

AGENDA
CLEAR HILLS COUNTY
AGRICULTURAL SERVICE BOARD MEETING
March 18, 2019

The Agricultural Service Board meeting of Clear Hills County will be held on Monday, March 18, 2019 at 10:00 a.m., meeting in the Council Chambers of the County Administration Office, 313 Alberta Avenue, Worsley, Alberta.

- 1. CALL TO ORDER**
- 2. AGENDA**
- 3. ADOPTION OF PREVIOUS MINUTES**
 - a. February 20, 2019 Regular.....2
- 4. Delegation(s)**
- 5. BUSINESS ARISING**
- 6. OLD BUSINESS**
 - a. Activity Report.....7
 - b. Date Time & Place of ASB Meetings10
 - c. Dugout Treatment Information.....11
 - d. Board Reports12
- 7. NEW BUSINESS**
 - a. Events.....20
 - b. Farmer Class 1 Training Exemption26
 - c. Tradeshow April 13, 201928
- 8. REPORTS**
 - a. Agricultural Fieldman Report.....29
- 9. INFORMATION & CORRESPONDENCE.....32**
- 10. CONFIDENTIAL**
- 11. ADJOURNMENT**

**MINUTES OF CLEAR HILLS COUNTY
AGRICULTURAL SERVICE BOARD MEETING
COUNCIL CHAMBERS, Worsley, Alberta
February 20, 2019**

PRESENT

Brian Harcourt	Chair
MacKay Ross	Member
Baldur Ruecker	Deputy Chair
Julie Watchorn	Member

ATTENDING

Audrey Bjorklund	Community Development Manager
Sarah Hayward	Community Development Clerk
Greg Coon	Agricultural Fieldman

ABSENT

David Janzen	Council Representative
Garry Candy	Member

CALL TO ORDER

Chair Harcourt called the meeting to order at 10:08 a.m.

AGENDA

AG23(02/20/19)

**RESOLUTION by Deputy Chair Ruecker that this Agricultural Service Board adopts the agenda governing the February 20, 2019 Agricultural Service Board meeting with the following addition:
7d. Beaver Coexistence Tools CARRIED.**

AG24(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board adopts the minutes of the November 19, 2018 Organizational Meeting as presented. CARRIED.

AG25(02/20/19)

RESOLUTION by Member Watchorn that this Agricultural Service Board adopts the minutes of the January 14, 2019 Agricultural Service Board Meeting as presented. CARRIED.

Activity Report

The Board is presented with the Agricultural Service Board Activity Report.

AG26(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accepts the February 20, 2019 Agricultural Service Board Activity Report as presented. CARRIED.

Date, Time and Place
Of Board Meetings

This item was tabled at the November 19, 2018 Organizational meeting because all members must be present to change the date, time and place of meetings.

AG27(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board table the Date, Time and Place of Agricultural Service Board meetings to the next regular scheduled meeting. CARRIED.

DELEGATION
Peace Country Beef
& Forage Association

Peace Country Beef and Forage Association (PCBFA) Manager, Liisa Jeffrey, will be in attendance at 10:15 a.m. to present a report on the 2018 Environmental Stream Partnership program and present the plans for the 2019 program. Also presented will be updates of the PCBFA programs, funding and direction.

AG28(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accept for information the delegation from Liisa Jeffrey, Manager and Akim Omokanye, Research Coordinator with Peace Country Beef and Forage Association on the 2018 Environmental Stream Partnership program and 2019 programming. CARRIED.

Chair Harcourt recessed for a break at 11:00 a.m.
Chair Harcourt reconvened the meeting at 11:04 a.m.

Northern Sunrise County
Alternative Land Use
Services

Northern Sunrise County Alternative Land Use Service Coordinator, Becky Devaleriola, will be attendance at 11:00 a.m. to present an overview of Alternative Land Use Service programs in Northern Sunrise County

AG29(02/20/19)

RESOLUTION by Deputy Chair Ruecker that this Agricultural Service Board accept for information the presentation from Becky Devaleriola on the Northern Sunrise County Alternative Land Use Service Program. CARRIED.

Chair Harcourt recessed for lunch at 11:56 a.m.
Chair Harcourt reconvened the meeting at 12:31 p.m.

AG30(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board direct administration to bring back costs and information on developing an Alternative Land Use Service Program. CARRIED.

OLD BUSINESS
Agricultural Service
Board Update to
Council update

Council is requesting that the Agricultural service Board existing or proposed dugout water quality testing opportunities and field/greenhouse to plate local marketing initiatives that could be put in the newsletter for information to ratepayers.

AG31(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board direct administration to contact the Agricultural Water Specialist, Dan Benson about organizing a dugout treatment workshop or program in Clear Hills County, and dugout treatment best practices information to include in the County newsletter. CARRIED.

AG32(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board direct administration to approach the Peace Country Beef and Forage about holding a Gate to Plate Marketing workshop in Clear Hills County to assist producers in direct marketing their produce and other farm products. CARRIED.

Chair Harcourt recessed for a break at 12:58 p.m.
Chair Harcourt reconvened the meeting at 1:02 p.m.

Board Reports

At this time the Board members will have an opportunity to present their reports on meetings attended and other agricultural related topics.

AG33(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accepts the February 20, 2019 Board members' written and verbal reports for information as presented. CARRIED.

NEW BUSINESS

Events

The Board is presented with events for their consideration.

AG34(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board authorize Member Watchorn and Member Ross to attend at the Fairview Vet Clinic Information Session on February 25, 2019 at the Dunvegan Motor Inn in Fairview, Alberta. CARRIED.

AG35(02/20/19)

RESOLUTION by Member Watchorn that this Agricultural Service Board authorize Member Ross to attend the Alberta Beef Conference on March 12-14, 2019 at the Sheraton Red Deer Hotel. CARRIED.

AG36(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board authorize Deputy Chair Ruecker, Member Ross and Councillor Janzen to attend the Organic Alberta Conference on April 5-6, 2019 in LaCrete, Alberta. CARRIED.

AG37(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board authorize all available members to attend the Clubroot information Session on February 28, 2019 at the Rycroft Ag Society Hall in Rycroft, Alberta. CARRIED.

AG38(02/20/19)

RESOLUTION by Member Watchorn that this Agricultural Service Board authorize Member Ross and Deputy Chair Ruecker to attend the Mental Health First Aid for Agriculture on March 19-20, 2019 at the Grande Prairie Regional College Fairview Campus. CARRIED.

AG39(02/20/19)

RESOLUTION by Deputy Chair Ruecker that this Agricultural Service Board authorize Member Ross and Deputy Chair Ruecker to attend the Green Acreages Guide Workshop on March 6, 2019 at the Wellington Resource Centre in Clairmont, Alberta. **CARRIED.**

AG40(02/20/19)

RESOLUTION by Member Watchorn that this Agricultural Service Board authorize all available members to attend one day at the Peace Country Classic on March 7-9, 2019 at the Evergreen Park in Grande Prairie, Alberta. **CARRIED.**

Veterinary Services Incorporated (1980) Ltd. (VSI) Update

The Board is presented with the Veterinary Services Incorporated (1980) Ltd. (VSI) review of 2018

AG41(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accept for information the 2018 Veterinary Services Incorporated (1980) Ltd. (VSI) review. **CARRIED.**

Grain Bag Extractor

Council is requesting the Agricultural Service Board review the Grain Bag Extractor rental rates.

AG42(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accept for information the grain bag extractor rental rates discussion. **CARRIED.**

Add In:
Beaver Coexistence Tools

Member Ross requested Beaver Coexistence Tools be added to the Agricultural Service Board meeting on February 20, 2019 and he will be providing handouts at the meeting.

AG43(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board direct administration bring back information on the relocation of live beaver legislation and what is and isn't allowed. **CARRIED.**

AG44(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accept for information the Beaver Coexistence Tools discussion. **CARRIED.**

REPORTS
Community Development Manager Report

The Board is presented with the Community Development Manager's report.

AG45(02/20/19)

RESOLUTION by Member Ross that this Agricultural Service Board accepts the February 20, 2019 Community Development Manager's Report for information as presented. **CARRIED.**

Agricultural Fieldman
Report

At this time the Agricultural Fieldman will have an opportunity to present his report.

AG46(02/20/19)

RESOLUTION by Chair Harcourt that this Agricultural Service Board accepts the February 20, 2019 Agricultural Fieldman's Report for information as presented. CARRIED.

Information &
Correspondence

The Board is presented with correspondence for review.

1. The Pest Insider – Newsletter – (63-10-02)
2. Mighty Peace Watershed Alliance – Board of Directors Nomination Form – (63-10-02)
3. Agricultural Service Board Provincial Conference – Media Release – (63-10-02)
4. Seed Royalty Stakeholder Consultation – Letter – (63-10-02)

AG47(02/20/19)

RESOLUTION by Member Watchorn that this Agricultural Service Board receives the Information and Correspondence as presented. CARRIED.

ADJOURNMENT

Chair adjourned the meeting at 2:02 p.m.

CHAIR

AGRICULTURAL FIELDMAN

Clear Hills County

Request For Decision (RFD)

Meeting:	Agricultural Service Board
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	ACTIVITY REPORT
File:	63-10-02

DESCRIPTION:

The board is presented with the Agricultural Service Board Activity Report.

BACKGROUND:

The Activity report is helpful to administration and the board for tracking the status of resolutions and directions from the board. Items will stay on the report until they are completed. Items that are shaded indicate that they are completed and will be removed from the list once presented at the current Agricultural Service Board meeting.

ATTACHMENTS:

- Agricultural Service Board Activity Report

RECOMMENDED ACTION:

RESOLUTION by _____ that this Agricultural Service Board (ASB) accepts the March 18, 2019 ASB Activity Report as presented.

