



Member of ARECA

Grain, Grass & Growth

September 2015

www.chinookappliedresearch.ca

ARECA Meets With Provincial Ag Minister

Taken from Agricultural Research and Extension Council of Alberta Connections

By Janette McDonald, Executive Director of ARECA

This week, we had an excellent meeting with the new Minister of Agriculture and Forestry (AF), Oneil Carlier. Chair Ian Murray (FFGA) and two ARECA Board members, Herman Wyering (GWFA) and Tom McMillan (GRO) and Janette McDonald (ARECA ED) attended.

Our primary goal was to talk about how we can enhance our partnership with AF. We talked about our nine member associations and the work we have done on Soil Health in 2015. We showed the Minister the long list of events planned and hosted by our associations this summer; on topics from pasture management, to stockmanship to crop field days, to soil health.

We talked about the province's carbon strategy and how our members can be a part of designing successful policy on maintaining and rewarding carbon sequestration in perennial pastures and grasslands.

We highlighted our delivery of the Alberta Environmental Farm Plan (AEFP). ARECA has delivered the EFP since 2013 and we talked with Carlier and AF Environmental Stewardship staff about our plans to strengthen the program in the future. We talked about the Agricultural Opportunities Fund (AOF) and its fundamental importance to the operation of our organizations. We were very clear that without maintenance of the AOF funding, delivery of good applied research and extension through ARAs and Forage Associations would be impossible.



Visit with the Minister of Agriculture and Forestry: L-R: Tom McMillan (GRO), Herman Wyering (GWFA), Minister Oneil Carlier, Agriculture and Forestry; Ian Murray (FFGA).

Ian invited the Minister to speak at our Western Canada Conference on Soil Health in December. We hope he plans to attend. Ian has also invited the Minister of Environment and Parks.

Registration for the 2015 Western Canadian Conference on Soil Health is now open! To register visit <http://albertasoilhealth.ca/>



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

50-70% cost share of certain projects including riparian area fencing, year round watering systems, shelterbelt establishment, livestock facility, permanent wintering site relocation, agricultural plastic waste management, improved pesticide management and more!

Windbreaks, chem handlers, fuel tanks, low drift nozzles and auto boom height control are no longer eligible for funding.

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

Business Opportunity Program

Between 50-75% cost share and has a maximum funding amount varying on each eligible activity. This program is to help new or established producers and producer groups enhance their competitiveness and growth prospects by connecting them with expert business advice.

For more information on any of the growing forward 2 programs you are able to call CARA at 664-3777.

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

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.

Food Safety Systems Producer

For cattle squeeze with neck extender, a scale, milk guards or computer software for tracking animal health.

To get the most up to date information on program availability please visit www.growingforward.alberta.ca and click subscribe on your favorite programs.

Alberta Barley calls on farmers to get involved

By Sydney Duhaime, Alberta Barley

Alberta Barley is asking the province's barley farmers to get involved, and submit their nominations for the commission's upcoming director elections.

"I first joined Alberta Barley as a delegate to learn about my industry," said Alberta Barley chairman and director-at-large Mike Ammeter. "Over the years, I have learned how important it is for farmers to have input in the decisions that affect their livelihood. That's why we are asking Alberta's barley farmers to consider getting involved in the commission."

Alberta Barley's directors and delegates are chosen from each of the province's six growing regions, which amounts to nine directors and 32 delegates. Together these elected representatives through various committees direct the commission and determine how best to promote the long-term profitability and sustainable growth of Alberta's barley sector.

Every year during regional meetings, Alberta Barley holds elections for the vacant director and delegate positions within each respective region. This year there are two regional director positions (regions five and six),

one director-at-large position (eligible from region one, two, five or six) and 14 delegate positions available. The current directors in regions five and six are eligible to serve a second term if re-elected.

As Ammeter indicated, these available positions are an opportunity for passionate and engaged farmers who are eager to take part in shaping the future of barley and Canadian agriculture.

