



WISHING EVERYONE A
VERY MERRY
CHRISTMAS
AND A SAFE & HAPPY
HOLIDAY SEASON!



Grain, Grass & Growth
December 2015/ January 2016
www.chinookappliedresearch.ca

WESTERN CANADA

Conference on Soil Health

With 2015 being declared the International Year of Soils (IYS), ARECA and its nine member associations across the province launched a soil health initiative to increase the awareness and understanding of the importance of soil for food security and essential ecosystem functions. Over the past year several workshops and activities focused on various aspects of soil health were held at points throughout Alberta, concluding with the very first Western Canada Conference on Soil Health.

The inaugural conference delivered an agenda packed full of a variety of speakers, including international researchers and provincial producers. The sold out crowd contained over 400 producers, students and industry representatives. CARA's Crop and Soil Health Management Specialist, Dr. Yamily Zavala, kicked off the conference with "What is Soil Health", setting the stage for understanding what a healthy soil is all about.

As the international year of soil comes to an end we begin the international year of pulses (IYP). Be watching for events that will increase awareness and understanding of the challenges faced by pulse farmers, be they large scale farms or small land holders.



Dr. Yamily Zavala Speaking at the Western Canada Conference for Soil Health



Western Canada Conference on Soil Health



Soil Pit Demonstration



2015
International
Year of Soils

If you would like a pdf of the proceedings from the Western Canada Conference on Soil Health?
Email cara-3@telus.net for a pdf version.

Growing Forward 2 Funding update



With the overwhelming applications and limited funding some Growing Forward 2 programs are currently closed until further notice. While Alberta Agriculture won't give a specific date to expect programs announcements, we can let you know which funding programs are currently accepting applications and which are not.

On-Farm Stewardship

This program has a cost share of 50%-70% cost share which is dependent on the type of project.. Some examples of projects that are eligible are Riparian area fencing, year round watering systems, shelterbelt establishment, livestock facility run off control, permanent wintering site relocations, agricultural waste management, and more!

New funding item available! Funding for certain types of Alert Monitors for Remote Livestock Watering systems are now available.

Portable Shelters, Windbreaks, Chem Handlers, Fuel Tanks, Low drift nozzles and auto boom height control are no longer eligible for funding. (Sectional control for chemical application, sprayer cones and shrouds, and pulse-width modulating sprayer systems are still eligible).

To apply for any grant under the On-Farm Stewardship program you have completed your Environmental Farm Plan. You can complete yours online or hardcopy with assistance from a CARA staff member.

These programs may or may not become available in the future. The following programs are still closed to applications.

Livestock Welfare Producer

For implementing low stress, low hazard environments for livestock, such as upgrading corral systems.

Animal Health Biosecurity Producer

For livestock quarantine pens and rodent control for poultry, for example.

For more information on any of the growing forward 2 programs you are able to call CARA at 664-3777. To get the most up to date information on program availability please visit www.growingforward.alberta.ca and click subscribe on your favorite programs.



High Quality Forages for Growing & Finishing Cattle with Dr. Anibal Pordomingo



Dr. Pordomingo resides in La Pampa Argentina, and is a Senior Researcher with the National Institute of Agriculture Research of Argentina, and is the National Coordinator for the National Animal Production Program for the National Institute for Agriculture Technology.

His work and areas of expertise encompass; ruminant nutrition, feeds & feeding, and animal performance. As well as forage sequencing for finishing cattle, grazing strategies for optimal gain, and beef quality under various grazing systems.

Clayton Robins owns and operates a fourth-generation mixed family farm in Rivers, Manitoba, focusing on cow/calf, back-grounding, and custom grazing steers. He is also a former beef and forage researcher with Agriculture and Agri-Food Canada.

Clayton is a 2013 Nuffield Scholar Graduate, where he studied feeding energy-dense forages and their place in production systems in Canada.



These events brought to you in collaboration with:



Join us for a day
during Anibal &
Clayton's Alberta
Tour!

Thursday, January 28th
Heritage Inn,
Brooks, AB

- Cost: \$40/Person,
\$30/ Association
Member

- Registration at 9 am
- Lunch will be
provided

Please contact your
local Applied Research
Association to register
for the event.

Brooks: 403-652-4900
or CARA: 403-554-3777

Ladies CALVING CLINIC

Kick off your boots & enjoy a night out!

TUESDAY FEBRUARY 2ND, 2016

4:00-9:00 PM

OYEN LEGION HALL

CALL CARA AT (403)-664-3777

COST \$25/ PERSON PAYABLE AT THE DOOR

PRE-REGISTER BY JANUARY 26TH, AS SPACE IS LIMITED

**DOOR
PRIZES!**



**MINI
TRADESHOW!**

TECHNIQUES & CALVING

Dr. C Ruschkowski & Dr. T Logan

The Docs will discuss supplies to have on hand, when to intervene, techniques to pull calves correctly, post-partum care, when to call the vet & more!

