



Grazing Management to Rebuild the Cow Herd

Use available land, labor and knowledge
resources to expand the cow herd.

Story & photo by **Kasey Brown**, associate editor

The national cow herd is in a rebuilding stage, but with recent high crop prices, more pasture ground has turned into cropland. This leaves cattlemen to figure out how to raise more cattle on the same amount of land resources. Is it possible? Yes, but Ted McCollum says there are four considerations to keep in mind when broaching the topic of expansion.

The Texas AgriLife Extension beef cattle specialist iterates these four considerations.

1. What is the objective for rebuilding or expansion?
2. What resources are available on the ranch? This can include more than just pasture, like knowledge, labor, finances and more.



► **Left:** Texas AgriLife Extension Beef Cattle Specialist Ted McCollum suggests using recent high incomes on long-term pasture improvements.

terms of time and expertise? What is your current livestock production model, and what would you like it to be? What can your land resources handle in terms of vegetation and available water? What developments, like fencing or water sources, do you need to add? Finally, but importantly, what financial shape are you in?

He warns that range improvements affect the total ranch operation, so evaluate the feasibility on a total ranch basis rather than a per-acre or per-grazing-unit basis.

Conscious management of existing forages may be a feasible solution with a few changes. He suggested creating a stock-flow plan for your cow-calf operation. This is similar to a cash-flow plan, though it estimates annual forage demands and monthly forage demands for the entire herd, McCollum explains. A stock-flow plan helps you determine the grazing capacity you require, by both year and month.

To complete the process, McCollum says to figure a forage production flow to evaluate the supply and demand compatibility. The forage production flow estimates both annual and monthly forage production.

For example, McCollum says a rancher did both flow

plans and realized his forage availability and stock demand were relatively similar on an annual basis. However, the monthly basis showed that his forage availability was lowest exactly when his stock demands were highest during the fall calving season.

He was able to fill the gaps in forage production by stockpiling to spread the use of forage across time, and supplemented his existing forage with a summer annual.

“Address the most critical forage limitation for the total livestock operation first,” McCollum suggests. “In the context of rebuilding or expansion, total forage production and distribution of forage supply across the year are the first considerations.”

Enhance usage of existing forage

Can you increase your existing grazable acres by using available forage production? There are a few considerations, he says. How good is the coverage of your water distribution? If water sources are far apart, then cows may not be using available forage between those water sources. If you can improve the distribution, then you can increase herd numbers and improve range health, he says.

Additionally, other options to use more of existing pasture include cross-fencing, brush suppression, working around topographical impediments, seasonal use and supplemental feeding. Of those, water distribution, brush suppression and cross-fencing can be 10- to 20-year investments, but he says there are cost-sharing options through government programs.

“With high cattle prices right now, use that available cash flow to help pay for long-term improvements,” he urges.

Enhance production of existing forage

You already have forage stands, but how can you get more from them? McCollum suggests managing grazing through deferment periods and stocking intensity as two options.

Deferment periods can allow leaf and root mass recovery. It can also be incorporated into other management practices, like prescribed burning, he says. Changing the stocking intensity improves plant health and the use of forage production throughout the year.

Monitor the soil fertility and forage nutrition of current and introduced

pastures, he recommends. Testing for only nitrogen is common, he acknowledges, but testing for more nutrients will prove beneficial. Knowing the nutrient deficiencies and fertilizing correctly will help maximize forage production. However, before fertilizing, calculate whether the fertilizing cost will be less than leasing pasture or buying hay.

Many options exist to renovate introduced pastures, like interseeding legumes, weed control, mechanics like aeration, and replanting or reseeding. If feasible, legumes can increase the total production and reduce nitrogen fertilization, he says.

Add forage production

While getting more pastureland is a challenge, he offers that redirecting land use could increase forage production. He says the first concern is to figure out what will complement existing forage production. Additionally, how does the additional forage resource fit in the total ranch plan? There needs to be balance, he emphasizes.

The forage production flow should show the monthly supply of each type of forage, so that will help figure which months have

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3. What are any additional grazing needs?
4. How can your current grazing resources or land use be adapted to fulfill objectives?

He suggests cattlemen evaluate the opportunities to enhance the utilization of the existing forage production, enhance production of existing forage resources, add forage production by redirecting land use, and increase stability by creating a drought cushion.