"Becoming involved as a director or delegate is an opportunity to voice your opinion, influence the direction of the commission, and contribute to the future of your industry," said Ammeter.

If you are interested in joining Alberta Barley as a director, the deadline for nominations is 4:30 p.m. on Friday October 30, 2015. Nomination forms are available on www.albertabarley.com or by calling 1-800-265-9111.

Delegate nominations are received from the floor during the regional meetings. To find out where your meeting is taking place, visit albertabarley.com/events.

Canola Crush Margin Important!

Canola market reports will often refer to crush margins changing, and therefore the price of canola was affected. What is the crush margin and why is important to canola prices? The crush margin is a comparison of the buying price of canola to the selling price of the products of the canola crush, canola oil and canola meal.

The actual crush margins are known only to the individual commercial businesses involved in the processing. They can reflect premiums or discounts for quality factors and be based on contracts entered into many months ago. From their crush margin, the crusher still has all of the costs of operation to cover.

To calculate a “board” canola crush margin, the ICE Canada canola futures price is used and, since there is not a canola oil or canola meal futures market trading in Canada, the US futures markets for soybean oil and soybean meal are used as a substitute, with an adjustment for average component differences. US soybean oil trades in cents/pound and US soybean meal trades in \$/2000 lb. ton, so adjustments are made to convert the products to \$/metric tonne. Although it no longer accurately reflects current canola seed content, canola is assumed to contain 40% oil and 60% meal. Because the US futures prices are used in the calculation, a currency adjustment is also made. Following is the board canola crush formula.

$$\begin{aligned} & \text{(BO X 22.046 X US\$/Cdn\$ X 0.40)} \\ \text{Canola Board Crush Margin (Can \$/tonne)} = & + (\text{SM X 1.1023 X US/Cdn \$ rate X 0.60 X 0.75}) \\ & - \text{ICE Futures Canada Canola seed futures} \end{aligned}$$

Keeping in mind that actual crusher margins do not necessarily match the calculated board crush margin, over the last 18 months, the canola board crush margin has dropped from \$200+/tonne in February 2014 to the current level of about \$50/tonne, even though the Canadian dollar has weakened during that time. The implication, especially with the limited size of the 2015 Canadian canola crop, is that Canadian canola crushers will not be operating at full capacity this crop year. However, canola crush margins could improve! The Canadian dollar could remain low, US meal prices could rebound after harvest, and vegetable oil values in general may improve. May through August rain in Malaysia and Indonesia, major producers of palm oil, has been just half of average. That could reduce palm oil production in a few months and support all vegetable oil prices.

Canola meal and oil have well developed markets, and that will keep Canadian crushers keen to attract canola deliveries in competition with export demand. You may expect stronger canola basis levels again this season after harvest selling pressure subsides.

Neil Blue
Crop Market Analyst
Alberta Agriculture & Forestry

Cocktail Cover Crop Demonstration

Like most producers, CARA's 2015 crop projects were affected by the weather. Our crop trial sites range from total write-offs to surprisingly good. The final numbers have not been collected, however, as we patiently wait out the weather for a chance to complete our harvest. One bright spot in the program was a demonstration of Cocktail Cover Crops which Yamily established east of the CARA Center at Oyen. The objective of growing these crop mixes is to improve condition of the soil for future crop production. As a replacement for a chemical (or tilled) fallow year, these crops provide organic matter, improve diversity of the biological component of the soil as well as enhance nutrient availability. Various combinations of tillage radish, field peas, chickpeas, fababeans, oats, millet, sunflowers and triticale were planted. Initial growth was very slow as we experienced drought conditions at the site until late July when we started to get some rain. Then the crops and mixes took off. These demos have generated a lot of interest. If you haven't stopped by yet – come right away as they will soon be harvested or incorporated.





