MUNICIPAL DISTRICT OF GREENVIEW NO. 16

"A Great Place to Live, Work and Play"

REGULAR AGRICULTURAL SERVICE BOARD MEETING AGENDA

Wednesday, September 9, 2016 | 9:30 AM | Council Chambers, Administration Building

#1	CALL TO ORDER		-
#2	ADOPTION OF AGENDA		-
#3	MINUTES	3.1 Regular Agricultural Service Board Meeting Minutes held July 27, 2016 – to be adopted	3
		3.2 Business Arising from the Minutes	-
#4	DELEGATIONS	4.1	-
#5	OLD BUSINESS	5.1	-
#6	NEW BUSINESS	6.1 Wolf Harvest Program	-
		6.2 Budget	-
#7	STAFF REPORT & ASB MEMBERS BUSINESS & REPORTS	7.1	-
#8	CORRESPONDENCE	8.1 2017 ASB Tour Save the Date	8
		8.2 CleanFarms Return you Unwanted or Obsolete Pesticide and Livestock Medication	10
		8.3 Beavers in our Landscape	12
		8.4 Cereal Grain Drying and Storage	13
		8.5 SARDA How to Pull a Tractor Unit or Vehicle Safely	29
		8.6 SARDA Peace River Will be Better Protected by Partnership Grant	33

Minutes of a
REGULAR AGRICULTURAL SERVICE BOARD MEETING
MUNICIPAL DISTRICT OF GREENVIEW NO. 16
M.D. Administration Building
Valleyview, Alberta on Thursday, July 27, 2016

#1 CALL TO ORDER

Chair Cailliau called the meeting to order at 9:29 a.m.

PRESENT

Chair	Roland Cailliau
Vice Chair	Allen Perkins
A.S.B. Member – Councillor	Bill Smith
A.S.B. Member – Councillor	Dale Smith
A.S.B. Member	Larry Smith
A.S.B. Member	Laurie Mitchell

ATTENDING

Manager, Agriculture Services	Quentin Bochar
Assistant Manager, Agriculture Services	Dave Berry
Recording Secretary/ Supervisor Trainee, Agriculture Services	Sean Allen

ABSENT

A.S.B. Member	Jonas Ljunggren

#2 AGENDA

MOTION: 16.07.40 Moved by: Allen Perkins
That the Agenda be adopted as presented.

CARRIED

#3.1 REGULAR ASB MEETING

MOTION: 16.07.41 Moved by: Larry Smith
That the minutes of the May 26, 2016 Regular Agricultural Service Board Meeting to be adopted with the following changes:

- replace the wording Quentin Bochar with Agricultural Manager
- Dale smith vacated the meeting during in camera be removed
- Change 5.1 Municipal Road Right-of-Ways will be added to Municipal Road Right-of-Ways that will be added.

CARRIED

#3.2 BUSINESS ARISING FROM MINUTES

3.2 BUSINESS ARISING FROM MINUTES

#4 DELEGATIONS

4.0 DELEGATIONS

4.1 DELEGATION FROM ALBERTA CONSERVATION ASSOCIATION (ACA)

MOTION: 16.07.43 Moved by: Bill Smith
That the Agricultural Service Board accepts the presentation from Alberta Conservation Association (ACA as information)

CARRIED

#5
OLD BUSINESS

5.0 OLD BUSINESS

#6
NEW BUSINESS

6.0 NEW BUSINESS

6.1 AGRICULTURE FOR LIFE – FIELD SIGNAGE PROGRAM

MOTION: 16.07.42 Moved by: Allen Perkins
That the Agricultural Service Board direct administration to provide logistic support for the Agriculture for Life Field Signage Campaign

CARRIED

6.2 ELK DEPREDATION

MOTION: 16.07.44 Moved by: Bill Smith
That the Agricultural Service Board recommend to Council, to direct administration to provide logistical support for the ACA's Elk Depredation Assistance Program.

CARRIED

6.3 WOLF HARVEST PROGRAM

MOTION: 16.07.45 Moved by: Dale Smith
That the Agricultural Service Board recommend to Council to approve an additional funding requisition of up to $15,000.00 from Contingency Reserve to fund unanticipated increase use of the program.

CARRIED

MOTION: 16.07.46 Moved by: Dale Smith
That the Agricultural Service Board accept the following documents: (Draft Version) Little Smoky and A La Peche Caribou Range Plan and Setting Alberta on the path to Caribou Recovery as information.

CARRIED

Councillor Dale Smith vacated the meeting at 10:22am

Councillor Dale Smith re-entered the meeting at 10:25am

6.4 Wild Boar Harvest Agreement

MOTION: 16.07.47 Moved by: Allen Perkins
That the Agricultural Service Board direct administration to enter an Agreement for the Implementation of Wild Boar Containment Standards under the Agricultural Pest Act with Alberta Agriculture and Forestry (AAF)

CARRIED

Councillor Bill Smith vacated the meeting at 11:02am

Councillor Bill Smith re-entered the meeting at 11:04am

#7 STAFF REPORT & ASB MEMBERS BUSINESS & REPORTS

7.0 STAFF REPORT & ASB MEMBERS BUSINESS & REPORTS

MEMBER LAURIE MITCHELL:

- No Report

MEMBER LARRY SMITH:

- No Report

VICE CHAIR ALLEN PERKINS:

- No Report

COUNCILLOR BILL SMITH:

- No Report

COUNCILLOR DALE SMITH:

- AER is doing a area based regulation multi based panel

CHAIR ROLAND CAILLIAU:

- No Report

Councillor Bill Smith vacated the meeting at 12:05am

Councillor Bill Smith re-entered the meeting at 12:07am

STAFF REPORTS

MOTION: 16.05.48 Moved by: Larry Smith
That the Agriculture Service Board accept the reports as information.
CARRIED

#8 CORRESPONDENCE

8.1 ALBERTA CROP CONDITION AS OF MAY 10, 2016

8.2 ALBERTA CROP CONDITION AS OF MAY 17, 2016

8.3 ALBERTA CROP CONDITION AS OF MAY 24, 2016

8.4 ALBERTA CROP CONDITION AS OF MAY 31, 2016

8.5 ALBERTA CROP CONDITION AS OF JUNE 7, 2016

8.6 ALBERTA CROP CONDITION AS OF JUNE 14, 2016

8.7 ALBERTA CROP CONDITION AS OF JUNE 21, 2016

8.8 ALBERTA CROP CONDITION AS OF JUNE 28, 2016

8.9 ALBERTA CROP CONDITION AS OF JULY 5, 2016

8.10 ALBERTA CROP CONDITION AS OF JULY 12, 2016

8.11 FORGAGE FACTS JUNE

8.12 FORAGE FACTS JULY

8.13 BACK FORTY

8.14 SARDA CUTWORM

8.15 SARDA TO SPRAY OR NOT TO SPRAY FUNGICIDE

8.16 ALBERTAS CROP COMMISIONS HIRE IPSOS REID TO SURVEY FARMS SUSTAINABILITY PRACTICES FINAL DRAFT

8.17 FARM SUSTAINABILITY EXTENSION WORKING GROUP HIRES EXTENSION COORDINATOR

8.18 ALBERTA BEEF PRODUCERS NOMINATIONS

8.19 ABP VERIFIED BEEF PRODUCTION PLUS PROGRAM

8.20 TENT CATERPILLAR

8.21 BERTHA ARMYWORM

8.22 CABBAGE SEEDPOD WEEVIL

8.23 STRIPE RUST

8.24 PCBFA INVITATION TO TENDER

8.25 CALENDER JULY, AUGUST, SEPTEMBER

CORRESPONDENCE LISTING

MOTION: 16.07.49 Moved by: Select a Member
That the Agricultural Service Board accept the correspondence listing as presented.

Choose an item.

#9 IN CAMERA

9.0 IN CAMERA

#10 ADJOURNMENT

10.0 ADJOURNMENT

MOTION: 16.07.50 Moved by: Larry Smith
That the Agricultural Service Board Meeting adjourns at 11:49 a.m.

CARRIED

Agricultural Service Board Chair Services

Manager, Agricultural

Sean Allen

To: Steve Majek
Subject: RE: 2017 ASB Tour Save-the-Date

2017 Provincial Agricultural Service Board Summer Tour

GROWING
Tomorrow's Agriculture
2017 ASB Summer Tour

SAVE - THE - DATE
JULY 11 – 14, 2017

Mountain View County and **Red Deer County** have teamed up to bring to you the 2017 Provincial Agricultural Service Board Summer Tour. We are busy putting together plans to create a jam-packed tour showcasing the latest and greatest of agriculture in Central Alberta.

Mountain View
COUNTY

Red Deer County

The theme for the tour is ***Growing Tomorrow's Agriculture***. We plan on showing our local producers in action and their contributions to the future of agriculture. Embodying our theme, **Olds College** has been selected as the base for the tour week and will be hosting registration, check-in, optional tours and all of the evening festivities.

The 2017 ASB Summer Tour team is in the process of building the website and finalizing tour stops for the Delegate Tour, Partner Tour and the Youth Tour. At this time, we are sending you an initial invitation to ensure you have ample time to SAVE-THE-DATES. Future notices will be circulated with registration and tour options.

GENERAL ITINERARY

Monday, July 10th	Accommodations: available for those arriving early, no formal activities.
Tuesday, July 11th	Optional activities golf, river rafting, Olds College Centre for Innovation, brewery tour Registration: Centennial Village. Evening: Welcoming Reception and social
Wednesday, July 12th	Delegate Tours and Partner Tours in both MVC and RDC Youth tour in Red Deer County Evening: BBQ Mixer, Tradeshow, Farmer's Market, College tours
Thursday, July 13th	Delegate Tours and Partner Tours in both MVC and RDC Youth tour in Mountain View County Evening: Banquet
Friday, July 14th	Stampede Breakfast and departure

ACCOMMODATION OPTIONS

Some of you may be anxious to book your rooms for the tour. Here are the options we have set up in and around Olds, Alberta:

1. Olds College offers a few options that allow you to stay right at the College where the action is:
   To book the Olds College accommodations call College Conference Services at **403.556.8330**
   A. Olds College Centennial Village
      $70/night with linens for 1 person (2016 prices)
      $80/night with linens for 2 people
   B. College Courts – townhouse style units with 4 bedrooms and 2 full bathrooms
      $50/night with linens for one bedroom (one person)
      $200/night with linens for 4 bedrooms (4 people)
   C. Camping at Olds College – parking lot DD - $25/night with power (no water or sewer)

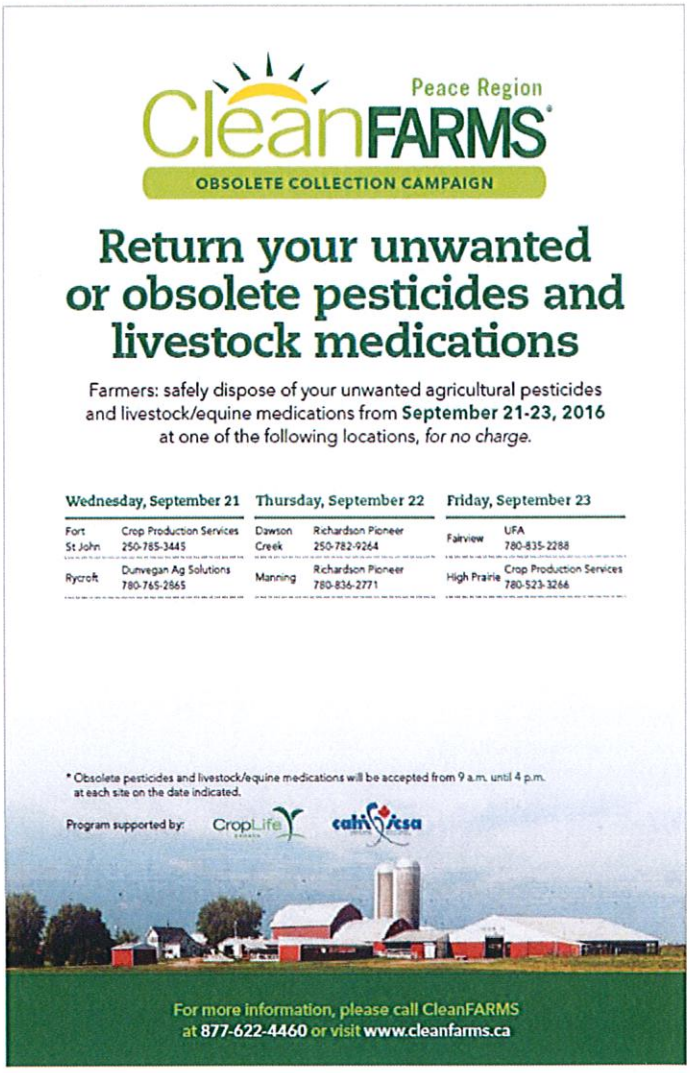
For inquiries about the Olds College accommodations call 403.556.8330 or email conferenceservices@oldscollege.ca

2. Pomeroy Inn & Suites @ Olds College - 4601, 46th Avenue, Olds Alberta 403.556.8815
   $129 - $179 + tax per night depending on room type
3. Best Western in Olds - 4520, 46th Street, Olds Alberta 403.556.5900
   $139.49 + tax per night
4. Ramada Olds - 500 – 6700, 46th Street, Olds Alberta 403.507.8349
   $134.99 + tax per night
5. Circle 5 Motel - 4513, 52 Avenue, Olds Alberta
   $107.00 + tax per night
6. O. R. Hedges Campground – 5013, 54th Street, Olds Alberta
   Begin taking reservations on May 1st, 2017. They book up very quickly.

As more details are seeded and growing, we will send updates, share further information and place all of this information on the 2017 ASB Summer Tour website. If you have inquiries about the tour please contact our Tour Coordinator, Donna Trottier at 403.348.9321 or email Donna at donna.trottier@tatonga.ca.

Clean Farms - Peace Region

CleanFARMS



Event Properties

Event date	09-21-2016 9:00 am
Event End Date	09-23-2016 4:00 pm

Individual Price	Free
Location	six locations

Invite Friend

Share this event:

Beavers in Our Landscape

A workshop on understanding and living with beavers

Tuesday, October 11th

Time: 6:30pm-9:30pm, 6:00pm registration

Where: County of Grande Prairie No. 1 Community Service Building, Clairmont

Cost: Free

Refreshments will be provided

To register or for more information , please call Jill Henry with the County of G.P. at 780-532-9727

Wednesday, October 12th

Time: 10:30am–2:30pm, 10:00am registration

Where: High Prairie Agriplex

Cost: Free

Lunch & refreshments will be provided

To register or for more information, please contact Jen or Kaitlin with PCBFA at 780-835-6799, or email jallen@gprc.ab.ca or kmclachlan@gprc.ab.ca

Please join us to share your knowledge and experiences, developed for Alberta natural resource managers, municipalities, landowners and others!

Whether you love them, hate them, want to understand them, think you need them, or want to learn how to live with them, you will find this workshop useful. Topics include:

- **Beaver basics** - Ecology, natural history, watershed connections
- **Beaver challenges** - Issues, management, options and alternatives
- **Beaver case studies** - How others are dealing and living with beavers
- **Beaver banter** - Round table discussion on beaver messages, messaging, management issues, management options, information needs
- **Beaver next steps** - Awareness messages, tool development, beaver role in watersheds, reintroductions and future management

An integral part of the workshop will be discussion about challenges, concerns & values.

Workshop Partners:

Supported by:

Cereal Grain Drying and Storage

Agri-News
This Week

Adapted from the Canada Grain Council's Complete Guide to Wheat Management.

Introduction

Once a cereal crop is harvested, it may have to be stored for a period of time before it can be marketed or used as feed or seed. The length of time cereal can be safely stored will depend on the condition it was harvested and the type of storage facility being utilized. Grain binned at lower temperatures and moisture contents can be kept in storage for longer periods of time before its quality will deteriorate. The presence and build up of insects, mites, molds and fungi, which are all affected by grain temperature and grain moisture content, will affect the grain quality and duration of grain storage.

Storage and Conditioning of Grain

Conditioning of grain has the single purpose of preserving the quality of grain. Low moisture content and low temperature have been shown to be essential for successful storage of grain for a long period of time. A number of processes are available for conditioning of grain thereby ensuring safe storage.

