Ontario

OMAFRA *Virtual Beef*

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In This Issue

Plunge and Drink – Alternative to In-Stream Watering

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Nose pumps can be found on pastures across Ontario as an alternative to in-stream watering. Animals push a plunger with their nose to move water with a diaphragm pump into a bowl. The nose pump can be located away from the stream so cattle drink from the bowl rather than the mudded up stream bank.

On Manitoulin Island, in northern Ontario, the nose pump option has been modified to work through the cold winter months as well as the summer. A local farmer, Dave Millette, working with an organization called Manitoulin Streams, has installed a frost free nose pump. The installation allows his cows access to cool, clean water year round. His cattle can access the nose pump so his stream, which would flood in spring and be tramped in summer, is now cattle free. The pump requires no electricity.

Figure 1: cow using nose pump

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Single paper copies may be obtained by calling 1-877-424-1300

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The well on Dave's property is 65 feet deep, within the workable range for a nose pump. The company which markets the nose pumps, Frostfree Nosepumps Ltd., recommend wells be less than 72 feet deep, with standing water of less than 45 feet. The higher the lift, the more force is required to push the plunger.

Up to 50 cow-calf pairs, or 100 cows can be serviced by one nose pump. Approximately one half litre of water comes up with each full stroke. This is about the amount one animal can swallow at a time, so there is little water left in the trough when they quit drinking. This help prevents freezing in the trough.

Figure 2: one half litre of water is available with each stroke

Dave worried that the cattle would not learn to use the nose pump, but once they became thirsty this was no longer a problem. The company recommends training a small group of cows to use the pump. They then show the rest of the herd how to use the pump.

To install the pump, Dave first put down a layer of gravel, then styrofoam insulation underneath the 20 X 20 foot pad cement pad. In the middle a 24 inch culvert, 21 foot long was put into the ground. Over this the pump was installed along with a steel lid for the culvert, and insulation for the culvert and lid.

Once installed and working, the pump was unaffected by cold weather down to -30^{o} and lower. The pump does not freeze because the geothermal heat from the ground heats the culvert. The insulation helps to retain the heat. There is a drain hole in the pipe 5 feet below the pump. When the cow is finished drinking, the water slowly drains down to this depth, and stays warm enough to not freeze.

For Manitoulin Streams project coordinator, Seija Deschenes, having farmers install remote watering systems such as the frost free pump, fits with the organization's goal of working with producers to seek solutions that are mutually beneficial. The cattle have a constant supply of cool, clean water, and the streams are protected from damage from cattle hooves, especially during vulnerable cool fall and spring periods.

Brian Bell, OMAFRA Agricultural Representative on Manitoulin, says this is just one aspect of environmental improvement being implemented on the island.

This project is another example of co-operation between industry, environmental protection groups and OMAFRA to establish best management practices at the farm level.

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Managing Specified Risk Material Under the Enhanced Feed Ban

Bill Groot-Nibbelink,
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Beginning July 12, 2007, enhanced feed ban regulations will be in effect. The new regulations are designed to complement existing measures to eliminate bovine spongiform encephalopathy (BSE) from the Canadian cattle herd as quickly as possible. The change will have an impact on Ontario's livestock producers.

Background:
In BSE-infected cattle, the BSE agent concentrates in tissues known as specified risk materials (SRM). BSE is believed to be spread when cattle consume feed containing SRM from infected cattle. To protect public health, these tissues have been

removed from all cattle slaughtered for human consumption since 2003.

To prevent the spread of BSE among cattle, Canada banned most mammalian animal proteins, including SRM, from cattle feed in 1997. To better protect animal health at large, as of July 12, 2007 enhanced federal regulations also ban SRM from all other animal feeds, pet foods and fertilizers.

According to the Canadian Food Inspection Agency (CFIA), removing SRM from the entire animal feed system greatly reduces the potential contamination of cattle feed during production, distribution, storage or use. Applying precautions to pet food and fertilizer materials limits the possibility of cattle and other susceptible animals being exposed to these products. The enhanced regulations should result in a speedier eradication of BSE from the national cattle herd.

Specified Risk Materials:
SRM are those cattle tissues which are thought to have the potential of transmitting BSE.
They include:

- the skull, brain, trigeminal ganglia (nerves attached to the brain), eyes, tonsils, spinal cord, and dorsal root ganglia (nerves attached to the spinal cord) of all cattle aged 30 months or older; and
- the distal ileum (portion of the small intestine) of cattle of all ages.

