The 2017 Western Canadian Dairy Seminar in Review

Source: Dr. Dave Christensen

The lead presentation was the "Canadian Dairy Industry, Past present and Future" by John Kennelly, Mike Southwood, and Bruce Beattie. The presentation recognized the roles of John Kennelly, Alberta Milk Producers Association and Alberta Agriculture in organizing the first WCDS held in Banff in 1983 with 77 paid attendees and a total of 95. Attendance at this world class dairy meeting in 2017 was 947 with strong support by sponsors and advertisers. There was something of interest for everyone associated with the dairy industry.

On Tuesday, March 7 there were dairy farm tours, a hoof trimming training session and a workshop for nutritionists. The seven sessions led off with industry challenges. Bruce Beattie noted the difficulty of predicting the future and the value of industry coordination at the national and provincial level. Margaret Smith described how genetics and plant breeding have changed the food supply.

The second session on Farm Management described dairy farm hazards that included biological, chemical, ergonomic physical and lifestyle decisions. The need for employee training and cow friendly protocols were described.

Session three on nutrition covered protein supplements, fatty acid digestibility, intestinal health and feed additives. Tim Mutsvangwa's review of literature showed that canola meal can effectively replace soybean meal. Other speakers showed that fat sources can be beneficial but the diet ingredients and fat source must be considered, and that computer tools are available to estimate the economic benefit of feed additives.

Session four was a highlight with five graduate students presenting an overview of their research project in 10 minutes. In this competition Amanda Fisher, U of A, placed first with her research on colostrum feeding, with Meagan King, U of Guelph, placed second describing fresh cow illness detection and Tony Bruinje, U of A, third with research on milk progesterone profiles. The second part of this session was a producer panel on measures of success. The presentations lived up to the passion aspect of the theme of the program. JP Brouwer focused on the use of new technology and the management required in a family partnership. Daphne Holterman described how their dairy had expanded from 45 cows to 425 and their methods for great people, great cows and great returns. Milk per kg of feed is one of the key measures of their management success. Jake Vermeer, described successful intensive management ranging from use of embryo transfer, transition cow management, and innovative methods of forage production.

Session five on reproduction dealt mainly with ovarian function and estrus detection. Associated factors include nutritional and metabolic stress, inflammation and infection. Good transition cow management, nutrition and in some cases programmed hormonal breeding were described as important in improved fertility. Further research is required to identify genetic stress, disease and nutritional factors in embryo loss. It was also pointed out that research on automated methods of heat detection shows promise but methods must be cost effective.

Session six on cow management and welfare started with a presentation indicating that pain is a serious welfare issue and pain relieving medicine may be underused. There are many indicators of pain based on body position and facial expression. Two papers in this section dealt with estrus detection, the variability among farms and relation of intensity of estrus and fertility were described. Automated detection methods range from mounting activity, rumination, body temperature to milk progesterone (P4). Gordon Atkins provided an in depth review of the role of genetics, and foot conformation and methods of foot trimming in managing lameness. A second paper described the impact of lameness, which is approximately 25%, on herd performance and causing estimated a cost of $528 per cow per year.

Session seven on Technology and Facilities dealt with precision management (PM) as well as feeding management and design of automated milking systems (AMS).

Jeffery Bewley led a workshop on Precision Management for nutritionists on Tuesday and in his Friday presentation described the wide range of electronic tools available. The basis of PM is comprehensive information on individual cows based on traditional herd monitoring as well as many new ways of collecting and interpreting data for economic benefit. Three papers reviewed the role of AMS. Most producers found the transition to AMS to be successful, but changes in housing may be required. The facilities must ensure cow comfort and lameness must be controlled and foot baths well managed. In the final paper, Greg Penner noted that low concentrate AMS feeding allows for more flexibility in concentrate formulation and overall feeding strategies.

During the week several speakers commented on the wide recognition of the high quality of this annual seminar. Such recognition is a tribute to the 17 individuals that act as the advisory committee. The 2018 WCDS will be held March 6 to 9, with information at wcds.ca and wcds@ualberta.ca.