The Road to Recovery

By Paul D. Ohlenbusch

Drought was the topic for up to five years in much of Texas. Then came 2007! Many parts have received more than their average rainfall in the first seven months. Some, a lot more!

Now, the grass is green and has grown well. The wildflowers bloomed well in the spring. Everything is recovering well. Don't bet on it! To understand what is happening, the information in the last several articles provides the background for what the future needs are.

First, perennial vegetation, both grasses and forbs, are just beginning to recover IF allowed to. The critical time for perennials is from mid-July to killing frost. This is the time perennials store food for next year. (See July-August issue.)

Second, many annual plants came on in the spring (wildflowers) and may have held back the warm-season perennials by shading them.

Third, the heavy rains on saturated soils in many areas. Hopefully, the soil profiles still have plenty of moisture. "How much soil moisture will actually be available for the perennials?" is the question as the summer continues. Will the weather remain wet or go back to dry?

In addition to having low food reserves, the plants have lost root mass, which limits their ability to take up nutrients and water. The root mass will take time to replaced and is one of the main requirements for recovery. The root mass on grasses and forbs make up at least 50 percent of their total weight and can be over 75 percent. Without the root mass, the plant can't compete with other plants.

So, how long does it take for the grasses and forbs to recover? It depends on three major factors: length of the drought, soil characteristics and precipitation in the following years. Table 1 gives some general guidelines following one dry year. For each additional drought year, add at least an additional year. In reality, as the average precipitation decreases, the longer the recovery takes. (September/October 2006)

There is an economic factor involved with the lengthy recovery time. With low animal numbers comes reduced gross income. This means variable costs will be reduced, but fixed costs will remain the same. How do you cover all these costs? Many options exist, but some of the more common ones include outside employment or income, selling assets, hunting or recreation opportunities. If land is leased or rented, consider letting it go. Do what works for you.

I am reminded of a rancher in West Texas during the 1950s drought. As the drought continued, he culled back more and more until he had his base genetic herd left. When the drought broke, he looked at the price and quality for replacements and decided to replace from within.

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MANAGEMENT TIPS

- Continue to evaluate rainfall history and current soil moisture status. If soil moisture has been short, late-season plant growth may be limited. Limited or no soil moisture can mean little plant growth.
- If plant growth is excellent, avoid the urge to add animals to harvest the forage. Instead, let the plants have the opportunity to store food for next year. Stockpile forage for fall and winter and look to the future.
- Consider stockpiling excess forage for fall and winter use.
- Monitor water sources for needed levels and quality. Develop options if sources are less than optimal.
- Review and adjust grazing and economic management plans for the rest of 2007 and adjust for current and past weather conditions, as well as changing economic factors.
- Start planning for 2008. It's never too late to consider a five-year planning window.

TABLE 1: YEARS FOR RECOVERY FOLLOWING ONE YEAR OF DROUGHT

Precipitation Zone (inches)	30+	25-32	18-26	12-18	>12
Years	1	2	3	3+	4

*overlaps in zones allows for differences in growing season length and soil characteristics.

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After several years of building back, folks noticed his pastures were in better condition and didn't have the annual weeds found in most pastures. By rebuilding over several years, the grasses and forbs his animals depended on were able to recover and provide the forage they needed. This also kept out undesirable plants that other ranches gained.

Today, managers need to realize that perennial grasses and forbs need time to rebuild their competitive ability. This can only happen if the plants are allowed to have plenty of leaf area to produce food for storage and root growth. If this is not allowed to happen, the animals will utilize the most desired plant species. Over time, these species will be lost and the animals are forced to utilize less desirable plants. Net result is lower carrying capacity, poorer animal performance and probably higher costs.

Next time: "*What's the Future of Grasslands?*" Agricultural land is being lost at over 1,200 acres each day. Will grasslands for grazing and wildlife still be around in 50 years?

See the previous articles at www.grassbydesign.com/tda.htm.

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