

# STARLAND AG TALK

Volume 7, Issue 3

IN TUNE...IN PROGRESS

November 2010



## To Keep in Mind...

### Starland County Agricultural Service Board

#### -14' Ezee On Breaking Disk

Rate: \$395/day

#### -15' JD 1590 No-till Drill Rental

Rate: \$6 per acre

#### -Rawhide Portable Corral System Rental

Rate: \$200/day



Don't forget to get your [Shelterbelt tree applications](#) in for next years tree order. Applications available at Starland County Office 403-772-3793.

**Reminder:** Starland County ASB has a Gallagher H3 Handheld RFID Tag Reader available for county residents to borrow.



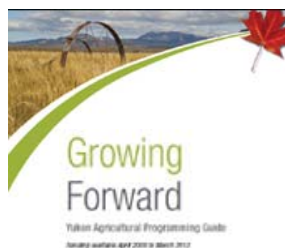
## Funding Program Updates:

The Growing Forward Stewardship Plan for **Integrated Crop Management** is no longer accepting applications as of July 9th.

[Manure Management](#), [Long-term Water Management](#) and [Grazing/Winter Feeding management Programs](#) are still accepting applications. Details on page 7.

Get your registration and applications in sooner rather than later! Funding is on a first come first serve basis and is being allocated quickly.

For Questions, Applications and Work Plans Please call Jared Malansky at Starland County Office 403-772-3793, or call directly to Diana Bingham @ 780-632-5487; Heather Landiak @ 780-632-5467; Ag-Info Centre @ 310-3276.



## Age-verification Incentive Program

The program applies incentive-discounts to radio frequency identification **tag purchases made between January 1, 2009 and December 31, 2012**. **Incentive-discounts, of up to three dollars for each age-verified animal**, represent critical information that producers contribute to support marketing and food safety efforts. Eligibility will be based on the number of animals a producer has, or intends to have, age-verified from the previous year's calf crop.

Encouraging cattle producers to provide vital information will help to assure greater industry participation in adopting tagging and age-verification best practices. Alberta's livestock traceability system is dependent on tagging an animal and entering this information into the Canadian Livestock Tracking System. This process is critical to identify when an animal enters the food production system.

[Tag Purchase Reimbursement Applications](#) available at [Starland County Office](#) call [Jared Malansky](#) at 403-772-3793.

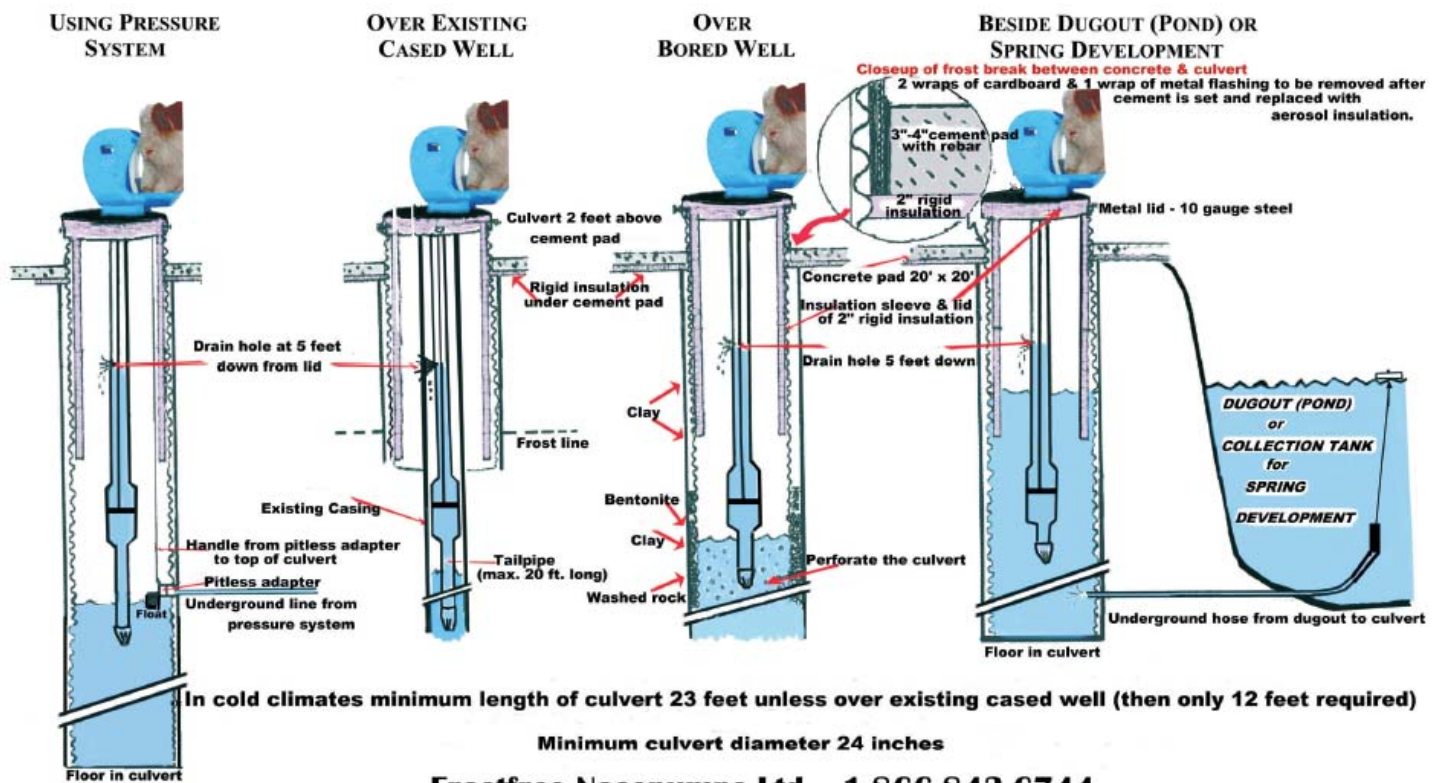
Note: [Tag Reimbursement Application Deadline](#) is December 31, 2010. **Eligible reimbursement on tag purchases are from Jan 1, 2009 - June 30, 2010**

