

Reasons that Dairy Cows Leave Home - Valid or Not?

David Kelton, DVM, PhD and **Kerry Lissemore, DVM, DVSc**
Department of Population Medicine
University of Guelph, Guelph, Ontario, Canada, N1G 2W1

Approximately 100,000 dairy cows are culled from dairy herds enrolled in milk recording through Ontario Dairy Herd Improvement (DHI) each year. The impact that these animals have on herd performance parameters, through their inclusion or exclusion, has been well established. As each cow removal is recorded, the producer is asked to designate one of 13 potential reasons for the cull. Once a year, a summary of all removals, including the removal reason and the days in milk (DIM) at removal, is provided to each producer. Questions have been raised about the utility of the removal report, and the validity of the information that it contains. The objective of this retrospective study was to validate, if possible, the reasons for removal and to suggest alternative strategies to recording and reporting dairy herd removal information.

Records for 292,000 cows removed from Ontario DHI herds between January 1991 and December 1994 were summarized and examined. The largest single category for removal was "Sold - Beef" (29%), with no specific reason given. With "Sold - Dairy Domestic" (20%), "Sold - Beef: Low Production" (15%) and "Sold - Beef: Reproduction" (13%), they made up over 75% of

the culls. Production, age and somatic cell count (SCC) data were used to validate the reasons Low Production, Old Age and Mastitis, respectively. Cows culled for Low Production had a significantly greater negative BCA deviation from herd average (-29) than did the remaining cows (-16). Cows recorded as culled for Old Age had a mean parity of 6.5 lactations at removal, versus an overall mean of 2.8 lactations. Cows culled for Mastitis had a SCC deviation from herd average of +680,000 cells/ml versus an overall deviation of +117,000 for all removed cows.

While it appears that cows removed for Low Production, Mastitis and Old Age did differ from other removals in those parameters, there was no opportunity to validate the other available removal reasons. The large proportion of animals listed as "Sold - Beef" suggested that many herd owners did not find utility in recording a removal reason. Efforts are currently underway to change the manner in which removal information is recorded and reported. The development of a Removed Animal Profile, incorporating all information available about the cow, is currently underway.