



# Outside the Box

by **TOM FIELD**, professor of animal science, Colorado State University

## Wreck avoidance

Business leaders point to the importance of being able to describe the core mission of an enterprise in less than a sentence or two. Bob and Judy Prosser, owners of the Bar T Bar Ranch in Winslow, Ariz., have taken this advice to a new level when they describe their management philosophy as “wreck avoidance.”

As I've thought about their approach, I am reminded of my Australian friends who contrast the general management styles of our two countries by stating that Australians manage as if things are only going to get worse, while Americans manage as if they will only get better.

Identifying the manageable control points in the beef production process is the first step in implementing a wreck-avoidance plan and lays the foundation for value-added production. There are four general categories deserving focus: reproduction, stocking rate, cost of production and health.

### Manageable control points

**Reproduction.** Reproduction is the bellwether trait that provides the

best indicator of the cumulative effectiveness of the nutritional, disease prevention and genetic management efforts on a particular farm or ranch. In terms of economic impact, reproduction has been estimated to have 10 times more impact on profitability than growth traits. While 100% reproductive efficiency is not typically an appropriate goal, improvement in weaned calf crop percentage is one of the most critical factors affecting breakeven price.

Percent calf crop weaned is affected by the fertility of the cow herd and the bull battery, as well as the death loss of calves prior to weaning. Failure of the cow to become pregnant accounts for approximately 60% of all losses prior to

weaning, and some 30% of preweaning losses can be attributed to calf death losses at birth and within the next two weeks. The primary causes of death loss prior to weaning are calving difficulty and disease — especially respiratory and digestive ailments.

**Stocking rate.** Stocking rate describes the animal demand for forage relative to the size of the grazing landmass. Stocking rate influences not only the quantity of available forage, but the quality as well. Determination of the appropriate grazing pressure for a pasture or series of pastures is among the most critical decisions made by cattle producers every year.

Continuous long-term overstocking will lead to deterioration of the forage base. Once the health of the forage base has been compromised, the most immediate consequence is the loss of management flexibility. Managers are then faced with the task of either reducing stock numbers, which can be especially problematic in times of low or falling cattle prices, and/or supplementing the forage with oftentimes costly purchased feedstuffs to prevent losses in reproductive efficiency. Thus, the proverbial domino effect is set into motion, which results in one problem compounding another.

**Cost of production.** Cost of production is the third control point that can create its own set of negative results if left untended. The big ticket item in annual cow cost is typically directly or indirectly related to feed.

Most low-cost producers have implemented strategies that allow for increasing the number of days that cows graze while decreasing the amount of harvested and purchased feed given per cow. This is typically achieved via better matching of calving season with green forage production, extending the grazing season via intensive and rotational systems, improving forage production and utilization via a variety of range enhancements, stockpiling standing forage for fall and winter grazing, and weaning calves at younger ages to allow cows more opportunity to recapture body condition.

It has been said, “If it rusts or rots, then own as little of it as is possible.” Equipment and machinery have a nasty habit of requiring additional

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inputs while rapidly depreciating in value. “Can we find a way not to need everything you want?” asked South Dakota rancher Roger Dunn of his brother. Both of these statements point to the need to keep the pressure on the cost of production.

**Animal health.** Animal health is the final point of influence where the combination of stress minimization, effective vaccination and good sanitation practices provide an environment in which cattle can perform at profitable levels. Unfortunately, there is no recipe for a one-size-fits-all herd health program. However, there are a few guidelines that can help frame the health plan:

- Record and analyze herd health history.
- Identify clear marketing goals, and understand the expectations of the customer.
- Following label guidelines, be precise in the timing of administration and adhere to Beef Quality Assurance (BQA) guidelines.
- Minimize stress by assuring that handling practices are appropriate, facilities are in good working order and the ranch staff is well-trained.
- Assure appropriate feeding programs with specific attention to mineral supplementation.

There are two common threads connecting these four areas of control — people and recordkeeping. Clear communication of expectations and consistent training can help assure that the “defensive driving” practices are implemented on a day-to-day basis. Finally, an effective recordkeeping system that allows for early detection of problems, trend analysis and control point monitoring provides the information required for a manager to effectively avoid the biggest of crashes. Good luck and safe driving.



**Editor's Note:** Tom Field is a professor at the Colorado State University (CSU) Department of Animal Sciences, where he is responsible for the seedstock cattle breeding program of the university teaching herd, composed of Angus and Hereford cattle. He directs the Seedstock Merchandising Team and teaches Food Animal Sciences, Beef Production and Family Ranching. He is a contributor to the research efforts of the CSU Beef-Tec program. A frequent speaker at beef cattle events in the United States and internationally, Field is also a partner in his family's commercial cow-calf enterprise, which uses Angus as an important genetic component.