Call [310-FARM \(3276\)](#) if you have any questions about the Age-Verification Incentive Program

## THE ENERGY-FREE SOLUTION TO LIVESTOCK WATERING! **Frostfree Nosepumps Ltd.**

### How does the Frostfree Nosepump work?

- The animals pump their own water by pushing on the nosepad!
- This pump captures geothermal heat enabling it to operate winter & summer without a power source!
- Install on a vertical culvert:
  - 1) in a drilled or excavated large diameter well
  - 2) around an existing small diameter well
  - 3) alongside a dugout, pond, or spring development OR
  - 4) with a pressure line, using a pitless adapter and float



**Frostfree Nosepumps Ltd. - 1-866-843-6744**

**FROSTFREE NOSEPUMPS™** have been on the market since 2002.

One pump will water up to 100 animals (or 50 pair). Multiple pumps per large diameter well will accommodate larger herds.

The construction and operation of the nosepump is simple and energy free, other than the energy required by the animal to operate the lever.

The parameters outlined in this brochure will accommodate minus 40 or 50 degree weather! In areas of shallow frost, these parameters may be relaxed. The pump will not freeze up, however, in very cold weather (minus 25° C or lower) the occasional removal of the ice that tends to build up on the sides of the hood may be necessary. The use of a **deadblow hammer** is recommended to prevent damage to the powder-coated finish of your pump.

Prevention of contamination of the water source is a major focus of this system. The design of the pump will prevent backwash, and the details of the system, including a cement pad, will prevent ground water contamination.

Proper installation is important. Many farmers/ranchers can do this themselves, often recruiting the help of a water-well driller or a trackhoe operator.



## Foot and Mouth Disease

Foot and mouth disease (FMD) is a highly contagious and sometimes fatal viral disease of cloven-hoofed animals, including domestic animals such as cattle, sheep, goats and pigs, as well as antelope, bison, elk, and deer. The llama and alpaca may develop mild symptoms, but are resistant to the disease and will not pass it on to others of the same species.

## Incubation

The incubation period for the FMD virus in susceptible animals can range from two to eight days, but can be up to twenty-one days post infection with the virus. Infected animals can spread the virus one to two days prior to the onset of clinical signs and for seven to ten days after the presentation of clinical signs.

