MAINTAINING GRASSLANDS

Grasslands and grasslands ecosystems provide carbon sequestration and storage. Grazing cattle on grasslands or tame on-farm pastures offers a host of environmental benefits. These natural systems can reduce greenhouse gas emissions, benefit water quality, help alleviate flood and droughts, improve soil health and air quality and promote biodiversity and species at risk preservation and enhancement.

Implementation Tips

- Conduct soil testing. Consult an agronomist to fertilize the grasslands according to their nutrient requirements.
- Evaluate the winter survival of your grasslands. If winter losses are too great, consider reseeding the prairie (by zones or as a whole) to avoid weed growth. In case of significant winter losses, think about planting emergency grasslands (e.g., sudangrass).
- · Control invasive plants as much as possible.
- Identify grassland bird priorities for your fields and consider implementing grassland management systems that support those species.

Resources

- Factsheet: proAction Environment Resources, Dairy Farmers of Canada (dfc-plc.info/MG1)
- Research study: Grazing livestock could reduce greenhouse gases in the atmosphere, study shows, University of Alberta (<u>dfc-plc.info/MG2</u>)
- Research study: Drever, C.R., Cook-Patton, S.C., Akhter, F., Badiou, P.H., Chmura, G.L., Davidson, S.J., Desjardins, R.L., Dyk, A., Fargione, J.E., Fellows, M., Filewod, B., Hessing-Lewis, M., Jayasundara, S., Keeton, W.S., Kroeger, T., Lark, T.J., Le, E., Leavitt, S.M., LeClerc, M.-E., Lemprière, T.C., Metsaranta, J., McConkey, B., Neilson, E., St-Laurent, G.P., Puric-Mladenovic, D., Rodrigue, S., Soolanayakanahally, R.Y., Spawn, S.A., Strack, M., Smyth, C., Thevathasan, N., Voicu, M., Williams, C.A., Woodbury, P.B., Worth, D.E., Xu, Z., Yeo, S., Kurz, W.A., 2021. Natural climate solutions for Canada. Science Advances 7, eabd6034. (dfc-plc.info/MG3)

Benefits



Carbon sequestration



Increased resiliency to the effects of climate change



Improved soil health



Enhanced biodiversity



Estimated return on investment Low



On-farm emission mitigation potential +

