



Farm Animal Council of Saskatchewan Inc.

Feeding in a Cold Snap

The critical temperature below which an animal must increase heat production to keep warm (i.e. eat more energy, reduce performance or use body reserves), is about -20°C for a mature beef cow on maintenance rations IF:

- She is in good condition (BCS 3.0).
- She has a dry winter haircoat.
- She is sheltered from the wind (and rain or wet snow if it is a regular occurrence).
- She has bedding to lie on.

Anything less than these “ideal” conditions means that the animal will be cold stressed at higher temperatures, -10°C or even 0°C . However, regardless of condition, cattle need extra feed to get through a cold snap with a minimum amount of stress. This is absolutely critical for thin or moderate condition cows (BCS 2.5 or less) as they have little or no back fat to keep them warm.

Have your consulting nutritionist or Extension specialist, with information from a laboratory analysis of your feed or a program like Alberta’s CowBytes, balance rations for whatever is considered “normal” winter temperature, e.g. -20°C . Then be prepared to feed extra energy during cold weather by feeding additional grain or pellets (range or screenings) or even high quality hay.

Remember it takes time for cattle in the early part of winter to adjust to cold. A cold snap in November or December when normal temperature is around -10°C will be felt more severely than a cold snap in January when normal temperature is around -20°C .

Thumb Rule

Increase energy at a rate of 1 lb (0.5 kg) grain or pellets for every 5°C drop in temperature at mid-day below -20°C (or -10°C , depending on your “normal” maintenance ration) to a maximum of 5 lbs. (2.5 kg).

For example if the temperature drops overnight from -20°C to -35°C , increase grain by 3 lbs (1.5 kg). If the temperature drops overnight from -10°C to -35°C the cattle need an extra 5 lbs (2.5 kg) of grain to help maintain body temperature.

Be careful of any sudden increase in grain. Make sure that it is spread out so every cow has opportunity to eat. If temperature drops dramatically, divide the extra grain into morning and night feedings which will get the cows moving around and help avoid over consumption by a few.

If a cold snap is anticipated, begin feeding a little extra grain (1 or 2 lbs; 0.5 or 1 kg) a couple days in advance. Continue feeding reduced amounts of extra grain two to three days after the temperature returns to “normal”. This will avoid sudden large changes in feed and present a more even flow of energy to the animal.

Watch for Rumen Impaction

Digestion of roughages in the rumen creates heat, which in the summer "goes to waste," but in Canadian winters becomes an important part of animal maintenance, i.e. it is used to keep the animal warm.

Cattle will tend to sharply increase feed intake in cold weather in an attempt to maintain body temperature. They may consume more low quality roughage such as straw or chaff, especially if ground or chopped, than they can digest, which could result in rumen or omasal impaction.

DO NOT grind or chop low quality roughages too fine (3/4" or 1" screen max). It costs money and can create impaction problems.

Feeding extra energy during a cold snap will reduce cold stress, maintain animal condition and reduce potential for impaction.

For more information:

- Western Forage Beef Group (Foragebeef.ca) – www.foragebeef.ca
- Western Beef Development Centre – www.wbdc.sk.ca
- Prairie Feed Resource Centre – www.feedresources.usask.ca
- SAFRR – www.agr.gov.sk.ca/Livestock.asp?firstPick=Livestock
- AAFRD – www1.agric.gov.ab.ca/app21/rtw/index.jsp
- MAFRI – www.gov.mb.ca/agriculture/livestock/index.html

Other CattleFACS available:

- Animal Health Concerns When Pastures and Feed are Limited (Drought)
- Annual Crops for Emergency Grazing
- Body Condition Scoring
- Calf Scours Overview
- Calving, When and How to Help
- Cancer Eye
- Carcass Quality Shortfalls
- Cattle Handling, In the Zone
- Colostrum
- Creep Feeding Calves
- Early Weaning of Calves
- Euthanasia in Cattle
- Feed Testing and Ration Balancing
- Managing Water Supplies in a Drought
- Nitrate Poisoning
- Non-Ambulatory Cattle (Downers)
- Not Enough Feed for the Winter?
- Problem Feeds



Farm Animal Council of Saskatchewan Inc.

502 - 45th Street West, 2nd Floor, Saskatoon, SK S7L 6H2

Phone: 306-249-3227 Fax: 306-244-4497

e-mail: facs@sasktel.net

website: www.facs.sk.ca

FACS represents the livestock industry in advancing responsible animal care and handling practices in agriculture.

Associate Memberships are available from \$50.00 – \$199.99 + GST.

Active Memberships start at \$200.00 + GST

Receipts are issued for all memberships.

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