forage VIEWS

WEST-CENTRAL FORAGE ASSOCIATION

November 2016

In This Issue

News from the Office

We've had a busy last few months here at WCFA. The end of September saw Jessica participate in the first working group meeting for the Athabasca River Basin Initiative, a project that will use integrative modeling tools to assess the current and future state of water resources in the basin. The working group consists of a variety of participants, representing a vast number of interests from across the basin, whose purpose is to ensure the modeling tool developed accurately represents the basin. WCFA will be continuing their involvement with this project over the next year or so.

Jessica was also pleased to participate in the City Slickers program in Stony Plain, a day that introduces Gr 4 and 5 students to various aspects of the agriculture industry.

At the beginning of October, Fito travelled to Banff to attend the Global Conference on Sustainable Beef, where a number of beef value chain stakeholders from around the world gathered to participate in seminars and discussions on sustainability in the beef industry.

Melissa and Jessica were also pleased to have been a part of the annual Farmer's Appreciation Breakfast put on by Yellowhead County, where we were able to meet many local producers.

We are also excited to announce that WCFA has been appointed as a member of the Brazeau County

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Agriculture Opportunity Fund

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News from the Office Continued

Alternative Land Use Services (ALUS) Partnership Advisory Committee (PAC). We are looking forward to this wonderful opportunity to work with the ALUS program and producers in Brazeau County.

If you have been following our Facebook and Twitter accounts you would have seen that we seeded Winter Cereal Variety Trials, and have spent some time playing in the mud doing plant counts for these projects.

To keep up to date on all the happenings around the office, and for information on upcoming events please be sure to follow us on Twitter (@WestCentralFor) and like us on Facebook (West-Central Forage Association).

Important Dates to Remember

November 19:

Success for Women in Agri-Food. "This event is for all women ag-entrepreneurs in rural Alberta who are interested in or in the business of primary agriculture, food processing and value added and are wanting to propel their business forward"

November 23:

Environmental Farm Plan & Growing Forward 2 Workshop, Yellowhead County Office Board Room, Wildwood. 5-8pm. Registration deadline is Nov 21.

November 28:

Deadline to order Canada Thistle Stem-Gall Fly!

December 6:

Generating Electricity from the Sun: Opportunities for Alberta Farmers. A one-day workshop on grid-tie solar options, to be held at the Wildwood Community Hall with registration starting at 9:30am. Registration deadline is December 1.

December 14:

Environmental Farm Plan & Growing Forward 2 Workshop, CETC, Drayton Valley. 5-8pm. Registration deadline is December 12.

January 19, 2017:

Winter Feeding workshop, Glen Park Hall.

For more information on upcoming events please visit www.westcentralforage.com, our Facebook & Twitter pages, or call the office at 780-727-4447 to register for an upcoming event.

Greenfeed under snow – What to do now?

Article from Barry Yaremcio – Beef/Forage specialist

With the early snow, many acres of annual crops grown for greenfeed are still in the field. There are more concerns now with the time of year and the possibility of not getting the material dry before baling.

Bales containing 18 to 20% moisture (or higher) have the potential to heat. Some of the sugars will be used by the microbes during the heating process. This will reduce the energy content available to the animals. If temperatures within the bale get above 40 o C, the bales will smell sweet or like tobacco. The color can change to dark brown or black. When this happens, some of the protein will be tied to the fibre and not available to the animals. If this occurs, request an Acid Detergent Insoluble Nitrogen (ADIN) or ADIP (protein) test in addition to the regular feed analysis. Use the adjusted lower protein value when formulating rations.

Molds can also develop in bales with higher moisture. This can result in a loss of quality and possible feed refusal. If mold is present; bales should not be fed through a bale processor but rather rolled out. This will allow the cows to sort through the greenfeed and allow them to waste the material that is contaminated with mold. Forcing cows to eat 5% moldy feed can possibly reduce the digestibility of the ration by 10%.

Nitrate could be present in greenfeed if the crop had significant amounts of nitrogen fertilizer or manure applied this spring or last fall. If the crop was cut 3 to 5 days after a light frost and the field was well fertilized, this creates conditions favorable for nitrate accumulation in the plant. When bales heat; nitrate can be converted to nitrite (the same first step that occurs in the rumen) making the nitrite 10X more toxic to the animal compared to nitrate. If the bales have slumped and lost normal shape, this indicates that heating has occurred and nitrate to nitrite conversion is possible. Test for both nitrates and nitrites in this situation.

Greenfeed that has been cut for 2 weeks or longer should not be made into chopped or bale silage. Aerobic bacteria have established themselves in the swath and outcompete the anaerobic bacteria that develop during the ensiling process. White mold can form. Nutrient losses also occur. It is also difficult to make good quality silage with material that has been exposed to the weather.