The whole carcass is considered to be SRM for any cattle deadstock from which the SRM has not been removed.

Livestock producers who handle, transport or dispose of cattle remains need to be aware of their responsibilities under the new regulations.

On-Farm Disposal of Cattle Deadstock:
For producers who dispose of cattle deadstock on-farm there are no added requirements under the new regulations. Carcasses must still be disposed of either by burial or composting as required under Ontario's Dead Animal Disposal Act (DADA). In this case, all cattle remains, including any composted material, must remain on the farm. It is also necessary to continue reporting the Canadian Cattle Identification Agency (CCIA) ear tag numbers of deadstock to the database for removal.

Transporting SRM Off-Farm:
As of July 12, 2007, any cattle deadstock that are moved off-farm must be stained with a visible stripe applied down the back of each carcass. Any raw SRM removed from a carcass must also be dyed.

It is anticipated that dead animal collectors will assume responsibility for applying the stripe prior to removal of carcasses. Nonetheless, cattle producers who normally use the services of a dead animal collector are advised to discuss this with their service provider.

New Federal Regulation Means Changes for Ontario's Livestock Producers

For cattle producers transporting their own deadstock to a receiver, there are additional changes under the new regulations.

Prior to moving any SRM, including cattle deadstock, off-farm a permit must be obtained from the CFIA. The application form is available through the CFIA (contact information below). The permits are free, issued for 90 days, and may involve an on-farm inspection by CFIA staff.

Producers who transport their deadstock in Ontario are already required to have a clearly displayed marker affixed to their transport vehicle as part of provincial regulations under the DADA. A valid DADA marker is required to obtain a permit to transport SRM from the CFIA.

DADA markers are free, issued annually and can be obtained through the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) (contact information below). In order to qualify for a DADA marker the following minimum requirements must be met:

- Vehicles used for transporting deadstock must be approved by the Ontario Ministry of Agriculture, Food and Rural Affairs
- Vehicles must be constructed to prevent spillage of liquids
- Dead animals must be covered at all times during transport
- Dead animals must not be transported together with live animals

- After delivering to a deadstock receiving plant, the vehicle must be thoroughly cleaned and disinfected before leaving the plant premises.

Producers should be aware that they are only allowed to deliver cattle deadstock to a facility that has a CFIA permit to receive SRM material. Check with staff at your normal delivery site to ensure that they have this permit.

Records:
Record keeping requirements have been added under the new regulations. Producers must record the following information for any movement of SRM and cattle deadstock off-farm:

- name and address of the transporter
- date of movement
- name of the dye used to mark the deadstock or SRM
- Canadian Cattle Identification Agency (or Quebec) tag number
- the combined weight of SRM and carcasses considered SRM, as well as the number of carcasses, and
- the destination.

Because of the long incubation period for BSE these records must be kept for 10 years.

Feed:
The 1997 feed ban that prohibits most proteins derived from mammals from use in ruminant feed still applies. These materials can still be fed to non-ruminants including chickens, pigs and horses. However, effective July 12, 2007 all feed, regardless of the species it is fed to, must be manufactured from SRM-free ingredients.

For more information about the new SRM regulations contact the CFIA at 1-800-442-2342 or visit inspection.gc.ca/bse.

Or Kevin Joynes, Dead Animal Disposal Advisor, Ontario Ministry of Agriculture, Food and Rural Affairs, 519-826-7510 or visit our website at ontario.ca/livestock.

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Adopt *Advantage* for Food Safety

Don Blakely
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Food safety is everyone's responsibility! For that reason the *Advantage Series of Food Safety Programs*™ are being developed and introduced at all stages along the food chain including Ontario farmers, truckers, processors and retailers. The most recent addition to this series is *Advantage Good Agricultural Practices*, which focuses on food safety at the farm.

What is *Advantage Good Agricultural Practices*?
Advantage Good Agricultural Practices is a set of food safety practices that are designed to meet the needs of farmers who produce more than one commodity. These practices cover all aspects of crop and livestock production on the farm.

Advantage Good Agricultural Practices was developed with small and medium sized operations in mind, but can be applied to any farm operation, regardless of size or farming practices. It is a whole-farm, generic approach to food safety that allows farmers who produce more than one commodity to follow one program and keep one set of records.