Appropriate Conditions for Storage

Proper conditions to store grain effectively are those which prevent or discourage the growth of microorganisms and insects. Such conditions involve control and maintenance of:

- Moisture content of grain
- Temperature of the grain
- Condition and soundness of the grain
- Oxygen supply of the storing environment.

Conditioning Processes of Cereal Grain

Advantages of conditioning (drying)

1. Allows for harvesting tough grain and thereby reduces losses from weather and wildlife.
2. Extends available harvest period.
3. Earlier harvest is possible.
4. Drying tough or damp grain can reduce or eliminate spoilage in storage.
5. May improve market grade and acceptability of grain.
6. May afford alternative market outlets for grain.
7. May eliminate necessity of swathing to obtain "dry" grain.
8. May improve malting quality by reducing kernel peeling and cracking during combining. However, most maltsers will not knowingly buy grain which has been artificially dried.
9. Since artificially dried grain usually contains near maximum allowable water content, the extra weight generates more dollars when sold.

Disadvantages of conditioning (drying)

1. Requires extra capital for equipment, energy and operation.
2. Requires extra labor and inconvenience of handling unless centralized facilities are available.
3. Requires some experience to operate effectively.
4. May impair quality of malting barley if not operated properly (low air temperature).

Aeration

Aeration is the process of ventilating stored grain at low air flow rates with the purpose of maintaining a fairly uniform grain temperature throughout the bin to prevent moisture accumulation at the top (or bottom] layers of the bin due to natural convection. The amount of air required to change the temperature of the grain may not change the moisture content very much. Although aeration is not a grain drying system and should not be considered as such, some drying can occur when the weather is very dry and the fan is run for a very long time. Moreover, the low airflows (1-2 litres/second/cubic metre) used are not sufficient for reliable safe storage unless grain temperatures are near or below 0 °C

Unheated or natural grain drying

In this system, the drying potential of surrounding air is utilized to remove moisture from the grain. It has been viewed as a race to get the grain dried before it spoils. Normally air is forced into the bin from the bottom through a fully perforated floor and exhausted through the roof vents. The moisture transfer from the grain to air takes place in the drying zone (Figure 1).

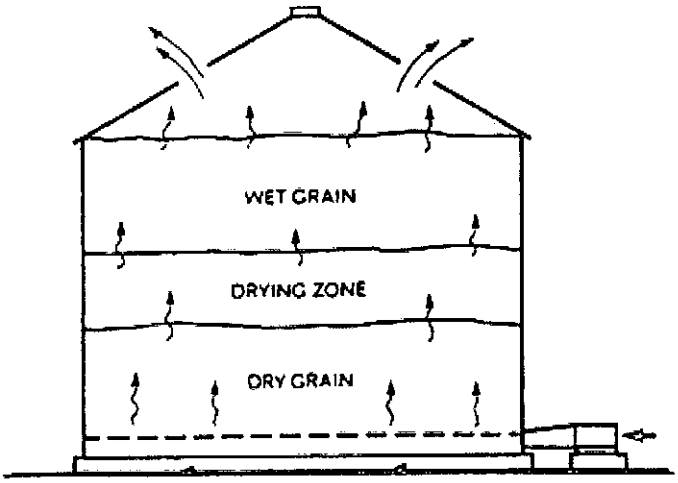


Figure 1. Unheated air drying

The key to success is to move the drying zone through the top of the grain mass within the allowable storage time. As shown in Figure 2, the allowable time for drying is reduced at high grain temperature and moisture content. This means a higher airflow requirement to accomplish drying within the allowable storage for wetter grain. Similarly at higher temperatures, high airflow rates are required to complete drying before grain spoils.

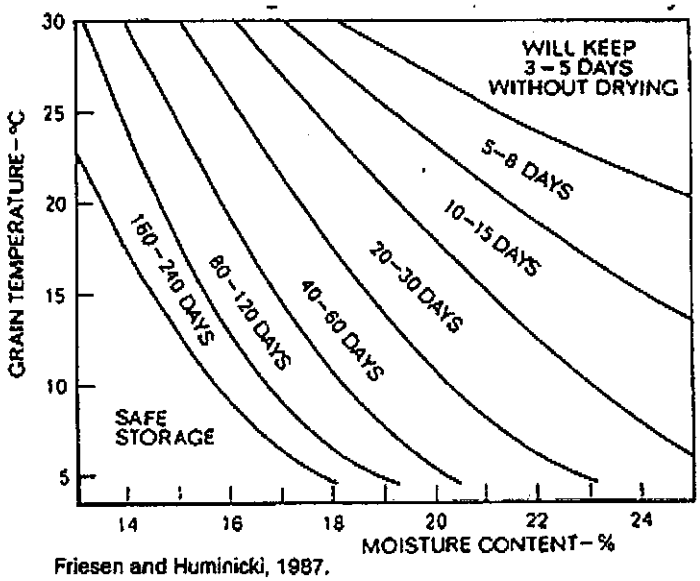


Figure 2. Effect of temperature and moisture content on allowable storage time of wheat, oats, and barley.

Dryeration

Dryeration is a modification of the system that utilizes heated air drying followed by rapid cooling of the grain in the dryer before transferring to storage. In dryeration, the hot grain is transferred to a cooling or dryeration bin. There it is tempered (stored without airflow) for 8 to 10 hours before being slowly cooled. The grain may be transferred to another bin for storage.There are three

advantages with dryeration over heated air drying with in-dryer cooling:

- Improved energy efficiencies
- Less danger of grain quality reduction
- Increased drying capacity due to higher drying temperature and replacement of the cooling section by an additional drying section.

In-storage cooling

The differences between in-storage cooling and dryeration is that when the hot grain is delivered from the dryer to a cooling bin with a partially perforated floor, the fan is started immediately rather than allowing the grain to temper. Tempering is eliminated in order to reduce or eliminate the condensation on the roof and walls. This allows the grain to be stored in the cooling bin rather than being transferred to another bin for storage. In-storage cooling may be an attractive alternative for bins with partially perforated floors, since it allows them to be used for both cooling and final storage.

Heated air grain drying

Whenever aeration or natural air drying fails to adequately condition grain for storage, a heated air dryer may be incorporated into the harvesting storage system. Compared to natural air drying, the heated air drying absorbs more moisture from the grain thus drying the grain faster. Over drying of a cereal grain however, reduces the weight of grain that will be sold as less water is being sold. Also, it is more expensive in terms of propane costs. These costs must be balanced against how long the wheat has to be safely stored and under what storage conditions.

Drying Temperatures

Some factors as listed below may dictate the maximum temperatures for drying cereal grain:

- length of storage
- low temperatures should be used if the grain is to be stored for 6 months or more.
- moisture content
- the damper the grain, the longer the drying process. Low temperatures should be used.
- type of grain dryer
- lower temperatures should be used in dryers which do not mix or circulate the grain.
- end use of the grain - malt or seed - low temperature

Maximum safe air temperatures entering dryer for barley and wheat

Because excessive heat can damage cereal grain and reduce their ability to germinate, maximum safe air temperatures must not be exceeded.

	Seeding and Malting	Commercial	Feed
Barley	45 Degrees Celsius (113 Degrees Fahrenheit)	55 Degrees Celsius (131 Degrees Fahrenheit)	80-100 Degrees Celsius (176-212 Degrees Fahrenheit)
Wheat	60 Degrees Celsius (140 Degrees Fahrenheit)	65 Degrees Celsius (149 Degrees Fahrenheit)	80-100 Degrees Celsius (176-212 Degrees Fahrenheit)

The Canadian Grain Commission will test grain samples for damage resulting from heated air drying. Two one pound (454 grams) samples should be submitted; one from before drying and one

from after drying. The samples should be as representative as possible.

Solar Drying

Spreading out a thin layer of grain in the sun is a form of solar drying that has been practiced for many years all over the world and is still being carried out in many tropical countries. However the disadvantages of this system are:

- Uncertainty of success due to variable weather
- Non uniform grain quality.

To circumvent these problems associated with traditional sun drying while still directly using the energy emitted by the sun, solar collectors have been applied in conjunction with a fan, a duct system and a bin in which grain is dried and stored.

Solar grain drying has been investigated in Alberta as one alternative to grain drying but has not proved to be dependable.
This has been attributed to the high cost of collectors and the unreliable sunshine when it is needed for drying. The conclusion has been that in Alberta, both hot air and natural air grain drying are more appropriate than solar grain drying.

The design of solar grain dryers cannot bc as precise as for other types of driers because of the diffuse, intermittent and unpredictable nature of solar energy.

Types of Grain Dryers

Major types of hot air dryers are designed as:

- Bin
- Batch
- Continuous flow

Bin

The basic system of a bin dryer comprises of a fully perforated floor, a grain spreader, fan and heater, sweep auger and under floor unloading auger. In this system, grain is loaded as a batch and remains stationary in the dryer throughout the drying period. Advantages of bin dryers are: Low set up cost.

- Minimal supervision required.
- Availability of bin for storage after drying is completed.
- Possibility of obtaining variable batch sizes.
  Disadvantages of bin dryers are:
- Initial high cost normally including grain handling.
- Requirement of careful management in order to obtain acceptable uniform drying.
- Requirement of matching loading and unloading equipment.

Batch dryers

The batch dryers are designed as:

- Non recirculating
- Recirculating

In the non-recirculating system, the column of grain is kept in the same position relative to the drying air for complete batch drying. The grain is under dried on the outside and over dried on the inside layer. The final moisture content of the grain is the average of the mixture when it is emptied. This problem is alleviated by the recirculating batch dryer in which grain is mixed constantly while drying using a recirculating auger. The advantages/disadvantages of batch dryers are:

- Uniformly dried grain due to constant recirculation in the recirculation type.
- Supervision required.
- Loss in drying time while the batch is being loaded or unloaded.

Continuous flow dryers
In these systems, hot air is passed through a continuously flowing mass of grain. After the hot air, cool air is blown through the grain. Because the grain passes the drying column only once, grain is often not dried as uniformly as the recirculating batch dryers. Advantages of continuous flow dryers is:

- Large quantities of grain can be dried without stopping.
  Disadvantages of continuous flow dryers are:
- Initial high cost normally including grain handling.
- Requirement of careful management in order to obtain acceptable uniform drying.
- Requirement of matching loading and unloading equipment.

Storage Facilities

Storage facilities are intended to:

- Prevent losses due to leakages, rodents, and livestock;Requirement of a central location.
- Protect grain from damage due to moisture migration, snow, rainfall, heating, insects and molds;
- Provide easy access with regards to handling or inspecting of grain.

The best storage facilities are those that are weather proof, ventilated and of single wall construction. Because small bulks cool faster and more evenly than large bulks, it is better to have several smaller bins than a few larger, ones, especially when aeration equipment is not available. Storage structures may be made of metal or wood and regardless of the nature, they all have advantages and disadvantages. They should be built on high, well drained land in order to protect grain from heavy rainfall and spring floods. Occasionally when the crop yields are above average, grain is stored in temporary storage including barns, machine sheds or in an open area.

Metal structures
Metal storage structures range in shape from circular steel bins and arch-roof types to slant and straight wall rectangular units.
Circular bins are the most common on the Canadian prairies because they are easy to erect, easy to maintain, come in a wide range of sizes and are adaptable to mechanized unloading, aeration and drying systems.

Advantages of metal structures are:

- Fire proof
- Rodent proof

- Require little or no maintenance, strong
- Provide fewer places for insects to breed
- Infested grain can be fumigated more effectively

Disadvantages of metal structures include:

- When erection on reinforced concrete slabs these slabs sometimes crack and allow ground moisture to seep into the grain.
- Expansion of storage sides when filled with grain, requiring waterproofing of the open seams.

Wood structures

The wood bins can be rectangular, circular or arch roof structures. Rectangular wood bins may be of either frame or crib construction. Grain unloading can be partially mechanized. Arch-roof structures may be either glulam curved arch or gambrel roof arch. Mechanized unloading can be included but it is not as convenient as with a circular storage. However, arch-roof structures may be used as machinery storage when not required for grain.

Advantages of wood structures:

- most of them are small, therefore can be moved when empty.

Disadvantages of wood structures:

- Require frequent repairs to keep weatherproof
- Not fire proof
- Not as rodent proof as metal
- The many cracks in wood makes it difficult to effectively control insects.

Temporary storage

As mentioned earlier, when there is a shortage of space because of above average yields and buying more bins is not possible, temporary storage may be the next best thing to seek the following are possible emergency or temporary grain storage facilities:

- Open piles.
- Covered piles and suction fans
- Plastic Ag storage bags
- Snow fencing and paper
- Woven wire bins
- Plank bins
- Baled straw or hay and wire ties
- Temporary plywood bins
- Commercially available temporary storages
- Existing farm buildings

Fill the bins to the brim to avoid free board between the grain and upper lip of the bin. Free-board space holds snow. Use a dark polyethylene shut to cover dry grain but leave tough and damp grain uncovered to dry by exposure to wind and sunshine.

In emergencies, cereal grain may be stored for short periods in conial piles on the ground. Cone the grain as high as possible in the centre of the pile without disturbing the natural slope of the sides and protect is from all disturbances.

No matter what type of structure is used to store grain, the filling should be done in the centre as this will provide even loading of the walls and a smooth uniform cone to help shed rain.

Fill the granary only to the top plate to provide crawl spaces for inspection, and for ventilation. Never store newly harvested grain on top of old grain that may be infested with insects or contain spoiled grain.

A survey conducted by Friesen (1972) indicated that wood was by far the most commonly used structure in bin construction in the three prairie provinces. Today bins are almost exclusively of metal construction and are becoming larger and equipped with natural air drying equipment.

Heating of Stored Grain

Stored grain is or can be at risk from damage that results from heating. The heating results from grain respiration, as well as respiration from microorganisms, insects, and mites during storage. The resulting heat from respiration can lead to the development of hot spots within the grain. The higher the moisture content and temperature of grain at storage time, the greater the risk of hot spots. A vicious circle of heating can be established leading to greater respiration resulting in the release of yet more heat causing increased temperature which in turn stimulates greater activity and so on. Continuous production of heat may lead to temperatures high enough to kill microorganisms, thus leaving heating due to oxidation (burning without flame).At temperatures of 50°C (122 °F) oxidation increases temperature so rapidly that if left uncontrolled, spontaneous combustion could occur within a short period. While this is the extreme effect of heating, it can also result in loss of ability to germinate as well as poor grain quality.

Thus heating of seed can result in:

- Loss in ability to germinate.
- Loss in weight
- Reduced quality
- Burning (in extreme conditions).

Table 2 shows the maximum moisture content levels at which cereal, pulse, and oilseed can be sold as straight grade, as permitted under the Canada Grain Act. The levels are revised periodically. If seed is sold as straight grade and the moisture content levels exceed the values shown in Table 2, a penalty is charged. The amount of the penalty is determined by the amount of moisture content above the acceptable level. Because seed with the moisture content levels shown in Table 2 can be sold without penalty, such values are often assumed to represent safe levels. In practice, though, the safe moisture content levels are one or two percentage points below those given in Table 2.

Table 2 Maximum moisture content levels for straight grade seeds*.

Barley (feed)	14.8
Barley (malt)	13.5
Canola rape seed	10.0
Corn/maize	15.5
Domestic buckwheat	16.0

Domestic mustard seed	10.0
Fababeans	16.0
Flax	10.0
Lentils	14.0
Oats	13.5
Peas	16.0
Rye	14.0
Safflower	9.5
Soybean	14.0
Sunflower	9.5
Triticale	14.0
Wheat	14.5

*Percentage wet weight basis

Factors Contributing to Storage Problems

Regardless of whether the grain moisture content and temperature have been determined and rated as safe, problems may yet occur. The relationships between moisture and temperature can dictate the severity of the problem (Figure 2). Safe storage time can be increased by cooling the grain and lowering its moisture content. If the grain has been stored in a "tough" condition [greater than 14.8% (feed barley), 14.5% (wheat), 14.0% (triticale and oats) moisture] examine the grain at least every two weeks by pushing your hand into the surface, as deeply as possible, to feel for warmth or crusting. Insert a long metal rod deeply into the grain to test for warmth and crusting at various depth. Feel the rod for warmth as soon as the rod is withdrawn from the grain. Additional factors may contribute to grain heating and deterioration in only localized parts of the bin.