Applying the appropriate amount of buffered propionic or formic acid to higher moisture greenfeed reduces mold growth and heating. These products could allow baling at 4 to 5% higher than normal. Moisture levels remain higher than recommended and these bales should be fed out as quickly as possible.

Higher moisture bales should not be stacked into pyramid piles or under a hay shed. If the bales start to heat, temperatures could get high enough to cause spontaneous combustion. Hay or greenfeed fires are possible.

Bacteria cannot develop when temperatures are below 0°C. One possible option to harvest the greenfeed is to let it stay in the field until temperatures remain below zero and then bale the crop. This is risky because the time available for baling before the crop is completely snowed under may be very short.

Considering completing an Environmental Farm Plan (EFP) but not sure why you should?

The EFP process will help you to identify and address environmental risks and opportunities in your operation.

By completing an EFP you will:

- Identify what you are already doing well, as well as identify areas for improvement, which will increase your personal knowledge & satisfaction.
- Demonstrate to the public, government, lenders and/or investors, etc. that you are managing your environmental risk, building acceptance of your operation among your neighbors and the public.
- Identify areas where you can reduce farm inputs such as fertilizer, chemical and fuel.
- Increase your understanding of the legal requirements related to environmental issues.
- Contribute to Agricultural Sustainability
- Become eligible for funding under some of the Growing Forward 2 programs!

If you are interested in completing an EFP why not check out one of our upcoming EFP & GF2 workshops? We will go over the EFP process with you, help you get started on your individual EFP, discuss resources available to you to help you complete your EFP, and discuss some of the funding options available to you under Growing Forward 2 once your EFP is complete.

Upcoming workshops:

- November 23, 2016 in Wildwood at the Yellowhead County Office Board Room. Workshop will run from 5:00-8:00 pm. Registration deadline is Nov 21.
- December 14, 2016 in Drayton Valley at the Clean Energy Technology Centre (CETC), 5400 24th Ave (for directions visit http://www.cetc-dv.com). Workshop will run from 5:00-8:00 pm. Registration deadline is December 12.

Stay tuned for more dates and locations to be added in the future!To register for these workshops please contact the office at 780.727.444.

For more information on the Alberta EFP program visit www.albertaefp.com, or contact the office at 780.727.444.

SACA
Stewardship Alliance for Conservation Agriculture

BUILDING ON A SOLID FOUNDATION
Alberta EFP
ENVIRONMENTAL FARM PLAN

Reminder

2017 West Central Forage Association Memberships are Due. Please renew by February 1, 2017

Exciting news regarding the Growing Forward 2 On-Farm Energy Management Program (OFEM)!

On October 24, 2016 Minister Carlier announced significant changes to the OFEM program. The OFEM program assists with the purchase of equipment that improves energy efficiency or monitors energy consumption, including lighting, pumps, meters, boilers, heaters and low energy livestock watering fountains. $10 million dollars in extra funding has been given to this program, to be used by March 31, 2018. The additional support for this program is being provided through the Climate Change Emissions Management Fund. The funding will support changes and expansion of several programs. The OFEM program will see changes in the cost-share percentage available to producers, with the cost-share rate for capital purchases increasing from 35% to 70%. The maximum funding for the program will also see a significant increase, going from a maximum of $50,000 to a maximum of $750,000 per applicant.

Any applications currently in the system for this program will be given the opportunity to withdraw their applications and reapply under the new rates & rules, as long as they agree to the new Terms and Conditions. Those producers who have already been paid out under the old terms will unfortunately not be receiving additional compensation for those projects, however they can reapply for funding for new projects.

The extra funding will available until March 31, 2018, and it is unlikely that the extra funding will be extended beyond this, so those wishing to take advantage of this extra funding are encouraged to apply to the program promptly. All purchases will have to be completed, and all equipment will need to be installed and operational by the March 31, 2018 deadline, therefore by January of 2018 the program will only accept applications for already-complete projects.

It is important to note that this project is retroactive to April 1, 2013, meaning if applicants have receipts for purchases from this date onwards, they are eligible to apply for funding under this program.

The carbon levy exemption on marked gasoline & diesel for farming purposes and the OFEM program will be the only options available to producers in terms of “carbon rebates”.

For more information on the changes to the OFEM program, and for information on any other Growing Forward 2 programs visit www.growingforward.alberta.ca, or contact the office at 780.727.4447.

3 Tools to Improve Farm Productivity Seminar

On October 25, West-Central Forage Association, Gateway Research Organization (GRO) and Lac Ste. Anne County co-hosted a successful seminar featuring 3 key tools for producers to use in improving productivity on their farm at the Diamond Centre in Mayerthorpe, AB.