Initials show support - Reviewed by: Manager: <i>abj</i> AgFieldman: <i>GC</i>
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Senior Management Team Agricultural Service Board

Activity Report for March 18, 2019 Page 1 of 2

Budget Items:

CAO = Chief Administrative Officer

DO = Development Officer

EA = Executive Assistant

Completed Items:

CSM = Corporate Services Manager

AF = Ag. Fieldman

CDM = Community Development Manager

MOTION DATE DESCRIPTION DEPT STATUS

REGULAR AGRICULTURAL SERVICE BOARD MEETINGS				
August 20, 2018				
AG74	(08/20/18)	RESOLUTION by Member Ross that this Agricultural Service Board table the Design and Plant your Edible Forest Garden workshops to the December Agricultural Service Board meeting.	CDC	A workshop being held in Ontario – 3hr workshop
October 15, 2018				
AG93	(10/15/18)	RESOLUTION by Chair Harcourt that this Agricultural Service Board approach the Peace Country Beef and Forage Association to investigate planning a No-Till Conference for northern Alberta for the winter of 2019-2020.	AF	
AG110	(10/15/18)	RESOLUTION by Councillor Janzen that this Agricultural Service Board approach Peace Country Beef and Forage Association to host a conference or workshop on economic field rotations and organic farming alternatives within Clear Hills County.	AF	
February 20, 2019				
AG27	(02/20/19)	RESOLUTION by Member Ross that this Agricultural Service Board table the Date, Time and Place of Agricultural Service Board meetings to the next regular scheduled meeting.		March 18 RFD
AG30	(02/20/19)	RESOLUTION by Member Ross that this Agricultural Service Board direct administration to bring back costs and information on developing an Alternative Land Use Service Program.		In the works – Developing Business Plan
AG31	(02/20/19)	RESOLUTION by Member Ross that this Agricultural Service Board direct administration to contact the Agricultural Water Specialist, Dan Benson about organizing a dugout treatment workshop or program in Clear Hills County, and dugout treatment best practices information to include in the County newsletter.		March 18 RFD
AG32	(02/20/19)	RESOLUTION by Member Ross that this Agricultural Service Board direct administration to approach the Peace Country Beef and Forage about holding a Gate to Plate Marketing workshop in Clear Hills County to assist producers in direct marketing their produce and other farm products.		



Senior Management Team Agricultural Service Board

Activity Report for March 18, 2019 Page 2 of 2

Budget Items:

CAO = Chief Administrative Officer

DO= Development Officer

EA = Executive Assistant

Completed Items:

CSM = Corporate Services Manager

AF = Ag. Fieldman

CDM = Community Development Manager

MOTION	DATE	DESCRIPTION	DEPT	STATUS
AG43	(02/20/19)	RESOLUTION by Member Ross that this Agricultural Service Board direct administration bring back information on the relocation of live beaver legislation and what is and isn't allowed.		In the works – waiting to hear back from Alberta Wildlife
Items in Waiting				
AG133	(12/12/16)	RESOLUTION by Member Watchorn that this Agricultural Service Board table the discussion around the CombCut Selective Mower and bring back information once the University of Saskatchewan field trial study is complete.		2020 OR 2021
AG21	(02/13/17)	RESOLUTION by Deputy Chair Ruecker that this Agricultural Service Board table motion AG109(10/17/16) regarding Glyphosate Tolerant Wheat until new information is available.		As of Nov 9 2018 no new info

Clear Hills County

Request For Decision (RFD)

Meeting:	Agricultural Service Board
Meeting Date:	March 18, 2019
Originated By:	Audrey Bjorklund Community Development Manager
Title:	DATE, TIME AND PLACE OF BOARD MEETINGS
File:	63-10-02

DESCRIPTION:

This item was tabled at the November 19, 2018 Organizational meeting because all members must be present to change the date, time and place of meetings.

BACKGROUND:

In 2018 the board met every third Monday except May when the meeting will be held on the first Monday of the month and there are no meetings held in April or September as per motion AG115(11/06/17).

In the past the board met on the third Wednesday of each month except April and August.

The board may change the day and time of meetings by resolution if the third Monday and 10:00 a.m. start time are not acceptable to the members. All members must be present to change the date, time and place of the meetings.

OPTIONS:

1. Set ASB meetings for the third Wednesday of each month except May when the meeting will be held the first Wednesday, and no meetings will be held in April and September at a selected time.
2. Set ASB meetings on the third Monday of each month except May when the meeting will be held on the first Monday, and no meeting will be held in April and September at 10:00 a.m.
3. Table the date, time and place of Board meetings until all members are present.

RECOMMENDED ACTION:

That this Agricultural Service Board... this Agricultural Service Board set Agricultural Service Board meetings for 2019 on the third Monday of each month except May when the meeting will be held on the first Monday, and no meetings will be held in April and September. Meetings will commence at 10:00 a.m. in the Clear Hills County Council Chambers at 313 Alberta Avenue Worsley, Alberta. At the call of the Chair, special meetings shall be posted 48 hours in advance.

Initials show support - Reviewed by:

Manager:

ABj

AgFieldman:

GC

Clear Hills County Request For Decision (RFD)

Meeting:	Agricultural Service Board
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	Dugout Treatment Information
File:	63-10-02

DESCRIPTION:

The Board is presented with information regarding dugout treatment.

BACKGROUND:

AG31(02/20/19) RESOLUTION by Member Ross that this Agricultural Service Board direct administration to contact the Agricultural Water Specialist, Dan Benson about organizing a dugout treatment workshop or program in Clear Hills County, and dugout treatment best practices information to include in the County newsletter. CARRIED.

In contacting Mr. Benson regarding a dugout treatment workshop, he does not carry out workshops around dugout treatment. He did however, point out that there is a great deal of information on the Alberta Agriculture and Forestry website. The link to this information is

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/wqe11302](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/wqe11302)

OPTIONS:

1. Feature one of these articles per month in a "Dugout Corner" section of the newsletter.
2. Provide the link to the website on the County website and on the County Facebook page.

ATTACHMENTS:

RECOMMENDED ACTION:

RESOLUTION by... that this Agricultural Service Board direct administration to _____

Initials show support - Reviewed by: Manager:

ABj

AgFieldman:

gc

Clear Hills County

Request For Decision (RFD)

Meeting:	Agricultural Service Board Meeting
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	BOARD REPORTS
File No:	63-10-02

DESCRIPTION:

At this time the Board members will have an opportunity to present their reports on meetings attended and other agricultural related topics.

BACKGROUND / PROPOSAL:

ATTACHMENTS:

- Julie Watchorn written reports
- Brian Harcourt written reports

RECOMMENDED ACTION:

RESOLUTION by _____ that this Agricultural Service Board accepts the Board members' written or verbal reports of March 18, 2019 for information.

Initials show support - Reviewed by: Manager: *ABJ* AgFieldman: *JK*

Fairview Veterinary Clinic
Fairview Alberta
February 25 2019
By: Julie Watchorn

A group called Mosaic Veterinary Partners Ltd owns Fairview Veterinary Clinic
They have 5 clinics in total Peace River
High Prairie
Fairview
Maple Creek
Brooks

In Fairview we have 2 Veterinarians and 3 Vet Technicians
Have a new chute system so you don't have to back up to the old chutes!
Vet/Client/Patient Relationship -VCPR
Must have herd health check
Adequate information to make treatment plans
Vets advice must be followed
Follow up after treatment

February 1-May 31 There will be local on call services
June 1-January 31 Shared on-call with Peace River weekends only

Offer AI services now

Calf hood Diseases

Cody Creelman DMV

1/3 of beef calves fail to acquire passive immunity due to delayed colostrum consumption
Calves must have 2L of colostrum within 4 hours of birth!!
Always use colostrum from your own herd, has the right immunities for your calves
not bringing in new diseases
Don't get a milk cow, also don't buy orphan calves! Same reason... different diseases
you don't need at calving!!

Saskatoon Colostrum Company is good brand
Can freeze fresh colostrum for one year
Don't re-freeze
Do not microwave to thaw
Thaw in warm water bath
7-year-old cow is the best donor for colostrum to freeze
Use colostrum that has at least 50-60 IgG for calves that just need a bit of help
100+ IgG for calves that does not have a mother or just has not had any colostrum

2Tb baking soda to 1 liter of water for acidotic calves after colostrum

Calf Scours

Most calf scours cannot be treated with antibiotics
Corona Virus, Rota virus and BVD are viral scours
Coccidia and Cryptosporidia (which is a zoonoses) are Protozoa type
E. Coli, Salmonella, and Clostridium perfringes are the ones that could be treated with antibiotics because they are bacterial

Improve management: Don't calve where you fed all winter
Calve heifer's separate
Don't overcrowd
Minimize exposure to older calves

Scours vaccines supplement. It can't prevent scour outbreak with bad management

Highest risk for scours outbreak is 11-15day old calves after 30 days you are generally out of the woods

Sandhills Calving System
Segregate by age
5 paddocks moving cows out every 2-4 weeks
Move cows that have not calved into new pastures
Leaving calves where they are

Beef Smart- Nutrition

Working for the producer
Copper effects scours too high or too low
Ensure good body condition for proper fetal growth

What you feed and how you feed are your two biggest expenses

What nutrients are you concerned with?

Energy
Protein
Minerals
Vitamins
Water

ENERGY=TDN=55-60-65

Mature cow requires 55% TDN to maintain BCS

60% TDN during late pregnancy

65% TDN after calving

Digestible Fibre

Crude Protein=7-9-11

7% for mature beef cow mid preg.

9% in late preg.

11% after calving

Copper deficient cows are

Un-thrifty poor gaining cows

Red coat color
Have difficult time conceiving
Do a liver biopsy 5-10 of your cows

Ergot Alkaloids
Reduces growth
Shorter gestation length
Lower conception rates
Abortion

Allowable limits-
.010-.33% ergot in feed
.1%= one ergot body in one liter if grain
2-3 ppm alkaloid potency

Beef Smart Consulting Inc.

Bree Kelin, MSc, PAg
Partner
306-725-1322
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Phil Bourque, MVS, DVM
BeefSmart Consultant
Partner
306-232-7223
phil@dairysmart.ca

Clubroot In The Peace Update

Hosted by SARDA

Rycroft, Ab

February 28/19

Krista Zuzak, Chief Provincial Plant Health Officer

Clubroot was originally found in 1970 in home gardens

Heavy infestation in a market garden 2001 in cabbage

First in 2003 in canola in Sturgeon County

2003 there were 12 fields

By 2018 there are 3044 fields that are positive for clubroot

With 10,000 fields tested

MD of Peace

Birch Hills

Greenview

RockyView

Northern Sunrise

300 new cases found in 2018

Clubroot is spread by soil on equipment

4 years clubroot spores die on their own

Contaminated soils from 100g to 1,000,000g

2016 there were 64 new strains

By 2018 there were up to 170

-Resting spores last a long time in the soil

-Soil movement is how the disease spreads

-The pathogen has a diversity of pathogens occurring naturally in the population

-Genetic resistance- foundational management tool

-Resting spore populations can rapidly shift to become virulent on resistant canola

Canola Council

Cover your Galls- Clubroot Management

Keep spores low and local

Make sure incoming traffic is free of soil especially from unknown areas or if known from clubroot areas

FIND IT EARLY!!!

Isolate patches; minimize soil transfer out of the patches

Seed infested areas to grass, help reduce soil movement and further reduce spore loads

Extend rotations and have at least 4-year rotations with canola

Manage coniferous weeds early (all brassicas will have clubroot spores if in the soil)

Stink weeds, volunteer canola, turnips and radishes in cover crops

Even going from farm to farm with boots

Your boots can carry 140g of soil

Can have spores up to 600,000,000 spores/g
=84, 000, 000, 000 spores on each boot
That's enough spores to infect 41.5 acres!

