

## Cattle Wintering Sites

I know from speaking to producers that you care about protecting natural resources and the land that provides us our livelihood. But, quite often it is challenging to find the balance between environmental stewardship and operational efficiency. In-field cattle feeding over the winter, can potentially cause environmental damage from manure deposits. However, there are some practical solutions that are both effective and economical, that can reduce the negative impact on the environment and possibly increase the productivity of your operation.

A major issue is water contamination through surface runoff where the nutrients, and potentially parasites or bacteria may be deposited into water supplies, creating a health concern, both to humans and livestock. (Contamination can also occur through; groundwater seepage, soil erosion, sedimentation and unmanaged access of livestock to water). High cattle traffic areas like the feeding area, the resting area and the water source, will have highest concentration of manure. Therefore, it is best to find areas within a field that will keep the potential for contamination resulting from runoff to a minimum.

Selecting a wintering site that is sloped away from a water body is a major step towards preventing contamination. A south slope is often selected in order to gain winter sun exposure. When this type of site is used in combination with a natural or constructed shelter it provides a protected environment for wintering livestock.



- Select a naturally elevated area for bedding to ensure drainage is controlled in a direction of least risk of water contamination.
- Increase the size of the wintering site area. This decreases the livestock stocking density and concentration of manure on the site.
- Increase the distance between major manure sources such as bedding and feeding areas and the watercourse to reduce manure accumulation.
- Create a vegetative buffer between the feeding site and the watercourse. The greater the width and height of vegetative cover, the more effective the buffer.
- Move the feeding site frequently during the feeding period to disperse manure.

Cattle use predictable routes between the bedding, water and feeding areas. Therefore, where cattle spend the most time results in the most manure buildup. Minimize manure buildup by encouraging your herd to deposit manure over a larger area. You can do this by periodically moving the feeding and bedding location throughout the entire wintering period. If the feeding, bedding and water supply well separated, less manure will build up at any of these locations.

In conclusion, there are risks associated with in-field feeding, especially the dislocation of manure into close waterbodies. However, the solutions offered above are simple and practical ways to manage these risks and protect the environment. Seasonal feeding and bedding site locations are regulated under the Agricultural Operation Practices Act (AOPA).

If you would like more information on this topic, you can download the full guide at the web-address below or feel free to contact me.

*This article presented a synopsis of 'Cattle Wintering Sites Managing for good Stewardship' (Agdex#420/580-2) by: Alberta Beef Producers, Agriculture and Agri-Food Canada – Prairie Farm Rehabilitation Administration, Alberta Agriculture, Food and Rural Development, and the Alberta Environmentally Sustainable Agriculture program. See the full article at <https://www.albertabeef.org/uploads/CattleWinteringSites-109.pdf>; Picture source: <http://www.ohiolandandcattle.com/>*