SUPPER IS ON US

(WE'LL EVEN DO THE DISHES!)

TBA

Watch for updates on social media

**Recipe
Exchange**

There is something for everyone.

Old Timers, Experienced Ranchers & Newbies

www.chinookappliedresearch.com



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#LadiesCalvingClinic



@CARAresearch

Follow us on Twitter & Retweet our poster to be eligible to win one free registration!

December Livestock Lessons

Winter Feeding

Special Areas Agricultural Fieldman Jesse Williams



This has been a popular topic for Special Areas ranchers since this past summer, and the momentum is still climbing. Our challenging growing conditions and interesting beef cattle price swings have given ranchers quite a unique set of circumstances to plan for this winter and the upcoming 2016 grazing year.

Here, at the end of November, it is likely you have decided what to feed your cattle this winter, whether its late stubble/regrowth grazing, pea straw, hay, pellets, liquid protein supplements, or one of the other ever growing list of economical cattle feed choices appearing on the prairies. But whichever combination you choose, there are still a few general ration formulation topics we should be keeping in mind as the winter develops.

During the recent Cattlemen's Clinic in Oyen, hosted by Chinook Applied Research Association, Barry Yaremco, Beef & Forage Specialist with Alberta Agriculture & Forestry gave a quick rundown of the financial and nutritional considerations when feeding cows in a drought year. Here are some of the highlights:

Basic Rations & Feed Sampling

In order to formulate an economical ration for your herd, it is best to sample the feed you have available. You can test bales by using a forage probe, inserting it between the twines for a representative sample. Feed probes are available at CARA in Oyen. It is best to sample 20 cores per bale type, selecting each bale randomly. For grain or pellet testing, you can take handfuls of each load and put them in a sample bag. For silage, it is recommended you take a handful per load when dumped in the pit, or 10-15 cores from across the pit, to a depth of 6 ft. Samples can be sent to forage labs for analysis you can also send your samples to CARA, who will have the analysis done and results explained to you.

Once you have analysis of your various feed sources, you may want to try a ration building program, such as 'CowBytes', developed by Alberta Agriculture. You can learn more about the \$50 software though the Alberta agriculture website. The program will allow you to build feed rations based on the type, age, condition and expected progeny of a breeding cow/heifer, bulls, feeders, etc. You can also go as far as to include the water sample results from your watering sources, for inclusion into your mineral ration. Feed, mineral and yardage costs are also input in order to provide you the most economical ration with the sources you have available to you.

Minimize Stored Feed Loss

If possible, the best way to keep bales from losing their feed value is to store them under a shed, or tarp. If that isn't possible, Yaremco cautions against stacking bales in a pyramid, but encourages producers to lay their bales out in single rows with 4-6" of space between them. As an in between option, stacking bales like mushrooms, is better than in pyramid stacks, he says. Yaremco explained that the moisture from snow and rain will roll off the top bales of a pyramid stack, soaking into the bottom bales, causing decay, reduction in feed value and even some toxic moulds. By placing the bales single file without touching, the bales will have a chance to dry out after moisture events. For a more detailed explanation, visit www.agric.gov.ab.ca information page for Round Bale Storage Techniques.



December Livestock Lessons Winter Feeding Cont'd

Bedding Requirements

Don't forget to include bedding in your calculations! On average, Yaremci suggests that our area should calculate at 2000lbs (~2 bales) of straw per mature animal for the winter. This will reduce your animals' energy loss and conserve heat during snowy, cold conditions. If straw is hard to come by, Yaremci recommended trying wood chips or sawdust. You can read some interesting facts & alternative methods for bedding by ForageBeef.ca.

Body Condition Scoring

A cow that is 200lbs light going into winter requires an additional 1400lbs of hay just to keep her warm, not gaining. Is that a cost you are willing to incur? Or should you cull that cow now and save the difference? Yaremci encourages all producers to Body Condition Score their animals before winter hits. You should strive for a BCS of 3.5 for cows going into winter, and a 3.0 after calving. 1 BCS is equal to a loss or gain of 200lbs. For more information on how and why to Body Condition Score your cattle, from the Beef Cattle Research Council.

Not Enough Feed?

If during your calculations you decide you have to reduce your herd size, consider feeding your economic drivers of the operation first- the productive cows, heifers and replacements. Weaned calves should be the first to go.

If you have any additional questions about winter feeding strategies you can call 310-FARM, surf Ropin' the Web for great resources, speak with your local Special Areas Agricultural Fieldman.



Thank you to everyone who attended the
6th Annual Cattlemen Clinic!