If you suspect clubroot or have positive test
You identify and mark infested area

Mark out area twice or three times as big

Initial treatment

-Seed to sod-forming grass (perennial rye)

-Control weeds

-Lime to >/< PH 7.2

-Get soil samples!!

Symptoms of Clubroot

-Plants start wilting

-Die out spots

-Of course GALLS ON ROOTS!!!

Greg Sekulic

sekulicg@canolacouncil.org

FYI: Our County has a policy in place already the it will be a 1-4 rotation
Which means you will only be allowed to plant canola every 4 years rotating with
cereals and grasses etc the other 3 years

Peace Country Beef & Forage Association
Annual General Meeting
February 22, 2019
Dunvegan Motor Inn
By: Brian Harcourt

Meeting lasted for 2 hours, very interesting.
Several changes in directors.
12 GOV'T sponsors, 10 MDs and Counties,
8 Gold and 56 small companies and individuals.
Excellent supper.
Dr Akim gave a short talk on Cover Crop Cocktail mixes,
blends of various types for many situations.
For advice give him a call. 780 835 6799.

Speaker..Leslie Kelly...Do More Ag..Mental Health and Farming.
Farming--smaller families-big impact on the whole world.
If you suspect a problem is beginning, talk, listen, act, Do More!
1 in 5 will suffer to some degree.
40% of those will not seek help.
In US, highest suicide group is FARMERS.
Everyone has a different level of stress.
If someone hints of having a problem walk a mile with him--her.
Support within your means.
domore.ag 3006 550 6135
mkfa.ca
Call EMS...They have a group of about 20 people.

Clubroot Session
Rycroft, Alberta
February 28, 2019

Speaker..Krista Zuzak, Chief Prov. Plant Health Officer.
History of Clubroot..First discovered near Edmonton.
2001..in a cabbage field near Leduc.
2003..in Sturgeon County in 12 fields.
2004.. over 10,000 fields checked. 2018, 3084 fields confirmed.
2018..MD 135, one field. 2018, in 41 Counties and MDs, 300 new fields.
Spores spread in many ways, equipment farm or otherwise,
wind, water, animals, birds.
One gram of soil could hold 1,000,000,000 spores.
Management..scout your fields looking wilting plants and
dig up some of the plants looking for Galls on the roots.

Spray for volunteer canola and weeds.
Remove all soil from all equipment and seed grass at the
entry to the field.
Seed resistant cultivars every 4 years.
Use seed most resistant to the most virulent pathogen types.
Clubroot resistances breaks down in three years.

Gregory Sekulic..Ag Specialist...Canola Growers Asso.
Advice..keep spore loads low and local.
Clean equipment, be very particular, get it all!!!
Isolate patches and minimize soil transfer.
Scout--scout..scout..to identify problem areas early.
Resting spores, Zoospores, Plasmodium invades plant
cells and causes the Galls.
Spores travels wherever soil goes even on your boots and clothing.
You can't do everything but you can't do nothing.
Liming is a possibility but expensive.
sekulic@canolacouncil.org
@sekulicCCC 310 FARM

Clear Hills County Request For Decision (RFD)

Meeting:	Agricultural Service Board
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	EVENTS
File:	63-10-02

DESCRIPTION:

The Board is presented with events for their consideration.

BACKGROUND:

- Councillor Janzen will be attending the Mental Health First Aid for Agriculture on March 19-20, 2019 at the Grande Prairie Regional College Fairview Campus in Room AC 144.
- Peace Country Beef Cattle Day on March 26, 2019 at the Grimshaw Legion in Grimshaw, Alberta.

OPTIONS:

1. Approve the attendance of one or more members to one or more of the events listed.
2. Accept for information.

ATTACHMENTS:

- Event Costs
- Peace Country Cattle Day poster
- Calendars (March/April/May)

RECOMMENDED ACTION:

RESOLUTION by... that this Agricultural Service Board....

Initials show support - Reviewed by: **Manager:**

ABJ

AgFieldman:

GC

Upcoming Events **Cost estimate per day per individual**

Event	Location	Dates	# of days	Registration	Kms roundtrip from Worsley	Mileage	Room	Meals	Personal Allowance	Per Diem	Total Cost per person per day
Peace Country Beef Cattle Day	Grimshaw	March 26, 2019	1	\$30	244	\$141.52	\$0.00	\$0.00	\$0.00	\$192.84	\$364.36
						\$0.00					\$0.00
											\$364.36

PEACE COUNTRY BEEF CATTLE DAY

PCBFA GRAZING SERIES

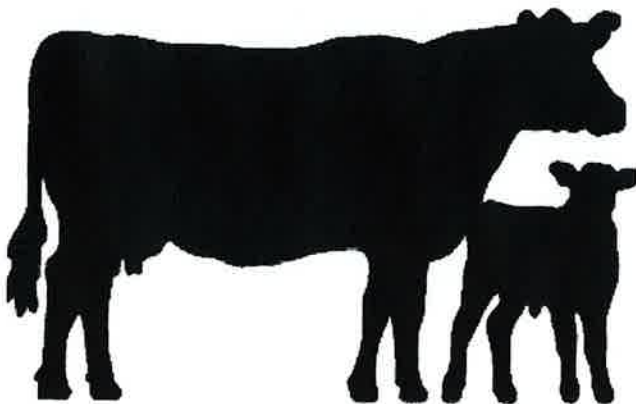
FOCUS ON
GRAZING
PLANNING

WITH PRESENTATIONS ON:

- ADAPTIVE PASTURE MANAGEMENT
- GRAZING PLANNING TOOLS
- VBP+ PROGRAM
- PRODUCER PANEL

TUESDAY
MAR 26, 2019

9:30 AM
REGISTRATION
STARTS 10:00AM
GRIMSHAW
LEGION




COST
\$30/MEMBER
\$50/MEMBER PAIR
\$40/NON-MEMBER
\$70/NON-MEMBER
PAIR



For more information or to register:
peacecountrybeef.ca | info@pcbfa.ca |
780-835-6799 ext. 3
Or Nora at NPARA
nora@npara.ca | 780-836-3354

March 2019

Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
					1	2
3	4	5	6	7	8	9
10	11	12 Council Meeting	13	14	15	16
17	18 ASB Meeting	19 Mental Health First Aid 	20	21	22	23
24	25	26 Peace Country Beef Cattle Day Council mtg.	27	28		

March 19-20th – Mental Health First Aid at the GPRC College at the Fairview Campus in room AC144.

March 26th – Peace Country Beef Cattle Day at the Grimshaw Legion starting at 9:30 a.m.

Legend:

- BH – Brian Harcourt
- BR – Baldur Ruecker
- MR – MacKay Ross
- GC – Garry Candy
- JW – Julie Watchorn
- DJ – David Janzen
- All – All available members

April 2019

Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	1	2	3	4	5 LaCrete Organic Conference BR, MR, DJ	6
7	8	9 Council mtg.	10	11	12	13 TRADE SHOW
14	15	16	17	18	19	20
21	22	23 Council mtg.	24 Public Meeting Worsley Community Centre	25 Public Meeting David Thompson Hall	26	27
28	29	30				

April 5-6th – LaCrete Organic Conference at the La Crete Heritage Centre
 April 13th – 25th Annual Trade Show in Hines Creek

Legend:

BH – Brian Harcourt
 BR – Baldur Ruecker
 MR – MacKay Ross
 GC – Garry Candy
 JW – Julie Watchorn
 DJ – David Janzen
 All – All available members

May 2019

Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
			1	2	3	4
5	6 ASB mtg.	7	8	9	10	11
12	13	14 Council	15	16	17	18
19	20	21	22	23	24	25
26	27	28 Council	29	30		

Legend:

- BH – Brian Harcourt
- BR – Baldur Ruecker
- MR – MacKay Ross
- GC – Garry Candy
- JW – Julie Watchorn
- DJ – David Janzen
- All – All available members

Clear Hills County Request For Decision (RFD)

Meeting:	Agricultural Service Board
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	Farmer Class 1 Training Exemption
File:	63-10-02

DESCRIPTION:

The Board is presented with a letter from Brazeau County regarding Class 1 Driver Training Requirements for Farmers.

BACKGROUND:

Brazeau County Agricultural Service Board is requesting agricultural producers be exempt from the Class 1 commercial driver training requirements.

Saskatchewan has provided an "F" exemption from farmers on their Class 1 licenses. Brazeau County's ASB encourages the Ministry of Transportation to implement a similar exemption from Alberta's agricultural producers.

OPTIONS:

1. Direct administration to draft a letter to the Minister of Transportation requesting agricultural producers be exempt from the Class 1 commercial driving training requirements.
2. Accept for information (no further action taken).

ATTACHMENTS:

- Brazeau County letter

RECOMMENDED ACTION:

RESOLUTION by... that this Agricultural Service Board...

Initials show support - Reviewed by: Manager: <i>ABj</i>	AgFieldman: <i>GC</i>
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Brazeau County

7401 – Twp Rd 494, P.O. Box 77, Drayton Valley, Alberta T7A 1R1
PHONE: (780) 542-7777 FAX: (780) 542-7770
www.brazeau.ab.ca

February 20, 2019

The Honorable Brian Mason
Minister of Transportation
6519-112 Avenue
Edmonton, AB T5W 0P1

Dear Minister:

RE: Class 1 Driver Training Requirements for Farmers

On behalf of the Brazeau County Agricultural Service Board (ASB), we are writing to request that agricultural producers be exempt from the Class 1 commercial driver training requirements.

Agriculture is one of Brazeau County's key industries with 655 farm operators reported in the 2016 census. The ability to get their products to market is essential for all 57,605 of Alberta's producers. The new Class 1 driver training requirements are an added cost and time commitment for producers looking to obtain their class 1 license. Margins and time are already tight for agricultural producers.

We understand and agree that the safety requirement for Class 1 drivers licensing is of utmost importance for all of our citizens; however, we feel the requirement should not be the same for commercial drivers compared to agricultural producers due to the distance and frequency differences in the industries.

Saskatchewan has provided an "F" exemption for farmers on their Class 1 licenses. Brazeau County's ASB encourages the Ministry of Transportation to implement a similar exemption for Alberta's agricultural producers.

Please do not hesitate to contact me should you have any questions.

