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How Canadian Farmers Are Extending the Grazing Season--A Research Success Story

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How Canadian farmers are extending the grazing season—A research success story

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Key words : beef, winter grazing, low cost

Introduction In the Aspen Parkland of western Canada feeding and managing the beef cow through the winter accounts for 60-65% of the total cost of production in a cow-calf operation (McCartney et al 2004). Generally, 200 winter feeding days (late October to mid May) are required in the Aspen Parkland of western Canada. A series of research and extension activities were developed to evaluate the economics and sustainability of alternative year round grazing systems as a means of lowering the costs of beef production in western Canada.

Materials and methods Dry pregnant beef cows were divided in Nov (late fall) of each of 3 years into three equal groups based on weight, body condition and breed cross and allocated to swath grazing of oat (*Avena sativa* L.) grazing of meadow brome grass alfalfa (*Bromus biebersteini* (Roem & Schul) & *Medicago sativa* L.) regrowth or to a traditional winter feeding system of straw *ab libitum* plus a barley (*Hordeum vulgare* L.) silage and barley grain supplement to meet the 1996 NRC requirements for beef cows. The oat for swath grazing were seeded in late May (late spring) and swathed in the soft dough stage in mid Sept. just before the killing frost. The perennial forage paddocks were cut for hay in early July and allowed to regrow until freeze up. Electric portable fences were used to control access to the grazing treatments and moved every two to three days to an ungrazed area. The traditional feeding system occurred in sheltered wintering pens.

Results and discussion Cattle successfully grazed the meadow brome alfalfa regrowth paddocks until early February at 1.7 cows ha⁻¹ and 178 grazing days ha⁻¹. The cattle grazed oat swath paddocks to early March at 12.6 cows ha⁻¹ and 524 grazing days ha⁻¹. All cattle including the traditionally fed cattle remained in the same body condition and weight changes throughout the study period. Cows calved in sheltered winter facilities in March and April. Wintering costs were reduced by approximately 45% when cattle were able to graze the oat swaths or the meadow brome alfalfa regrowth compared to traditional feeding of stored feed.

The research results on alternate systems for wintering beef cows were presented at research and producer conferences all across Canada. In addition, there was wide spread newspaper press articles. Selected cow calf producers in five different agricultural zones in Alberta were selected to participate in an on farm demonstration program. These farmers hosted demonstration days for neighbouring farmers and also were featured at a large provincial grazing conference. Two extension booklets outlining the different winter feeding systems were developed and widely distributed across Canada.

Conclusion There has been a large percentage of cow calf producers across Canada adapt alternative winter feeding systems based on this research program as a means of reducing their overall costs of operation.

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