Agronomy Update

2016

January 19 & 20
 Registration: 1-800-387-6030
 Sheraton Red Deer Hotel,
 Red Deer, Alberta

A two-day conference for grain producers, crop advisors and industry partners to interface with leading agricultural scientists about relevant soil and crop issues

To register or for more
information call the **Ag-Info Centre:**

1-800-387-6030

Alberta Government

Visit the events page on the Alberta Agriculture & Forestry website for more information.

AgriProfit\$

From the November 30, 2015 issue of Agri-News

“With changes in today’s environment and economy, there seems to be renewed interest in building business plans, following cost of production and getting adequate returns for that production,” says Pauline Van Biert, research analyst, Alberta Agriculture and Forestry (AF), Edmonton. “The AgriProfit\$ is a business analysis program that provides economic analysis and farm business management information to cow/calf and crop farmers using their own numbers.”

After providing their farm information, participants receive a detailed analysis that drills right down to their own cost of production, such as the cost per pound of calf weaned, cost per ton of hay or cost per bushel of barley, or for whatever unit for the product they produce.

“In working with Alberta producers we’ve learned that while two farms may look pretty similar on the outside, their costs and profits can vary widely for a number of reasons. Differences in profitability has more to do with differences in their costs of production and less about commodity prices. In knowing these differences and using their own numbers, farm managers can better control their business.”

Van Biert says that while financial statements summarize the activity of the business, they don’t dig down to how each activity, crop, or enterprise, contributes to the overall farm profitability.

“AgriProfit\$ breaks down the farm into enterprises, like a cow herd, or grains, or forages. Each enterprise is reported on individually and can be looked at as a unit to see where there are strengths or weaknesses. AgriProfit\$ also brings it all back together into a farm analysis so farmers can also see their overall farm picture.”

Provincial averages, or benchmarks, are also provided to participants. The data from all participants is used to establish these benchmarks. These can be used as a reference points by producers to see how they compare to their peers.

AgriProfit\$ is for the 2015 production year and producers are sent forms to fill in. A farm visit is made between January and March to finish up and pick up the forms.

“Producers tell us that they have become more effective at analyzing, budgeting and planning, and that they are making better management decisions,” says Van Biert. “They understand what their long term average costs are, can identify targets for what their costs should be, and are more effective at identifying business options and opportunities.”

The only cost for the program is in the time invested in it. “In return, the producer receives a business analysis of their own farm, using their own numbers, to use in making profitable management decisions.”

Enrollment for this year’s program is will open until the middle of January. For more information, or to register, contact Pauline Van Biert. Visit the AF’s website at www.agric.gov.ab.ca and search AgriProfit\$ Business Analysis and Research Program for more information.

Contact:

Pauline Van Biert
pauline.vanbeirt@gov.ab.ca
 780-415-2153

**JENNIFER
WOODS**

M.S.C., LIVESTOCK
HANDLING SPECIALIST

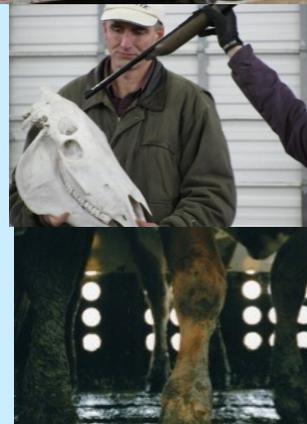


Transport, Assessing & Euthanasia

What does McDonald’s Sustainability mean to you operation?

February 9th – Pollockville
 February 10th – Consort

Contact the CARA office to register
 & for more information.



2016 Wheat Stem Sawfly Forecast

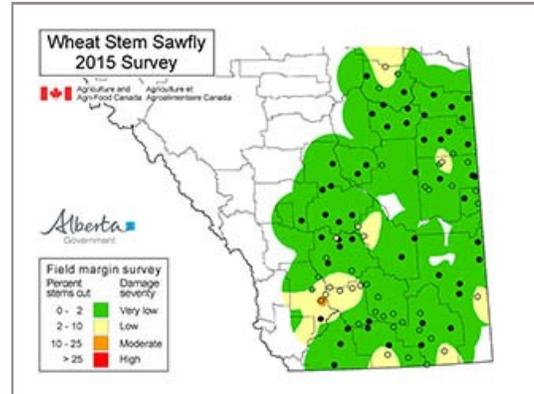
Alberta Insect Pest
Monitoring Network



The [Wheat Stem Sawfly Map](#) is based on cut stem counts conducted after the 2015 harvest. The percent of stems cut by sawfly gives an indication of the number of reproductive adult sawflies that will emerge in late June through early July. Winter conditions have very little impact on sawfly populations and a high proportion of wheat stems cut in the fall will produce adults. Producers in areas with moderate to high levels of cutting should consider using solid stem wheat as a control strategy.