Yours sincerely,

Sara Wheale
Brazeau County ASB Chairperson

SW/dm

cc: Oneil Carlier, Minister of Agriculture and Forestry
Mark Smith, MLA for Drayton Valley-Devon
Brazeau County Council
Alberta's Agricultural Service Boards

Clear Hills County Request For Decision (RFD)

Meeting:	Agricultural Service Board
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	Tradeshow, April 13, 2019
File:	63-10-10

DESCRIPTION:

The 25th Annual Tradeshow is being held on April 13, 2019. Administration is requesting Board members to sign up for their shifts in the Agricultural Service Board booth at the Trade Show

BACKGROUND:

The booth display will include the 2018 Biggest Vegetable winner, and does the Board have any other ideas or highlights to include in the ASB booth? We will be developing rental booklets.

Door prize draw? Prize? Last year the Board mentioned a wall map and map book.

We will also be ordering rubber mats for the booth as requested in 2018.

Welcome from ASB:

10:00 a.m. Opening Ceremonies

6:00 p.m. Farmer's Appreciation Banquet.

Schedule for booth - 10:00 a.m. – 5:00 p.m. 1 hour shifts with two Board members a shift.

	2 Board Members per shift
10:00 a.m. -11:00 a.m.	Brian
11:00 a.m. – 12:00 p.m.	Brian
12:00 p.m. – 1:00 p.m.	
1:00 p.m. – 2:00 p.m.	
2:00 p.m. – 3:00 p.m.	
3:00 p.m. – 4:00 p.m.	
4:00 p.m. – 5:00 p.m.	

RECOMMENDED MOTION:

RESOLUTION by that this Agricultural Service Board accept for information the Agricultural Service Board booth schedule and discussion around the 25th Annual Clear Hills County Agricultural Trade Show being held on April 13, 2019 at the Dave Shaw Memorial Complex in Hines Creek, Alberta.

Initials show support - Reviewed by:	Manager: <i>ABJ</i>	AgFieldman: <i>GC</i>
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Clear Hills County

Request For Decision (RFD)

Meeting:	Agricultural Service Board Meeting
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	AGRICULTURAL FIELDMAN REPORT
File No:	63-10-02

DESCRIPTION:

At this time the Agricultural Fieldman will have an opportunity to present his report.

BACKGROUND / PROPOSAL:

ATTACHMENTS:

- Greg- Agricultural Fieldman Report-March 18, 2019

RECOMMENDED ACTION:

RESOLUTION by _____ that the Agricultural Service Board accepts the March 18, 2019 Agricultural Fieldman report for information.

Initials show support - Reviewed by: Manager: *ABj* AgFieldman: *GC*

MARCH 18, 2019

PEST CONTROL

• **Wolves Claimed 2019 YTD:**

Total #	Total \$
21	\$7350.00

OTHER TOPICS

- UTV sprayer has arrived. We will begin mounting it in the UTV this week.
- Welder was held up with other projects and will now be starting modifications to car hauler trailer this month.
- Doors for UTV have arrived. We are waiting for hinges and latches.
- Will be modifying water pump trailers to include a hose reel holder mounted permanently on each trailer in March.
- Planning for trade show is ongoing. We have 23 unsold booths. Radio ads have been approved and will start running March 20th on CJXX, Q99,CKYL, and Moose FM. Posters are made and will be going up this week. Highway signs will be put up this week.
- Advertising for weed inspectors is in progress. Have received 2 resume's for the positions so far.
- I completed the midterm exam for the Program Administration and Legislation Course from Alberta Agriculture. 5 modules have been completed and 3 left to complete and then the final exam.
- I am on the planning committee for the Peace region weed inspector and spray crew workshops. We will be holding it in Rycroft on May 28th and 29th.

January 1 - March 13, 2019

Rental Equipment	Rental Deposit	Rental Rates	Total Users	Total Days	Total
Backpack Sprayer	\$ 50.00	\$ -	0	0	\$ -
Bale Scale	\$ 100.00	\$ 30.00	0	0	\$ -
BBQ Trailer	\$ 100.00	\$ 50.00	1	1	\$ -
Chairs	\$ 50.00	\$0.50/chair	0	0	\$ -
Community Centre	\$ 50.00	\$ 50.00	1	1	\$ 50.00
Corral Panels	\$ 50.00	\$ 50.00	0	0	\$ -
Eco-Bran Applicator	\$ 50.00	\$ -	0	0	\$ -
Exta Hoses	\$ 50.00	\$1.000/hose	1	2	\$ 10.00
Grain Bagger	\$ 350.00	\$ 350.00	0	0	\$ -
Grain Bag Roller	\$ 50.00	\$ -	2	2	\$ -
Grain Bag Extractor	\$ 350.00	\$ 350.00	2	6	\$ 1,925.00
Grain Vac	\$ 400.00	\$ 200.00	4	6	\$ 800.00
Grill	\$ 50.00	\$ 5.00	0	0	\$ -
Hand Held Rope Wick	\$ 50.00	\$ -	0	0	\$ -
Land Leveller	\$ 260.00	\$ 130.00	0	0	\$ -
Loading Chute	\$ 50.00	\$ 25.00	2	2	\$ 50.00
Manure Spreader	\$ 300.00	\$ 150.00	0	0	\$ -
Mulch Applicator	\$ 50.00	\$ 25.00	0	0	\$ -
Post Hole Auger	\$ 50.00	\$ 25.00	0	0	\$ -
Post Pounder	\$ 250.00	\$ 125.00	0	0	\$ -
Pull/Push Roller Applicator	\$ 50.00	\$ -	0	0	\$ -
Quad Mount Rope Wick	\$ 50.00	\$ -	0	0	\$ -
Quad Mounted Sprayer	\$ 50.00	\$ -	0	0	\$ -
Quad Pull Type Sprayer	\$ 50.00	\$ -	0	0	\$ -
Rock Picker	\$ 600.00	\$ 300.00	0	0	\$ -
Rock Rake	\$ 600.00	\$ 300.00	0	0	\$ -
Roller Mill	\$ 50.00	\$ 20.00	2	2	\$ 40.00
Rotowiper	\$ 150.00	\$ -	0	0	\$ -
Sickle Mower	\$ 100.00	\$ 50.00	0	0	\$ -
Skidmount Sprayer	\$ 50.00	\$ -	0	0	\$ -
Smoke Signs	\$ 60.00	\$ -	0	0	\$ -
Steam Tables	\$ 50.00	\$ 5.00	0	0	\$ -
Tables	\$ 50.00	\$1.00/table	0	0	\$ -
Toilets	\$ 100.00	\$ 40.00	0	0	\$ -
Tree Spade	\$ 300.00	\$ 50.00	0	0	\$ -
Truck Mount Sprayer	\$ 200.00	\$ -	0	0	\$ -
Wash Station	\$ 50.00	\$ 10.00	0	0	\$ -
Water Pumps	\$100 (summer) \$1000 (winter)	\$75 (summer) \$200 (winter)	0	0	\$ -
Wire Roller	\$ 50.00	\$ 25.00	0	0	\$ -
Zero Till Drills	\$ 300.00	\$ 150.00	0	0	\$ -
			15	22	\$ 2,875.00

Clear Hills County

Request For Decision (RFD)

Meeting:	Agricultural Service Board Meeting
Meeting Date:	March 18, 2019
Originated By:	Greg Coon, Agricultural Fieldman
Title:	INFORMATION & CORRESPONDENCE
File No:	63-10-02

DESCRIPTION:

The board is presented with correspondence for review.

BACKGROUND:

Attached are documents for the Board's information:

ATTACHMENTS:

- SARDA – Newsletter – (63-10-02)

RECOMMENDED ACTION:

RESOLUTION by _____ that this Agricultural Service Board receives the information & correspondence of March 18, 2019 as presented.

Initials show support - Reviewed by: Manager: *ABj* AgFieldman: *GC*

The Back Forty

February 2019

ISSUE No. 85

SARDA
AG RESEARCH



SARDA Ag Research Agricultural Trade Show 2017

2019 SARDA Agricultural Trade Show

SARDA will be hosting the 21st biannual Agricultural Trade Show on the 14th-16th MARCH 2019.

Page 2

Alberta's Wetland Policy

A Recent update to Alberta's Wetland Policy (DEC/18) means more opportunities for farmers to get paid for wetland restoration!

Page 10

Clubroot in my field! What Now?

This is an issue for every producer, not just the guy 6 miles east who had the municipality find clubroot in his crop entrance.

Page 4

Grain dryer components and the FEAP Program

FEAP shares cost with producers upgrading components of their grain dryers

Page 15

Journal Articles

Evaluation of long term fertility treatments under direct seeding and minimum tillage

Page 6

Summary of Water Quality Sampling Program, 2018

Nutrients and to a lesser extent metals are the greatest impediments to water quality in our areas

Page 16

Journal Articles

Limiting losses and improved N efficiency in winter wheat through stabilized N applications

Page 7

SARDA Variety Trial Yield Results 2018

2018 growing season was a particularly challenging year.

Page 21

SARDA will be hosting the 21st biannual Agricultural Trade Show on the 14th-16th MARCH 2019, at the Falher Regional Recreation Complex.

This biennial event through the years has become highly sought after by our exhibitors, producers and visitors.

This event fits well with SARDA's mandate to facilitate the transfer of ideas and products between research institutions, industry, and regional producers. The task of organizing and coordinating

2019 SARDA AG RESEARCH AGRICULTURAL TRADE SHOW

Visions of Change

Our ongoing theme **Visions of Change**, will again be demonstrated in our sold out exhibition halls which includes displays on various aspects of agriculture plus recreation, home, finance, and leisure. Thanks to our many sponsors, we are able to include free admission, daily door prizes of \$500.00, farm and family safety programs, informative seminars, free pancake breakfasts, and children's entertainment. Also on Friday evening we provide a Farmers appreciation Dinner and Comedy Social for all who wish to attend.



Our Trade Show includes free admission, daily door prizes of \$500.00, farm and family safety programs, informative seminars, free pancake breakfasts, and a Farmers' Appreciation Event.

FREE 8 am to 10 am

Pancake Breakfast

March 15

Sponsored by:



FREE 8 am to 10 am

Pancake Breakfast

March 16

Sponsored by:



– 16th we invite you to attend. Come and support SARDA and the agricultural industry for an informative and fun filled weekend for the whole family.

By *ROCH BREMONT*
Trade Show Coordinator

Family Safety Day

FREE March 16
10:00 am—4:00 pm



Chevalier Centre, Main Street, Falher

\$2 Mascot Luncheon
(children under 12)



Many Activities & Demonstrations

- Quad and Bike Safety
- Brain Injury and Concussion
- Animal Safety and Demonstration
- Equipment Safety
- Hazard Assessments
- PTO Safety
- Games
- Rear Safety
- Fire and Emergency Services
- Bouncy Castles
- Glitter Tattoos & Face Painting
- And so much more!

