



Outside the Box

► by Tom Field, director of producer education, National Cattlemen's Beef Association

Benchmarking the cow-calf sector

Characterizing and understanding the U.S. cow-calf industry is made difficult by the regional variations in production systems, the variety of economic goals of beef cattle owners, and a host of other factors. However, by creating and utilizing demographic and management benchmarks, it is possible for cow-calf managers to assess their protocols and decisions relative to other operations and for seedstock suppliers to better understand the needs of their cow-calf customers.

A few demographics

The U.S. cattle herd is scattered across all 50 states. About 80% of the cow-calf herds

have inventories of less than 50 head of brood cows, yet those herds account for less than 30% of the U.S. beef cow inventory. The

Table 1: Reproductive technology utilization (percent) by herds of various sizes

Reproductive technology	1-49	50-99	100-199	>200	All herds
Estrus synchronization	5.7	10.5	14.9	19.3	7.9
Artificial insemination	5.6	8.4	16.3	19.8	7.6
Pregnancy testing	11.3	30.2	47.7	71.7	20.2
Pelvic measurement	1.5	4.8	15.4	15.9	3.9
Body condition scoring	10.5	19.1	26.8	34.4	14.3
Semen evaluation	10.9	33.2	45.9	56.8	19.5
Embryo transfer	0.7	4.3	2.6	5.0	1.6
Any of the above	25.3	49.7	65.8	78.5	35.0

Source: Beef 2007-2008 Part II: Beef Cow-calf Management Practices in the United States. USDA APHIS VS NAHMS, February 2009.

Table 2: Primary reasons reproductive technologies were not incorporated on herds of various sizes

Technology	Doesn't work	Labor/time	Cost	Lack of facilities	Too complicated
Estrus synchronization	2.3	39.1	16.8	10.5	17.2
Artificial insemination	1.6	37.7	21.1	10.6	16.0
Pregnancy testing (palpation)	1.3	38.4	19.6	10.6	16.4
Pelvic measurement	1.9	38.2	18.1	10.1	17.7
Body condition scoring	1.7	40.1	17.0	8.3	18.5
Semen evaluation	1.3	34.4	25.2	9.4	16.1

Source: Beef 2007-2008 Part II: Beef Cow-calf Management Practices in the United States. USDA APHIS VS NAHMS, February 2009.

Table 3: Weaning protocols (%) utilized by cow-calf herds of various sizes

Protocol	1-49	50-99	100-199	>200	All herds
Sold same day as weaned	56.0	44.8	27.0	34.0	49.8
Sold 1-31 days postweaning	15.4	19.9	21.2	12.4	16.6
Sold 32-61 days postweaning	12.2	12.8	25.6	16.0	13.8
Provided buyers information about health program	28.2	43.4	57.5	74.0	35.2
Sold calves to repeat buyers	27.2	37.1	39.8	60.3	31.5
Utilized forward pricing	2.3	3.1	6.9	15.4	3.5

Source: Beef 2007-2008 Part II: Beef Cow-calf Management Practices in the United States. USDA APHIS VS NAHMS, February 2009.

10% of operations with more than 100 head of cows on hand control a little more than half of the national herd.

According to the most recent National Animal Health Monitoring System (NAHMS) survey of management practices on beef cattle operations (2007-2008), only 14.3% of cattle operations depended on that enterprise as their primary source of income. Among herds with more than 200 head of cattle, 65% of the owners reported cattle as their primary income source, while just over 40% of herds ranging from 100-199 head relied on cattle sales as the primary source of income.

About 50% of beef cows (48.4%) are on operations with a single defined breeding season, while 17.5% of cows are in herds with two or more defined breeding seasons (typically spring and fall). Still, 34.1% of the cow herd is managed with no set breeding season.

As for time of calving, 45.1% of the national cow herd calves in January to March, 32.3% calve in the second quarter, 9.1% calve in the third quarter and 13.5% deliver in the months of October through December. About half of cow-calf enterprises have calving seasons of three months or less, with an additional 25% restricting the calving season to 150 days or less.

Reproductive technologies

The use of reproductive technologies is highly variable, with utilization generally higher on larger operations (Table 1).

Pregnancy checking at the end of breeding season and annual semen evaluation of herd sires are the two most likely technologies to be incorporated. However, approximately two-thirds of operations reported that they didn't use any of the technologies described in Table 1.

The reasons why these technologies were rejected provide keen insight into the mindset of many cow-calf operators (Table 2). In nearly three-quarters of the cases, three factors reduced adoption — labor and time constraints, expense, and complexity. Surprisingly, the single greatest barrier was not cost, but rather labor constraints.

Weaning observations

Survey data relative to weaning

performance revealed that male calves weighed an average of 559 pounds (lb.), while replacement and non-replacement heifer calves averaged 532 and 515 lb., respectively. Herds with more than 50 head had very similar average weaning weights and outperformed herds with fewer than 50 head by nearly 40 lb.

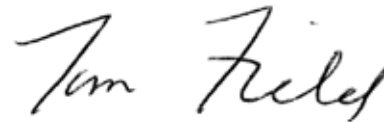
The average age at weaning was 207 days, with little variation between various-sized herds. Table 3 describes, in part, the weaning procedures utilized by the cow-calf sector. In general, larger herds tend to background or precondition their calves prior to sale, provide more information to buyers, and sell

more often to repeat customers. They also are more likely to manage risk with forward pricing.

In summary

While these data are not a perfect description of all cow-calf enterprises, the information helps seedstock suppliers understand that their customers have opportunities to incorporate management changes that will most likely prove to be beneficial. In regard to providing information and educational opportunities to clients, these data provide potential areas of focus.

As seedstock providers develop plans to be competitive, benchmarking their customers against these national data should provide insight into client needs. For access to the full survey results go to <http://nahms.aphis.usda.gov>.



E-MAIL: tfield@beef.org

Editor's Note: *Tom Field is a rancher from Parlin, Colo., and executive director of producer education for the National Cattlemen's Beef Association.*