The day started with an extremely informative presentation by Chinook Applied Research Association’s (CARA) Yamily Zavala,Ph.D. on soil health.

Dr. Zavala began her presentation by covering the main soil functions (habitat for organisms, supporting plant growth, etc.). She highlighted some of the key things we want in a soil; good tilth & organic matter (OM) content, sufficient rooting depth, good water storage & drainage, enough nutrients, resistance to being degraded/eroded and the ability to recover quickly from adverse events.

So what are some signs of poor soil health? Signs of runoff, erosion, compaction, crusting,

Continued...

3 Tools to Improve Farm Productivity Seminar Continued

poor plant growth, declining yield & and an increased need for inputs are just a few of the things to look for according to Dr. Zavala.

Dr. Zavala presentation focused on the importance of good tilth (or aggregates). Aggregates promote: infiltration (ability to capture & store moisture), water storage, porosity (drainage ability, room for root exploration), and soil life. The presence of aggregates also leads to less runoff, compaction and erosion.

Mychorizzal fungi was also covered briefly during the presentation. This fungi is able to make phosphorus more readily available to the plant roots where it is found. This fungi has a symbiotic relationship with the plant, accessing the phosphorus that is tied up in the soil in exchange for compounds produced in the plant. All plants are able to benefit from this symbiotic relationship, aside from the Brassicas. Ultimately, healthy soils are the product of diversity and microbial activities.

Cover crop cocktails (CCC) where discussed and their benefits to soil health. The main purposes of CCC are to: increase soil OM, biological diversity and water infiltration, reduce erosion & soil compaction, reduce weed competition, capture & redistribute nutrients in the soil and provide supplemental forage.

After lunch we were treated to an educational presentation, and some lively discussion, on power fencing. Garth Hein, territory manager with Gallagher, covered topics such as grounding, troubleshooting, types of electric fencing and the various components of electric fence.His presentation emphasized that you should buy joules, not volts (although voltage is important as well) when you are looking at fencers, and his comparison of voltages to tractor rpm and joules to tractor horsepower was a hit among participants.

Garth suggested that a general rule of thumb was to have one ground rod for every two joules of stored energy. He also emphasized the importance of using galvanized rods and suggested a minimum of three six -foot grounding rods, with ten feet between each rod, connected with a galvanized wire.

Garth also went over methods to check the grounding on your fence, and suggested that grounding be checked twice a year (grounding will be much more important when it comes to winter power fencing). Garth's suggestion for checking the ground was to intentionally short out the fence using steel posts, and lower the voltage to 1000 volts or less, with a reading of 200 volts or less being the ideal range. If the voltage is higher than this it would suggest that additional ground rods are required.

Shane Menzak with the UFA Livestock Production Team then discuss protein and mineral supplementation for cattle and the various options available to producers. Shane reminded participants that we don't feed cattle, we feed the rumen and it is the rumen microbes that are responsible for extracting energy from feedstuffs. The majority of protein in the rumen is from dead rumen microbes.

"Research has shown that the rumen benefits from a full mineral and vitamin pac year round, and that rumen microbes will also need supplemental protein about 2/3 of the year". He also reminded everyone that it is very expensive to condition cows in the winter and that fall is a great time for at least one body condition score. "A cow in poor body condition will require 3x the energy to get through the winter as a cow in good condition".

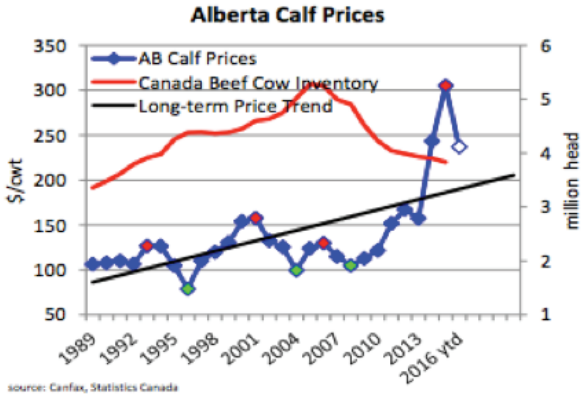
Why mineral supplementation? Minerals are required for biological functions and to support rumen microbe activity, and forages lack adequate mineral profiles to support optimal performance. "The bottom line" says Shane, "is: cattle need supplementation (minerals and vitamins) all year long, and protein supplementation is often necessary starting in the fall until good quality forage becomes available again."

Follow us on Facebook & Twitter to see highlight from this, and future events.