WESTERN CANADA



Conference on Soil Health

December
8th, 9th & 10th 2015

Radisson[®]

HOTEL EDMONTON SOUTH
4440 GATEWAY BOULEVARD

Speakers:

Dr. Yamily Zavala	<i>What is Soil Health?</i>
Dr. Harold van Es	<i>Soil Health Assessment and Building Soils for Better Crops</i>
Gabe Brown	<i>Healthy Soils, Healthy Farms, Healthy Communities</i>
Dr. Jill Clapperton	<i>Healthy Plants Grow in Healthy Soils</i>
Dr. Allen Williams	<i>Adaptive Grazing Leads to Reduced Inputs & Improved Profitability; Grazing for Soil Health</i>
Dr. Jeff Battigelli	<i>Soil Biodiversity - Exploring the World Beneath Your Feet</i>
Dr. Martin Entz	<i>Ecological Farm Management to Improve Health of Prairie Soils</i>
Neil Dennis	<i>Grazing to Healthier Soils</i>
Dr. Odette Menard	<i>Earthworms, Soil Conservation, Soil Health...Getting to the Roots of It</i>
Jay Fuhrer	<i>Cover Crops and Living Soils</i>
Producer Panel	<i>How I Improved the Health of My Soil</i>
Banquet Speaker: Blake Vince	Nuffield Scholar "Multi-species Cover Cropping Around the World"

For more information or to Register contact:
www.albertasoilhealth.ca or ARECA 780-612-9712



Harry Brook, Crop Specialist Alberta Agriculture
from Sept 9, 2015 Column

Harvest is still to be completed but it's not too early to consider post-harvest weed control. Conditions are good this year for some excellent control against perennial and winter annual weeds.

Winter annuals are weeds that germinate in the fall or late fall, go through the winter in a rosette form, and go to seed quickly once spring comes. Common winter annuals include stinkweed, shepherd's purse, scentless chamomile, narrow-leaved hawk'sbeard, bluebur, stork'sbill, ball mustard, peppergrass, downy brome, dog mustard, wormseed mustard, chickweed, flixweed, knawel, night-flowering catchfly, and common groundsel. They form a few leaves in the fall, and overwinter in that state. These plants develop their own anti-freeze, preventing them from dying. It gives the plants an advantage the following spring as it will send up a seed stalk and go to seed before most other plants get started.

Winter annuals deplete soil moisture and nutrients in the fall and spring. They can be very competitive against fall and spring seeded crops. Often, a spring herbicide application is too late as the plants are already going to flower or seed and are difficult to kill.

Under conventional tillage, these weeds were not a big problem. A late fall tillage operation would control them easily. With the switch to conservation and zero tillage, these weeds are gaining prominence as serious, spring weed problems. Without tillage, other control strategies need to be used and the most effective is a late fall application of herbicide.

The best time for a fall application of herbicide is from late September to mid or late October, depending on the fall and the problem weeds. However, a successful fall weed control program requires the right conditions. Weed control, even after a frost, can still be very effective as long as the weeds have some green, actively growing plant material. Timing of application then is most effective because the plants are small and more susceptible. Also, you get as many weed seeds germinating as possible. Winter annuals are able to continue growing, even after the first frost, until the ground freezes. Most winter annuals can be controlled in the spring, except for narrow-leaved hawk'sbeard, but control after they bolt is a lot more expensive and less effective.

Herbicide options are very economical in the fall. Chemicals like 2,4-D and MCPA provide good control and, at recommended rates, will be safe for most crops the subsequent spring. It is important to know the problem winter annuals you have so you can pick the best herbicide for it. Glyphosate works well in mixtures, on many winter annuals but it may not be

the best one depending on the weed. Other common herbicides used for winter annuals, other than MCPA, 2,4-D and glyphosate, are dicamba, tribenuron-methyl and bromoxynil.

Problem perennial weeds like Canada thistle, quackgrass, dandelion and sow thistle are best controlled by a fall application of herbicide. Once again, the plants need some green leaf material and be actively growing. Dandelion seedlings are easy to control in the fall but, after overwintering, they almost become bulletproof.

