

Wintering Site and Crop Selection

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Forage Facts

Wintering Site Selection

by Stacy Pritchard



Well, it's hard to believe that November is already here, and winter is coming. For those of us utilizing extended grazing methods such as bale grazing, swath grazing or corn grazing. The nutrients left behind by our cattle tend to be uniformly spread across the field, accumulating in bedding areas, and around water sources. Whereas, in confined winter feeding systems, these nutrients (particularly phosphorus (P) and nitrogen (N)) accumulate in large quantities where we have our cattle wintering.

Some nutrient accumulation is inevitable, however, by properly selecting a wintering site, we can reduce negative effects on the environment due to the concentrated quantities of these nutrients.

We have a number of resources available to help us select wintering sites. One of the newest is the *Wintering Site Assessment and Design Tool* published by Alberta Agriculture in 2013. This Tool takes producers through the process of site selection and site management to help producers understand the benefits of winter feeding and also address potential environmental concerns. This Tool focuses on win-

tering sites for extensive winter feeding systems.

So what exactly is a wintering site? Well, they typically include a feeding area, a sheltered area and a water source. It is in these areas that we see the accumulation of nutrients and therefore steps should be taken to ensure that the nutrient accumulation in these areas does not contaminate nearby water bodies or water sources.

Some keys to selecting wintering sites according to the *Wintering Site Assessment and Design Tool* as well as *Cattle Wintering Sites: Managing for good Stewardship* (Agdex #450/580-2):

- Use grazing systems that enhance forage resources (pasture or rangeland)

- Manage water supply for operation

- Maintain water quality for other users, both human, livestock and wildlife

- Protect riparian areas

- Protect against erosion of the landscape and nutrient overloading

There are 5 aspects of a wintering site that we should look at when making an assessment as to where to put our wintering site and those are (from Alberta Nutrient Management Planning Guide):

- Soil physical properties (look for sandy loam or clay loam because of higher water holding capacity and limit leaching)

- Slope (gently sloping or flat presents less risk for runoff, and increase nutrient transport)

- Water bodies (there is always a potential risk to water quality when sites are close to water bodies)

- Problematic soil conditions (salinity, pH, solonchic soils, organic soils, eroded soils – these can limit the potential for benefits from wintering)

- Past and current site management (can help identify any changes in management that could be beneficial)

So what exactly are the benefits that properly choosing a wintering site could do for you?

- Access to clean water could mean increased animal performance,

- Improved distribution of manure,

- Increased productivity, and

- Improved labour and cost efficiency



Wintering Site Selection

Continued

One of the most important factors to consider when choosing a wintering site, is what type of feeding system you are utilizing. When we use swath grazing, graze corn or use stockpiled forages, the nutrients are spread pretty uniformly across the field, with accumulation typically only occurring near watering sites, and bedding sites. To manage this accumulation, bedding sites should be moved every 2 weeks. However, when we are using bale grazing, processing bales, or rolling bales out, the accumulation not only occurs in watering and bedding areas, but is also concentrated around the bales. If we process or roll out our bales on different areas of the field then the manure is spread more evenly than if we continuously use the same area. With bale grazing, the concentration and accumulation of nutrients is dependent on the spacing of the bales. Denser bale placement can result in high accumulation (or hot spots) in the field. In the Wintering Site Assessment and Design Tool, bale spacing recommendations are available.



Wintering areas should be designed so that we limit the time cattle spend in riparian areas. By providing alternative shelter in the form of windbreaks (portable or fixed), we can avoid cattle spending large amounts of time in riparian areas where the nutrient accumulation has the easiest access to water bodies.

As you might have guessed, one of the biggest concerns for nutrient accumulation in wintering sites is potential spring runoff into both water bodies and water sources. There is also a risk of seepage into the groundwater. Risk of seepage can be assessed by looking at the soil type and structure. For example, seepage can be reduced when wintering sites are built on clay-type soils.

Movement of our wintering sites can help reduce the effects of nutrient accumulation. It allows the crop, whether its hay, pasture or annual crop to use the nutrients applied throughout the winter. By rotating our wintering sites, we also reduce the risk for nutrient buildup and leaching. How often we return to a wintering site depends somewhat on our feeding method. On sites where we import feed (bales for grazing, processing or unrolling), there is a higher potential for nutrient accumulation and nutrient distribution isn't always even. On sites where we don't import feeds (swath, corn, stockpile grazing), nutrient distribution is more even, but overuse of these sites can still result in excess nutrient buildup even though it is more evenly distributed. For imported and non-imported feed systems the recommended feeding frequency is once every 3-4 years. If it is not possible to rotate the entire site, rotating the location of the feeding site and where animals are bedded should be done every year to reduce the risk of excess nutrient accumulation.

