

# Female Inventory Change Analysis Is Big Benefit of Commercial Records

By Kris Ringwall  
Extension Beef Specialist  
NDSU Extension Service



In a world of bigger and better, performance has been an often-misunderstood and -abused term. For years, beef cattle producers discussed production record programs as tools which would help manage herd performance. This philosophy was preached since the late 50s and early 60s as consultants and extension beef specialists urged producers to weigh calves and analyze the information for efficient cattle production.

Purebred breed associations have continued to improve the use and accuracy of production records and made significant change within each respective breed of cattle. The same can be said for the commercial beef programs that are available to focus and improve the analysis of herd management procedures.

Anytime I overhear a conversation between a producer that keeps records and a producer that doesn't, I notice that their discussion focuses heavily on performance. That's only natural because part of the paycheck comes from the annual production (calves). There is, however, another important part of the record-keeping software that has a tremendous impact on current and future beef sales--inventory change in females.

Bull selection utilizes records from other producers. These records are generally available through the breed association's record base and presented as expected progeny differences, commonly called EPDs. Sire selection, however, has a direct impact on a cow herd, especially for producers who grow their own replacements and utilize programs like the Cow Herd Appraisal Performance Software (CHAPS).

Commercial cow record-keeping programs provide producers with analysis on the percentage of cows that are culled and the reasons why they were culled. CHAPS data suggests producers are using the analysis to make decisions on how and when to move females in and out of the herd.

In the past five years, CHAPS producers have rotated female inventory by an average of 14.4 percent each year. (In 2002, the average was 13.7 percent.) In other words, out of every 100 cows exposed to the bull during the normal breeding season, producers culled about 14 cows in the fall.

In reviewing the numbers from the most recent year (2002), the largest data set and most significant reason for culling cows by producers was reproduction. In 2002, approxi-

mately 5.1 percent of every 100 cows exposed to the bull in the spring were open in the fall and culled. This does not mean additional cows were not open, but the decision was made to only remove 5.1 percent of the cows from the herd that were open.

The next-largest group of cull cows (2.1 percent) was those sold to the neighbor. In this case, the cow herd was simply moved from one producer to the next. In 2002, the third-largest group of cows culled (2.4 percent) were old cows.

The next major group of cows leaving the herd were those cows that were structurally unsound -- had udder problems, disposition problems, etc. This group accounted for 1.3 percent of the cow herd. As is often the case in accounting for cows and the challenges in recording all the data, 1.3 percent of the cows were culled for unknown reasons.

Finally, the most-talked-about reason, but in reality the very last reason cows left the herd in 2002 was poor performance (1.3 percent). Well, actually, there was one more reason -- the death of a cow on the ranch. Those dead cows accounted for 0.8 percent. There is, however, no active management decision involving sporadic dead cows.

Purebred breed associations have made tremendous progress in helping producers with bull records. EPDs are indicative of the tremendous genetic progress breed associations have made evaluating bulls based on solid genetic records, somewhat independent of environment.

The CHAPS data reveals that today, in the world of Country Of Origin Labeling (COOL) and source verification, commercial herd management programs are utilized to control and manage cow herd inventory, a big change from 10 years ago.

May you find all your ear tags.

Your comments are always welcome at [www.Beeftalk.com](http://www.Beeftalk.com). For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to [www.CHAPS2000.com](http://www.CHAPS2000.com) on the Internet. In correspondence about this column, refer to BT0169.

## Reasons for Culling Cows\*

Average cow herd size = 187 cows

	Number of Cows	Percent of Herd
Infertile or open	9-10	5.1
Sold to the neighbor	4	2.1
Old age	4-5	2.4
Structurally unsound, bad udders and poor disposition	2-3	1.3
Unknown or missing data	2-3	1.3
Poor calf production	2-3	1.3
Cow died	1-2	0.8
Overall 2002 culling rate for CHAPS herds	24-30	14.4

\* Based on CHAPS records, 1997-2002 production years.