ADVANTAGE
SERIES OF FOOD SAFETY PROGRAMS

Figure 1: Advantage Good Agricultural Practice logo

How was *Advantage Good Agricultural Practices* developed?
On-farm food safety requirements from existing national, provincial and international programs were examined to identify universal standards. From these universal standards a common set of good agricultural practices and record keeping requirements were developed. The Advantage Good Agricultural Practices manual combines all identified practices into three sections: a general production module; a livestock and poultry module; and a crop module. No new food safety practices or standards were created. Instead, practices were re-packed to meet the needs of farms that produce more than one commodity.

How does *Advantage Good Agricultural Practices* compare to national commodity on-farm food safety programs?
National commodity on-farm food safety programs are based on internationally recognized Hazard Analysis Critical Control Points (HACCP), covering a single commodity and requiring third-party audit recognition. For single commodity farms these programs are an important part of gaining food safety recognition and marketing promotion.

Advantage Good Agricultural Practices provides farmers with another option for implementing food safety that best fits their management style, diversification and niche marketing. For example, farms that produce more than one commodity would be able to use one manual instead of following several programs. As a result farms would only need to keep one set of records and would reduce the amount of time spent on record keeping.

How does *Advantage Good Agricultural Practices* work?
The *Advantage Good Agricultural Practices* manual offers the full spectrum of on-farm food safety needs and producers can select practices that apply to their specific production systems. With each good agricultural practice is a listing of Ontario and Federal regulations governing the practice, record requirements and what could be required for an audit. Supporting materials will include posters, fact sheets, training packages for workers and generic record templates. Materials will be made available in hard and electronic formats.

What is the present status of *Advantage Good Agricultural Practices*?
Draft 1 of the manual has been available since February 2007 however, distribution has been limited until a pilot testing is completed. The pilot includes six mixed-farming operations in Ontario and will be completed by December 2007. Any changes coming out of the pilot will be incorporated into the manual which will be ready for complete distribution in early 2008.

What other *Advantage* programs are in the making?
Strategies for trucking and food handlers are presently being studied for introduction in the near future. In addition Advantage Good Agricultural Practices could see an expansion to include animal welfare and biosecurity.

If you think *Advantage Good Agricultural Practices* will suit your on-farm food safety needs and would like additional information please contact: Agricultural Information Contact Centre 1-877-424-1300.

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The Need to Develop a National Meat Training Centre

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The Canadian Meat Industry is challenged with a labour shortage and skill deficit which is affecting industry competitiveness and the ability to maintain existing production levels. Many meat industry processing plants face a high turnover of employees and/or a shortage of labour. Canada does not have a national training system in place for this labour pool and existing training is considered to be fragmented. Reasons why a shortage of labour exists includes non-competitive wages with other industries, a poor image, and difficult working conditions as well as no defined career path.

Many countries such as Australia, Denmark and Germany have national training systems. There are up to four levels of training in some countries including a three-year apprenticeship program, Master Butcher course, a two-year Meat Technology program and a Meat Science Degree.

In 2004, Olds College in Alberta was successful in securing funding to conduct an extensive study of the training needs of the Canadian meat industry. This needs assessment project focused on three major activities:

1. Completion of a collaborative national meat industry training needs assessment

2. Dissemination of assessment results to industry
3. Collection and analysis of industry views regarding the development of a National Meat Training Centre at Olds College.

The study was completed in 2006. It identified the need for a national training system that recognized existing training and establishes training standards that lead toward career paths for the meat industry. An overview of the Industry Needs Assessment, a background document and the final report can be accessed at the following link: www.oldscollege.ab.ca/NMTC/

In June 2007, various meat industry stakeholders and organizations, including government, universities, sector associations, training schools and private industry, involved in the development and or delivery of meat training materials met to discuss the development of a Canadian Meat Training System (CMTS) that would be governed by a Canadian Meat Training Committee (CTMC). It is the intention of the CMTS to be a nationally recognized training system that the Canadian meat industry promotes as a viable profession with multiple career paths. The CMTS will provide an articulated training structure encouraging career advancement and industry retention. There will be challenges in making this a reality but there is strong interest from industry stakeholders and organizations involved in training to move this need forward.

Figure 1: National Meat Training Centre logo

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Useful Links:

- Pasture Grasses Identified 06-095
- Programs and Services for Ontario Farmers 07-021
- Dry Conditions and Low Water Information