Managing our wintering sites can help us get the most out of these alternative feeding system. By managing all aspects of these systems (feed, water, bedding and shelter) we can reduce the environmental risk associated with wintering sites.

Some resources for Producers include:

- * www.foragebeef.ca
- * Wintering Site Assessment & Design Tool
- * Agdex #420/580-3
- * Cattle Wintering Sites-Managing for Good Stewardship
- * (Agdex #420/580-2)

All photos in this article were found in the Wintering Site Assessment & Design Tool



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CropChoice\$ 2015 Available *Producers can analyze crop opportunities with the latest data*

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CropChoice\$ is different from other decision tools, because it also measures the risk associated with each alternative, each crop mix and each management scenario. It puts the business manager in the position to identify, measure and manage risks for their operation's crop plan.

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www.producer.com

If you don't have your own unit costing, CropChoice\$ comes with per acre average cost estimates, by crop and soil zone, based on AgriProfit\$ benchmarks. These averages can be a starting point and modified to match your own situation.

CropChoice\$ is available on Alberta Agriculture and Rural Development's website, Ropin' the Web. To download a free copy, go to www.agric.gov.ab.ca and click on "Decision Making Tools".

For further information, contact the AgInfo Center toll-free at 310-FARM (3276).

The direct link for CropChoice\$ is www.agric.gov.ab.ca/cropchoices.

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Upcoming Events!

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Herd Management Software & Verified Beef Production Training Seminar

Rycroft Ag Society Hall
Nov 17, 2015
4-9pm

BIXS 2.0 Presentation & Demonstration

Delivers individual animal data to benefit beef supply chain participants along the entire beef chain

bioTrack Livestock Management Solution

Identify, Track, Record & Manage Livestock

VBP Beef On-Farm Food Safety Training

A Requirement for GF2 On-Farm Food Safety Program Applications. Complete your training in preparation for the program reopening in Spring 2016

Dugout Workshop

Grovedale Community Hall
Nov 27, 2015
1-4pm

Join us to learn from Alberta Agriculture
Water Specialists

Dugout design, construction & aeration
Dugout biology & water quality trouble-
shooting

In-house treatment of surface water
Growing Forward 2 Programs

WESTERN CANADA



Conference on Soil Health

December 8-10, 2015

Agenda to Include:

Dr. Yamily Zavala, Gabe Brown, Producer Panel, Dr. Jill Clapperton, Neil Dennis and Banquet Speaker Blake Vince

Early Bird Conference Fees (Banquet not included) ~ Student \$200/pr ~ Producer \$250/pr ~
Farm Unit (2 members) \$450/farm unit (\$225/additional farm members) ~ Industry \$175/pr ~

One Day Registration \$175/pr ~ Banquet Ticket \$42/pr

~After Nov 11 and at door conference fees increase an additional \$25/pr~

Register at www.albertasoilhealth.ca or ARECA 780-612-9712

Holistic Management Course

with Don & Bev Campbell

Valleyview—Jan 14, 15, 16 & 21, 22, 23

Demmitt—Jan 28, 29, 30 & Feb 4, 5, 6

A hands-on course covering:

*Goal Setting * Land Management *

*Financial Management * Decision Making*

Cost: \$1495 + tax per farm unit up to 4 people

\$500 Deposit due by Dec 4

Registration is limited to 8 farm units per location.

Get your deposit in to guarantee your place in this
course.

Upcoming Events

Peace Country Beef Congress
Jan 8-10—Dawson Creek

Winter Watering Systems Tour
Jan 30—Birch Hills County

PCBFA Tour to the Denver Stock Show
January 2017

More Details to Come!

**For more information, directions or to register for PCBFA events please call
Stacy or Kaitlin at 780-835-6799!**

Monika Benoit
Manager
High Prairie, AB
780-523-4033
780-536-7373

Akim Omokanye
Research Coordinator
Fairview, AB
780-835-6799
780-835-1112

Stacy Pritchard
Extension & ASB Coordinator
Fairview, AB
780-835-6799
780-772-0277

Kaitlin McLachlan
Crop Program Coordinator
Fairview, AB
780-835-6799
780-523-0443