## Biosecurity Measures

Normal production practices should always include basic biosecurity measures geared to minimize the introduction and spread of all infectious animal diseases, including:

- restrict visitor access to animals, especially visitors from overseas.
- where possible, limit contact between domestic and wild animals
- routinely clean and disinfect footwear, clothing and equipment
- record movement of people, animals and equipment on and off farms and ranches
- purchase animal replacements, feed and supplies from reputable suppliers



## Signs of Foot and Mouth in Cattle

- Sores, ulcers and blisters on feet, nose, lips and in the mouth
- Excessive salivation with drooling of saliva from the mouth and smacking of lips
- Shivering
- Tender and sore feet with vesicles and ulcers on the coronary band
- Reduced milk yield
- Fever and off feed
- Cows can develop vesicles or lesions on their teats
- Bulls can develop vesicles and blisters on scrotum

## Signs and Symptoms

Signs and symptoms will differ slightly per species. Some of the symptoms noted can easily be mistaken for other diseases in a species, so it is important to contact your veterinarian immediately.

### Why is biosecurity important?

The appearance of FMD on Canadian soil would immediately shut down entire segments of our livestock industry. The economic and societal impact of FMD on a trading nation is devastating; disease control costs can be astronomical and recovery from outbreaks prolonged. The disease is reportable federally and provincially. Early detection to facilitate rapid response and recovery is important.

If you have any concerns about animals on your farm please contact your local veterinarian and or the regional CFIA office or ARD office. Do not ask a neighbour or other producer to assist you in checking your animals.

### For more information

Office of the Chief Provincial Veterinarian  
 Alberta Agriculture and Rural Development  
 Phone: 780-427-3448  
 Fax: 780-415-0810  
[www.agriculture.alberta.ca](http://www.agriculture.alberta.ca)

## Signs of Foot and Mouth in Pigs

- Blisters may develop on the snout or on the tongue
- Blisters form on the upper edge of the hoof, where the skin and horn meet, and on the heels and in the cleft
- Sudden lameness
- Prefers to lie down
- The pig is reluctant to move and squeals in pain and hobbles around
- Decreased feed consumption

It is important to remember that other swine diseases have lesions identical to foot and mouth disease and therefore anyone who sees blisters in pigs must report the sighting to their veterinarian to pursue further testing for suspected foot and mouth disease.

## Signs of Foot and Mouth in Sheep

- Sores and blisters on feet, nose, lips and in the mouth around the dental pad and on the tongue
- Sudden onset of lameness in multiple animals with varying degree of severity of lameness
- Blisters will be found on the foot where the hoof joins the skin which may extend all round the coronet and in the cleft of the foot. When these blisters burst, extensive ulcers may result and may lead to separation of horn from the tissues underneath. Hair round the hoof may appear damp.



## [Win-win for Ranchers and Wildlife: Grassland Habitat Enhancement Projects](#)

Operation Grassland Community, a program of the Alberta Fish and Game Association, is a grassroots stewardship program that works directly with landholders in Alberta to secure and enhance prairie wildlife habitats for species at risk. Operation Grassland Community believes that prairie habitats can be wisely used, ensuring the sustainability of both wildlife habitats and agricultural livelihoods.

Starting in 2005, Operation Grassland Community (OGC) began working with its members to enhance wildlife habitats through specific land management projects. Habitat Enhancement Projects (HEPs) preserve or enhance habitats for a suite of grassland species, while at the same time improve native range thus providing economical as well as ecological benefits to participating landowners. OGC is currently promoting HEPs targeted at four bird species at risk in southern Alberta.

### [Burrowing Owl Habitat Enhancement Projects:](#)

Burrowing Owls require a mosaic of grassland heights: areas of sparse, well-grazed grass for nesting (helps them see predators approaching) and hunting (can see and catch prey easier in short grass), and areas of taller grass where their favorite foods, voles and mice tend to live. Often, these areas of longer grasses are associated with wetlands or riparian areas. By fencing off a dugout or other water bodies and providing an alternate water source, cattle are prevented from grazing or trampling wetland edges and grass can grow back and provide a place for prey to live. OGC advocates the use of cattle oilers and salt blocks to intensify grazing pressure near nest burrows and throughout their foraging range to create/maintain these necessary patches of short vegetation. In turn, these measures also provide benefits to landholders. Controlling major pests (e.g., lice, face flies, mosquitoes, etc.) and preventing livestock from entering and contaminating water has been shown to significantly improve herd health, and increased livestock production.