Moisture migration

At the time grain is first stored, grain moisture content is fairly uniform throughout the bin. With time, localized high moisture zones may develop due to changes in outdoor air temperatures. The low outside temperature cools the wheat nearer the wall. This results in a downward air flow through the grain and upward towards the centre of the bin. As the air moves through the grain it becomes warmer and begins to pick up moisture from the grain. Condensation occurs when the warm moist air hits the cool surface of the grain near the centre of the bin, thus leading to grain spoilage Figure 3.

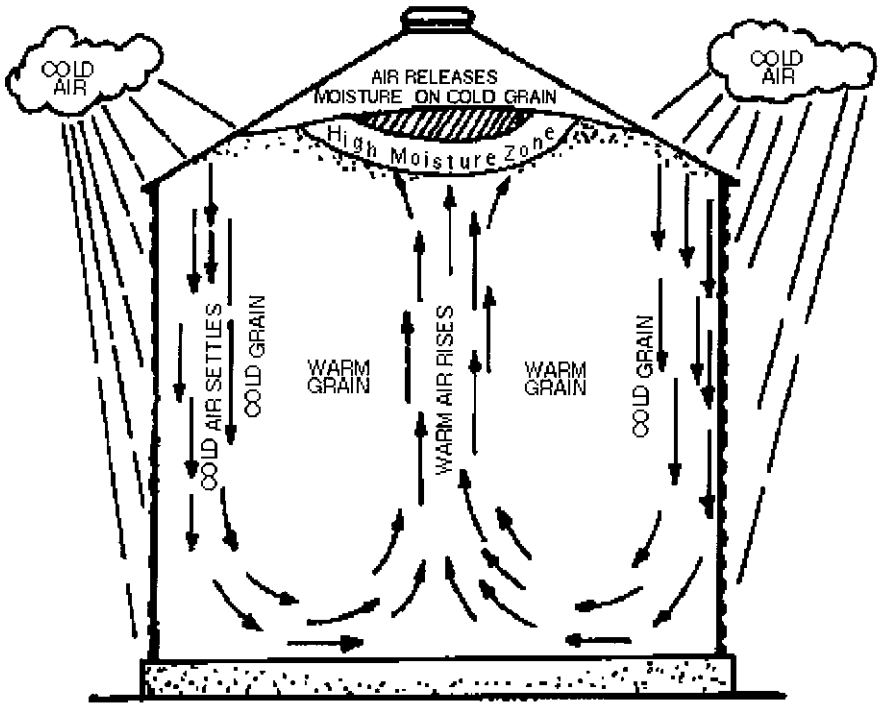


Figure 3. Moisture migration in storage bin in cold weather

The reverse airflow may occur if grain is still in storage in the late spring. Warming action from the sun on the outside of the bin causes moisture currents to move up and into the bin through the centre of the bin. High moisture due to condensation therefore occurs at the bottom of the bin in Figure 4. In addition, wet zones may form in the grain when rain or snow gets into the storage through ventilators and cracks in the roofs and walls.

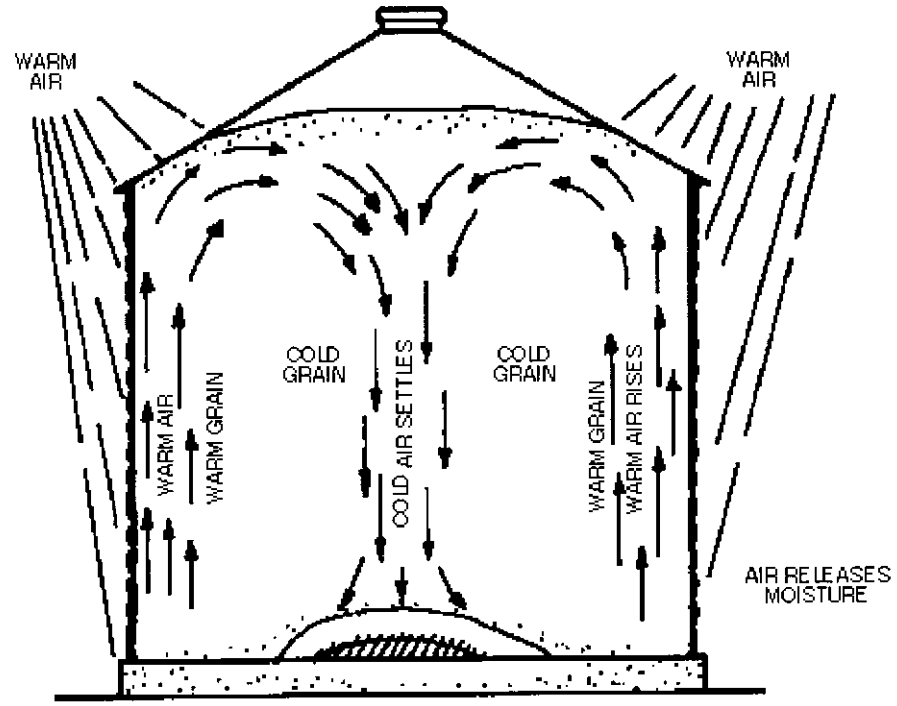


Figure 4. Moisture migration in storage bin in warm weather.

Insects, mites and molds

Failing to protect grain from infestations may result in quality losses; a price that may be too high to pay. The insects, mites and molds that cause grain to heat and lose condition are inactive at low temperatures (below 8 °C (48.4 °F) for insects, 3°C (37.4°F) for mites and 8°C (17.6 °F) for molds). Moisture content of grain below 13% arrests the growth of most molds and mites. Moisture content below 10% limits the development of most stored grain insects and pests. In addition to actual moisture content of the grain, bulk of grain stored also affects the rate of cooling. Tough (moisture content 14.6%-17.0 %) and damp (moisture content> I 7.0 %) grain stored in bulks of less than 27 tonnes usually cools rapidly and evenly during winter. However a bulk larger than 50 metric tonnes or more cools more slowly, hence temperature differences between the centre may cause condensation and spoilage.

Practical farm storage conditions are summarized in Figure 5. The ideal condition would be a moisture content of 12% or less and a temperature of 3 °C or less.

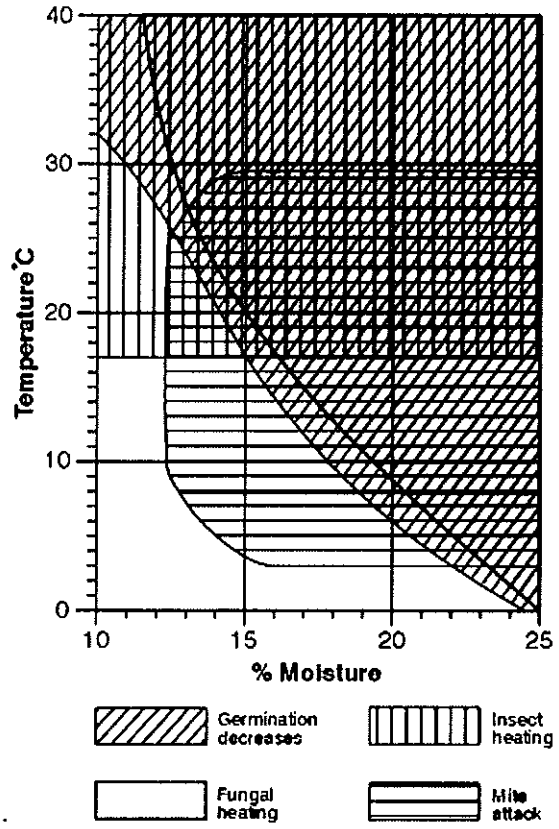


Figure 5. Practical farm storage conditions

Detecting Infestations

Before any control measure can be taken, the problem must first be detected. Sampling the grain every 2 weeks to check for insects and heating may ensure early detection of spoilage.

Checking for insects

A sieve (4 meshes/cm or 10/in) can be used to screen samples from the surface. A sampling probe may aid in obtaining deep samples. The siftings can then be observed over slight heat to detect movement of insects. Other insect detection devices consist of probes or pipes perforated with small holes that will exclude grain kernels but allow insects to drop into the trap.
Also plastic cups filled with water may be inserted in the bin to trap insects during summer. The two most important insects of stored grain in Canada are the rusty grain beetle and the red flour beetle. The rusty grain beetle larvae feed internally. The adult beetle is long (0.2 cm), flat, reddish-brown and its' antennae are not club shaped. It is usually the adult beetle which is detected in grain. The red flour beetle is twice as long as the rusty grain beetle and has club shaped antennae.

Checking for mites

For mite infestations, grain samples may be sieved through a sieve (12 meshes/cm; 30/in]. The dust and screenings should be warmed to room temperature and examined with a magnifying glass. While it is harder to see smaller numbers of mites, the larger numbers in grain sittings look like clumps of moving dust.

Controlling Infestations

Before grain is stored the empty bin should be sprayed with a recommended insecticide to control any insects which may already be present (Table 2).

Once infestations are detected in stored grain, it is important to control them as soon as possible in order to keep them from spreading to other bins. The kind of control measure depends on the condition of the grain, kinds of mites or insects present, grain temperature and the season of the year. Infested grain can be cold weather treated or fumigated.

Cold weather treatment

Lower the grain temperature by augering grain from one bin to a truck then to another bin. This is quite often an effective way to control infestations. Although only the grain that is heating may be moved, many transfers may be required to the cool grain to below 0 °C.

As mentioned earlier, insects do not multiply or damage grain at 0 °C.

Grain fumigation

Grain can be fumigated using liquid or solid fumigants. Fumigants are toxic to farm animals, humans and insects, therefore fumigations should be applied only by trained people. Follow the instructions as well as any precautionary measures indicated on the container (Table 3).

Table 3. Stored Grain Insects

Pest and location	Insecticide	Metric	Rate of Measure	Application	Remarks
EMPTY BINS Rusty grain beetle, Red flour beetle Saw-toothed grain beetle, Granary weevil	malathion 500	300ml/5L water	10 fl oz of 50% EC/1 gal water	5 L/100m² (1gal/1000 ft²)	Apply to inside surfaces of bins. Also clean and spray area below perforated floors in bins with air drying systems. Wait one day before filling.
Treatment for stored grain and empty grain bins Rusty grain beetle, rice weevil, granary weevil, Indian meal moth, Mediterranean flour moth, red flour beetle	Diatomaceous earth – Protect-it	5 kg. Bag of powder	100 – 1000 grams/metric tonne of grain depending on insect and crop type		For wheat the Wheat board suggests no more than 100 gms/tonne as a maximum. As the activity of product produces death through dehydration,

					wait 4 weeks before mixing grain.
FUMIGATION OF GRAIN IN STORAGE	Phostoxin Gastoxin	Ready to use tablets or pellets	Ready to use tablets or pellets	Inject tablets or pellets evenly throughout grain according to label instructions	Wax coating on pellets prevents release of gas for 4 hours after opening container. Phostoxin is a very toxic gas; seal granary and post warning signs. Work in pairs. Use only when grain temp. is above 5°C (40°F).
Fumigation Period		Grain Temperature 4°C-12°C 12°-15°C1 16°-20°C	Fumigation Period 10 days 5 days 4 days		Following fumigation, aerate bins for 48 hours or until odor dissipates. Grain can be used for livestock feed following aeration.
CONTROL BY COLD TEMPERATURE	Rusty grain beetles an other stored grain insects can be killed by periods of cold temperatures as follows:				
		Grain Temperature -5° -10° -15°	Time required to kill insects 6 weeks 4 weeks 2 weeks		
	Grain temperatures can be lowered by aeration. Moving grain several times during cold weather may lower temperatures enough to kill insects.				

Source: Kolach and McCullough, 1992.

For more information about the content of this document, contact Harry Brook.
This document is maintained by Janet Fletcher.
This information published to the web on June 19, 2001.

Last Reviewed/Revised on October 18, 2010.

Phone the Ag-Info Centre, toll-free in Alberta at 310-FARM (3276), for agricultural information.

Sean Allen

From: SARDA <extension=sarda.ca@mail71.atl51.rsgsv.net> on behalf of SARDA <extension@sarda.ca>
Sent: September-02-16 4:00 PM
To: Sean Allen
Subject: Stuck in the Mud!!!

Stuck in the Mud!!! View this email in your browser

SARDA
AG RESEARCH

How to pull a tractor unit or vehicle safely

From Alberta Pulse Growers Pulse Check, August 31, 2016 and

Purdue Extension publication - Extracting Stuck Equipment

Massive storms and historical rainfall events across Alberta during the last two weeks have resulted in some very muddy conditions across regions of Alberta. Before you load up some chains and call the neighbour, take some time to consider the following points and ensure that you inspect all tow ropes, tow straps, recovery straps, ropes and tow hooks. The next time that you are shut down by a shower might be a good time to inspect the equipment before it is needed in the field.

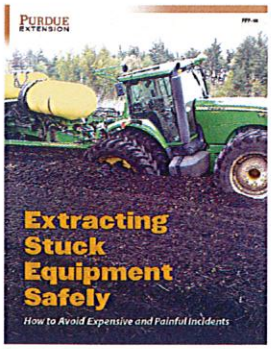
The number one thing to remember is to keep your cool. Emotions often run high at harvest when it is go time. Complacency and 'doing what we have always done' can lead to hairy situations. Here are some tips for recovering vehicles or heavy equipment when stuck in the mud.

1. Know how deep it is - Understand the increased mire resistance when calculating horsepower of the towing vehicle required and your tow strap, rope or cable strength ratings.
2. Keep the tailpipe uncovered.
3. Dig around the vehicle tires, if necessary.
4. Keep a fire extinguisher handy.
5. Unload to reduce weight when possible or disconnect trailers or implements.
6. Get the towing vehicle as close as possible to the stuck vehicle and on higher ground if possible.
7. Pull in a straight line.
8. Try to make only two attachment points and ensure they will hold under pressure (not the bumper of your pickup).
9. Use the stuck neighbour's towing equipment (inspect it together) and ensure he hooks up the equipment for liability reasons.
10. Place something heavy on the chain, extraction strap or cable rope (such as a rug, blanket or heavy coat) to direct the force into the ground instead of into the air.
11. Remove all bystanders from danger zones – only the two operators of the vehicles within 100m when pulling.
12. Use the lowest gears available.

And most importantly, always remain calm. Know when you are beat (this may be hard to admit) and need professional help.

Many producers and safety industry professionals evaluate the pros and cons of using chains vs. cable ropes vs. extraction straps. All can be used provided they are in good condition and are being used appropriately.

Please refer to the Purdue Extension safety manual: Extracting Stuck Equipment Safely for a complete guide on evaluating conditions and selection of appropriate extraction equipment. Have a safe harvest and fall season.



https://www.extension.purdue.edu/extmedia/PPP/PPP-98.pdf

Our mailing address is:
SARDA (Smoky Applied Research and Demonstration Association)
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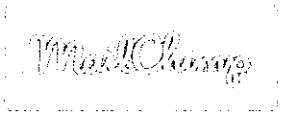
Falher, AB T0H 1M0
Canada



Sean Allen

From: SARDA <extension=sarda.ca@mail100.atl91.mcsv.net> on behalf of SARDA <extension@sarda.ca>
Sent: August-25-16 11:01 AM
To: Sean Allen
Subject: Peace River basin will be better protected by partnership grant

A $265,000 grant for the Mighty Peace Watershed Alliance View this email in your browser

SARDA
AG RESEARCH

Online Bulletin from the Alberta Government - August 9, 2016

Peace River basin will be better protected by partnership grant.

A $265,000 provincial grant will help the Mighty Peace Watershed Alliance deliver priority projects in support of Alberta's Water For Life strategy

The Watershed Planning and Advisory Council partnership grant will advance environmental education, collaboration and planning throughout the Peace River basin. It will also support the continuation of community-based projects, such as the restoration of Heart River and the Redwillow River Watershed.

"The Mighty Peace Watershed Alliance is a valued partner that cares deeply about protecting and enhancing natural watershed features throughout the

Peace River basin. I am grateful for their continuing efforts to help ensure the sustainability of precious water resources throughout Peace country."

- *Shannon Phillips, Minister of Environment and Parks*

"This funding will support important watershed projects that will have a positive impact on local communities in the Peace River basin. I'm happy to see the continued investment in priority watershed projects in northern Alberta."

