Rangeland/Pasture Restoration

By Matt Mattox

The past several growing seasons have been tough on many ranchers. Drought has caused many of the “good” native grasses in rangeland plant communities to decline or die out. Some producers who have bermudagrass, in addition to native grass, were able to have cattle overgraze the bermudagrass while resting the native grass, keeping it from declining severely. However, many ranchers didn’t have this option and now have poor native grass. Where little bluestem and indian grass once were, threeawn, tumblegrass, and silver bluestem have established, not to mention high populations of ragweed, broomweed, bitterweed, and the like.

Now the question becomes, “What do you do to turn this situation around?” The answer that immediately pops into some folks’ heads is to thicken the stand or completely replant. In some cases, this may be the answer. If you asked an economist, the answer would probably be “it depends”—which always results in a few heads shaking and maybe a little dust being kicked, but I promise you they don’t say it to elicit that response. As anybody in agriculture knows, this business depends on many variables such as weather, markets, cash flow, genetics, and soils. The answer to the question depends on your circumstances. It depends on how many years you can wait for your native grass to improve. It depends on how much risk you can bear in replanting a native grass stand. It depends on how many cattle you have to run to make a living. And most importantly, it depends on your management capabilities. So, before you come up with your own answer, thoroughly examine your situation. The first thing you need to know is how to identify native grasses. Qualified personnel from the Natural Resources Conservation Service (NRCS), Bureau of Land Management

(BLM), County Extension service, and other agencies should be able to help you. There are some good illustrated books on the market, and for those of you with computers, the Noble Foundation’s Web site has a very good native plant photographic gallery at <http://www.noble.org/imagegallery/index.html>.

Knowing the condition of your native grass relative to the natural potential for that particular site on your ranch is necessary. Check the grass’ condition. Again, consultants can help you, or you can use the range section of your county soil survey, a book funded by your tax dollars and obtainable through your county NRCS office. If good plants represent more than 15%–20% of the area in question and are fairly well distributed, grazing management, with the proper stocking rate, can normally improve the condition of native grass. This method is often the most economical, depending on the production potential of the site and the potential for effective rainfall during the growing season.

Grazing management alone can sometimes take longer than a person is willing to wait. If good plants are scarce, consider replanting, which can be expensive whether you are planting native grass or introduced grasses such as bermudagrass. If the native grass is in poor condition, you don’t want to wait several years to improve it, and wildlife use of the area is not important to you, consider planting something like bermudagrass or an Old World bluestem variety. However, many soils will not support sufficient stands of introduced grasses. So, check your county soil survey before planting introduced grasses on rangeland. If you are having trouble making a decision on replanting an area, resting it for 1 growing season, if practical, can often help you decide. Normally, seeds from good native grasses

are within a 5-yard perimeter of the parent plant. You can usually get a decent idea of the status of your seed bank within 1 year because good native grasses and seedlings will be taller and easier to see. If you do decide to replant native grass and want a successful seeding, you will need to

- Make sure the site is suitable for seeding (not too rocky, droughty, etc)
- Choose plants that are adapted to the site
- Kill weeds, and prepare as adequate a seedbed as possible (normally, this means very light tillage, if at all, in higher rainfall areas to reduce weed competition)
- Plant during theoretically optimal growing conditions
- Consider planting mixtures of species to reduce risk of planting failure
- Follow seeding rate guidelines
- Plant at proper seeding depth

Weather can make or break you, but completing these tasks as well as possible will greatly improve your chances of obtaining a good stand of native grass.

If you think your home on the range needs a little housecleaning, contact a forage or rangeland professional to discuss your situation. Better yet, the coming years may provide us with better growing conditions, and we can take “it depends” out of our vocabulary for a few years.

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