

Better Quality Forage =

How you maintain good grazing conditions has a lot to do with your grazing management plan and stocking rate.



PHOTO BY SHAUNA ROSE HERMEL

More Beef Profit Potential

Producing the right amount of quality forage can help tip the scales toward profitability.

During these challenging economic times, cattle owners and managers continue to search for more ways to squeeze the most profit from their operations. One approach that is getting more attention is producing a reliable, abundant supply of high-quality grass.

"Maintaining quality pastureland is the bottom line in a cattle operation," says Rayford Pullen, a registered Angus cattle producer near Bellevue, Texas. "We're actually in the forage business. If we don't have grass for the cattle to eat in summer and winter, we cannot economically produce beef."

Claremore, Okla., purebred Angus producer Mike Armitage echoes Pullen's views on the importance of maintaining quality pasture. "Not only are we growing more forage and converting more dollars into beef, there's an aesthetic value, too," he notes. "It's much easier to market our cattle when prospective customers see them grazing on clean grassland pasture. That makes the cattle much more appealing."

Producing enough high-value forage also gives cattle operations great flexibility. From increased stocking rates and the ability to feed more cows per acre to reduced supplemental feed costs in the winter and increased calf weaning rates or earlier weaning possibilities, operations with more available grass per acre boost efficiency and improve profit potential.

Gauge pasture condition first

"Making pastures work harder takes a systems approach that includes grazing management, balanced fertility levels and adequate weed control," says Craig Alford, range, pasture and invasives portfolio manager for DuPont Crop Protection. "Manage those things well and you'll achieve the increased grass production you're looking for."

To get started improving grass production, Alford recommends assessing the current pasture condition.

"Determine the level of 'decreaser' grass species in the pasture," he notes. "These are

typically more-desirable, tall grasses that can decline under excessive grazing pressure. Decreaser species are good indicators of pasture condition."

As decreaseers decline, invasive weeds and low-growing plants ("increasers") can become established and begin to thrive. While pasture managers often prefer to keep some low-growing plants such as forbs and brush available for wildlife feeding, they shouldn't be allowed to dominate the pasture.

"It's all about maintaining the right balance between decreaseers and increaseers," Alford explains.

For optimal grazing, a pasture should contain at least 76% decreaser plants (see Table 1). Maintaining at least 50% of decreaser species is recommended. Below that level, increaseers gain the advantage, and the pasture's productivity is compromised. Then it's time to determine how the deterioration occurred and make plans for returning those acres to peak production.

Actively manage grazing

How you maintain good grazing conditions has a lot to do with your

grazing management plan and stocking rate.

"For example, when a pasture is in excellent grazing condition, it may only take three acres to feed one cow per month," explains Alford. "When the same pasture is in poor condition, every cow may need 15 acres."

Under that same scenario, a 100-head herd could be maintained on 900 acres over three summer months. That number jumps to 4,500 acres for three months when pasture conditions are poor.

To help avoid poor conditions, Alford offers these steps:

- **Maintain the appropriate stocking rate.** Determine the right number of cattle to keep your pasture in good to excellent condition.
- **Monitor grazing.** When grass has been grazed down 50%, it's time to move the cattle and let the pasture recover.
- **Record pasture condition over time.** One way to monitor pasture condition is to drive a steel post into the ground, then take photos each year in all four directions away from the post. Compare the photos annually to see if increaser plants or other undesirable plants are taking hold.
- **Modify grazing patterns.** If

Table 1: Percentage of plant species desired, by pasture condition, assuming an annual rainfall of 10-14 in.

Pasture in excellent condition includes a higher percentage of tall grasses for grazing (decreaseers) and fewer low-growing plants (increaseers).

Excellent pasture condition:

Green needlegrass	55%
Bluebunch wheatgrass	10%
Little bluestem	10%
Blue grama	10%
Fringed sagewort	5%
Other forbs	10%

Fair pasture condition

Green needlegrass	5%
Plains muhly	5%
Blue grama	20%
Needle-and-thread grass	10%
Sandberg bluegrass	10%
Kentucky bluegrass	5%
Fringed sagewort	15%
Buckbrush	20%
Broom snakeweed	5%
Curlycup gumweed	5%



PHOTO COURTESY DUPONT CROP PROTECTION

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cows are avoiding certain pasture areas, encourage them to eat in those spots by placing mineral blocks or water tanks nearby.

● **Adjust stocking rate.** If your pasture needs recovery time, you may need to lease additional pastureland or reduce cattle numbers.

“We constantly make sure our stocking rate matches forage production,” notes Pullen. “Excess grass is very important to us. Because we don’t know when or if a drought will begin, we only use 35% to 40% of each pasture annually to make sure we don’t run out of grass.”

Apply crop nutrients wisely

When considering the addition of crop nutrients, it’s important to determine where you’ll get the best return on your investment. Conducting soil tests will help identify which nutrients are needed and where they will do the most good.

“In dry western environments, low-lying hay meadows that get adequate moisture will be more likely to provide a positive return on your crop nutrient investment,” Alford says. In other areas of the country with more plentiful rainfall, he adds, most pastures can benefit.

Control weeds to preserve productivity

To avoid costly restoration tactics that can take several years to complete, Alford advises keeping undesirable weeds under control while maintaining desirable species.

“Twenty years ago, a rancher friend of mine said the only free thing in agriculture was the herbicide treatment we use to control weeds on our grassland,” says Armitage. “After 30-plus years in this business, I’ve come to agree with that statement. Whatever investment we make per acre in weed control is converted into additional pounds on our cattle and enhances the long-term productivity of our grasslands.”

With 18,000 acres of predominantly bluestem native grassland, Armitage treats most of his pastureland on an every-other-year cycle, with his intensely grazed acres getting annual herbicide treatments. Pullen sprays about one-third of his 3,500 acres of native grassland pastures each May, or more often when faced with intense weed pressure. Both suggest including DuPont™ Cimarron® MAX herbicide in the tank mix to achieve broad-spectrum, long-lasting residual control with a wide application window.

“With weeds such as woolly croton that germinate later than some of the other perennial weeds we treat in May, it’s important to have residual control,” Pullen notes.

“It’s extremely important for us to have a wider window of application in our area because of all the rainfall and wind we have to work around,” Armitage adds.

“Even in years with below-average rainfall, we expect to double forage

production when we treat with a herbicide,” Pullen says. “Spraying 1,000 acres provides the same benefit as leasing another 1,000 acres, but without having to take care of all the fences.”

Control moving pests

Alford reminds producers not to forget about other pests that inhibit pasture improvement. “After you’ve identified any

rodents, insects or other problems that may be holding back grass production, work with your supplier to select the right control method,” he advises. “Then follow proper application rates, procedures and timing to achieve maximum benefits.

“The condition of your pasture depends on the care you provide. Whether you use chemical, mechanical, biological or burning control methods, be sure to allow enough

time to evaluate treatment effects,” Alford adds. “By taking the time to manage your acres properly from the beginning, you’ll reap long-term benefits for years to come.”



Editor’s Note: *Craig Alford is range, pasture and invasives portfolio manager for DuPont Crop Protection. He can be reached at craig.alford@usa.dupont.com.*