- *Margaret McCuaig-Boyd, MLA for Dunvegan-Central Peace-Notley*

"The continued support from the Government of Alberta in the form of a yearly grant for operations and projects is hugely important to the Mighty Peace Watershed Alliance (MPWA). As the Government designated Watershed Planning and Advisory Council for the Peace and Slave Basins, the MPWA uses these funds to evaluate the State of the Watershed and work with a multitude of stakeholders to prepare an Integrated Watershed Management Plan. The MPWA provides opportunity and direction for stakeholders to engage in discussion and planning. Everyone needs to evaluate and consider improved actions in all we do on the landscape that effects water quality and quantity. This watershed covers 30% of Alberta's landscape and the MPWA strives to engage all who live, work and play in the basin."

- *Rhonda Clarke-Gauthier, P.Ag., Executive Director, Mighty Peace Watershed Alliance*

Watershed Planning and Advisory Councils across the province play a key role in the management, restoration and protection of water resources. Additional Watershed Planning and Advisory Council partnership grants will be announced in the coming weeks.

Click **here** or on the adjacent logo to visit the Mighty Peace Watershed Alliance Website.

Our mailing address is:
SARDA (Smoky Applied Research and Demonstration Association)
Box 90
#701 Mainstreet
Falher, AB T0H 1M0
Canada

Peace Region Agricultural Service Board Conference
November 9th, 2016
Dixonville Community Hall, AB

Proposed time	Event	Potential speakers
9:30 – 9:50am	Registration	
9:50 – 10:0 am	Opening remarks	County of Northern Lights, A.S.B. Rep
10:00 – 11:00 am	GMO	Someone
11:00 to 11:15 am	Coffee break	Sponsored by: 4B Ventures
11:15 – 12 noon	A.S.B. program and Acts update	Doug Macaulay, David Feindel
12 noon	Lunch	
1:00 to 1:30 pm	NPARA Update	Tom Fromme and Nora Paulovich
1:30 to 2:30 pm	New Venture Specialist and Growing Forward Update	Elaine Stenbraaten
2:30 to 3:00 pm	Coffee break	Sponsored by: Venture Parts and Homesteader Building Supplies
3:00 to 4:30 pm	Resolution session 1. Election of ASB Regional Rep 2. Updates from ASB Provincial Committee 3. Review Rules of Procedure 4. Call for amendments to Rules 5. Motion to accept Emergent resolutions (if any) 6. Motion to accept order of resolutions Resolutions session	Doug Macaulay, AARD Corey Beck, 2016 Regional ASB Representative
4:30 pm	Invitation to 2017 Regional ASB Conference	A.S.B. Chairman, MD of Fairview
4:35 pm	7. Adjournment	Northern Lights Chairman

THANK YOU TO OUR SPONSORS!

2016 REGIONAL AGRICULTURAL SERVICE BOARD CONFERENCE

Hosted by the County of Norther Lights

Dixonville Community Hall, Dixonville, AB
November 9, 2016

Deadline for Registration is **October 19, 2016**
Please note, all appointed A.S.B. or A.S.B. Committee members are allowed to vote on resolutions at the Regional A.S.B. Conference.

Attending Municipality:_____

Surname	*Given*	*Position*	*Voting Member*	*Conference Registration Fee $50.00 + GST*
			GRAND TOTAL:	

Please Make Cheques Payable To: County of Northern Lights

All payments must be received by the registration deadline of October 19, 2015

Please mail/fax or email your registration form to:
County of Northern Lights
Box 10 Manning, AB T0H 2B0
780-836-3348 Fax : 780-836-3663
Attention: Blake Gaugler gauglerb@countyofnorthernlights.com

SARDA Plots 2016
Dion East

Photo by Victor Gauthier

SARDA

Back Forty

Mission: To facilitate the transfer of unbiased ideas and information between research institutions, industry, and agricultural producers.

PRE-HARVEST ISSUE AUGUST 2016

IN THIS ISSUE

Making Hail!

Kabal S. Gill, Phd. & Shelleen Gerbig, P.Ag.

Mean hail simulator machine and crop recovery using foliar fungicides and nutrient blends

SARDA has been involved in a very exciting provincial project that is looking at the effects of hail on canola, peas and wheat. Replicated small plot trials are located near Donnelly, Vegreville and Lethbridge. 2016 is the first year of three year trials.

The study is lead by Ken Coles (Farming Smarter). Other team members include Jamie Puchinger and Mike Gretzinger (Farming Smarter), Vance Yaremko and Kabal S. Gill (SARDA), Ralph Lange and Rodney Werezuk (Alberta Inovates Technology Futures (AITF)). Small plot trials are being done near Donnelly (SARDA), Vegreville (AITF) and Lethbridge (Farming Smarter). AFSC crop adjusters assess the different levels of

Continued on page 2

This publication made possible in part by:

Alberta Government · Alberta Pulse Growers · Alberta Wheat Commission · Alberta Canola Producers

Continued from page 1

damage as per the AFSC guidelines.

What could be more exciting? A hail machine was fabricated by Farming Smarter and a local fabricator in 2015. This led to numerous discussions, trials and modifications. Finally two more machines were made for AITF and SARDA. In addition, the researchers get to beat up the crops, test several different treatments that may help with the crop recovery and observe their work.

The objectives of the study are to:

1. Develop a hail simulator machine to mimic hail events.
2. Determine the response of canola, peas and wheat to different levels simulated hail damage.
3. Determine the response of canola, peas and wheat to simulated hail damage at different growth stages.
4. Determine the potential benefits of foliar fungicide applications on peas and wheat , which are said to improve crop growth, harvestability and yield after hail damage.
5. Determine the potential benefits of foliar nutrient applications on peas and wheat, which are said to improve crop growth, harvestability and yield after hail damage.

Hail Simulator mounted on SARDA's spider sprayer.

Hail Simulator machine in action.

Treatments on wheat and peas include 3 levels of hail damage (0%, 33% and 67%) at three different growth stages (4-6 node, 50% flowering and 50% podded on peas; and tillering, heading and flowering on wheat). Foliar fungicide applications or foliar nutrient applications treatments were applied to test if they will improve crop recovery.

Treatments on canola include 5 levels of damage (0%, 25%, 50%, 75% and 100%) on five different growth stages (3 leaf, first flower visible, 7 days, 14 days and 21 days after first flower visible). Data is collected on plant heights before and

Simulated 67 % hail damage on wheat at tillering stage

Simulated 100 % hail damage on canola at the 3-5 leaf stage

after hail damage, biomass, yield and grade of crops for each of the treatments in each crop.

AFSC crop adjusters assist in determining the levels of hail damage and assessed the likely yield losses for the different simulated hail events. These assessed losses will be compared to the actual yield losses "ground truthing" after harvest.

Simulated 67% damage on peas at 4-6 node growth stage

Funding for the project is being provided in part by Alberta Pulse Growers (AGP), Alberta Wheat Commission (AWC) and AFSC. For SARDA's site, additional funding is being supplemented by the municipalities of Greenview, Smoky River, Big Lakes County, and Northern Sunrise County.

The information gathered from the three years and three locations in the province will help AFSC refine their assessment process and provide science to back their policies.

More Information

SARDA
780-837-2900
www.sarda.ca

North Dakota State University NDSU

Controlling Foxtail Barley

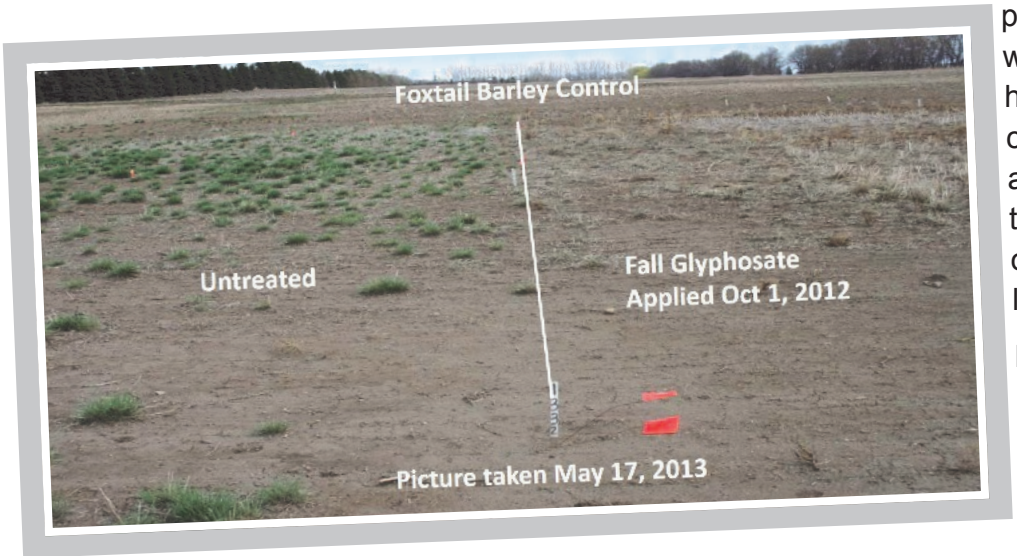
Excerpts from Making a Difference, NSDU Extension Service and 2013 ND Weed Control guide.

Foxtail barley is a perennial bunchgrass that has become ubiquitous where reduced tillage or no-till is practiced. Foxtail barley is a native of North America and is commonly found in wet areas. It can germinate, fall or spring. Fall-germinating plants resume growth early in the spring and have a competitive advantage over spring-seeded crops if not controlled. Foxtail barley seeds are primarily spread by wind but can attach to birds or animals for more distant distribution. Foxtail barley significantly reduces crop yields if left uncontrolled.


Headed foxtail barley

Foxtail barley stands, 1-2 feet tall and forms a pale green, bushy spike. The leaves are soft to the touch due to very short, and dense hairs. These hairs give the plant a bluish-green or grayish-green appearance.

Foxtail barley is easily controlled with tillage because it has a shallow fibrous root system and does not spread by rootstocks or rhizomes like some other perennial weedy grasses. Using tillage to control foxtail barley, causes growers to lose the benefits of no-till production. In wheat, Group 1 herbicides do not control foxtail barley and Glyphosate tends to provide only suppression of larger plants.



North Central Research Extension Center (NCREC) personnel

conducted studies 2012-2014 to identify effective control methods for foxtail barley. Studies were conducted using fall- and spring-applied herbicides. In wheat, fall- and spring-applied glyphosate followed by Olympus or Rimfire Max applied in-crop generally provided excellent foxtail barley control (85-99%). In comparison, glyphosate spring-applied alone provided only 35-68% foxtail barley control. In broadleaf crops, fall- and spring-applied glyphosate followed by either Assure II or Select generally provided excellent control. The fall glyphosate application tends to be the most important application given that foxtail barley is a perennial grass.

This NCREC research led to new recommendations for controlling foxtail barley. These recommendations stress crop rotation, fall- and spring-applied glyphosate, use of Group 2 herbicides in wheat and Group 1 herbicides (Select or Assure II) in broadleaf crops.

More Information

Dr. Brian Jenks
North Central Research Extension Center
Phone: 701-857-7677
E-mail: brian.jenks@ndsu.edu

Alberta Environmental Farm Plan

http://www.albertaefp.com/start-an-efp

Starting the EFP Process

Start the registration process by sending us an email at register@albertaEFP.com.

Have questions? Contact us at inquiries@albertaefp.com o r go to producers' groups (SARDA, PCBFA) for more information.

Important things to know:

* Completing an EFP costs you nothing.
* All of your information is confidential.
* There are many benefits in completing an EFP.

We will connect you to an EFP Technician who will set up your account and let you know when it's ready.

You will then receive an email from AlbertaEFP.com with a link to start the workbook.

Contact your technician if you need help along the way. (There is no deadline for completing an EFP; however it is easier and more efficient to do it within a short time period.)

When your EFP is finished and your Action Plan developed, submit it to your technician for review. If it needs more work, he or she will offer advice.

Once your EFP is approved, you will receive a Letter of Completion.

Implement your EFP Action Plan on your own time and as money permits. You can ask your technician for help or use our online resources.

More Information

To Register
register@albertaEFP.com
Questions?
inquiries@albertaefp.com

AFSC NEWSLETTER

For more information about AFSC's programs and services please contact us.

www.AFSC.ca • 1.877.899.AFSC (2372) • @AFSC_AB

IMPORTANT DEADLINES

August 15, 2016	**Annual Crop Insurance** Last day to file Report of Grain in Storage prior to harvest
September 1, 2016	**Bee Overwintering Insurance** Last day to file Report of bee Overwintering Hives and Hive Yard Location
September 30, 2016	**AgriStability** 2015 Supplementary Forms can be submitted anytime up to September 30th (without penalty).

MAKING PAYMENTS

You can choose to make payments at your local Branch Office and financial institution or through internet and telephone banking. For internet and telephone banking, your subscription number is required.

CARRYOVER GRAIN

It's your responsibility to ensure carryover grain from newly-insured production is identifiable. You are required to advise your Branch Office prior to storing new grain on top of old grain. Remember to mark the level of carryover on the outside of the bin in which the new grain is stored. AFSC must be able to identify your current year's production from past production. If it is unidentifiable, both carryover and current production will be prorated.

REMINDERS

- A 2% discount is available if you purchase Straight Hail Insurance online. Contact AFSC for an authorization key if you have not used this service in the past.
- Reporting Hail - hail claims need to be reported within five working days of the storm that caused the damage. Download the Client Reported Hail Claim Information form on AFSC.ca, and fax, email or drop it off at your Branch Office.
- Deferrals - If you're planning ahead for the 2016 tax year, consider the ability to defer indemnities to the 2017 tax year. There is no option to defer payment once an indemnity cheque is issued to you.

DESTROYING A CROP?

Remember to inform your local Branch Office!

If you plan to harvest damaged acres or put a crop to a use other than combining (including silage, greenfeed, livestock grazing or plowing down), remember to notify AFSC five days in advance of any action. Failure to do so will negatively impact your insurance.

Useful tools and helpful information about Hail Insurance on AFSC.ca

- Straight Hail Insurance Resources
  - Straight Hail Premium Calculator
  - Straight Hail Insurance Rate Map 2016
  - Client Reported Hail Claim Information form

Growing Forward 2 | Alberta Government | Canada

"Good things come in Trees" Tour

By Normand Boulet, CCA

On Tuesday July 12th the Smoky Applied Research and Demonstration Association (SARDA) and the M.D. of Smoky River held a tree tour with special guests Toso Bozic, Woodlot Extension Specialist with Alberta Agriculture and Forestry and Pieter van Der Schoot a Director with the Agroforestry and Woodlot Extension Society (AWES) as well as a Director of the Alberta Mycological Society. The tour was attended by about 20 area residents, all of whom were keen to learn about different tree and shrub species, diseases, proper pruning techniques, proper establishment and the benefits of trees and shrubs. Toso and Pieter both shared their extensive knowledge with the group at the 5 stops of the tour. Of interest was a newly established spruce shelterbelt which could definitely have benefited from a plastic mulch application as was seen on our 2nd stop. That 2nd stop showcased a mulch application which was done by SARDA in conjunction with the landowner just over 20 years ago (the first plastic mulch application done in the area), and the establishment and health of these spruce was amazing. Even 20 years later the mulch was still in place, now covered by organic matter (soil and decaying needles) and still providing some weed suppression and moisture retention. Our next 3 stops were at yard sites. Garth and Tamara Rondeau's yard showcased 100 year old and newly established trees and shrubs. Toso demonstrated proper pruning techniques for disease, tree "direction training" and aesthetic reasons. Following the stop at the Rondeaus' we visited Denis and Colleen Cloutier's yard and saw what amazing results can be accomplished in a matter of 7 or 8 years, learning about wood chip mulch placement, how to choose potted trees when purchasing, and planting techniques – as well as pruning different species for flower vs fruit production. At the Bremont Shelterbelt, an Alberta Heritage Tree site, Marc Bremont gave the group a quick history of the site establishment and we discussed differentiating the various tree species there as well as succession of established natural tree stands which were approaching the end of their life cycle.

After the last stop the group returned to its starting point at the Falher Campground shelter and were treated to a BBQ lunch prepared by SARDA staff, presentations on establishing a field shelterbelt, pruning, biomass projects for power and heating, and even the Carbon Levy program, part of the Alberta Climate Leadership Plan. Throughout the day the speakers fielded questions and held informal discussion on an incredible number of topics. This was the first tree tour in the M.D. and it certainly seemed that the people in attendance enjoyed it. The amount of information gleaned from it was definitely overwhelming!