What's up with the Cattle Market?

The Canadian cattle market has been trending lower in 2016, after peaking in 2015. Many have called this a market correction, but there seems to still be caution and concern moving forward. It is believed the majority of the price has already occurred, but there could still be some price erosion moving forward. The U.S. cattle herd has been expanding, and there has been record large pork production in the U.S. putting pressure on cattle prices. On a global scale, pork will continue to be a major competitor in the red meat market and continues to gain market share.

The Canadian cattle herd has generally stabilized over the last couple of years and herd growth seems like it will be limited over the next couple of years. Calf prices have fallen significantly in the past year, but Canadian prices remain historically strong.



Remember that the cattle cycle causes the beef price cycle (they are highly correlated but run in opposite directions). Even with different economic situations and inventories in each cycle, prices tend to move below long-term trend lines within a year or two of the peaks, with the lows occurring in two to four years. If this trend were to continue to hold it could suggest that calf prices may continue to fall below the trend line and bottom in 2017-2019, especially considering how far above the long term trend line prices still remain. Expectations are for lower prices in 2017/2018 as production continues to increase. Fed cattle prices also tend to follow a similar pattern to annual calf prices, but the bottom typically occurs within three years of the peak. It is important to note, however, that the historical trend line may give us an idea where the market is headed but no two cattle cycles will ever be exactly the same.

Many put a lot of emphasis on the futures market when looking for direction for prices, but there are other important drivers to consider. In addition to considering futures, basis, Canadian dollar and feed costs, other production parameters are important in determining what a feeder will pay for calves.

The following table outlines some production and market changes, along with the corresponding price impact:

Factor	Change	Price Impact on 550 lb steer
Live Cattle Futures	$1/cwt	+ $3.20/cwt
Canadian Dollar	1 cent	- $4.50/cwt
Basis	$1/cwt	+ $2.50/cwt
Barley	$0.50 per bushel	- $10/cwt
Out Weight	50 lbs	+ $2.50/cwt
Conversion	5% change in feed use	- $4/cwt
Death Loss	1 % (i.e. 1% vs. 2% DL)	- $3/cwt

A "+" sign means the calf prices move in the same direction as the change, and "-" means they move in the opposite. For example, as the futures go up, so do calf prices, or if your calves have a full 1% lower death loss rate, calf prices go up $3/cwt. (Source: Market Summary for the Canadian Cattle Industry, CANFAX September 13, 2016)

The feeder cattle market tends to be more volatile than the slaughter cattle market, and tends to show considerable variation between regions. The feeder cattle market is what could be considered a competitive market, where supply and demand interact to determine the price. The demand for feeder cattle is driven by feeding and backgrounding industries and the economic conditions surrounding these sectors. Fed cattle price expectations are based on two primary factors: current cash price and live cattle futures (adjusted for exchange rate and basis).

Continued...

What's up with the Cattle Market Continued

Expectations of future slaughter cattle prices are not static; they change constantly as new prices or information about the slaughter cattle market become available. New information is quickly translated into revised expectations, as evidenced by shifts in the futures market. Revised expectations for fed cattle, in turn, immediately change the outlook for feeder cattle prices in the future. Demand considerations are the dominate driving factor in determining the feeder cattle market, but supply factors may also play a a key role in affecting prices from week to week. There is a tendency for calf prices to soften in the fall run, as supply is at it's greatest. Ultimately, on sale date the forces of supply and demand will dictate the price.

For updated market reports visit www.albertabeef.org, and view the Daily Cattle Report.

Article adapted from "Market Summary for the Canadian Cattle Industry"-CANFAX and "The Price Cycle and Evolving Cycle Drivers" Fact Sheet-CANFAX.

Now Accepting orders for Canada Thistle Stem-Gall Fly!

We are pleased to be offering Canada Thistle Stem-Gall Fly as another alternative for biological control of Canada Thistle!

The stem-gall fly can help to significantly reduce thistle stands! The stem-gall fly attacks the stems of the thistle plant, boring in and causing the plant form gall tissue, stressing the plant. The gall becomes a nutrient sink, directing energy away from the plant's normal metabolic & reproductive functions. Plant vigor is reduced, and abnormally developed flower heads frequently occur above the gall, resulting in fewer flowers and lowered seed production. Flies will overwinter in the gall tissue as mature larvae & will emerge in the spring as adults to continue their lifecycle, meaning they will be a self-perpetuating, long-term control agent.

The flies also work very well when used with the Canada Thistle Stem-Mining Weevils we also offer!

For more information and to order your flies please contact Jessica at 780.727.4424 or conservationag@westcentralforage.com. All orders for gall flies must be received by Nov 28, 2016.