality is limited. Animals may hesitate to graze it mid-summer. If there is fescue toxicity, it will affect feed intake, lower gains, produce rough hair coats and reduce reproductive performance. Low- or novel-endophyte varieties are available on the market.
- ▶ Orchard grass is very productive and high in quality, but not as persistent. Staff considers it one of the most useful cool-season grasses for hay and pasture.
- ▶ Timothy is not drought-tolerant and is a shallow-rooted grass, but establishes rapidly.
- ▶ Smooth brome grass should not be overgrazed in the spring. It has higher yields in regions like central and northern Illinois.
- ▶ Perennial ryegrass will survive several growing seasons and mismanagement. However, it is less persistent than other cool-season grasses.
- ▶ Reed canary grass is on the noxious and invasive plant list in some states like Illinois.

Warm-season grasses

- ▶ Both big bluestem and Indiangrass are good for June to September grazing, but establishment in the pasture can take two or three years.

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- ▶ Eastern gamagrass has high palatability and quality, but should not be overgrazed.
- ▶ Little bluestem is not recommended for continuous grazing and is not as palatable or productive on its own. It is lower-yielding than other warm-season grasses.
- ▶ Switchgrass is the easiest warm-season grass to establish and grows early in the season.
- ▶ Sideoats grama should not be continuously grazed and less than 25% of any mix.

Legumes

- ▶ Alfalfa is the highest-yielding and a good source of nitrogen, but bloat can be a concern.
- ▶ Red clover must be reseeded to maintain

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its stand and also is a good source of nitrogen. It can cause bloat if not managed properly.

- ▶ Ladino white clover is short-lived, has bloat potential and is not suited for hay.
- ▶ Bird's-foot trefoil is high-quality and non-bloating, but you must rotate grazing for the legume to maintain its stand.



Editor's Note: A former National Junior Angus Board member, Barb Baylor Anderson is a freelancer from Edwardsville, Ill.

Top forage selection tips

Spring is a good time to take stock of your pasture conditions and upcoming needs:

- ▶ Start with a soil test.
- ▶ Recognize there are no silver bullets in forage selection.
- ▶ Choose a forage that best complements present forages, fills needed gaps, meets your goals and management system, and fits within your budget.
- ▶ Always buy certified forage seed. Never buy variety-not-stated (VNS) seed.
- ▶ Stock properly and manage intensively.