Bale Handling Safely

From the July 18, 2016 Issue of Agri-News

Baling season is once again in full swing. Many producers equate baling with hot summer days and a rush to beat the weather. While getting the hay baled and off the field is a top priority, doing the job safely should take precedence.

“To increase the safety of baling procedures while ensuring the job gets done, look for hazards related to baler operation, handling, transporting and stacking,” says Kenda Lubeck, farm safety coordinator with Alberta Agriculture and Forestry. “Once you identify hazards, make the necessary changes to ensure the safety of all workers.”

The following are some of the hazards.

Handling:

- Ensure no children play near hay balers, carriers and stackers.
- Properly train operators handling tractors, front-end loaders or forklifts.
- Tractors with cabs, FOPS (falling object protective structure) or four-poster ROPS (roll-over protective structure) are highly recommended. Two-poster tractor ROPS offer no operator protection from bales falling back off of forks or bale-loading frames.
- Ensure bale-loading attachments on tractors and forklifts are secure and well fitted.
- Carry bales as low to the ground as possible.
- Ensure sufficient counterbalance on tractor or forklift vehicle.
- Hydraulic control valve should be specific to the front-end loader attachment.

Baler operation:

- Ensure baler is properly connected to the tractor.
- Make certain adequate safety guards are fitted.
- Nobody should ever be allowed to ride on the baler.
- Prevent others from getting too close to the baler.
- Watch for and clear any build-up of loose, combustible material in the baler.
- Ensure an updated fire extinguisher is fitted to the machine.
- Stop engine, disengage PTO and apply fly wheel brake (on square balers) prior to making adjustments or repairs.
- Extra care and attention should be made when reversing or turning the machine.
- Work during the day when there is adequate lighting.

Stacking:

- Consider fall-arrest protection for people working at heights.
- Land stack on even ground.
- Stacks should be clear of overhead powerlines.
- Stacked round bales should be adequately chocked and the borders posted.
- Watch for damaged bales at base of stack.
- Stack bales tightly and at a stable height.
- Do not stack bales higher than safe operating height of farm tractor or forklift.
- Never allow children to play on stacked bales.
- Do not handle more bales than is safe for the loader.

Transporting:

- Make sure vehicle controls are fitted specifically for the attachment in use.
- Carry heavy loads of bales with a sturdy trailer.
- Make sure stack and load heights do not exceed the lifting capabilities of the bale handling equipment.
- Ensure proper restraining frames on the back and front of trailer.
- Use fitted hooks so ropes can be used to secure load.
- Watch for overhead powerlines on or near roads.
- Avoid rough terrain that can cause bales to become unstable. Travel at safe speeds at all times.
- People should never ride on loaded hay trailers. This is highly dangerous.

“After making this list, check each hazard that has been spotted to assess how likely this hazard is to injure someone, and how severe that injury would be,” says Lubeck. “After this hazard assessment, take the list of hay baling and stacking hazards and number them in order of priority, so that those most likely to cause injury or harm can be addressed first.” .

More Information

Kenda Lubeck
780-538-5606

Build a Legacy!

Give a gift that benefits the Agricultural Community by providing a piece of land or funds to assist with the purchase of land. SARDA is a producer directed, not for profit organization whose Vision is to own an advanced agriculture resource center of excellence. Build your legacy. Call Vance at 780-837-2900. Tax deductible benefits available.

TREEPEOPLE

Top 22 Benefits of Trees

www.treepeople.org

Here are 22 of the best reasons to plant and care for trees or defend a tree's standing:

1. **Trees combat climate change**

Excess carbon dioxide (CO_2) caused by many factors is a building up in our atmosphere and contributing to climate change. Trees absorb CO_2, removing and storing the carbon while releasing the oxygen back into the air. In one year, an acre of mature trees absorbs the amount of CO_2 produced when you drive your car 26,000 miles

2. **Trees clean the air**

Trees absorb odors and pollutant gases (nitrogen oxides, ammonia, sulfur dioxide and ozone) and filter particulates out of the air by trapping them on their leaves and bark.

3. **Trees provide oxygen**

In one year an acre of mature trees can provide enough oxygen for 18 people.

4. **Trees cool the streets and the city**

Average temperatures in Los Angeles have risen 6°F in the last 50 years as tree coverage has declined and the number of heat-absorbing roads and buildings has increased. Trees cool the city by up to 10° F, by shading our homes and streets, breaking up urban "heat islands" and releasing water vapor into the air through their leaves.

5. **Trees conserve energy**

Three trees placed strategically around a single-family home can cut summer air conditioning needs by up to 50 percent. By reducing the energy demand for cooling our houses, we reduce carbon dioxide and other pollution emissions from power plants.

6. **Trees save water**

Shade from trees slows water evaporation from thirsty lawns. Most newly planted trees need only fifteen gallons of water a week. As trees transpire, they increase atmospheric moisture.

7. **Trees help prevent water pollution**

Trees reduce runoff by breaking rainfall thus allowing the water to flow down the trunk and into the earth below the tree. This prevents stormwater from carrying pollutants to the ocean. When mulched, trees act like a sponge that filters this water naturally and uses it to recharge groundwater supplies.

8. **Trees help prevent soil erosion**

On hillsides or stream slopes, trees slow runoff and hold soil in place

9. **Trees shield children from ultra-violet rays**

Skin cancer is the most common form of cancer in the United States. Trees reduce UV-B exposure by about 50 percent, thus providing protection to children on school campuses and playgrounds - where children spend hours outdoors.

10. **Trees provide food**

An apple tree can yield up to 15-20 bushels of fruit per year and can be planted on the tiniest urban lot. Aside from fruit for humans, trees provide food for birds and wildlife.

11. **Trees heal**

Studies have shown that patients with views of trees out their windows heal faster and with less complications. Children with ADHD show fewer symptoms when they have access to nature.

Exposure to trees and nature aids concentration by reducing mental fatigue.

12. Trees reduce violence
Neighborhoods and homes that are barren have shown to have a greater incidence of violence in and out of the home than their greener counterparts. Trees and landscaping help to reduce the level of fear.

13. Trees mark the seasons
Is it winter, spring, summer or fall? Look at the trees.

14. Trees create economic opportunities
Fruit harvested from community orchards can be sold, thus providing income. Small business opportunities in green waste management and landscaping arise when cities value mulching and its water-saving qualities. Vocational training for youth interested in green jobs is also a great way to develop economic opportunities from trees.

15. Trees are teachers and playmates
Whether as houses for children or creative and spiritual inspiration for adults, trees have provided the space for human retreat throughout the ages.

16. Trees bring diverse groups of people together
Tree plantings provide an opportunity for community involvement and empowerment that improves the quality of life in our neighborhoods. All cultures, ages, and genders have an important role to play at a tree planting or tree care event.

17. Trees add unity
Trees as landmarks can give a neighborhood a new identity and encourage civic pride.

18. Trees provide a canopy and habitat for wildlife
Sycamore and oak are among the many urban species that provide excellent urban homes for birds, bees, possums and squirrels.

19. Trees block things
Trees can mask concrete walls or parking lots, and unsightly views. They muffle sound from nearby streets and freeways, and create an eye-soothing canopy of green. Trees absorb dust and wind and reduce glare.

20. Trees provide wood
In suburban and rural areas, trees can be selectively harvested for fuel and craft wood.

21. Trees increase property values
The beauty of a well-planted property and its surrounding street and neighborhood can raise property values by as much as 15 percent.

22. Trees increase business traffic
Studies show that the more trees and landscaping a business district has, the more business will flow in. A tree-lined street will also slow traffic – enough to allow the drivers to look at the store fronts instead of whizzing by.

Many municipalities promote planting of trees and shelterbelts through reduced prices for trees, help in applying for programs to help with the establishment of shelterbelts and expertise in choosing the right trees for the different locations. In addition, AF have access to experts to deal with disease, insect pests and proper maintenance. For more information please contact your local AF.

More Information

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780-322-3831
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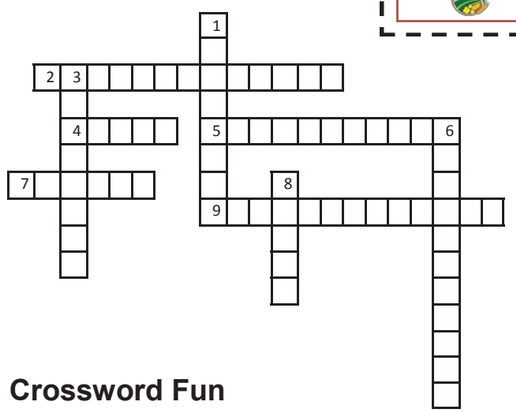
SARDA requires pre-registration for ALL SARDA events.

Event Name	Location	Time	Date	Cost	Comments
Soil Field School	NPARA Research Farm, - 1/2 mile W of North Star	10:00 am-4:00 pm	**August 18**	**$25 (Lunch provided)**	**Preregistration required. Phone or email Nora at 780-836-3354 or email: nora@npara.ca**
Morning Coffee Tour	NPARA Research Farm, - 1/2 mile W of North Star	8:00 am - 12:00 noon	**August 19**	**FREE**	**For more information, contact Nora at 780-836-3354 or email: nora@npara.ca**
Grainy Days	County of Grande Prairie, Clairmont	7:15 am—5:30 pm	**August 25**	**FREE**	**Open to everyone. Limited spots. For more information, call 780-532-9727. Registrations close August 19.**
Cover Crop and Pasture Tour	Various County locations	2:00 pm	**August 25**	**TBA**	**For more information, contact Nora at 780-836-3354 or email: nora@npara.ca**
Agri-Trade	Westerner Park, Red Deer		**Nov. 9-12**		
Canola Growers Meeting	Dunvegan Inn, Fairview	9:00 am-3:30 pm	**Nov. 29**	**FREE**	**Complete details available in September Visit www.albertacanola.com**
	Guy Community Hall, Guy		**Nov. 30**		
	Five Mile Hall, Grande Prairie		**Dec. 1**		
Hemp Growing	Regional Recreation Complex, Falher	10:30 am—2:30 pm	**December 9**	**FREE**	**RSVP Now Diane Chiasson 780-837-6630 Suzanne Prevost 780-573-4516**
2017 Study Tour National Western Stock Show	Denver, Colorado	TBA	**Jan 10-17**	**Twin—$2989 Single—$3526**	**$500 deposit due July 4th For more information call Kaitlan 780-835-6799 or visit www.peacecountrybeef.ca**
Farm Tech 2017	Expo Centre, Northlands, Edmonton	TBA	**Jan 31-Feb. 2**		**Registration Opens November 1, 2016**



Crossword Fun

Down

1 impartial
3 replicated trials
6 surroundings

Across

2 the economics of farming practices
4 Smoky Applied Research and Demonstration Association
5 the science of farming
7 another word for sustainable, feasible, and practical

Be BearSmart!

From mid-July through August bears can be found using different habitats in search of food. This includes digging for roots in shrubby or alpine habitats, eating insects in forests and bogs, and looking for berries in mixed and open forest habitats (Munro et al., 2006). Bears are therefore moving around a lot, and can be so preoccupied with finding food they don't immediately notice people or can come into work sites, farms, communities and homes—particularly if possible food sources are improperly stored or garbage is left out.

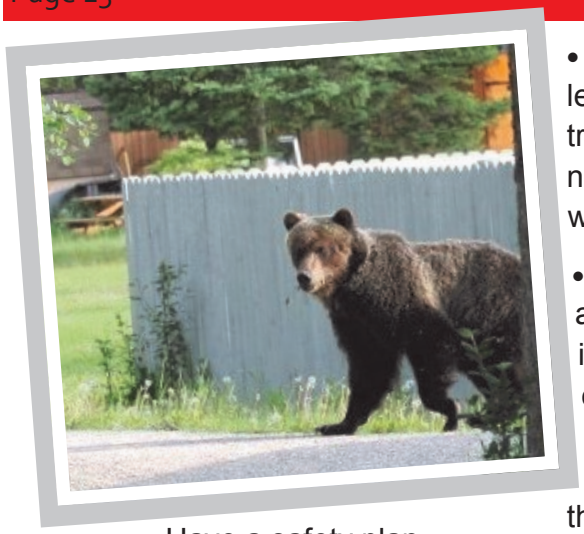
Therefore, it is important to Be BearSmart—clean up and store food attractants properly so you don't contribute to bear problems. It is also important to stay safe in bear country, especially since people are out enjoying summer, berry picking, camping, hiking, biking, and more. Carrying bear spray, accessible on your person, is a great way to help keep you safe in bear country!

What is bear spray? Bear spray normally contains three items: varying concentrations of capsaicin—the active chemical found in chili peppers— an oil base. and propellant. A typical 225 gram can has 5-6 one second bursts, with a shelf life of up to 3 years.

How does it work? The effective range of bear spray is typically 3—5 meters. When the cloud of spray come into contact with the bear it causes irritation to the eyes, nose and mouth. The sound and sight of the spray coming out of the can may also help deter the bear. The immediate effect of spray is to deter the bear, whether it is approaching you or standing there.

Tips for Avoiding Bear Encounters at Home, Work and Recreating:

- Keep your BBQ clean—bears will smell food residues left behind and come investigate!
- Securely store pet food indoors or in bear-proof containers. Same goes for garbage, recycling, or dead livestock!
- Clean up fruiting trees and shrubs, and don't put out bird seed.



- Have a safety plan for kids playing outdoors—they should know what to do if they see a bear! Practice a "bear safety drills."
- Keep your dog on leash—dogs can trigger unwanted and negative encounters with bears.
- Remember: bears are curious, intelligent animals—once they learn about a new food source, even if left there unintentionally, they will return.

See our Bear Spray video on the Environment and Parks YouTube channel: https://www.youtube.com/watch?v=TgE9o4xX1WI

Most bear encounters can be prevented. It's up to us to decide how we will keep ourselves safe, and keep wild bears from becoming habituated, problem bears. For more information visit: http://aep.alberta.ca/recreation-public-use/alberta-bear-smart/default.aspx

More Information

Visit http://aep.alberta.ca/recreation-public-use/alberta-bear-smart/default.aspx

SwathTiming and Straight Cutting

Excerpts from Canola Watch—July 27, 2016, August 26,2015, August 6, 2015, August 7, 2014

Some of the earliest canola fields could be ready to swath in two weeks or less. Swathing hastens crop drying rates, ensures uniform ripening, and reduces the possibility of seed losses from wind and hail. After the crop dries to uniform seed moisture content of 8 to 10% moisture (usually five to 10 days after swathing), it may be ready for harvesting if sufficient curing has also taken place to reduce the percentage of green seed to acceptable levels.

The advantages of swathing canola are:

- earlier harvest (eight to 10 days) and more uniform seed maturity - this is particularly important in fields where maturity is uneven
- earlier harvest to avoid fall

Seeds in this pod would be counted as colour changed.

