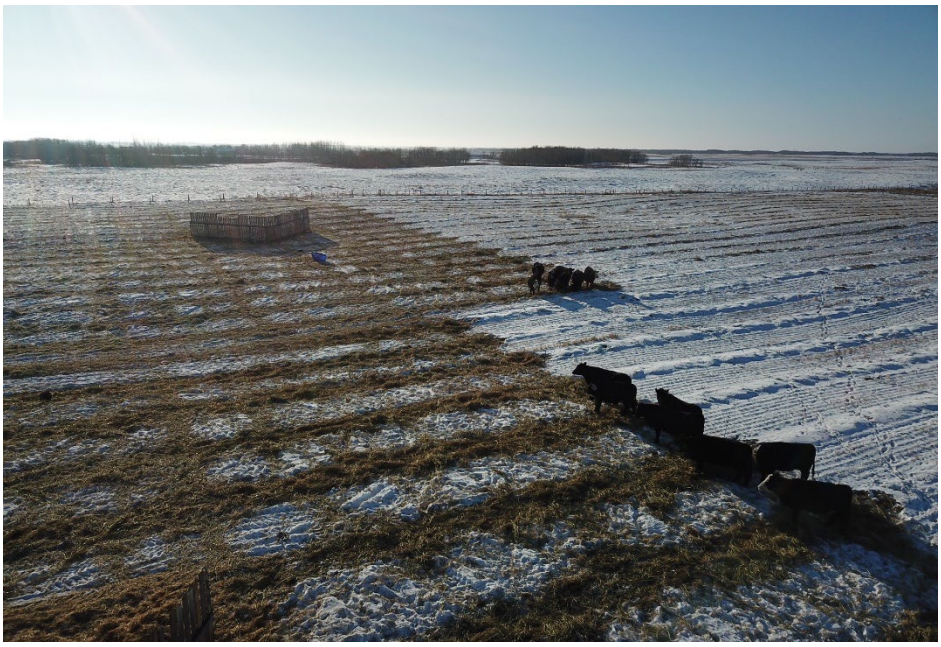

Cover Cropping

Beneficial Categories

Background

Cover crops, also known as polycrops, poly cultures, and cocktail crops, are used to improve overall soil productivity and protect those soils. Cover crops are generally non-cash crops and are not often harvested although they can be used for grazing as feed for cattle with the added benefits of restoring soil health. Grazing cover crops can be used in a variety of ways including continuous grazing, rotational grazing, swath grazed, stockpiled and more. A variety of forage mixes can be used depending on the overall cover cropping goal for your operation. Other benefits that can be realized through cover cropping include, but are not limited to, decreased work load, soil improvement, extended grazing period, rest for existing pastures, or introducing livestock grazing onto grain land.

Examples of Ways to Implement Cover Cropping

Implementation of cover crops on your operation will vary depending on their intended use.

If Using for Grazing:

A cover crop mixture provides diverse dietary nutrients for cattle. With certain mixtures, individual plant species may reach maturity at varying times, providing green forage throughout the growing season which can in turn also help to extend the grazing season. Cover crops can be grazed throughout the summer, baled, swathed, or put up as silage for feed, depending on the mix used and goals of the producer.

There are important considerations when grazing mixtures as well. To prevent animals from selectively grazing, the use of temporary fencing or a rotational system may need to be incorporated. Also, depending on the species, some do not provide sufficient fibre and it may be necessary to provide extra roughage in the fields. Ensuring animals are monitored and managed in order to ensure nutrient needs are met is essential.

If Using to Improve Overall Soil Health:

If your goal is to add organic matter, selection of cover crop species and growth conditions will influence the amount added. For example, oats may produce less than radish but more than rye. Some cover crop species, such as legumes, will also fix nitrogen while others such as grass use the available nitrogen, which can help reduce nitrogen loss from leaching. Some cover crop mixes can be used for utilizing excess water in a field that may be waterlogged. On the other end, some mixtures can include plants that are more drought tolerant and can make use of the existing moisture in the soil. (You can learn more on this topic at beefresearch.ca)

Working with a professional agronomist in your region can help determine the best species mix for your operation based on your current soil health and overall goals.

Potential Economic Costs/Benefits

A current government program provides financial support for adopting cover cropping to protect soil from erosion, retaining nutrients, enhancing soil health (improving soil organic matter, nutrient cycling), and providing cover over winter.

Putting a dollar value on the economic benefit of using cover crops can be difficult and will vary based on each individual operation's goals. In a livestock situation, revenue can be based on haying or grazing the forage based on days of grazing or tonnes per acre. However, including the revenue by measuring the increase in soil health, organic matter, and nutrient cycling can be difficult. The obvious cost to consider is based on the seed cost, which can range from $2–$80 per acre. Other costs will vary based on species used, seeding rate, and seeding methods. Therefore, clear goals and objectives are important to help determine the economic benefit.

Financial Incentives

The Canadian government's On-Farm Climate Action Fund offers funding for adoption of BMPs that reduce greenhouse gas (GHG) emissions and store carbon, specifically: in-field nitrogen management, expanding cover cropping, and implementing rotational grazing practices.

Since February 2022, 12 recipient organizations have received funds to redistribute to help farmers adopt and implement immediate on-farm BMPs that store carbon and reduce GHGs in the three areas mentioned above, including cover cropping.

To access more information and find a recipient organization to best suit your needs, visit https://agriculture.canada.ca/en/agricultural-programs-and-services/agricultural-climate-solutions-farm-climate-action-fund-0

For more specific information on adopting cover crops, visit the links below:

Cover Crops Canada

Government of New Brunswick – cover crops

Beef Cattle Research Council – Cover crops

Government of Ontario – Cover crops

Canadian Agri-Food Policy Institute – Cover Cropping on the Prairies