Two shows
10:30 am
2:00 pm

Goody Bags to the first 300 children (under 12)

this three day event, is massive, it requires many volunteers, and support from all the communities in the region. This first class Trade Show is due to SARDA's high standards, strong community support, dedicated staff, and an active and involved board of directors. So on March 14th

Sponsors










ALBERTA CANOLA

PRODUCERS

www.albertacanola.com

On November 14th in Nampa, Alberta Conola put on “Powering Your Profits” and was gracious enough to allow the Fieldman of Northern Sunrise County, the MD Smoky River and Big Lakes County 15 minutes to speak to the producers that were in attendance and provide them with an update on the clubroot situation within our municipalities.

Clubroot in my Field! What Now?

One thing struck me in particular- guys, we need to sit down and have a chat.

Finding clubroot in your field is not anything to be ashamed of. Prepare for it because chances are, it is going to happen. Clubroot is not the end of growing canola- yes, it puts a crimp in your rotational plans, no doubt, but it is not the end. You only need to drive around the municipalities surrounding Edmonton to realize that Canola is still a popular lady.

What is important though is that we drop this shame routine and finger pointing. This is a pest to be dealt with. This is an issue for every producer, not just the unfortunate guy 6 miles east who had the municipality find clubroot in his crop entrance. This is something that we all need to be looking for.

In the fall of 2013, I got a call from my Dad. He had found clubroot in the south quarter. Was it in the entrance? No. Was it in a low spot? Nope. It was at the far south east corner of the field. He asked me what he should do. We developed a plan to seed and harvest that quarter section last for the next four years. Dad flagged the patch off so he could see it while working the field and knew to stay away. Was canola grown in that field in the next four years?

Finding clubroot in your field is not anything to be ashamed of.

No and yes- that hurt, especially as Dad isn't a large land owner, farming 5 quarters most years. But having a field that could no longer economically produce canola would have hurt worse. Maybe he was lucky- 5X had just been found in Westlock County and being in the County of Barrhead, it was a little close for comfort. There was a lot of awareness and talk in the community. Dad took it seriously and was extra cautious.

The point of this story is that the municipality would never have found this infested patch. If my Dad had not been scouting himself, it would have been years before the County found it. By that time, the spore load would have been so high and the selection pressure on resistant varieties phenomenal. This field could have been added to the 150 or so around the province that can no longer produce canola economically. If Dad hadn't been honest and asked for help, or implemented some measures on his own, he could have spread the clubroot to his other fields. Instead, he planted canola on that field for the first time this past spring. While he's about as excited to talk about the results of harvest for 2018 as most producers this year, there was no clubroot.



Municipalities must follow the Freedom of Information and Privacy Act. Some have interpreted this to mean they cannot publicize clubroot positive locations as it could do harm to the landowner. In Big Lakes County when clubroot is found we will report the find to the Township level, not to the quarter or section level. Big Lakes County encourages all landowners that have received notification of a clubroot infestation being found on their land, or if they find clubroot themselves to speak to their neighbors. We feel it's best if the producer makes that call. Please make that call.

If we are going to be successful holding the line on the spread of clubroot in the Peace Region, we need to talk about clubroot. Finding clubroot is not a sign of a bad farmer, it is a sign of a good scouting technique and practice by a good producer, a good steward of the land. Like all Albertans we prefer dealing immediately with a problem ourselves; and as Albertans, we should also continue to work together when one of our own faces adversity. Clubroot is not something to be ashamed of but something that it takes the entire community to work at controlling. We all need to be looking for clubroot and we need to catch infestations early, while spore loads are low.

Norm Boulet, Agricultural Fieldman for the MD of Smoky River also farms and he had a picture taken inside his swather cab in his presentation. On the floor he had a digging tool and pruning shears so he could survey his canola for clubroot and blackleg as he swathed. Follow his lead and make a tool kit. Pull a few plants when you scout your fields throughout the season. Find it. That's the first step in controlling it.

By Sheila Kaus, AF for Big Lakes County

SARDA
AG RESEARCH
AGRICULTURAL TRADE SHOW

**FREE Information
Session**



Wetland Farming in Alberta: Getting Paid for Your Wetlands

Shifts to the Wetland Policy that occurred in late 2018 allow for landowners to now be paid for wetland restoration on private lands. Projects can also occur anywhere in Alberta, so delivery is not constrained to one particular agency's "sweet spot", something that has been a hinderance in the past. New Wetland Delivery Agents (formerly known as wetland restoration agencies) can apply to the Government of Alberta and receive contractual agreements for wetland restoration projects. This policy shift will entice landowners, consultants, municipalities and others to become delivery agents, fulfill the goals of the Wetland Policy, and restore highly valued ecosystems that were destroyed. Wetland restoration success has traditionally been low in Alberta due to the expense involved. Landowners can diversify their financial support towards restoration projects by applying to the ALUS program for wetland goods and services funds. We will highlight the new changes to the Alberta Wetland Policy and the role of the Wetland Delivery Agent. We will also discuss goods and services payments under the ALUS program in Northern Sunrise County.

March 14

Log Cabin, Falher

8:00 am

Journal Publications

Responses of residual and recommended N, P, K, S nutrients and crops to six annual soil test-based fertilizer rates and seeding systems

Dr. Kabal Gill, SARDA Ag Research. www.sarda.ca

Evaluation of long term fertility treatments under direct seeding and minimum tillage

For 6 years, 0%, 60%, 100%, and 140% rates of N, P, K, and S fertilizers (based on the soil tests from each treatment every year) were compared near Donnelly (Peace Region, Alberta), under direct seeding (DS) and minimum tillage (MT) systems. Canola-cereals rotation was followed on two adjoining areas.

Residual and Recommended Nutrients Responses to Fertilizer Rates

- Higher fertilizer rates increased residual NO₃-N, K, and SO₄-S amounts after dry years with low crop yields, particularly NO₃-N, but without a temporal trend.
- Residual available P level showed a gradual increase (positive temporal trend) for the 60, 100 and 140% treatments.
- Lower N, P, and S fertilizer rates were recommended to crops after higher residual NO₃-N, P, and SO₄-S levels. The changes in recommended rates reflected the crop yields, growing conditions, and residual nutrient amounts in the preceding year. Compared to 0% rate for example, the N amount recommended to canola for the 140% rate was lower by 40, 24, and

37 lb N/ac in 2011, 2014, and 2015, respectively. Following the 2010 mowed canola, only 26 and 3.6 lb N/ac was recommended to 2011 wheat for the 100% and 140% treatments, respectively.

- Above shows the benefit of soil testing for residual nutrients to adjust fertilizer rates, reduce both input costs and potential nutrient losses to the environment, while optimizing crop production.

Crop Responses to Fertilizer Rates

- Crops effectively used the residual nutrients. For example with 7 lb N/ac for 140% rate in 2011, the wheat yield was significantly greater than with 35 lb N/ac for 60% rate, and there was a 17.8 bu/ac wheat yield increase over 0%.
- Seed yield benefit from fertilization varied with year. Canola yield benefit from 140% over 0% rate averaged 18.9 bu/ac in dry years (2011 and 2014) while it averaged 42.1 bu/ac in other years. Wheat yield benefit from 140% over 0% rate was only 2.4 bu/ac in 2010 (a dry year) compared to 16.2 bu/ac in 2011 and 2012.
- With increases in fertilizer rate, generally canola emergence declined and plant height increased.
- Wheat and barley emergence as well as plant height did not show significant response to fertilizer rates.

For 6 years, 0%, 60%, 100%, and 140% rates of N, P, K, and S fertilizers (based on the soil tests from each treatment every year) were compared near Donnelly (Peace Region, Alberta), under direct seeding (DS) and minimum tillage (MT) systems.

Stabilized Nitrogen Applications in Winter Wheat

- Usually, crops showed delayed development and lighter color canopy for the 0% than higher fertilizer rates, more so for canola than cereals.

Temporal Trend of Yield Responses to Fertilizer Rates

- Compared to 0%, the relative seed yields at 60, 100, and 140% rates increased with years of fertilization, indicating a positive temporal trend.
- Increase in seed yield after 6 years was greater for canola (ranged from 2.65 to 3.18 times) compared to cereals (ranged from 1.18 to 1.35 times).
- Increased relative yields from fertilization with passage of year's indicated improvement in soil productivity and efficiency of applied fertilizers, apparently from enhanced recycling of nutrients in fertilized treatments.
- Positive temporal trend of crop yield indicates that some of nutrients from fertilizers were used by crops in subsequent years. Thus fertilizer use efficiency based only on application year data is under estimated and multi-year data can provide a better estimation.

Nutrients and Crops Response to seeding Systems

- There were no clear responses of measured soil and crop parameters to seeding systems.

Source: JOURNAL OF PLANT NUTRITION. 2019. Taylor & Francis. www.tandfonline.com

We compared controlled-release and stabilized forms of N to conventional granular and liquid N forms.

Limiting losses and improved N efficiency in winter wheat through stabilized N applications

Summary by Kabal S. Gill

Source: Beres, B., Hao, X, Mohr, R, Hall, L., Gill, K.S., and Holzapfel, C. 2017. Test 243 and 244 Final Report. (Copy at www.sarda.ca)

Background and Objectives:

A large portion of applied N is lost through volatilization, leaching, nitrification or denitrification. This is particularly important for winter wheat, as some or all of the N is applied in fall. We compared controlled-release and stabilized forms of N to conventional granular and liquid N forms; to determine if they may;

1. benefit winter wheat yield and yield components, and
2. mitigate losses and increase the rate of N recovery.

Methodology:

Two experiments were conducted during 2014 to 2017. The N fertilizer rate for all treatments was based on 80% soil test recommendation targeting 80 bushels acre⁻¹. A milling quality winter wheat, Flourish, was used.

Experiment I:

Conducted at 6 locations (Edmonton, Lethbridge (irrigated and dry land), Falher, Indian Head and Brandon) during 2014 to 2017. Assessed the following N types:

1. uncoated urea,
2. Instinct[®],
3. SuperU[®]), and
4. ESN[®].

Each urea type was applied as below:

1. All N side-banded at planting,
2. 30%N side-banded at planting + 70%N applied in-crop in late fall (1st first week of November),
3. 30%N banded at planting + 70%N applied in-crop in early-spring at Feekes 4 stage.

Included 2 zero-N controls (one received phosphorus, potassium and sulphur fertilizers; other received phosphorus only).

