

Canadian Dairy Producers' Transition to Automatic Milking Systems: Preliminary Results of a National Survey

C. Tse¹, T. DeVries², E. Vasseur³, H. Barkema¹, E. Pajor¹

¹Dept. of Production Animal Health, University of Calgary, 3330 Hospital Drive NW, Calgary, AB T2N 4N1

²Dept. of Animal and Poultry Science, University of Guelph, 830 Prescott St, Kemptville, ON, Box 2003, K0G 1J0

³Organic Dairy Research Centre, University of Guelph, 31 rue St-Paul, Alfred, ON, C.P. 580, K0B 1A0

Email: chrtse@ucalgary.ca

Usage of automatic milking systems (AMS) is becoming increasingly common in Canada. The purpose of this study was to describe producers' transition to AMS and document their satisfaction. A total of 149 AMS producers were surveyed in 9 provinces by telephone and email. The average number (\pm S.D.) of robotic units/farm was 2 ± 1 . The median AMS age was 32 months, with a range of 4 to 170 months. Of the respondents, 88% of farms used a free-flow traffic system, while 12% used a directed traffic system. 56% of producers built a new barn and 50% changed housing systems for the transition. 21% of producers trained cows prior to first milking and 38% used a training program for heifers. It took, on average, one week to train cows (7.4 ± 6.0 d) and heifers (7.7 ± 5.9 d), but 2.7 ± 0.4 months for the entire herd to adapt to the robot. 60% of farms had cows that were not able to adapt to the robot. The median proportion of the herd culled for not adapting was 1% (with a range of 0 to 40%). The average number of lactating cows increased from 92 ± 56 to 102 ± 68 . The total hours devoted to milking/day, which included moving/fetching cows, milking time, preparation and cleaning of milking system, decreased by 40%. Milking frequency averaged 3.1 ± 0.4 milkings/day. 84% of surveyed farms experienced an increase in milk yield from their previous milking system. The median bulk tank SCC was 180 thousand cells/ml, with a range of 43 to 375 thousand cells/ml. Changes in bulk tank SCC were variable with producers reporting increases, decreases or no change. Producers also reported an increase in time flexibility, life quality and a willingness to recommend AMS to other dairy producers.

Transitioning to an AMS requires effort in training cows and learning a new management system. Producers reported that AMS have met their economic and lifestyle expectations, while improving animal welfare.