OGC works with landholders who have known Burrowing Owl nests on or near their property and provides financial assistance towards the cost of an off-site watering system, fencing around dugouts or wetlands, cattle oilers/salt blocks, and native seeding.

### [Sprague's Pipit Habitat Enhancement Projects:](#)

Sprague's Pipits are small grassland specialist songbirds (slightly larger than a sparrow). They have brown and white streaked plumage; this colouring and markings allow the bird to blend into its natural surroundings. Pipits are more often heard than seen. If a pipit is on your property, you will hear an ethereal tinkling, high in the sky! They prefer native mixed-grass prairie and are more likely found on blocks of prairie larger than 64 ha (160 acres). Native rangeland in good to excellent range health is important for the survival and recovery of this bird. These birds have earned the nickname *Goldilocks* since they require vegetation that is not too tall and dense or short and sparse, but **“just right”!**

OGC works with, and provides financial assistance to landholders/ land managers who have Sprague's Pipits nesting on their property to install cross fencing as part of their overall grazing strategies to improve range health and the long-term sustainability of their pastures.

### [Loggerhead Shrike Habitat Enhancement Projects:](#)

Loggerhead Shrikes are robin-sized, predatory songbirds. They have a dark gray back and head with whitish under-parts. They have a black band across eye and on wings. Loggerhead Shrikes are also known as the “butcher bird” as they often impale prey (grasshoppers or mice) on thorns or barbed wire to compensate for the fact that they do not have heavy talons and strong feet to allow it to hold its prey while feeding.

Continued...

Loggerhead Shrikes require open habitats of grasslands with scattered trees and shrubs which provide nesting and perching sites. Nests are often found in yard sites (abandoned and active) and on windrows along roads.

OGC works with landholders who have Loggerhead Shrikes nesting on their property and provides financial assistance towards fencing materials to protect a shrub/tree grove being used as a perch or nesting site under threat of destruction or degradation by cattle. In turn, protecting trees and shrubs can provide habitat for other wildlife (deer, grouse) and help improve snow catch and moisture levels during the summer months.

### **Ferruginous Hawk Nesting Platform and Pole:**

Ferruginous Hawks are the largest prairie hawk in Canada. They are named for the reddish colouring on leg feathers. In areas where trees have decreased in number, an increase in number of artificial nest platforms for Ferruginous Hawks have shown to help increase numbers of this threatened bird. The presence of Ferruginous Hawks is, in turn, beneficial to landholders: a single pair can consume as many as 500 ground squirrels in one season.

OGC will provide landholders with fencing to protect an existing nest with fencing or work with Alberta power companies to provide and install Ferruginous Hawk nesting platforms and poles for landholders with Ferruginous Hawks currently nesting in natural or artificial nests that are at risk of falling, and/or previously occupied nests that have fallen.

*If you wish to find out more about Habitat Enhancement Projects and about the potential financial assistance that may be available to you for these projects, please contact Operation Grassland Community at (780) 437-2342 or email: [office@afga.org](mailto:office@afga.org).*

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## **Ergot Information**

[www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/prm2402](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/prm2402)

### **Biology**

Ergot infects many cereals and grasses; these include (in order of decreasing susceptibility), rye, triticale, wheat and barley. Oats are rarely affected.

Ergot overwinters as black grain-sized fungal structures. In late spring, these ergots germinate and form tiny spore-producing mushroom-like structures. Infectious spores are carried by wind currents to the host during the flowering stage. Infection of the cereal flowers may produce a secondary phase called honeydew. Honeydew is a shiny sticky liquid that oozes from infected flowers and contains large numbers of ergot spores. The spores spread to adjacent flowers and heads by insects and rain splash particularly to the open flowers of rye. Ergot that germinates in June can infect early flowering weed grasses, which produce honeydew when cereals are flowering.

Cool, damp weather in late spring and early summer favors ergot germination, helps prolong the flowering period of cereals and grasses, and increases the probability of ergot infection.

The presence of ergot in wheat and barley in Alberta has been strongly correlated with soils that are low in copper, or with management practices that cause a copper deficiency in cereals. Wheat, and barley, grown on copper deficient soils have a high rate of pollen sterility. Barley and wheat are self-pollinating and the florets normally do not open. If the pollen is sterile, florets of wheat and barley open and expose the stigmas to ergot infection. Male sterile lines of wheat and barley are very susceptible to ergot infection and have been abandoned in plant breeding. Open florets are very obvious in wheat growing on copper deficient soils.

