Virtual Beef

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Direct general questions and suggestions to: Megan Van Schaik, Editor at Megan.VanSchaik@ontario.ca or call 519-826-5106. For inquiries regarding content of a specific article contact the author.

An Overview of a Fall Calving Beef Cow System

James Byrne, Beef Cattle Specialist, OMAFRA, Lindsay

Fall calving presents opportunities for beef farmers but also several challenges. The major benefits of fall calving is that calves will be heavier at weaning when it comes to the following year's calf sales and can be sold at a time when the volume of such calves is lower. This should give producers a price advantage over lighter spring born calves. It is important to define what we mean by fall calving. In practice this means calves are typically born from mid-September to the end of November, although depending on location, calving may begin as early as mid-August. Breeding takes place from December through to February and calves are weaned at up to nine months of age. The key to the success of this system is to have calves born before the arrival of snow, allowing calves to be born on pasture.

Fall calving cows tend to be in very good body condition. Without a calf nursing, cows will easily gain weight over the summer grazing period. This is important as body condition score plays a pivotal part in the length of anestrus – the period between calving and the first expression of estrus. In all cow-calf operations, the length of anestrus is the primary factor limiting reproductive efficiency which itself directly affects farm profitability. It is important for farm profitability to target a calf per cow per year. As a rule of thumb, the higher the body condition score the sooner a beef cow will breed and the higher the number of cows within the herd that will successfully breed. We do not want overconditioned cows either as this may cause problems at calving. Calving cows early in the fall allows cows to graze on fall pastures and retain body condition. The risk to cows that calve later in the fall is they may be faced with the onset of snow, which can precipitate rapid loss of body condition unless supplementary forage is provided. Loss of body condition can have an adverse effect on the length of anestrus and therefore the rate at which cows get back into calf. In addition, calf performance can be negatively impacted. There is some evidence that assistance rates tend to be lower for fall calving heifers than for spring calving heifers, although this may be explained by the fact that many spring calving heifers calve indoors and therefore have increased access to assistance through closer monitoring rather than an increase in calving difficulties per se.

For profitable beef production, certain key targets need to be achieved and most of these targets are equally important regardless of the calving system in place. Producers should aim for a 365 day calving interval, mortality rates at birth of less than 2.5%, 60% of cows calved by the end of the first month of the calving season and 80% calved by the end of the second month and wean 0.95 calves per cow. For fall calving herds, a weaning weight of 900 lbs for steers at 9 months of age and 800 lbs for heifers at weaning is achievable.

Fall calving poses many challenges. It is a high cost production system compared to spring calving systems. Work carried out by the University of Guelph New Liskeard Research Station showed that the cost of rearing a fall born calf was $47 per cow higher than the spring born equivalent. The higher cost can be attributed to the requirement to provide high quality feed while the calf is nursing in a fall calving system and the increased cost of bedding. To minimise these costs, producers must aim to calve early in fall to maximise the time grazing and aim to have cows and calves onto grass as early as possible once the following year's grass growing season begins. Extended grazing techniques will further help reduce costs but weather conditions and the age of calves has to be considered.

It is important to have a grazing plan in place to ensure that there will be adequate pasture available in the fall to meet demand. Producers will need to bank enough grass over the summer period to have grazing available to cows as they calve in the fall. The planning process begins with considering how cows will be managed on pasture once they are weaned in June/July. Producers must consider the fact that grass growth rates in the fall are less than they are in the spring and consequently the grazing area will have to be larger than what would be needed for an equivalent number of cows calving in the spring. It is critical for the profitability of the system that adequate grazing is available in the fall to avoid feeding supplementary forages for as long as possible.

In the spring calving herd, producers are only concerned about producing stored forage to meet the nutritional requirements of dry cows in the winter. In the fall calving herd, producers have to produce forages such as hay, haylage and corn silage, in adequate quantity and quality, to meet the nutritional requirements of lactating cows and their calves. These forages must be of high quality as the nutritional demands of fall calving cows are high. If high quality forage is not available, grain supplementation will be necessary. Lactating beef cows have a protein and energy demand that is 25% to 30% higher than a dry cow. Additional protein and mineral supplementation from purchased feed will also be required to maintain cow and calf performance.