Know what you have

Before diving into each of these opportunities, he urges cattlemen to assess their current resources. What kind of management capabilities do you have in

CONTINUED ON PAGE 144

Grazing Management to Rebuild the Cow Herd CONTINUED FROM PAGE 143

nutrient holes. Additional forage should work to fill these holes. Keep in mind, he adds, that complete forage complementarity should include total yield, the season of growth, seasonal nutritional value, tolerance to defoliation, stockpiling capability, availability throughout the year, dependability and management needs.

Perennial forages are the backbone of the forage system and primary source of tonnage, he acknowledges. Stockpiling perennial

forages can provide year-round grazing when needed because they are dependable forages. However, perennial forages do not always supply the highest nutritional value. Management should be aimed at perpetuating the stands.

Annual forages can serve as gap fillers, and can keep acres available for other use. They offer bonus production and higher quality. They can also survive more intense use. They are less dependable forages, though, and there

is more risk in establishing the stands.

When deciding whether to plant warm-season or cool-season annuals, he says look to the forage production flow. When is production needed? What is the nutritional value relative to the annual requirements of the cows? Keep your region's climate in mind, too.

Increase stability

The health and vigor of the plant community and having a drought cushion for the core of your livestock herd will increase the stability of your ranch, McCollum says.

Identify the management required to maintain the integrity of the soils and the site, and to maintain vigor and productivity of the plant community — whether introduced or native.

“A lot of these introduced forages can take more abuse than native, but we can thin those out with the wrong kind of management,” he notes.

Then, he recommends incorporating changes like proper stocking and usage and deferment periods.

Climate variability is becoming the new normal, so avoid liquidating the herd by building a drought cushion. For a stocking plan, keep a reserve available. McCollum suggests allocating less than 75% of your long-term forage production to the core cows.

“In my part of the world, where we get 15-18 inches of rainfall, that may be as low as 50%-60% of my forage production is allocated to cows. If you're in a wetter part of the country, then you could push that higher. The point is, determine how much risk you have of drops of forage production due to drops in rainfall. Then set that level, so if that does occur, you're not having to cut into that main cow herd that you've invested in,” he recommends.

Also, carry grazable forage forward and have an external pasture or forages option if you decide not to sell cows. He adds that cattlemen shouldn't rely heavily on annual forages for cows. If you do end up converting crop ground to pasture ground, he recommends maintaining the irrigation capabilities.

For more specific information on soil surveys or forage options, McCollum recommends talking with an area extension agent or National Resources Conservation Service (NRCS) office.



Fig 1: Stock demand and forage availability out of balance monthly

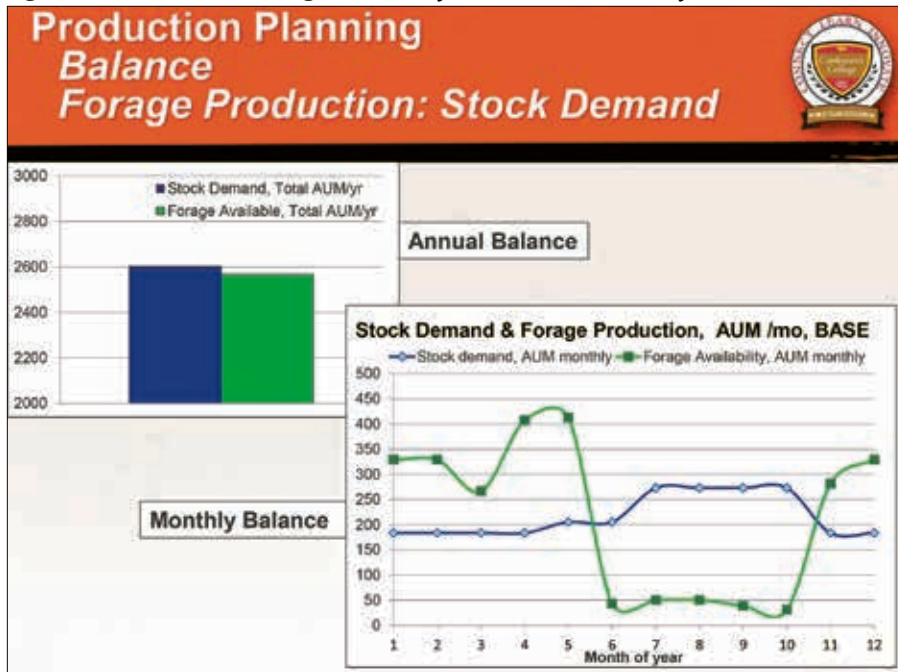


Fig 2: Forage adjustments create demand balance