The area at risk of economically significant sawfly populations in 2016 will be limited to only a few areas. The 2015 field margin survey shows low populations in most of the area surveyed including the traditional sawfly areas in the Special Areas and the Forty Mile county.

The damage ratings are based on 93 fields in 20 municipalities. One field was found with a moderately elevated sawfly infestation in the MD of Willow Creek. Thirteen other fields were found with elevated but still low sawfly numbers in Willow Creek, Warner, Lethbridge, Vulcan, Forty Mile, Cypress, Newell, Special Areas 3 and (surprisingly) Flagstaff municipalities.

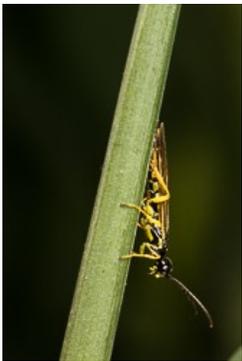


The [Wheat Stem Sawfly Map](#) is based on cut stem counts conducted after the 2015 harvest.

Overall the sawfly concern remains very low although there were more fields with elevated numbers and they were spread out throughout southern Alberta. This may represent the beginning of population resurgence in sawfly if dryer conditions continue.

Despite the low level of sawfly in the survey, individual fields may still have higher wheat stem sawfly populations than are indicated in the map. Overall there were zero or very low sawfly numbers in 79 of 93 (84%) of fields surveyed. (Field locations denoted by a black dot had zero sawfly found in the survey.) Thank you to Wayne Spurrill who reported sawfly damage in the Flagstaff county, as a result the survey was expanded further north to ensure this area was properly represented.

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Wheat Stem Sawfly



Wheat Stem Sawfly Damage



Wheat Stem Sawfly Larva in stem

Female sawflies lay eggs inside grass and grassy crop stems; the eggs hatch and tunnel inside stems until the crop starts to dry down near harvest. As the crop starts to ripen the sawfly larva migrates to the stem base and cuts a notch most of the way through the stem. Feeding damage from the tunneling can result in hidden yield losses of 10 to 15 percent. Further yield losses can occur from lodging at harvest. More information can be found at [wheat stem sawfly life cycle](#).

It is possible that population hot spots still exist in areas of lower risk, individual producers need to be aware of the potential risks in their own fields.

Cutting levels higher than 10 to 15 percent in the previous crop indicate the need to consider seeding solid stem wheat to reduce sawfly losses. It is important farmers evaluate their individual situations in making their variety choices. When populations are low it is typical to have small localized populations of sawfly that affect only one field or even just a portion of one field.

Parasitism can reduce populations and reduce the level of cutting. A parasitic wasp, *Bracon cephi*, has been shown to have significant impact on sawfly populations. The use of solid stem wheat varieties and the increase in parasitism are the major factors in lower sawfly populations in Alberta.

For more information about the content, contact Scott Meers (Insect Management Specialist) Ph: 403-362-1366

CARA Calendar of Events

Date	Event Details
January 14 Cereal, AB Cereal Community Hall	CARA Cooperator Appreciation Night To RSVP please call CARA at 403-664-3777
January 19 & 20 Red Deer, AB Sheraton Red Deer Hotel	Agronomy Update 2016 To register call 1-800-387-6030 For more information visit www.agric.gov.ab.ca events page
January 23, 2016 Buffalo, AB Buffalo Community Center	Come Garden in Winter To register or for more information call Sherri at (403)-664-2060
January 26-28 Edmonton Expo Centre	Farm Tech 2016 Visit www.farmtechconference.com for more information
January 28 Brooks, Heritage Inn & Convention Centre	High Quality Forages for Growing & Finishing Cattle To register call CARA at 403-664-3777 or FFGA at 403-652-4900
January 31 Sedalia Community Hall	4H Calving Clinic Details TBA
February 2, 2016 Oyen, Legion Hall	Ladies Calving Clinic To register please call CARA at 403-664-3777
Feb. 9- Pollockville Feb. 10- Consort	Transport, Assessing & Euthanasia; McDonald's sustainability For more information or to register contact CARA
February 10 & 11 Calgary, AB Deerfoot Inn & Casino	Tactical Farming Conference To register visit www.tacticalfarming.ca or call 780-582-7308
TBA	Crop Strategy Meetings & Irrigation Workshop

Don't miss an issue of
Grain, Grass & Growth!

Join Chinook Applied Research Association
or RENEW your membership!

2016-2017 Memberships are available

For more information phone
403-664-3777



Tree Seedling Order Form

Prairie Shelterbelt Program
www.prairieshelterbeltprogram.ca



Now accepting Spring 2016 tree orders. Order forms are
available at the Special Areas offices & on their website
www.specialareas.ab.ca

More of a Digital Person?

If you would like to receive this newsletter via
email, please contact Olivia at cara-3@telus.net

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