Continued on page 16

Continued from page 15

frost and accelerate dry down, especially in short season areas

- earlier harvest to allow for double cropping or fall seeding of subsequent crops (e.g. winter wheat)
- more flexibility for time of harvest with a large acreage since canola typically retains its quality in the swath better than other crops (e.g. cereals), making the timing of harvest less critical
- reduced shatter losses during the harvest operation - especially in crops infected with Alternaria
- swathing can be done around the clock (unlike direct combining) which assists with the harvesting of large acreages
- cutting weeds allows a cleaner and drier sample that will reduce the risk of heating in storage and reduce the number of weed seeds that reach maturity

One alternative to swathing canola is to straight combine the crop. The advantages of straight combining are:

- Reduced manpower, fuel use and equipment requirement
- May increase seed size and yield
- May increase oil content
- Potential green seed reduction

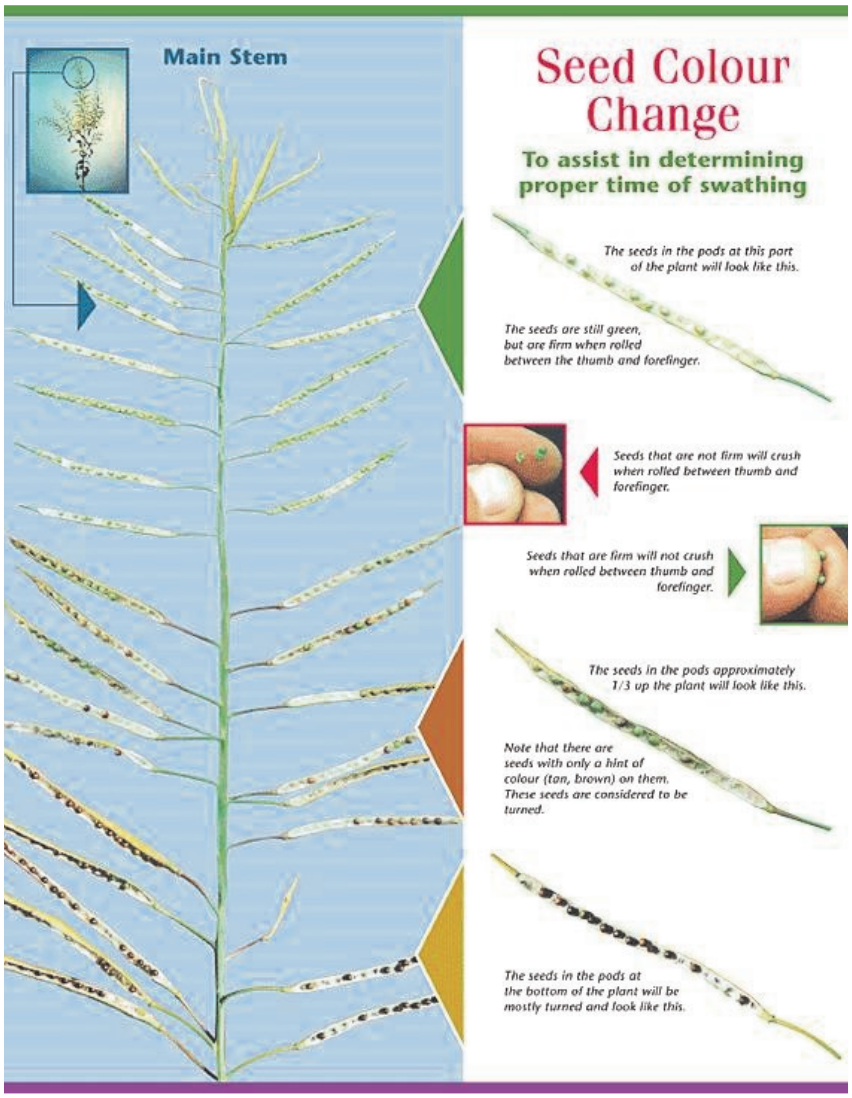
Carefully assess each canola field to determine the suitability for swathing versus direct combining. In western Canada, B. napus canola is generally swathed because it tends to not ripen evenly and may sustain pod split and pod drop, and shattering losses if direct combined. B. napus can be direct combined with or without a desiccant or pod sealant.

Swathing is the standard harvest approach for most canola producers. Some conditions which make swathing the preferred method include:

- Immature crop with imminent frost
- Uneven crop maturity
- Problems with green weed undergrowth or crop re-growth
- Reduced effects of alternaria black spot
- Reduced risk of shattering losses

The CCC advises growers to assess each canola crop carefully before choosing straight cutting, based on four factors.

1. **Crop canopy** – The crop should be well knitted and slightly lodged to reduce potential seed loss through pod shelling and drop. If a large proportion of the plants appear to move independently in the wind, they will be at higher risk for shattering loss as the plants senesce and dry down. The plant stand should be thick (hard to walk through). Pod integrity can be affected by frost, drought and insect damage. A uniform crop with minimal green weed growth is also a huge advantage when straight cutting.
2. **Disease** – The crop should be relatively free from



blackleg, fusarium wilt, sclerotinia and alternaria, as these diseases can result in premature ripening, causing the crop to be prone to pod shatter.

3. **Hail-** Crops affected by hail are poor candidates for straight cutting because the physical damage reduces pod integrity and they normally see greater disease infection. If late season hail is common in a certain area, growers should keep in mind that hail will typically cause more damage to a standing crop than a swathed crop.

4. **Frost risk** – Canola seed is at significant risk for fall frost damage until seed moisture drops below 20%. This moisture drop will take much longer in a standing crop, and as such, late maturing crops are poor candidates for straight cutting. They will be much more vulnerable to yield loss, and to downgrading from frost damage when standing.

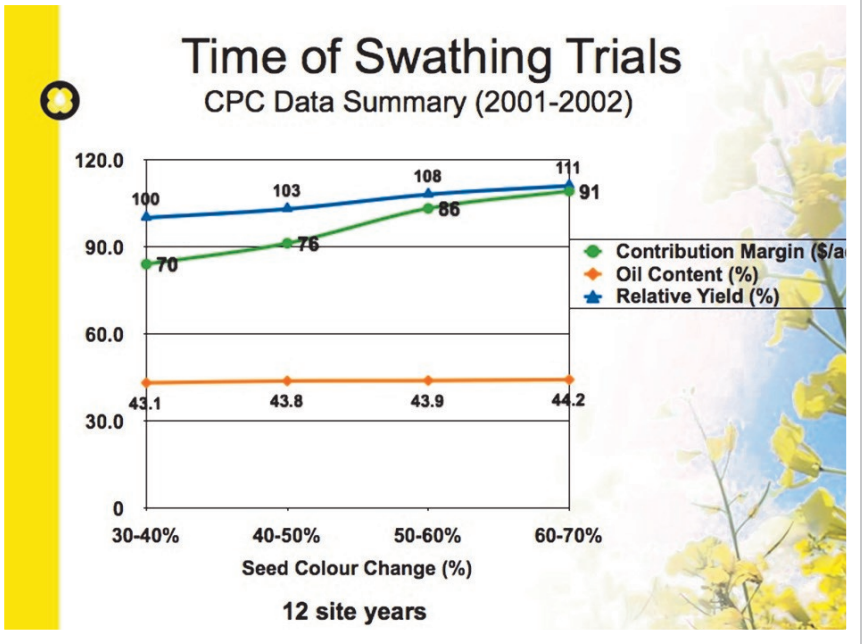
Additional considerations include:

- Short, severely lodged, or excessively branched canopies may be candidates as well, because if swathed there would be minimal stubble left to anchor the swaths from moving with wind. In this situation growers should consider the potential for wind damage to the swath relative to shattering risk if left standing.
- Appropriate combine equipment with experienced operations and settings.
- Varieties with increased shattering tolerance and lodging resistance.
- In western Canada, B. rapa varieties may be direct combined because they mature earlier and resist shattering.

Continued on page 18

Continued from page 17

Now that you have assessed each field as to whether you will swath or direct combine, and swathing is your choice, it is time to assess when to swath. Swathing at 60% seed colour change (SCC) on the main stem will mean higher yield and quality than swathing at 30% seed colour change on the main stem. SCC is considered any amount of yellow or brown on the seed.



Summary results pooled for both 3 and 5 lb/ac seeding rates at all locations based on similar trends observed. Straight cut treatments at 10 of 12 locations produced relative yield of 107% vs 30-40% SCC.

Waiting allows more seeds on side branches to fill out and the average seed size for the whole plant is larger. With fewer plants per square foot than, say, a decade ago, more yield comes from these side branches than ever before.

To assess SCC, start in an area of the field that best represents the stand, stage and yield potential of the crop. Pull a plant and isolate the main raceme, which is typically the longest branch with the most pods — representing the greatest percentage of yield. Take pods from the bottom, middle and top of the main raceme.

For 60% SCC, seeds from pods at bottom third of the main raceme will be totally brown to purplish brown, seeds from the middle third will be starting to turn, and

Do you Receive the Back Forty?

Rural Farm mailboxes in the MD's of Smoky River and Greenview, the County of Grande Prairie, Big Lakes County and Northern Sunrise County, all receive complementary issues of the Back Forty Newsletter. Request your mailbox be classified as **Farm** by talking to your local Post Mistress to ensure you receive your copy.

seed from the top are green but firm and will roll between your thumb and forefinger without mushing. Check five plants in this area, then repeat in another couple of places in the field.

While checking, look at plants that are ripening pre-maturely. Disease is the likely reason. Identify the disease so management steps can be taken to reduce disease severity in future canola crops.

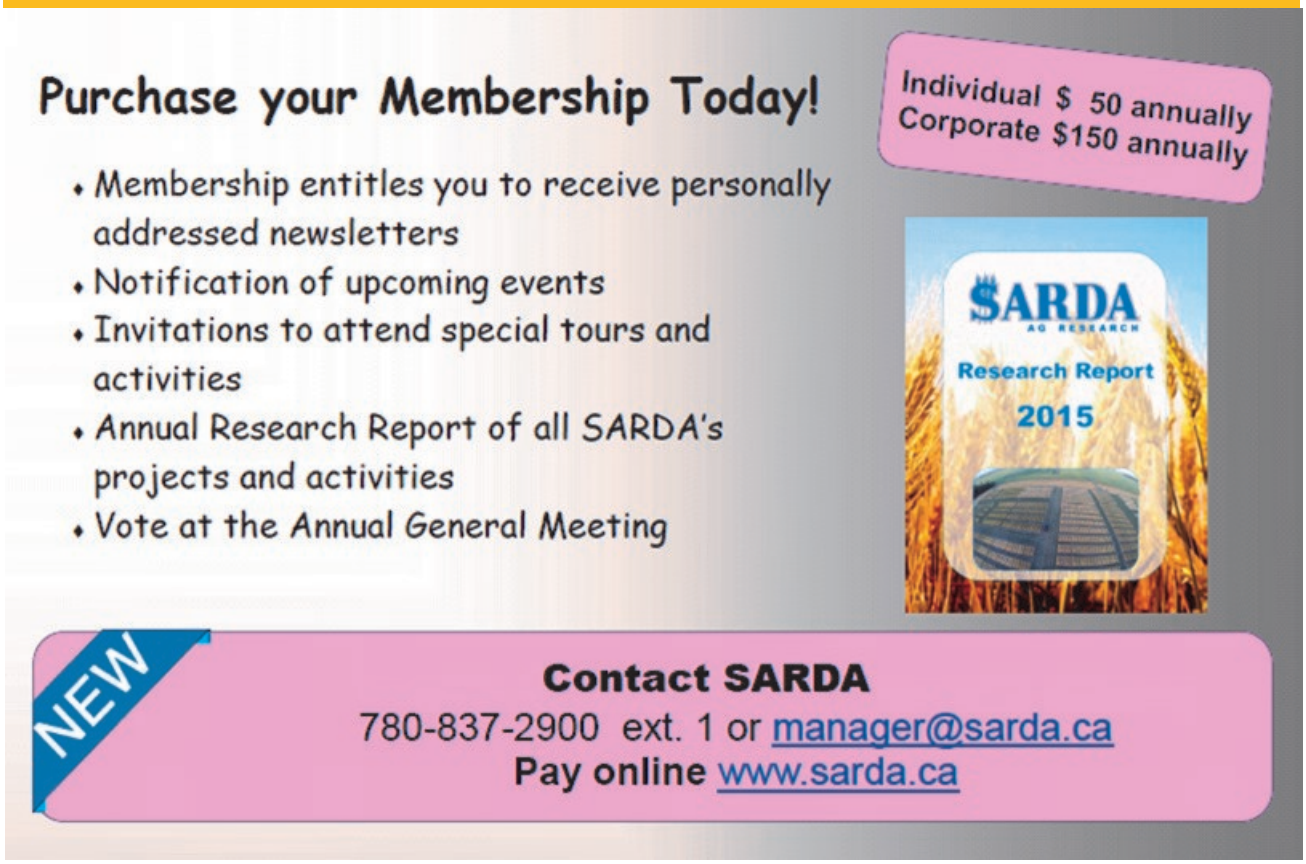
Cut Later for Higher yields

Some of the earliest pods may shell out with later swathing, but improved size and maturity for seeds in later pods makes up for this. Early shelling may also be a bonus if pods are shelling because they're diseased and contain peppery seed that won't amount to anything. One approach is to start swathing when the first crop reaches 50% SCC, and then swath canola crops until shattering starts and leave the rest for straight combining.

How quick does canola dry down? Under warm to hot and windy conditions, moisture loss can be as high as 2-3% per day. Later in September, more typical dry down would be 1-1.5% per day. A rough guide is that a 10% increase in seed colour change occurs with about 5% moisture loss. So the period from 30% seed colour change to 50% seed colour change, for example, would need a 10% drop in moisture. This may take 10 days in cool weather and only 3 days in hot windy weather.

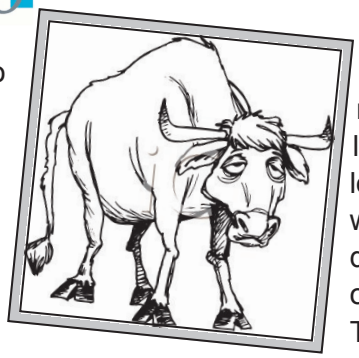
Check out the following video on how to determine when to swath.

https://www.youtube.com/watch?v=4rZxQfn_FMY



Salvaging Hail Damaged Crops

From the July 25, 2016 Issue of Agri-News



Storm damage to crops can result in problems with nitrate accumulations, especially if the crops were heavily fertilized or manured in the spring to optimize yield.

"Over the past few weeks in Alberta to say the weather has been volatile would be an understatement," says Andrea Hanson, beef extension specialist, Alberta Agriculture and Forestry, Airdrie. "With volatile weather comes storm damage and, for some producers, this means salvaging crops for feed."

Hanson cautions producers to use care as salvaged crops may have high levels of nitrates that are toxic to ruminants and emphasizes the importance of testing salvaged feed to establish quality and nitrate levels prior to feeding.

"Sometimes producers want to wait to see if the crop will recover before salvaging it for feed. That's when the balancing act starts. The nitrate levels in those damaged crops that were heavily fertilized or manured to optimize yield will have the highest accumulations. It takes about four to five days after the damage for the nitrates to build to the highest levels. If the plants start to recover, the nitrate levels will return to a lower level about two weeks after the damage, depending on their growth rate. The true balancing act starts when the leaves start to brown off and the plants begin to deteriorate, losing leaf material and yield.

Unless a perennial hay crop is fertilized at high rates, the risk of accumulating nitrate is much lower than in annual crops, she says. "Alfalfa is a plant that only takes up as much nitrogen as it requires on a daily basis. The excess is stored in the nodules. Nitrate accumulation in alfalfa is extremely rare."

Nitrates accumulate in plants when the plant is stressed. Drought, hail and frost are all stressors that can cause nitrate toxicity. Photosynthesis is disrupted because of the damage to the plant but the roots of the plant are undamaged. As long as the roots are still alive, they continue to push nitrogen to the leaves. With damaged leaves, photosynthesis is disrupted, and the nitrogen (in the form of nitrates) accumulates.

"If a producer does decide to salvage the crop, it's essential that the nitrate levels are known before any of the feed is used," says Hanson. "Getting a feed test done is cheap compared to losing an animal to something that can be managed. Once the plant has been cut, the nitrate level is fixed and a feed test can be taken. Be sure to check out Foragebeef.ca for useful information on how to properly sample feed for testing.

Hanson also stresses the importance of finding out from the feed testing laboratory what type of nitrate test was carried out as the limits are different depending on how the nitrate level is reported. "AF's factsheet Nitrate Poisoning and Feeding Nitrate Feeds to Livestock is a good reference that has the conversion chart for different reporting systems. Often the laboratory will provide the recommendations based on the level outcome."

"Feeds containing nitrates can be fed depending on the levels of nitrates and the other feed stuffs available," adds Hanson. "A strategy for feeding high nitrate feed is needed well before creating a feeding plan to reduce the risk of nitrate poisoning."

More Information

AF Factsheet
Nitrate Poisoning and Feeding Nitrate Feeds to Livestock

SARDA AG RESEARCH

Harvest Losses

Excerpts from PAMI presentation , Don't Set it and Forget it! And the Silent Thief Presentation by Jim Bessel

Harvest season is almost on us and I would guess that by the time this newsletter is delivered, farmers will be starting to harvest peas. It has been a difficult season , with excessive rain, bugs, disease and weeds cutting into a producers profit margin. It would be sad to lose excessive amounts of crop out the back end of the combine.

