



Outside the Box

► by **Tom Field**, director of the Engler Agribusiness Entrepreneurship Program, University of Nebraska

Drought planning

For two decades, the hurricane forecasters at Colorado State University have issued a December prediction about Atlantic storm activity for the ensuing year. In the future, forecasting will be delayed until April. Why? After a vigorous evaluation of their methodology, according to the scientists, they concluded that predicting hurricanes and major storm activity any earlier is “just about as good as making a guess.”

Their announcement reminds us that despite all of our knowledge, weather is beyond our reach of control. Just as the first people who domesticated plants and animals must have understood that weather was a chaotic influence on agricultural enterprises, modern agriculturalists must deal with weather-induced risk.

Planning and flexibility

Nonetheless, cattle producers must incorporate weather issues into their management strategy — be it drought, blizzard, torrential rains or extreme temperatures. To assume that conditions will be ideal leads to poor decision-making that reduces flexibility in tough times. Yet, assuming that conditions will be poor limits the opportunity to take advantage of excellent conditions. Perhaps Ben Franklin was right when he advised that “planning for the worst and hoping for the best” was the best approach.

At the recent Range Beef Cow Symposium in Mitchell, Neb., forage specialists Jerry Volesky (speaker) and Don Adams presented a paper that provides guidance for approaching management when forage conditions are poor and feed is limited. Their approach provides a reasonable process that can help cattle producers create a system with a proactive plan of action in times of moderate to severe drought.

Drought has affected nearly every region of the United States during the past decade, whether in the form of long-term low precipitation levels or relatively fleeting periods of low rainfall during a critical growing season. The consequences of drought are reduced forage production, root growth and rhizome development. In the case of long-term drought, plant species composition will be affected. Fortunately, precipitation levels and timing provide a good indicator of anticipated forage production.

Nonetheless, managers are advised to have a plan in place to assure that decisions are made early before damage to the grazing

resource or reduced cow herd performance is severely affected. There are two basic choices available to managers in times of drought — find additional feed resources and/or reduce cattle numbers.

Production decisions

Volesky and Adams point to the following decisions to preserve animal unit month (AUM) capacity for the most productive animals in the herd when early indications point to drought:

- Cull animals in a timely manner each season to avoid unproductive animals consuming limited resources.
- Identify surplus animals (old cows, misfits in terms of size and type) and cull them and their calves early in the grazing season.
- Wean earlier and sell steer calves and surplus heifers closer to weaning date.
- Pregnancy-check earlier than normal and remove open and late-bred females from the herd.
- Seek alternative local feed resources and weigh the cost and benefit of moving cattle to other regions with better forage availability.

The Nebraska researchers provided an example of saving 1,197 AUMs and 140 tons of hay by utilizing a combination of these strategies in a 520-head herd. The key to their success was having a plan in place and implementing it in a timely fashion.

Alternative and stockpiling forage

Accessing alternative sources of feed is a second area of opportunity under drought conditions. In working through alternate

strategies, decision makers must integrate effects on cost of production and revenue. Stockpiling forage can be achieved through a variety of choices:

- Build standing forage reserves through deferred use or by shifting low-production or low-return hay ground to grazing.
- Increase pasture and range productivity via implementation of improved grazing strategies based on appropriate stocking rates. Seeding is another option, especially in irrigated situations. A forage and range specialist can provide counsel in choosing optimal specie composition and other agronomic protocols.
- Building hay reserves is another consideration to provide flexibility against weather risk. As with the other options, financial effects must be considered and storage should be developed that preserves forage quality to the extent possible.
- Supplemental feeding during periods of drought can be effective. Research has shown that distillers’ wet grains can be used to supplement low-quality forage. When evaluating supplements, price per unit of feed value should be used to make comparisons.

A good source of information to assist cattle producers in building a drought management strategy is the National Drought Management Center, www.drought.unl.edu/ranchplan, created by the University of Nebraska–Lincoln. This resource provides a comprehensive approach in determining options under drought conditions.

Predicting the weather has never been a perfect science but through effective planning, cattle producers can be better prepared to respond appropriately to the whims of nature.

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