Experiment II:

Conducted at 5 locations (Edmonton, Lethbridge (irrigated and dry land), and, and Brandon) during 2014 to 2017. Following N treatments were compared:

1. Uncoated urea,

2. Urea ammonium nitrate (UAN);
3. UAN + Instinct[®],
4. UAN + Agrotain Ultra[®],
5. UAN + Agrotain Plus[®], and
6. ESN[®] applied at planting (50%N) + uncoated urea applied in-crop late fall (50%N), and
7. Zero-N control.

For 1 to 5 treatments, 50% of product was applied at planting (side- or midrow-banded), and 50% was applied in-crop at Feekes 4 stage.

Experiment I Results

There was a significant N sources effect for grain yield, seed mass and protein content.

The trend in yield was in the order of SuperU[®] ≥ Instinct[®] ≥ urea ≥ ESN[®], with 65.5, 64.5, 64.3 and 62.7 bu/ac yield, respectively.

The yield response to SuperU[®] was significantly higher than ESN[®].

For timing and placement, superior yields were observed when N was all-banded at planting (65.8 bu/ac), and least with 30%N banded + 70%N late fall in-crop application (63.2 bu/ac). This could be related to ammonia volatilization losses during in-crop late fall urea application.



A split application of N in-crop at Feekes 4 produced similar yield to all banded, . The one exception was for ESN[®], which displayed lower yield when applied in-crop, most notably in spring. This is not a surprise as a polymer-coated urea would require moisture to imbibe the urea prill before hydrolysis can be initiated, and risk to this process occurs if the prills are stranded above or on the soil surface as opposed to incorporation during seed-placed or side-banded systems.

Grain protein content of Instinct[®] (11.1%) was significantly lower than ESN[®] (11.3%) and SuperU[®] (11.3%) but not different from urea (11.2%). The protein content was greater for all-banded (11.3%) than 30% banded + 70% late fall (11.1%) in-crop application.

Nitrogen recovery tended not to vary with N sources.

Fall and spring densities, grassy weeds, chlorophyll and winter survival was not affected by either N source or placement.

Because split applications of N in-crop at Feekes 4 produced similar protein content to all-banded at planting, a producer would assume no risk to yield or protein if a split application was desired provided it is applied in spring at Feekes 4.

Experiment II

All N sources (containing either nitrification inhibitor or urease inhibitor or both) provided higher yield, protein content, grain bulk density, heads/plant, total N uptake, agronomic efficiency and recovery efficiency compared with no N fertilizer control.

The trend in yield was in the order of UAN + Agrotain Ultra[®] ≥ urea ≥ UAN + Agrotain Plus[®] ≥ UAN ≥ ESN50+Urea50 ≥ UAN + Instinct[®] control; and UAN + Agrotain Ultra[®] (66.8 bu/ac) produced significant higher yield than Instinct[®] and ESN50 + Urea50 (63.8 bu/ac).

All N sources provided higher (11.5) protein content than control (10.6%), except UAN + Instinct[®] which produced the least protein content, and there was no protein content difference among N sources.

Thus, UAN + Agrotain Ultra[®] and SuperU[®] may be applied during seeding operations and/or broadcast in-crop the next spring with reasonably low risk of any yield-related penalty relative to urea side-banded at the time of seeding.

However, N applied in late- fall and/or when combined with a nitrification inhibitor (Instinct[®]) produced significantly less protein.

Nitrous oxide emissions

There were no consistent effects of enhanced efficiency fertilizers (EEFs) on cumulative N₂O emissions.

The potential for solids EEF's with N stabilizers to reduce N₂O emissions compared to urea is greatest if applied at Feekes 4.

While there were some instances where N₂O emissions were lower from soils that received liquid fertilizers with urease inhibitors, but urease inhibitors were generally ineffective at reducing N₂O emissions.

Fertilizer with a nitrification inhibitor was more consistent than fertilizer with urease inhibitor or urease+nitrification inhibitor at reducing cumulative N₂O emissions.

In general, the results from both studies suggest that polymer-coated urea (ESN[®]) and nitrification inhibitors were generally better than urease inhibitors for reducing N₂O emissions in winter wheat cultivated Prairie soils.

A recent update to Alberta's Wetland Policy (DEC/18) means that grants are now available from the Government of Alberta to finance private wetland restoration in addition to existing ALUS Canada (Alternative Land Use Services) payments. This means even more opportunities for farmers to get paid for wetland restoration!

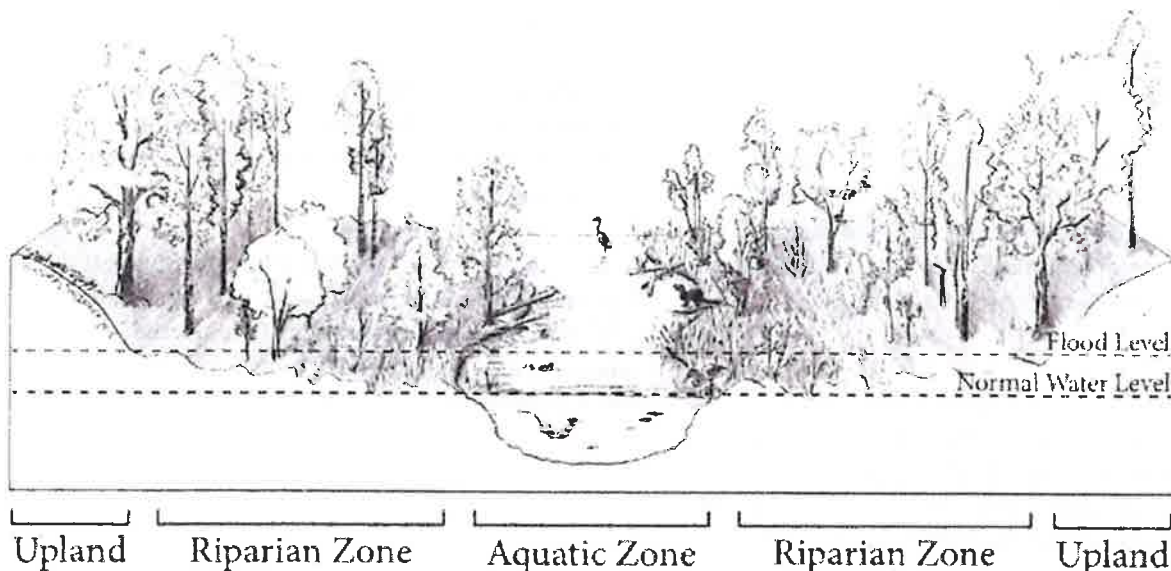
Update for Alberta's Wetland Policy Means Huge Opportunity for Farmers

Alberta has already lost 70% of wetlands in settled areas.¹ Landowners and proponents responsible for the loss of a wetland must pay a wetland replacement fee or undertake a wetland replacement project.² The December update to the Wetland Policy shifts replacement fee payments from Ducks Unlimited Canada back to the Alberta Government.^{2,3} This shift in policy provides more flexibility and access to wetland restoration funds for farmers and other landowners who have had difficulty restoring wetlands due to the expense.² Over the past several decades, drastic wetland losses have occurred because

the value of these ecosystems wasn't understood, and it was difficult to restore wetlands on private lands. Now there are funds available to accomplish this. Shifts to the Wetland Policy allow for wetland delivery agents (formerly known as wetland restoration agencies) to apply to the Government of Alberta and receive contractual agreements for wetland restoration projects.³ This can be extremely advantageous as delivery agencies can expand the geographic region in which Alberta can complete wetland restoration, something that has been a hinderance in the past.³ Emerging delivery agencies could support certain groups for restoration projects, similar to how producers are supported specifically by ALUS programs for wetland restoration.³

This could create specialized delivery agencies that deliver wetland restoration plans to meet the client's goals and ensure the long-term success of the project. This policy shift will allow a huge opportunity for landowners, municipalities, consultants, and others to become delivery agents, fulfill the goals of the Wetland Policy, and restore highly valued ecosystems that were destroyed.²

ALUS Canada is a non-profit program that Aquality partners with for wetland restoration. ALUS works with farmers and ranchers at a community level to



A Recent update to Alberta's Wetland Policy (DEC/18) means more opportunities for farmers to get paid for wetland restoration!

protect and restore wetlands, among other projects.⁴ ALUS pays producers annually for following wetland restoration and environmental management plans that ALUS specifically designs for their landscape.⁴ ALUS has already partnered with several communities in Alberta, such as Northern Sunrise County.⁵ ALUS, Northern Sunrise and Aquality have advised and implemented several successful projects, such as wetland and riparian enhancement.⁶

Want to become a wetland delivery agent or discuss your project needs? Contact Aquality Environmental Consulting Ltd. today!

info@aquality.ca or (780) 757-5530

For more information on becoming an ALUS participant, please contact your ALUS Northern Sunrise Program Coordinator for all the details!

ALUS@northernsunrise.net or (780) 322-3831

*Aquality Environmental Consulting Ltd.
Taylor Bujarzek & Jay White (January 2019)*

1. Government of Alberta, Alberta Environment and Parks, Jul 6, 2018, Wetlands: What are Wetlands? Accessed January 10, 2019 <http://aep.alberta.ca/water/programs-and-services/wetlands/default.aspx>
2. Government of Alberta, 2018, Alberta Wetland Replacement Fact Sheet, Accessed January 15, 2019, <https://open.alberta.ca/dataset/434aa453-8836-4637-9386-c67844b41b9d/resource/9e455832-f97b-4905-9575-c772dced9338/download/wetland-replacement-factsheet-201812.pdf>
3. Alberta NAWMP Partnership, 2013, Wetland Restoration in Alberta: Current Status and Future Potential, Accessed January 16, 2019, http://www.abnawmp.ca/media/uploads/Alberta_NAWMP_Wetland_Forum_Summary_March_2013.pdf
4. ALUS Canada, 2014, ALUS Cookbook 2014-11-24,
5. ALUS Canada, 2019, ALUS Northern Sunrise, Accessed January 15, 2019, https://alus.ca/alus_community/alus-northern-sunrise/
6. Northern Sunrise County, 2017, 2017 Agricultural Stewardship Tour: Heart River Watershed Project & ALUS Northern Sunrise, Accessed January 16, 2019, https://albertaeccotruster.com/wp-content/uploads/2016/06/Tour_Information_Sheets.pdf