Western Canadian producers face a number of challenges which add to the stress level of farming:

- A short harvest window
- Weather challenges
- Varieties of crops and conditions
- Inexperienced combine operators
- Experienced operators (usually the owners) are busy managing the operations
- Shortage of farm labour
- Crop variability

There are also several misconceptions about harvesting that equipment dealers may be willing to encourage:

- Mph = capacity
- More power = more capacity
- Keeping the machine full (driving faster) = less loss
- The losses can't by that bad
- If I can't find much on the ground, the losses are ok
- I can go the same speed with a wider header
- The same settings for one crop will be fine for the entire season
- The same settings for one crop will be fine for the entire day
- May loss monitor tells me my loss

So what can combine losses cost? Producers leave 2-3 bushels per acre in the field, which is at least 20 times the seeding rate. In fact, a three year study in Western Canada determined that producers lose 3-5 bu per acre and losses have been recorded at 5-15 bu/ac. Sources of losses include:

- Nature—shatter (ripening, wind, rain, hail, wildlife, heat)
- Cutting—swathing or straight cutting
- Combine loss—feeder, separator, grain tank, elevators, shoe seals
- Combine processing—feeding, threshing separating, and cleaning

Producers do not have control over nature but they do have some control over equipment maintenance, settings, timing and harvest management.

Since 1990, combine horsepower has more than doubled and while there has been significant material handling improvements, maximum throughput may be greater than the capacity of the processing and cleaning systems in some conditions. Modern spreaders and

Example 1:

1 bu/ac loss @ $10/bu = $10/ ac loss

Harvesting

20 ac/hr X $10/ac = $200/hr LOSS

One Combine

160 ac @ 20 ac/hr = 8 hrs to harvest

$200/hr X 8 hrs = $1600 LOSS on 160 ac

Two Combines—slower

Time Value

160 ac @ 15 ac/hr with 2 combines = 5.3 hr

Saved ~3 hr @ $200/hr = $600 ($300/combine)

$100/hr savings X 5 hrs X 2 combines

$ 1000 SAVINGS per 160 ac

Crop Value

Save 1bu/ac on 160 ac = 160 bu @ $10/bu

$1600 SAVINGS

The combined value for 2 machines moving slower equates to $2600 per 160 acres

choppers hide the losses. Producers are using wider headers, not reducing speeds and dealing with greatly increased crop yields which can lead to increased harvest losses. There is also an assumption that if the combine can send the crop through, the grain will end up in the tank. This is not the case.

So how do I reduce harvest losses? The first step is to quantify the loss. The August, 2015 issue of the Back Forty newsletter included an article on how to quantify combine losses. Adjust combine one settings one at a time to minimize loss, reduce breakage and have a clean sample. As conditions change from early in the day to later, know that the operator must adjust the combine speed accordingly. Field conditions will also change from day to day, field to field, and crop to crop. It is important to check and recheck combine losses and settings. Technology can help. Monitors will register losses or changes in losses but they are only accurate if they are calibrated. Experienced operators will watch how the crop is feeding, how the monitors are fluctuating, how the sample looks and adjust speed accordingly.

1 bu/ac loss is achievable and 2 bu/ac loss is reasonable. If producers can reduce harvest losses from the combine by 2 bu/ac, quick math says you could be putting an additional $3,200 per quarter in your pocket when the crop is valued at $10/bu.

Happy Harvest!

Example 2:

Assume a travel speed of 4mph

If yield increases by 20% (50 to 60 bu/ac)

Harvest speed should now be 3.2 mph (20% decrease)

Change a 30' header to a 36' = 20% increase

Harvest speed should now be 2.5 mph (20% decrease)

If you still travel at 4 mph, this is 60% over the target feed rate!

Losses could increase by 5 times!

County of Grande Prairie Corner

By Sonja Raven, Agricultural Fieldman

Sonja Raven, Agricultural Fieldman

Good day from the County of Grande Prairie! As I drive around the County, I have been so impressed by the incredible crops we are seeing. Even the east side of the County has been getting rain this year! However, given that harvest looks to be a bit earlier than usual, it would be nice to turn the taps off for a bit!

Along with fantastic crops comes phenomenal weed growth! Inspectors have been busy all over the county informing people about their weed issues. Of course, we often inform folks who know quite well they have weeds, and they are often not happy to see us, as they are either in the process of dealing with their weeds, or really don't want to. For the top producers out there, please bear with us informing you of the weeds you know you have – many of my inspectors are students not raised on the farm, and they are just doing their job. A simple call back to tell them of your plans will close the file and you won't hear from them again. I will have to issue weed notices to those landowners we are not able to contact.

Our annual Ag Tour is coming up on August 25th, and this year we are focusing on the wonders of barley – from grain to beer! It promises to be another great tour, starting with a hearty breakfast, and ending with a tour of our new local brewery! Spots on the bus are limited, so please call the office at 780-532-9727 to register. Registration closes August 19th.

Mowing is going very well this year, in spite of losing some days to the weather. I anticipate we will have the majority of the county finished first cut by the end of August. We have some excellent operators, and they are doing their best to get things done quickly, and well.

Vegetation management has been a challenge this year with all the rain as well. However, we are addressing many of the parcels that the county owns, in an effort to practice what we preach. Our roadside weed control is well underway. We will be shifting the focus to controlling Canada thistle, as we have addressed the majority of the areas with early-season plants such as toadflax, mayweed, and ox eye daisy. Control of tansy will be ongoing, as we are seeing a real boom in growth this year.

"No Spray Program" participants are reminded that controlling weeds and brush in the ditch under the agreement, is your responsibility. We are inspecting this year, and have been forced to cancel 2 agreements for non-compliance. If you are advised you have noxious weeds in your ditch, you must control them within 5 days. If you fail to do so, OR they regrow and are found again, you will be removed from the program, and your signs pulled. You will receive a letter explaining what has happened, as well as a copy of your cancelled agreement. We definitely prefer not to have to remove people from this valuable program, so please remember to check your ditch and keep it clean.

Wishing everyone a successful harvest, and the good weather that goes with it!

PRESENTATION

HEMP GROWING

Northwest Region of Alberta

The Conseil de développement économique de l'Alberta (CDÉA), in collaboration with its partners, Smoky River Regional Economic Development and Smoky Applied Research And Demonstration Association, would like to invite you to the Hemp Growing Presentation in the Northwest Region.

Mr. Jan Slaski (Presenter)
From Alberta Innovates Technology Futures

FALHER

December 9th, 2016
10:30 am - 2:30 pm
Falher Regional Recreation Complex
32 Central Avenue NW
Falher, AB

RSVP NOW

Diane Chiasson
diane.chiasson@lecdea.ca
780.837.6630

Suzanne Prévost
suzanne.prevost@lecdea.ca
780.573.4516

CDÉA conseil de développement économique de l'alberta

Smoky River Regional Economic Development

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Alberta Innovates Technology Futures

Alberta HUB

Community Futures Lac La Biche

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Falher, AB
T0H 1M0

Phone: 780-837-2900
Fax: 780-837-8223
Email: admin@sarda.ca

www.sarda.ca

Sean Allen

From: Peace Country Beef & Forage Association <kmclachlan=gprc.ab.ca@mail212.atl171.mcdlv.net> on behalf of Peace Country Beef & Forage Association <kmclachlan@gprc.ab.ca>
Sent: August-26-16 2:10 PM
To: Sean Allen
Subject: Livestock Water Quality Study

PCBFA
PEACE COUNTRY BEEF & FORAGE ASSOCIATION

If you are interested in participating in this study, please contact Abraham Munene directly at 587-433-0028.

Opportunity to Paticipate in U of C Livestock Water Quality Study

Hello, my name is Abraham Munene. I am a PhD student at the University of Calgary's Faculty of Veterinary Medicine (supervised by Dr. David Hall) investigating perceptions of water quality in rural Alberta associated with livestock. We are currently looking for participants for this study.

Participants in this study will be asked to answer a questionnaire (approximately 20 min. in length) and submit a private water sample for microbiological testing (i.e., total coliforms and *E. coli*). To be eligible for this study a

participant must be at least 18 years old and have a private water source (i.e., a water well, cistern, borehole, or dug out) which they use for domestic purposes (e.g., drinking, washing, and cooking in the household). The questionnaire will address demographic information, private water use, livestock attributes, and questions related to water quality and risk.

We will offer a $100 dollar gift card (e.g.,Tim Hortons or Home Hardware) to the first **50** participants who submit a **completed questionnaire *AND* water sample** as a token of our appreciation.
For participants who cannot drop off a water sample at a drop off centre and live within 1 hour by road to Peace River, we can try to arrange picking up samples.

If you are interested and have any further questions, please contact us:
(Email: abraham.munene2@ucalgary.ca , Cell Phone (587) 433 0028)

Our mailing address is:
Peace Country Beef & Forage Association
Box 3000
Fairview, AB T0H 1L0
Canada

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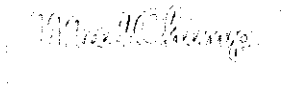
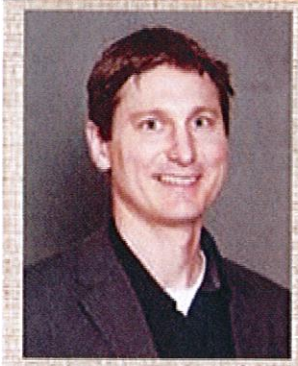


The Fall Run is Upon Us—Join Us for a

Cattle Market Outlook Evening with Brian Perillat of Canfax



As the Manager and Senior Analyst at Canfax, Brian ensures Canfax maintains accurate and relevant market information, as well as provides and oversees market analysis provided for its members and the industry. Canfax maintains its independence as a third party source of unbiased market information.

Date: Monday, September 19th
Time: 5:30pm Registration, 6pm Start
Where: Teepee Creek Hall

Cost: $10/Member
$20/Non-Member
Supper Provided

For more information or to register, contact Kaitlin or Jen at 780-835-6799, kmclachlan@gprc.ab.ca or jallen@gprc.ab.ca

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County of Grande Prairie No. 1
Alberta, Canada

Forage Facts

Published by the Peace Country Beef & Forage Association **August 2016. Volume 12, Issue 139**

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Stay up-to-date with all PCBFA's activities!

A special thanks to
Acres North
for helping out with spraying at our *Sainfoin for High Legume Project* site this year!

Acres North
Clint Toews
780-864-0552
acresnorth@gmail.com

Growing Forward 2 Update at a Glance

By: Jen Allen

Growing Forward 2 (GF2) still has programs open and is accepting applications; we would like to give you an update! GF2 funding is allocated based on a first come, first served based, so it is important to get an idea of what program suits your needs, and get your applications in as soon as possible to have a better chance at receiving funding for your project.

GF2 is in its fourth fiscal year of the five year programming. With that being said, funding for some programs, such as the **On-Farm Stewardship Program**, is getting slim and already has accumulated a long queue of applicants. The On-Farm Stewardship Program will continue to stay open until the queue equivalent to next year's allocated budget is reached. However, if extra funding does become available, then applicants in the queue could still be processed for this fiscal year (ends March 31st, 2017). If no extra funding becomes available, then all applicants in the queue will be funded out of next year's budget. Under the On-Farm Stewardship Program, producers may receive funding for projects that include grazing management (i.e. riparian area, wetland, and shelterbelt management and/or improvements, or watering systems), manure management (i.e. manure storage facilities, runoff control, wintering site relocation), crop-input management (i.e. improved pesticide and nutrient management) , agricultural waste management (i.e. used oil storage or plastic waste management), and there is an activity for Innovative Stewardship Solutions.

Three programs in particular that still have a significant amount of funding left are the On-Farm Solar Photovoltaics Program, On-Farm Energy Management Program, and Confined Feeding Operations Stewardship Program.

The **On-Farm Solar Photovoltaics (PV) Program** provides funding to allow producers to improve their environmental stewardship and lessen the environmental footprint of Alberta's agriculture industry by conserving non-renewable energy (such as fossil fuels) and reducing carbon emissions. Funding under this program is calculated based on an eligible system's nominal wattage, up to a maximum percentage of system cost. An applicant may receive up to a total of 100kW of solar PV or a capacity of $50,000. Types of PV systems that are eligible under this program are grid-tied (not off-grid), approved under Alberta's Micro-Generation Legislation, located to optimize sunshine and decrease shading, have manufacturer-warranties on solar modules, racking, inverters, and/or micro-inverters, produce power that is used in the production of a primary commodity, and were purchased after April 1, 2013. Higher funding rates are available for systems that are installed by a contractor, or if an Energy Assessment is completed.

The **On-Farm Energy Management Program** helps producers with investments that improve energy efficiency on their farm, and will cover 35% of costs up to a maximum $50,000. Some of the projects that are eligible under this program are construction projects that install high-efficiency equipment, retrofit projects that enhance an operation's energy usage per unit of production, and installation of submeters to observe on-farm electricity and/natural gas usage (the program covers 100% of the cost for each applicant's first three submeters).

The **Confined Feeding Operation (CFO) Stewardship Program** is directed to improve the agricultural industry in 3 focal areas: lessen agricultural impact on water quality, improve business outcomes for livestock producers and commercial manure applicators, and improve market opportunities. This program is open for both CFOs and Commercial Manure Applicators. Depending on the project, funding is available to cover 30-70% of eligible costs, with a maximum of $100,000 per CFO and $70,000 for commercial manure applicators. (GF2, GoA)

Growing Forward 2
A federal-provincial-territorial initiative

Alberta Government

Canada

Programs Accepting Applications

- ✓ Agri Processing Automation & Efficiency - Livestock
- ✓ Agri Processing Product & Market Development - Livestock
- ✓ Agricultural Watershed Enhancement
- ✓ Business Management Skills Development
- ✓ Business Opportunity
- ✓ Confined Feeding Operation Stewardship
- ✓ Food Safety Systems Delivery Agent
- ✓ Food Safety Systems Processor
- ✓ Food Safety Systems Producer
- ✓ Irrigation Efficiency
- ✓ Livestock Welfare Processor
- ✓ On-Farm Energy Management
- ✓ On-Farm Solar Photovoltaics
- ✓ On-Farm Stewardship
- ✓ On-Farm Water Management
- ✓ Regional Water Supply
- ✓ Traceability Pilot
- ✓ Traceability Technology Adoption
- ✓ Traceability Training

Programs Not Accepting Applications

- ✗ Agri Processing Automation and Efficiency - Crop
- ✗ Agri Processing Product and Market Development - Crop
- ✗ Animal Health Biosecurity Delivery Agent
- ✗ Animal Health Biosecurity Producer
- ✗ Livestock Welfare Delivery Agent
- ✗ Livestock Welfare Producer

Growing Forward 2 Programs are continuously updated and changes are made to the programs. All information on GF2 programs can be found at

www.growingforward.alberta.ca

The best way to stay up to date on all things GF2 is to subscribe to the programs that you are interested in. The subscribe function can be found on the right side of the GF2 home screen.

PCBFA staff would be happy to help with your GF2 applications, just give us a call!

Enhancing Soil Health with Jay Fuhrer

To continue our Soil Health Programming this summer, PCBFA, in partnership with NPARA, is welcoming Jay Fuhrer to the Peace Country!

Since growing up on a small grain and livestock farm, Jay Fuhrer has been studying, practicing, and advocating soil health for over 20 years. Currently, Jay is a district conservationist with the Natural Resources Conservation Service (NRCS) in Bismarck, North Dakota.

With his years of experience and research working with no-till, cover crops & soil health, Jay conducts workshops all over the world, giving producers practical and innovative ideas to improve the health of their soils.

Learn how to measure the health of your soils—this is a hands-on event assessing soil health. Jay will measure carbon/nitrogen ratios; water infiltration rates and conduct slake and run-off tests. He will discuss practises that can be implemented to improve and build soil. Jay joined us at the Western Canada Conference on Soil Health this past winter & was enjoyed by all!

Photo via: http://www.conservationwebinars.net/webinars/integrating-livestock-into-a-cropping-system

THURSDAY, August 18

NPARA RESEARCH FARM

(1/2 mile W of North Star)

10 A.M.– 4 P.M. (lunch provided)
Members $15 non-members $25

Call the PCBFA office at 780-835-6799 to pre-register.