Mature cows are very resistant to the effects of snow due to a high bodyweight to surface area ratio. However young calves do not have the same tolerance. Housing young calves is the only practical measure to deal with winter conditions and to sustain growth rates necessary to ensure the profitability of the system. Adequate bedding, access to water and access to supplementary feeding, where required, must be provided.

Fall calving cows have a tendency to become overconditioned, which can lead to issues with ketosis. Proper management of the beef cow over the dry period can help prevent this. Such management largely depends on the condition of the cow at weaning, weeks to calving and the feed available.

It is generally correct to say fall born calves command a higher price in the sales barns the following year by virtue of being heavier at weaning and being sold at a time of the year when calf numbers are lower. This is not always true. Calves sold in Ontario in June 2017 averaged 4% lower than calves sold in October 2017. Producers should research likely returns and consider management pros and cons before deciding on this high cost of production system.

In conclusion, fall calving is a viable option for producers to take advantage of being able to sell calves at times of the year when prices are generally higher and numbers on the market are lower. Calves should be born onto pasture as early in the fall as possible. Cows should in good condition at calving which will allow those cows to get back in calf quickly.

Due to the higher costs of the system, it is critical calves achieve their target sale weights prior to weaning. This is necessary to ensure the higher price available to producers adequately compensates for the higher cost of production.

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James Byrne, Beef Cattle Specialist

Ontario Ministry of Agriculture, Food and Rural Affairs

james.byrne@ontario.ca

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Antimicrobial Use and Resistance — Change is Coming

Pending Changes to Address Antimicrobial Resistance

OMAFRA Animal Health and Welfare Branch staff

Increasing antimicrobial resistance is a global concern and its effects on human and animal health have been raised by experts at local, national and international levels.

The Government of Canada is working in partnership with provinces, territories and industry to help control antimicrobial resistance and promote improved antimicrobial stewardship in both humans and animals. Health Canada has announced how it is taking action to help reduce the use of antimicrobials in animals and enhance veterinary oversight:

- By December 1, 2018, a **veterinary prescription** will be required for the purchase of antimicrobials that are important to human medicine. This means that Ontario producers will no longer be able to purchase such products at Livestock Medicines Outlets. It will be important to work with a veterinarian to purchase these products.

  Antimicrobials in mixed feed will still be available at feed mills and will also require a prescription. Producers should discuss delivery options with their veterinarian if there are concerns about geographical distance to a veterinary office or obtaining products for timely treatment.

Products containing the following active ingredients will require a prescription (subject to change):
Apramycin
Bacitracin
Erythromycin
Lincomycin
Neomycin
Penicillin G
Spectinomycin
Streptomycin/Dihydrostreptomycin
Sulphonamides
Tetracycline/Chlortetracycline/Oxytetracycline
Tilmicosin
Tiamulin
Tylosin/Tylvalosin
Virginiamycin
Or their salts or derivatives

Ionophore products and coccidiostats will NOT be affected by this change.

- As of November 2017, approvals and access to **low-risk veterinary health products** such as “nutraceuticals” have been improved to give producers greater access to a broader range of products for animal health.

- Also beginning in November 2017, **importation** of antimicrobials that are important to human medicine **for producers’ own use** are no longer permitted. National producer organizations have been consulted on products that are exempted, but no products containing antimicrobials are eligible for exemption.

- By May 2018, only those with a Canadian Food Inspection Agency Drug Establishment License (DEL) will be able to import **active pharmaceutical ingredients**. Producers will otherwise no longer be able to import these ingredients to mix on farm.

- Beginning with the 2018 sales year, **reporting of veterinary antimicrobial sales** will be mandatory for manufacturers, importers and compounders of veterinary antimicrobials.

- By December 2018, **Growth promotion claims** will be removed from the labels of veterinary products containing antimicrobials that are important to human medicine.

For more information about changes to federal policy and the regulations related to antimicrobial use and resistance, please visit:
Government of Canada's response to antimicrobial resistance

To review OMAFRA's approach to complement federal changes to address antimicrobial resistance, please visit: *Antimicrobial Resistance in Agriculture or* comment on our proposed regulatory changes that align with the federal changes. http://www.ontariocanada.com/registry/view.do?postingId=25272&language=en

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Animal Health and Welfare Branch staff
Ontario Ministry of Agriculture, Food and Rural Affairs

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