ALUS Northern Sunrise https://alus.ca/alus_community/alus-northern-sunrise/	Aquality Environmental Consulting Ltd. http://aquality.ca/	Alberta Wetland Policy http://aep.alberta.ca/water/programs-and-services/wetlands/alberta-wetland-policy.aspx	Alberta Wetland Policy Implementation http://aep.alberta.ca/water/programs-and-services/wetlands/alberta-wetland-policy-implementation.aspx
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Event Name	Location	Time	Date	Cost	Comments
Annual General Meeting	Chevalier Centre, Falher	8:30 am - 3:30 pm	Feb. 21	FREE lunch included	Register online at www.sarda.ca or call 780-837-2900
Annual General Meeting	Dunvegan Motor Inn, Fairview	3:30 pm - 10:00 pm	Feb. 22	\$75 includes membership	Register online at www.peacecountrybeef.ca/agm or call 780-835-6799 ext.3
Soil Summit	TCU Place, Saskatoon		Feb. 26	\$107.68	Register online at https://www.eventbrite.ca/soil-summit-management-sustainability-tickets-49738205311
Clubroot Road Show	Peace Region North Manning	7:00 pm - 10:00 pm	Feb. 27	FREE	Club root is coming near you. Learn how it can affect your farming operations.
Clubroot Road Show	Peace Region South Rycroft Ag Society Hall, Rycroft	1:00 pm - 4:00 pm	Feb. 28	FREE	Club root is coming near you. Learn how it can affect your farming operations.
2019 SARDA Ag Research Agricultural Trade Show	Regional Recreational Complex, Falher	noon - 7:00 pm	March 14	FREE	Visit www.sarda.ca/trade-show for more information
		10:00 am - 6:00 pm	March 15		
		10:00 am - 5:00 pm	March 16		
Agricultural Trade Show Information Seminars	Log Cabin, Falher (across the street)	8:00 am - 7:00 pm	March 14	FREE	Visit www.sarda.ca/trade-show for more information
		10:00 am - 6:00 pm	March 15		
		10:00 am - 5:00 pm	March 16		
Pancake Breakfast	Upstairs, Regional Recreational Complex, Falher	8:00 am - 10:00 am	March 15	FREE	Visit www.sarda.ca/trade-show for more information Sponsored by Syngenta
Farmers' Appreciation Event	Chevalier Centre	Cocktails 6:00 pm Supper 7:00 pm	March 15	\$45	Supper and entertainment included. Tickets on sale at www.sarda.ca/trade-show
Pancake Breakfast	Upstairs, Regional Recreational Complex, Falher	8:00 am - 10:00 am	March 16	FREE	Visit www.sarda.ca/trade-show for more information Sponsored by BASF



Click Here
for the
Complete list of Events
www.sarda.ca/events



**Mighty Peace
Watershed Alliance**

Save the Date

Annual General Meeting – May 24, 2019

9:30 am – 3:30 pm
Peace River, AB

AGM to include Project and organization updates, election of new directors and guest speakers

Election of Directors

-2 year terms (May 2018– May 2020) – Federal Transboundary Relations, Large Urban, Forestry, Mining, Watershed Stewardship, Member-at-Large (2), Tourism/Fisheries/Recreation, Métis Settlement General Council, Upper Watershed First Nation, Middle Watershed First Nation.

-1 year term (May 2019– May 2020 to fulfill the second year of a 2 year term) – Agriculture, Metis Nation of Alberta

For More Information, membership forms & Nomination forms please go to our website:

www.mightypeacewatershedalliance.org

To Register for AGM:

Tel: 780-324-3355

Email: mpwa.admin@telus.net

“Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest.”

-Aldo Leopold, 1934

ALUS seeks new participants for 2019!

Are you a farmer or rancher with some marginal or ecologically sensitive acres?

ALUS can help you establish wetlands, native prairie, pollinator habitat and other projects on your land.

Even better, ALUS pays you annually to keep these projects in prime working order.

Your ALUS projects will produce cleaner air, cleaner water and more biodiversity, benefiting both your farm and your community.

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For more information, contact your ALUS Program Coordinator:

Becky Devaleriola

Northern Sunrise County
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T: 780 322-3831

E: ALUS@northernsunrise.net



**NORTHERN SUNRISE
COUNTY**

We've got it all!

The Farm Energy and Agri-Processors (FEAP) Program continues to share costs with producers who are upgrading components of their grain dryers to high-efficiency models.

Grain dryer components and the FEAP Program

Katherine Rogers, energy extension coordinator with Alberta Agriculture and Forestry, clarifies what is eligible for funding through this program. The program includes sharing costs for components of a new dryer or when retrofitting components of an existing dryer.

“For retro-fit grain dryer components,” says Rogers, “Eligibility is determined on a case-by-case basis. You must include detailed quotes, specifications, and if possible, calculations showing the energy savings of the upgrade.”

Eligible retrofits may include:

- Hopper covers.
- Automatic moisture controllers.
- New high-efficiency burners.
- Variable speed drives (VSD) for electric motors.
- PTO to electric motor conversion.
- Insulated plenums.
- Exhaust air recirculation systems or secondary heat exchangers.
- Gravity-fill roofs that replace powered leveling augers.

As for new grain dryer components, Rogers explains what funding may cover. “Upgrade options on

new dryers are considered if they are an optional upgrade from the standard new dryer configuration. Only cost of the options is eligible, not the cost of the standard dryer. The application must include detailed quotes or invoices, specifications or calculations demonstrating energy savings.”

Eligible new components may include upgrade options such as:

- Heat exchangers.
- Preheat systems utilizing exhaust air.
- Optional high-efficiency burners.
- Variable speed drives (VSD) for electric motors.
- Optional automated moisture controllers.
- Gravity-fill roofs used in place of powered leveling augers.

Rogers adds that components considered “business as usual,” are not covered, including bins, conveyors, legs and aeration fans.

The program is retroactive to April 1, 2016, so any upgrades or new construction projects done since that date may be eligible for funding. Go to www.agriculture.alberta.ca/feap to see the full funding list, application form and other eligibility requirements. Outreach officers are available to answer questions about the program and can provide assistance with the application process:

Northern Alberta - Amber Kenyon, 780-307-7849.

Southern Alberta - Vern Steinborn, 403-894-0050.

Eastern Alberta - Rongrong Xiang, 780-853-0222.

For further information, call the Alberta Ag-Info Centre at 310-FARM (3276).

AgriNews – Feb 4, 2019

Alberta Wheat

www.albertawheat.com

The Smoky Applied Research and Demonstration Association (SARDA) began a water quality monitoring program in 2011, with the assistance of Aquality Environmental Consulting Ltd (Aquality).

Summary of Water Quality Sampling Program, 2018

Surface water samples were taken from three sites in SARDA's research area: Peavine Creek, New Fish Creek, and the Little Smoky River. Sample locations, chosen by SARDA, were based on their proximity to agricultural lands, use as drinking water intakes, and their likelihood of exposure to terrestrial inputs.

Semi-annual sampling continued in 2018. Sampling occurred once in the late spring to early summer after the spraying of pre-emergent herbicides on croplands, and again in late summer to early fall following harvest. Water samples were analyzed for nutrients, bacteria, pesticides, and metals.

Water Quality Guidelines

The Province of Alberta released new water quality guidelines in 2018, updating those previously available from 2014, though no guidelines for the parameters investigated here were changed.



Where possible, the newer guidelines will be used in this report. For some parameters (nitrogen and phosphorus in particular), the updated document outlines an approach for calculating site-specific guidelines, but does not provide a fixed guideline for comparison. Because site-specific guidelines have not been determined for the sites in the present study, the previous 1999 guidelines will be used for these parameters.

Nutrients

Total Phosphorus

Total phosphorus (TP) exceeded the guideline (0.05 mg/L) at Peavine Creek in the spring and fall and at Fish Creek in the spring. Concentrations at Fish Creek and Little Smoky River were lower in the fall, but Peavine Creek went counter to the historical pattern and showed the opposite trend. The relative concentrations of TP between sites was consistent with the historical pattern, with Peavine Creek > Fish Creek > Little Smoky River. There has been no interannual trend in TP concentrations.

Dissolved sources of phosphorus made up a larger fraction of the concentrations at Peavine Creek compared to the other two sites. This corresponds to the general pattern seen for previous years, though the total amount of particulate phosphorus at Peavine Creek was substantially higher in the fall of 2018 than historically.

Total Nitrogen

Total Nitrogen (TN) exceeded the guideline (1.0 mg/L) at Peavine Creek for the spring and fall sampling periods, while concentrations were below the guideline at Fish Creek and the Little Smoky River for both periods. For Peavine Creek, concentrations of TN are generally higher in the spring than in the fall, but no clear seasonal pattern exists for Fish Creek or Little Smoky River. Concentrations at Peavine Creek in 2018 were the highest seen in both the spring and the fall since monitoring began.

There have been no general trends in TN concentrations between years over the course of the

study, but Peavine Creek has generally had the highest overall concentrations of TN historically. Nitrogen concentrations largely comprised particulate/organic sources at most of the sites, with limited contributions of nitrate, nitrite, or ammonia.

Bacteria

In 2018, total coliform concentrations were below the guideline (1000 CFU/100 mL) at all sites in all seasons. Total coliform concentrations were generally lower during the fall sampling period than in the spring, and have continued to fall since 2015.

E. coli concentrations were below guidelines at all sites except for Fish Creek in the spring, which saw concentrations at the guideline. Concentrations of *E. coli* at Peavine Creek and Little Smoky were both below historical averages.

Pesticides

Samples were analyzed for a total of 101 different pesticides; however, no pesticides were detected in 2018. This was consistent with the lack of pesticide detections from 2016 and 2017, and indicates a continued improvement from previous years (2011 – 2015).

Metals

Samples were analyzed for 32 different metals. Of these, three metals exceeded current guidelines for 2018, including iron, lead, and mercury. Exceedances were most common at Peavine Creek, with iron and mercury exceedances in the spring and iron in the fall. Iron had the highest number of exceedances, with two in the spring (at Peavine and Fish Creek)

and one in the fall (at Peavine Creek).

Historically, Fish Creek has had the highest total number of exceedances of metals (n=17), followed by Peavine Creek (n=14) and the Little Smoky River (n=8). The greatest number of exceedances have been for zinc (n=10), lead (n=7), and mercury (n=7), which together accounted for more than 61% of the total metals exceedances that have been detected over the course of the monitoring program. Aluminum was previously reported as having had numerous exceedances, but current guidelines for aluminum are determined against dissolved forms (Alberta Environment & Sustainable Resource Development, 2018), and previous exceedances had only been noted for total forms of aluminum.

River Water Quality Index Site Ranking

AQUALITY developed a modified version of Alberta Environment and Parks' (AEP) River Water Quality Index in 2013. The index was modified to include all parameters sampled by SARDA; however, the methodology and statistical formula used to analyze the data remained the same. The index considers the number of times a parameter exceeded guidelines and the magnitude of those exceedances, broken down across four categories of parameters: Nutrients and Related Variables, Bacteria, Metals, and Pesticides

The results from the sub-indices are averaged to provide an overall water quality index score for each site, with 100 being the best water quality and 0 being the poorest. From these percentages, we can obtain a water quality rating for each site from excellent to poor.



