Extended Grazing

Beneficial Categories

Background

There are a variety of ways to help extend the grazing season and choosing the one that works best for your operation depends on a variety of factors including winter environment and the availability of water, shelter, summer forage, labour and more. Some methods to extend the grazing season include, but are not limited to, bale grazing in the field, grazing standing corn, swath grazing, stockpiled perennial forages and crop residues. Using extended grazing versus traditional winter-feeding systems (keeping cattle in pens over winter) can reduce costs from decreased equipment usage, decreased feed handling, reduced labour, and minimizing the need for hauling manure. However, to ensure any type of extended grazing system can be successful, good management to keep cattle healthy and in good condition is essential.

Important Management Considerations when Implementing an Extended Grazing system

Depending on regional conditions, management considerations will vary. Forage quality, fencing options, water and shelter availability will need to be planned and managed in all regions. Back-up feed and water supply need to be available in case of inclement weather. Extra consideration for calves, thin cows, young cows, and pairs also needs to be in place. Supplementation may need to be considered depending on forage quality and weather. Forage quality may vary from year to year depending on weather and growing season conditions, therefore feed testing is important to ensure nutrient requirements are met.

Examples of Ways to Implement Extended Grazing

There are a variety of ways to extend the grazing system depending on the growing season and the availability of land and water. The most popular ways are outlined below.

Swath Grazing

Cattle are able to graze annual crops cut in swaths over winter. This allows cattle to be kept on pasture rather than in a pen over winter, which can reduce labour, machinery and feeding costs. In Canada, barley and oats work well for swath grazing and should be cut before the soft dough stage (barley) or milk stage (oats). Barley will have a higher feed value than oats, which is important when considering supplementation. Other cereals can also be considered such as triticale, peas and wheat, with studies finding triticale being a high yielding crop option. Typically for use in swath grazing, cereals are seeded later (mid to late June) than when seeded for grain production, however, timing can vary based on your climate and annual crop choice.

To prevent sorting, trampling and waste, cattle access should be restricted to areas using portable fencing for about three days per paddock. An important weather consideration for swath grazing is snow depth, as deep snow can prevent cattle from reaching the swaths. When selecting a location for swath grazing, consider fields with available shelter or use portable windbreaks and fields close to water access.

Corn Grazing

Grazing standing corn is increasing in popularity and has a variety of benefits. These include shelter, higher energy feed, and increased yield compared to barley. Also, unlike swath grazing and stockpiled forage, corn is more easily accessed even under snowy conditions. However, corn has one main setback in Canada: available heat units for growth. There are increasing hybrid varieties that can grow at lower heat units, but these vary based on location. Reach out to a trusted agronomist familiar with corn to determine if your site will be suitable for growing corn.

Corn also requires increased management for successful grazing including limiting/controlling access to the corn with portable fencing to prevent grain overload, waste and trampling. Also, corn, although higher in energy, is typically lower in crude protein content so supplementation may be needed especially for replacement heifers or backgrounding cattle.

Bale Grazing

Bale grazing is one of the most common extended grazing systems used in Canada. Perennials are typically used for bale grazing but greenfeed and straw can also be used. Bale quality will vary depending on forage type and stage of harvest. Legumes have a higher protein content than grasses making them a good option if considering bale grazing in the winter. Placing bales in the field prior to snowfall with 9–10 metres between the bales will reduce costs associated with snow removal, equipment operation, and ease of management.

Certain environmental considerations should be understood when using bale grazing. Higher stocking density can typically be used for bale grazing compared to swath grazing; however, manure concentration around feeding areas can be a concern. Depending on winter conditions, snow can accumulate between bales reducing access or animal movement in the field which can impact the soil quality and nearby bodies of water from nutrient loss from surface runoff with snow melt. Proper planning of bale placement in the field with consideration for typical winter conditions can limit these effects.

Stockpile Grazing

Stockpile grazing is useful in fall and early winter, typically before significant snowfall, and involves grazing regrowth on hay fields or pastures. A major benefit of this type of extended grazing is the reduced cost compared to other systems, as there is no need for harvesting machinery or swathing/baling. However, under general Canadian winter conditions, it may not be possible once winter weather and snow accumulation begins.

Nutrient quality can also be a concern with stockpile grazing as it can be of lower quality compared to forages in other systems. Therefore, supplementation is an important consideration when using this extended grazing method. Ideal forage varieties for stockpile grazing will vary based on growing season, fall and winter environment, and stocking rate. Discussing these plans with a local government agriculture office or agronomist with specific knowledge for your area is a good practice.

Potential Economic Costs/Benefits

The most common benefits of using extended grazing systems are the reduced cost of production (feed cost, fuel costs and manure handling) and labour needed for winter feeding. Other benefits can include environmental benefits such as feeding grass, reduced carbon footprint and increased soil quality.

Common costs include new or upgraded equipment costs if you implement a new crop such as corn which requires specialized equipment compared to other annual crops. The use of portable fencing is also an added cost and management consideration if that is not already in use on your operation.

Financial Incentives

There are no current financial incentives but there are free learning opportunities available if you want more in-depth information about extended grazing systems.

There is also a mentorship program available through the Canadian Forage and Grassland Association (CFGA).

For more information on extended grazing practices, you can visit the following sites:

Beef North - Extending the grazing scene this fall and winter

Beef Cattle Research Council (BCRC) – Extended grazing

Farmers for Climate Solutions – Implement advanced grazing systems

Government of Manitoba – A quick guide to extended grazing

Government of Ontario – Stockpiling perennial forages for fall and winter beef cow grazing

Lakeland Agricultural Research Association (LARA) – Extended grazing

McGeough et al. 2017, Annual and Perennial Forages for Fall/Winter Grazing in Western Canada, Canadian Journal of Plant Science. 98(2): 247-254

Nutrien Ag Solutions – Tips for winter grazing beef cattle corn