Some herbicides may disrupt copper availability. Manure applications and high application rates of nitrogen and phosphate fertilizer may tie-up available copper, particularly on soils already low in this micro-nutrient. All of these factors singly or combined may contribute to copper deficiency resulting in greatly reduced yields and vastly increased infection rates of ergot in barley and wheat.

### Damage Description

Ergot is most easily recognized by the hard black bodies that replace the grains of the affected head. Heads may contain one or more ergots. Earlier in the season, before the ergots are produced, an amber liquid or honeydew can be detected on individual flower heads. Heads collect dust and pollen on the sticky honeydew and may appear dirty.

Ergot bodies are highly poisonous. Alkaloids in ergot are extremely toxic to humans and livestock. Ergot alkaloids have been detected in flour and cereals intended for human as well as animal feeds. For cattle, 0.5 per cent by weight of ergot in the diet causes reduced feed consumption and weight loss. Economic losses also result through reduction of yield and through rejection or downgrading of contaminated grain by the elevator. Yields are occasionally reduced by as much as 5 per cent in rye and 10 per cent in wheat.

### Diagnosis

The Canadian Seeds Act (July 1987) defines the maximum number of ergots allowed per kilogram of seed before the sample is downgraded.

Grade	Maximum number of ergots/kg		
	Wheat	Barley & oats	Triticale and rye
Canada Foundation #1	1	1	2
Canada Foundation #2	8	8	10
Canada Registered #1	1	1	2
Canada Registered #2	8	8	10
Canada Certified #1	1	2	4
Canada Certified #2	8	8	15
Common #1	1	2	4
Common #2	8	8	15

Ergot can move into a field through contaminated seed but usually the source of inoculum is infected grasses in the headlands. When the disease source is the headland grass the highest density of ergoty cereals is around the perimeter along the headlands. If the infected plants are more evenly distributed throughout the crop, the disease source is likely from contaminated seed or a previously infected crop. Knowledge of the distribution pattern is important at grain harvest. Under

very windy conditions in standing grain that is mature or nearly so, the ergots often protruding in infected heads will get shaken or knocked off. This will reduce the amount of ergot in the harvested grain by up to 70% or more. Cereal spikes containing ergot have fewer kernels per head with less weight per seed. Yield loss percentage for rye can be estimated as follows:

Percent loss = % ergoty spikes x (1 - seed weight of ergoty spike) / seed weight of healthy spike

### Management Strategy and Control

Reduce inoculum levels and apply copper fertilizer to reduce or eliminate this disease in wheat and barley. With adequate soil copper, all cereals except rye will have little or no ergot infection. Some herbicides and environmental conditions may interfere with normal growth and reduce available copper and, consequently, may result in ergot infection. Research in Finland has shown that soils low in boron induce pollen sterility in barley. Thus, in a similar manner to the pollen sterility caused by copper deficiency, the normally closed flowers of wheat, barley and oats will open and ergot infections occur.

- Test soils for copper availability; an application of copper fertilizer may be needed if levels are below 1 ppm in many soils.
- Use a rotation with non-host crops to reduce inoculum levels. Ergots rarely survive more than a year in the soil.
- Bury crop residue 2.5 cm or more into soil to prevent spore-producing "mushrooms" from emerging above ground.
- Delay swathing, particularly in headland areas if possible, because windy weather will shake out the ergots from standing grain.
- Mow headland grasses on a regular, annual basis well before seed set. This will prevent ergot production. Meadow foxtail is extremely susceptible to ergot.
- Harvest headland area swaths separately because they are likely to have the highest ergot contamination.
- Store ergoty grain intended for seed for two years. The ergots will die, but the grain will remain viable for many more years.

## Growing Forward Update

### A Note about Retroactivity:

We've received a few questions about the continuance of retroactivity into next fiscal year. The response is "Yes, retroactivity still applies", BUT we are still held accountable for meeting our obligations to the Federal Government and the Canadian Environmental Assessment Act. So if a project has involved some sort of excavation or moving of dirt, the applicant is strongly recommended to call the appropriate Work Plan Coordinator to discuss the project first to see if it remains eligible for funding.