In 2017 the AEP's water quality tolerance parameters were updated to reflect changes in provincial water quality guidelines. The index was therefore subsequently updated to reflect these changes. The results from the past sampling periods were updated with the new changes, allowing for parameters to be comparable with the old data. Additionally, several metals (including aluminum and iron) were excluded from the index, due to a lack of available data for dissolved forms prior to 2015. This resulted in an increase in metals scores since 2015, but the values prior to that 2015 had been artificially inflated due to a lack of data. Scores calculated moving forward may be biased towards higher water quality, but comparisons between all years will be valid. The water quality index was calculated by season for all sample sites. In 2018, the poorest water quality rating was observed at Peavine Creek in the spring (81.3%), while the best water quality rating was observed at both the Little Smoky River (100%) in the spring and fall, together with Fish Creek in the Fall. All sample locations were considered to be Good in 2018.

The results from 2011 to 2018 show that overall water quality is typically poorer in the spring sampling period.

Individual sub-indices for each of the four parameter groups were calculated for all sample sites. Pesticides and bacteria show 'excellent' scores from all sites in sampling periods, with deviations generally occurring during the spring.

Nutrients, and to a lesser extent, metals, have been the primary impediments to water quality, based on the values from the individual sub-indices for all sites. Nutrient values have shown high variability between years and sites, with Peavine Creek generally having the poorest water quality due to nutrients. The exclusion of aluminum and iron from the metals calculation of the index has resulted in a general increase in scores for that category, though metals remain the second-greatest impediment to water quality across all sites.

Water quality sub-indices by year for all sites, 2011 to 2018.

YEAR	Season	Peavine Creek				Fish Creek				Little Smoky River			
		Nutr.	Bact.	Metals	Pest.	Nutr.	Bact.	Metals	Pest.	Nutr.	Bact.	Metals	Pest.
2018	Spring	35.5	100	89.6	100	70.2	100	68.3	100	100	100	100	100
	Fall	45.2	100	100	100	100	100	100	100	100	100	100	100
2017	Spring	47.8	100	74.1	100	76.0	100	71.6	100	100	100	100	100
	Fall	84.2	100	56.9	100	100	100	100	100	100	100	100	100
2016	Spring	57.3	54.9	100	100	51.4	61.4	45.7	100	81.0	100	66.5	100
	Fall	57.0	100	100	100	100	100	100	100	69.8	100	100	100
2015	Spring	68.7	55.5	54.3	100	100	100	100	100	100	100	100	100
	Fall	100	100	100	100	58.5	55.5	46.5	100	100	100	89.6	100
2014	Spring	43.7	100	60.1	100	100	100	100	100	100	100	100	100
	Fall	71.1	100	49.3	100	100	100	100	100	100	100	100	100
2013	Spring	54.7	52.4	72.7	100	72.2	68.2	86.0	100	53.6	65.3	43.7	100
	Fall	51.6	100	55.6	100	100	100	100	100	100	100	100	100
2012	Spring	46.1	100	100	100	78.9	100	100	100	100	100	100	100
	Fall	100	100	50.3	100	100	100	86.0	100	100	100	100	100
2011	Spring	68.3	49.3	65.2	100	100	100	100	100	57.7	100	94.1	100
	Fall	27.8	100	45.8	100	100	100	100	100	100	100	100	100

Summary and Conclusions

SARDA Ag Research has been monitoring water quality at three locations since 2011. The parameters assessed followed Alberta Environment & Parks Guidelines for river water quality and included nutrients, bacteria, metals and pesticides. This program has assisted in determining the most serious impediments to water quality in Peavine Creek, Fish Creek, and the Little Smoky River.

In 2018 guidelines were exceeded at Peavine Creek in the spring and fall for both phosphorus and nitrogen, and at Fish Creek in the spring for phosphorus, but were below guidelines for all other samples, which is consistent with previous sampling years.

Bacteria remained below guidelines for all three sites except for Fish Creek during the spring sampling period.

No pesticides were detected within the 2018 sampling period, which is consistent with the pattern seen from 2016 and 2017 and continues to be a high standard.

Metals exceedances were most frequent at Peavine Creek and then Fish Creek, with no exceedances at the Little Smoky River site; historically, Fish Creek had had the greatest number of exceedances. There was a reduction in the overall number of exceedances in 2018 compared to the previous year.

Values for the River Water Quality Index in 2018 were in line with results from previous years, with nutrients and metals the most impaired parameter groups. Iron and aluminum were removed from the metals sub-index due to a lack of data prior to 2015, which resulted in an increase in the metals sub-index score, but allows consistency in the scoring between years. The Index values are in line with the pattern of water quality between sites over previous years, with Peavine Creek being the most impaired and the Little Smoky River having the highest water quality scores.

The results of this ongoing study indicate Peavine Creek has the greatest impediments to water quality, while Fish Creek and the Little Smoky River are less impaired. In all systems, nutrients and to a lesser extent metals are the greatest impediments to water quality, though in Peavine Creek nutrients are a relatively greater problem than at the other sites. Due to the continued elevated nutrient concentrations at Peavine Creek, an investigation of differences in land use practices between the basins may be warranted to determine the source of these contaminants, though based on a preliminary examination it appears likely related to the small size of the catchment and the relatively higher density of agricultural lands compared to the other basins.

Full Document Available at www.sarda.ca

Prepared by Aquality Environmental Consulting Ltd.. #204, 7205 Roper Road NW, Edmonton, AB, Canada, T6B 3J4



Build a Legacy!

Give a gift that benefits your Agricultural Community. SARDA Ag Research is a producer directed, not for profit organization whose vision is to own an Advanced Agricultural Resource Center of Excellence. Build your legacy. Call Vance at 780-837-2900. Tax deductible benefits available.



Clubroot Information Sessions

2 locations in the Peace Region

- ◆ Recognizing Clubroot
- ◆ What Clubroot Can Do to Your Crop
- ◆ Preventing Spread
- ◆ Testing for Clubroot
- ◆ What Producers Can Do
- ◆ Producer's perspective -Farming with Clubroot
- ◆ Local Update

February 27	7pm—10 pm	Manning Legion	Manning
February 28	1 pm—4 pm	Rycroft Ag Society Hall	Rycroft



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Get the most out of your seeded crops at harvest time this year and insure them with AFSC. Annual Crop Insurance provides coverage for both dryland and irrigated crops and reflects the conditions on your farm. The deadline to apply for Annual Crop Insurance is April 30.

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SARDA Variety Trial Yield Results 2018

Spring Wheat

Rycroft				
Variety	% of check	S.D.	Protein	S.D.
AAC Connery	164	a	14.37	ef
Superb	134	ab	14.86	de
AAC Cameron VB	119	cde	14.93	cde
CDC Plentiful	119	abc	15.20	cde
CDC Utmost VB	119	abc	15.00	cde
AC Stettler	118	abc	15.23	b-e
AAC Viewfield	118	abc	14.83	de
CDC Landmark VB	117	abc	14.67	de
CDC Titanium VB	116	abc	16.20	ab
Thorsby	115	abc	15.06	cde
AAC Brandon	111	abc	15.23	b-e
Redberry	108	abc	16.43	a
AAC Elie	107	abc	15.60	a-d
CDC Abound	100	abc	15.40	b-e
AC Carberry (Check)	100	abc	14.73	de
AAC Crossfield	96	a-d	13.60	f
CDC VR Morris	91	a-d	15.87	abc
AAC Redwater	83	bcd	15.50	a-e
CDC Go	75	cd	16.10	abc
AC Harvest	70	cd	14.67	de
BW1048	57	d	16.03	abc

Yields are expressed as a percentage of check as this makes the data comparable to the regional variety trials hosted by the government of Alberta and to the results in the seed guides. SARDA small plot trials are purposefully conducted on the most consistent and highest performing land possible, which allows the differences in varieties to be highlighted instead of other limiting factors such as water, nutrients or other potential deficiencies. This results in high yielding plots compared to what a grower would consistently average across a field or a farm.

2018 growing season was a particularly challenging year. Yields were lower than normal and many of the varieties did not complete maturation. When this happens, the data is more variable and less reliable. The other 2 locations for the trial did not produce good data and therefore are not included in our report.

S.D.: Significant Difference: Letters used to identify statistically calculated significant differences between yields of varieties.

Note: Harvest was reclassified as the new Canada Northern Hard Red Spring class by the Canadian Grain Commission in 2018. Other varieties will remain in the current class, however Redwater is scheduled to move into the Canada Northern Hard Red Spring class on August 1, 2021.

Note: CDC Landmark VB, CDC Utmost VB, AAC Cameron VB and CDC Titanium are wheat midge tolerant varieties.



Join us for our AGM & Extension Event

February 21, 2019

8:30 am—3:00 pm

Chevalier Centre, Falher

Feature Speakers



Brian Tischler

Creator of Ag Open GPS

- *2018 Winner: Outstanding Achievement in Agricultural Innovation*
- *2018 and 2019 Farm Tech Speaker*

An Alberta farmer has developed open source software capable of driving tractors autonomously with the use of their existing GPS.



Darcy Boisvert

It's a "Hail" of a Presentation

Should we be spraying fungicides or a nutrient blend after a hail storm to help recover losses? Join SARDA Ag Research Agriologist Darcy Boisvert for the story of SARDA's Hail Damage trials and how to best manage your crop after a hail storm.

Lunch included

Please Pre-Register for catering purposes

780-837-2900 or www.sarda.ca/events

INDUSTRIAL HEMP MARKET INFORMATION SESSION

MARCH 5, 2019 | 10am - 3pm

GIROUXVILLE COMMUNITY HALL | 5012-48 Ave, Girouxville

GUEST SPEAKERS

Jan Salski
InnoTech Alberta

Erin Moskalyk
Hemp Producer

Jesse Hahn
Natural Fibre Technologies

Andrea Eriksson
NorQuest College

and Industry members

**RSVP before
March 1st, 2019
to Diane at
ecdev@midsmokyriver.com
or call at
(780)837-6630.**

\$15 REGISTRATION FEE

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Farm mailboxes in the MD's of Smoky River and Greenview, Big Lakes County and Northern Sunrise County receive complementary copies. Request your mailbox be classified as farm by talking to your postmaster. The County of GP makes copies available at agricultural businesses. Electronic versions are available on the website or you may subscribe at www.sarda.ca.



Farmer Appreciation Event

\$45 Dinner and Entertainment

March 15th

Chevallier Centre, Falher



Johnny Saggipes

Cocktails	6:00 pm
Dinner	7:00 pm
Entertainment	9:00-11:00 pm



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