Thank-You to the PCBFA Board of Directors

Jordan Barnfield
Thomas Claydon
Conrad Dolen
Nancy VanHerk
Preston Basnett
Faron Steffen
John Prinse
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Have Project or Workshop Ideas?

We are always looking for ideas! Give us a call!

PCBFA Member Perks

- Two Free Feed Tests/Year
- Ration Balancing Assistance
- Growing Forward 2 Assistance
- Environmental Farm Plans
- Scale & Tag Reader available for member use
- Soil & Livestock Water Quality Testing

Thank-You to our Municipal Partners

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MD of Peace
Clear Hills County
Saddle Hills County
MD of Spirit River
Birch Hills County
MD of Greenview
Big Lakes County
County of Grande Prairie

Feed Testing—It's all in the Sample!

By: Kaitlin McLachlan

Well bagged and labeled samples are the key to efficiency! Also, help is always appreciated! Photo by Kaitlin McLachlan

Haying is in full swing in the Peace Country and we are battling something that many of us thought would be the least of our problems this year — rain on laying hay! Speaking from experience, nothing is more frustrating than a rain cloud that arrives at the field the same time as you do with the baler! Not only do you have to find something else to do (like attend one of PCBFA's great events) but we can do nothing but watch the swaths get blacker and blacker.

This year, with the amount of rain many of us are getting on our hay, it is very important that we all take advantage of PCBFA's feed sampling service! Even if you are one of the lucky ones that got your bales made without any rain, it is still recommended that you take a couple feed samples to determine the nutritional quality of your feed and start making plans for winter.

With a membership with PCBFA, you are entitled to 2 free feed samples a year. That is almost a $60 value! We can also send out any extra samples you have as well and you will be invoiced the cost later on in the year. In preparation for the fall rush, here are some things that you need to know about taking a good feed sample:

1) Get a feed probe. PCBFA has several bale probes in both the Fairview and High Prairie Offices as well as a silage probe. Please give us a call prior to coming in to check availability.
2) Have a bucket and a large 'ziploc' bag. In the feed yard, take samples from several bales in the stack. Mix the sample well in the bucket to get a proper representative sample and bag a portion of it. If you are silaging, you can take a sample at the time of chopping. Have a bucket near you pit or pile, and grab a handful of silage out of every other load. Mix the sample well and bag it. The 'Ziploc' should be 1/2—3/4 full. This ensures that the lab will be able to get a proper reading and re-test if necessary.
3) Label and drop off at the office. With a sharpie, please mark on the bag your name, the type of sample (alfalfa hay, cocktail silage, oat greenfeed, etc) and the date it was sampled. Then arrange drop off at your nearest office. If you will not be through Fairview or High Prairie, give us a shout and we can make alternate arrangements to get the sample.

Feed test results typically take a week-ten days to receive back from the time we send them. We will email or mail you your results.

PCBFA staff are also available to help with ration balancing questions.

Stay tuned for tips for interpreting your feed test results in upcoming editions of Forage Facts!

Director's Corner *with Preston Basnett*

Hi my name is Preston Basnett. I grew up on a farm near Eurkea River, which is where I reside now. In 1990, I enrolled in Ag. Engineering Technology at Olds College, taking an Environmental major. This opened up some different opportunities for me, but I went towards the oilfield sector where a person could have a full-time, steady job working an 8/6 shift in operations. Working in the patch gave me the opportunity to purchase farmland. I started buying farmland in the early 90s, as I had cattle with my parents and resided in Fairview. We moved up to the farm in 2004 when I had the opportunity to purchase a home quarter at a farm sale. From there we have grown some and now operate a 200 plus cow/calf operation.

Julie and I have raised two older boys and are in the process of raising 2 teenage boys on the farm. I think giving these kids the experience to go into 4H and numerous other activities helps give the kids some work ethic and not be afraid to tackle big things later on in life. We are blessed to live in a great community with tonnes of family nearby.

This is my second year as one of the 10 board members of PCBFA. The PCBFA staff and board members make for a great team. Being on the board has opened my eyes and mind on soil health. Cover crops were common before the 80s, but since then farmers and ranchers have been conditioned to pour the fertilizers onto the soils to get the desired yields. Now, we are going 'back' to the way it was to help and improve our soils with different cover crop mixtures.

I am continually learning on how to improve our soil and techniques to benefit our land and improve the yields in our hay fields by going to the workshops that are put on by PCBFA.

Upcoming Events

Whole Farm Water Planning with Jessie Lemieux	August 3rd & 4th	Aug 3rd—Blueberry Mountain Aug 4th—Hines Creek (call for directions)
Soil Health Workshop with Jay Fuhrer	August 18th Details TBA	Manning, NPARA Research Farm
Watering Systems Workshop	Mid-September Details TBA	High Prairie
Cattle Marketing Workshop	September, Details TBA	TBA
Holistic Management Workshop	October, Details TBA	TBA
Peace Beef Cattle Day	December 7th	DMI in Fairview

For more information or to register for any of these great events, please call Kaitlin or Jen at 780-835-6799.

Thank You to our Corporate Sponsors

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Forage Facts

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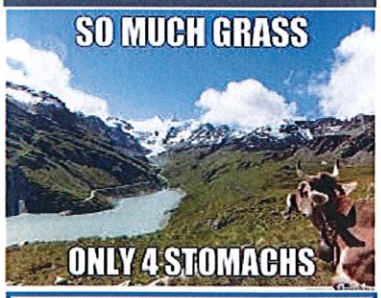


Reminder:
Get your Feed Samples in for Testing!

With a PCBFA membership, you are eligible for 2 free feed samples a year! Get your samples in at a PCBFA office today!

To Till or Not to Till?

By: Kaitlin McLachlan

Photo via: shutterstock.com

Recently, we have been very fortunate to play host to many great soil health experts: Jay Fuhrer, Nicole Masters, Dr. Yamily Zavala, and countless more who spoke at the Soil Health Conference in Edmonton this past December. With encouragement from our board and great enthusiasm from membership, we are pleased to have soil health as one of our main focuses moving forward.

This year, the very dry, then very wet weather has posed some unique challenges. We have been getting calls about various weed issues in old pasture and hay stands as well as compaction issues due to travelling on the wet ground trying to get hay off. Traditionally, when dealing with worn-out pastures and hay stands, we pull out the trusty plow and fly at it. 'Renovating' a field is a costly and time consuming process. Furthermore, tilling a field may actually intensify weed and compaction issues!

From our past soil health workshops, we have heard time and time again to leave the tillage equipment parked. But why? Tillage has been a go-to solution for years.

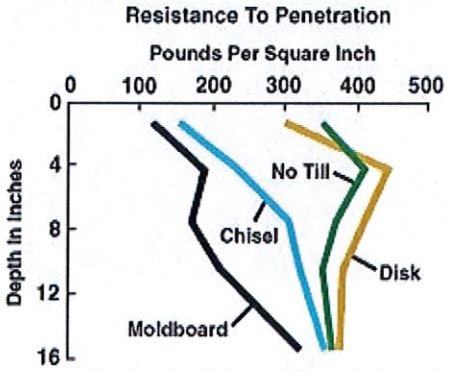
One of the main reasons that we are being advised to mitigate tillage is because it causes soil compaction. Soil compaction occurs when soil particles are pressed together, reducing pore spaces between them. This reduction in pore spaces makes fewer channels for water and air to get through the soil. The lack of large pore spaces means that water is not able to move through the soil properly. Instead, soils become saturated and excess water will sit on top or run-off. Due to the compression of soil particles, we are also changing the structure of our soil. Compaction makes the ground hard and instead of nice, granular aggregates, the soil aggregates turn to hard lumps. This makes it extremely difficult for plant roots to venture deep into the soil to seek water and nutrients.

There are three main causes of soil compaction: wheel traffic, minimal crop rotation, and tillage. Tillage is unique in that it can be responsible for both surface and subsoil compaction.

Surface compaction is primarily caused by wheel traffic, however, tillage is also a major secondary cause. Tillage studies conducted in clay soils in Wisconsin involved a 10 year corn tillage study. They found that discing the field every spring led to the highest compaction readings of the options tested. A hardpan at the 4 inch depth was hard enough to be impenetrable to plant roots.

Subsoil compaction, as illustrated in

the above graph, can be attributed more to deep tillage practices. Subsoiling is also noted as a major contributor to subsoil compaction. But why should we be concerned about soil compaction over 10 inches below the surface? Subsoil compaction shows up especially in wet years. Saturated soils facing subsoil compaction will not drain due to the lack of deep pore spaces. Saturated soils could result in an anaerobic root environment, causing root rot and limited nutrient uptake.



Soil compaction due to disk, moldboard plow, chisel plow and no-till equipment. Photo via: extension.umn.edu

Simply put, compaction can affect:

- Water availability to roots
- Nitrogen and Potassium uptake
- Plant growth and yield

There are theories that we do not have compaction here in the Peace due to the freeze-thaw cycles. However, studies have shown that after nine years of cropping and annual freezing and thawing, there was no removal of compacted soil at the bottom of a plow furrow (Voorhees, 1983). This evidence, paired with the larger equipment that we run now, compaction is indeed an issue.

During our past soil health workshops with Nicole Masters and Jay Fuhrer, we learned that weeds can be seen as symptoms of soil issues. Some are nutrient related, but many are related to compaction. By alleviating compaction issues we can also alleviate some of our weed issues.

So what can we do? Reducing the amount of tillage and wheel traffic we are imposing on the land can help to decrease compaction. Also, studies have shown that practices such as rotational and mob grazing can help to boost grass production. Proper grazing can not only boost above ground production, but also root production. Over time, root action will eventually break up soil compaction.

Certain plant species have root systems that can help to decrease the effects of compaction. Tillage radishes are noted for their deep reaching, strong roots that are capable of growing through compacted soils and creating pore spaces. Tillage radishes are a short season annual and grow best when planted late in the summer.

Cocktail cover crops are also a potential solution for adding carbon to the soil and loosening up hard soil layers. Choose a variety of species with a variety of tap roots and fibrous root which helps to break up hard soil aggregates.

For many of PCBFA's research projects, we have been measuring the attributes of the soils the projects are on, including compaction and water infiltration. Watch for data in our annual report, which will be coming out at our AGM in February. We still have a lot to learn, but we are starting to understand more about our Peace Country soils!

Thank-You to the PCBFA Board of Directors

Jordan Barnfield
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Preston Basnett
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New Growing Forward 2 Program: Accelerating Agricultural Innovation

By: Jen Allen

Since some great projects were arising that were beneficial to the Alberta agriculture industry, but were not eligible under any other current Growing Forward 2 (GF2) programs, GF2 decided to establish a new program called the "Accelerating Agricultural Innovation Program." The purpose of the Accelerating Agricultural Innovation Program is to encourage investment in the demonstration, commercialization and adoption of innovative products, practices and processes that have the likelihood to provide sector wide Impact on the agriculture, agri-food and/or agri-product sectors.

There are two separate program streams available under the Accelerating Agricultural Innovation Program: Stream A: Collaborating Innovation and Stream B: Implementing Innovation.

The Collaborating Innovation Stream is aimed towards Agricultural Groups who are registered under the Societies Act, Industry Organizations, Producer Groups, and other non-profit entities operating within Alberta. This Stream will help such non-profit organizations with the "capital and non-capital costs for advancing the Sector-Wide Impact of agriculture innovation and collaboration through proof-of-concept and commercialization" of new products, processes or business practices in Alberta (GF2, 2016). Depending on the activity, eligible applicants could receive funding to cover capital costs up to 70%, and non-capital costs up to 90%.

The Implementing Innovation Stream is geared more towards Primary Producers, Agri-Processors (including Food Processors, Bio Industrial Processors, and Agri-Based Product Processors), and other for-profit legal organizations working within Alberta. Through this Stream, for-profit organizations can receive funding for capital and non-capital expenses of "becoming Early Adopters of new technologies or practices that have the potential for Sector-Wide impact as well as supporting the demonstration or adaptation of sector-impacting technical innovations within their operations (GF2, 2016). Depending of the activity, eligible applicants may receive funding for capital costs up to 60%, and non-capital costs up to 80%.

Depending on the Program Stream (A or B) and the type of project pursued, applicants are eligible to receive up to $1,000,000 in project funding.

To apply for this program funding, applicants must submit a Letter of Intent by October 5, 2016 at 12:00 PM that includes a filled out Application Form, and a copy of a completed business case or feasibility study for the project. All projects must also be completed by February 1, 2018. Applications will be reviewed using a competitive system, so it is important to double check to make sure all requirements on the program application form are completed properly, as incomplete applications will be rejected and not assessed. (GF2, GoA)

PCBFA would be happy to assist you in completing any GF2 Applications, just give us a call!

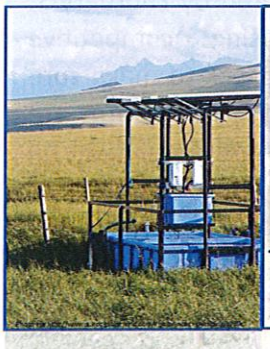
Director's Corner *with John Prinse*

Hi everyone, my name is John Prinse. My farm is located in the High Prairie area, where we have rich, black soil on my land with being so close to the lake. Here I run a cow/calf and backgrounding operation. I have been involved with the PCBFA for a while now and have been on the Board of Directors for the past 2 years. I have tremendously enjoyed being a Director and being a part of the PCBFA community. Since being involved with PCBFA, I have learned a lot and have been able to take what I have learned and apply it to my own farm. I have fenced off my riparian areas, where I am seeing positive results in revegetation. I have also implemented a paddock grazing system into my operation, where I run 30 paddocks total. I have started to see the benefits that paddock grazing provides, such as healthier soil and soil carbon, healthier grass, and healthier cows. The cows are always eager to get through that gate into the next paddock and get on the fresh grass, which eliminates over grazing. I also have solar watering systems out at the paddocks. From information provided by PCBFA I have also learned to nicely divide my risks in feed. I have diversified my feed options and introduced alternatives to hay by using corn and swath grazing and cocktail cover crops. PCBFA puts on great events and workshops where we are able to get good information and has helped me broaden my horizons. I am glad to be on the Board with friendly group of people and staff members.

Upcoming Events

Watering Systems Tour

Looking to install a new watering system or to enhance your current one?
Join us to learn about innovative watering systems!



Date: ***Friday Sept. 9th, 2016***

Time: ***9:30am registration***

Meet at: ***High Prairie Ag Society***

Cost: ***Free***
Lunch & refreshments will be provided

Tour will include visiting project sites with unique watering challenges

With special guest speaker:
Marvin Jackson of Sundog Solar!

Beaver Workshops

Date: Mid-October

Location: One each in the East Peace & West Peace

Stay Tuned for More Details!

For more Information or to Register for any of these great events, Call the Fairview office at 780-835-6799 or email Jen at jallen@gprc.ab.ca or Kaitlin at kmclachlan@gprc.ab.ca

Cattle Market Outlook Evening with Brian Perillat of Canfax

As the Manager and Senior Analyst at Canfax, Brian ensures Canfax maintains accurate and relevant market information, as well as provides and oversees market analysis provided for its members and the industry. Canfax maintains its independence as a third party source of unbiased market information.

Date: Monday, September 19th
Time: 5:30pm Registration, 6pm Start
Where: Teepee Creek Hall

Cost: $10/Member
$20/Non-Member
Supper Provided

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Jen Allen
Agri-Environmental Coordinator
Fairview, AB
780-835-6799
780-772-0277

September 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9 *ASB Meeting*	10
11	12	13 *Council Meeting*	14	15	16	17
18	19 *Cattle Market Outlook Evening*	20	21	22	23 *Cleanfarm– return unwanted pesticides Fairview, and High Prairie*	24
25	26	27 *Council Meeting*	28	29	30	

October 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11 Council Meeting Beavers in our Land-scape	12 Beavers in our Land-scape	13	14	15
16	17	18	19	20	21	22
23	24	25 Council Meeting	26 ASB Meeting	27	28	29
30	31					

November 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8 *Council Meeting*	9 *ASB Regional Conference*	10	11	12
13	14	15	16	17 *Green Industry Show & Conference—Edmonton*	18 *Green Industry Show & Conference—Edmonton*	19
20	21	22 *Council Meeting*	23 *ASB Meeting*	24	25	26
27	28	29	30			