### Manure Management Program:

Applications received are currently being reviewed. According to the forecasted budget, Work Plans and Applications received after September 1 will fall under next year's budget. For producers currently applying for a project, they will fall under next year's budget. Funds from next year's budget cannot be dispersed before April 2011. General enquiries into the program have really dropped (as expected at this time of the year); though we anticipate that calls will start up again once we move into Conference and Trade Show season. There may be some program changes in the coming months.

### Integrated Crop Management Update

Funding has been fully allocated for 2010/2011; we are now placing applicants on hold for the 2011/2012 and 2012/2013 fiscal years.

### Grazing and Winter Feeding Management Update

- 2010/2011 - 40% of the current budget has been allocated
- 2011/2012 - 35% of the available budget has been allocated
- 2012/2013 - <1% of the available budget has been allocated

### Program Changes for Growing Forward - Manure Management Program Effective November 1, 2010

#### Details:

*The Manure Management Funding List has been revised to reflect the following program changes:*

- **'silage leachate collection, transfer and storage systems' are no longer considered eligible expenses or projects under the Program** (see Activity Code 306 in the attached Funding List – Final Version November 2010).
- The **purchase of a vertical beater component (or assembly)** on a solid manure box spreader remains an eligible expense under the program at a cost share of 50/50 **though a maximum \$15,000 Grant contribution has been set for this eligible expense** (see Activity Code 309 in the attached Funding List– Final Version November 2010).

The **installation of load cells** on a solid manure spreader remains an eligible expense under the Program at a cost share of 50/50 **though a maximum Grant contribution of \$5500 has been set for this eligible expense** (see Activity Code 309 in the attached Funding List– Final Version November 2010).

The above mentioned changes apply to all Applications submitted and received on or after November 1, 2010. The revised Manure Management Funding List will be posted to the Growing Forward website ([www.growingforward.alberta.ca](http://www.growingforward.alberta.ca)) the week of October 25<sup>th</sup>, 2010.

**SACA presents**  
**Farming Today:**  
**Are you Ready?**  
**conference & tradeshow**

**Medicine Hat Exhibition and  
 Stampede Cypress Centre**  
 2055 21st AVE SE  
 Medicine Hat AB

**November 30 – December 1 , 2010**



**More Information on Our Website:**

**[www.farmingsmarter.com](http://www.farmingsmarter.com)**



**Art Froehlich's** roots in the world of agriculture reach back to his childhood on the family farm in east central Saskatchewan. Art works with a wide variety of industry stakeholders in both public and private sectors. He also shares his expertise with private and public sector organizations that focus on finance, processing, research, international marketing and retailing. Along with his business and professional commitments, Art is still active on the family farm raising registered Red Angus cattle and producing wheat, malting barley and milling oats. In addition, he volunteers his time to the Canadian Foodgrains Bank and has served as a mentor to young entrepreneurs through the Business Development Bank of Canada.



**Wendy Holm** An award-winning resource economist, Agrologist and journalist, Wendy has covered stories at the forefront of Canadian policy since the early 1990's, picking up five national journalism awards since 2003. During her 35-year career, Wendy has provided policy advice to public and private sector clients in the areas of agriculture, resources, regulation, competition policy, trade and international co-operation.

**Keynote Speakers**



**Hon. Preston Manning** is one of Canada's great political visionaries who has tirelessly championed the cause of democratic and political reform. He founded two political parties – the Reform Party and the Canadian Reform Conservative Alliance – both of which became the official Opposition in the Canadian Parliament. Mr. Manning served as the Leader of the Opposition from 1997 to 2000, and in 2007 he was made a Companion of the Order of Canada. As founder, President and CEO of the Manning Centre for Building Democracy, Mr. Manning continues his lifelong commitment to improving Canada's democracy.



**Brent VanKoughnet** M.Sc. P.Ag. is Owner / Manager of Agri Skills Inc. a company that specializes in agricultural innovation and human resource development services. Agri Skills presently provides market development consulting services, custom skills development and training programs, and field scale precision trial services to several major manufacturers and retailers in western Canada and the northern United States. He has recently completed training in the area of mediation and conflict resolution. Brent brings a unique combination of practical experience and insight from the perspectives of a producer, a marketer, a consultant, a mediator and a facilitator.

**For conference & tradeshow inquiries please contact**

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