With any herbicide with some residual effect, (2,4-D, MCPA, Dicamba) you have to be careful with the following spring's crop. There will be little breakdown of the chemical over winter and there might be some carryover effects on the succeeding crop. When using dicamba, tribenuron-methyl, 2,4-D or MCPA you might want to do a bioassay prior to seeding any non-cereal crop. A bioassay is simple taking some of the soil and trying to grow plants in it prior to actual seeding. If the plants die, don't seed.

Winter annuals are a persistent, increasing problem under reduced tillage. Under the right weather conditions, a late fall spray can repay you handsomely with reduced weed competition next spring. If the weather's right it could be worth your time and effort.

ASBA Symposium

"The Value of Health"

October 15-17, 2015

Holiday Inn & Suites South



Registration Forms Now Available!

Preparing your trees for winter

Olivia Sederberg, CARA Conservation Technician

Preparing plants and gardens for winter does not necessarily have to be complicated or a lot of work. One of the simplest things you can do is select plants that thrive in your region and keep them healthy right up to frost. There are many homeowners who simply select plants, shrubs and trees that are hardy to a zone or two north of their region, water them occasionally and everything does pretty well. Assuming that you may have a greater variety of plants with varying levels of hardiness, you may need to invest just a bit more care into your plants and gardens, let's start with the basic preparations for winter.

Water

When temperatures plummet and the air's moisture content is low, which generally happens in winter, plants lose their moisture even though they are not actively growing. If the ground is frozen and the plant cannot move moisture from the soil through the plant, injury will occur. The longer these adverse conditions prevail, the more extensive the injury.

- Water evergreens thoroughly in fall before the ground freezes. The soil should be moist but not waterlogged. If the ground freezes late, continue watering as long as possible to ensure the plant goes into winter with the highest moisture content possible.
- Water deciduous shrubs and trees thoroughly in fall before the ground freezes to allow the plant to reduce water intake on its' own. Withholding water will not aid the plant in acclimating itself to winter, rather it may reduce the plants' winter hardiness. Watering can be reduced as freezing temperatures approach.
- Plants that continue to grow late into autumn but are susceptible to early freeze damage, such as rhododendrons, evergreen azalea, boxwood and holly, should also be well watered until the ground freezes.

It is important to continue to provide your plants water throughout the fall. Many people incorrectly think that once it gets cold they should quit watering. Plants still need to be watered, but you can do so less frequently as long as you make sure to water deeply to saturate the root zones. After a couple hard freezes, perennials will start to show signs of dormancy by wilting or changing color. Trees and shrubs should be watered until the ground freezes. Continued deep watering is important for root production and growth and necessary to ensure your trees and shrubs are ready for the winter.

Clean up Debris

Leaves, stems and branches left lying about the garden may harbor insects and disease that will be more than happy to re-infect your plants next spring. Dispose of all diseased plant material by bagging or burning. Healthy trimmings may be composted.

If any of your plants were afflicted with leaf spot or other diseases and fungus that infect leaves, the foliage should be removed and bagged or burned. After the plant has died back, carefully snip off all infected foliage to be disposed of.

Mulch

Just about the time the soil is freezing, it will be time to pile on the mulch. Mulch does not keep your plant warm through winter; it helps the soil to maintain a more constant temperature and also helps it to retain moisture. Soil that freezes, thaws, and then freezes again will eventually damage roots and may heave your plants up out of the soil.

If you applied summer mulch for weed control and moisture retention, remove it from around the base of shrubs and trees to form a "donut" by mid-August. This will allow the plant to begin its' acclimation to winter by exposing it to the slowly reducing temperatures. Plants and perennials that require additional protection to survive your winter will need a deep layer of mulch added by mid-November or later, when the ground is beginning to freeze.

Prune prudently

A newly planted tree needs only minimal pruning. Prune out only dead, diseased or injured branches. Research shows that transplanted trees establish quicker when as much foliage as possible remains. If you do prune, don't use pruning compounds on pruning cuts.



Lack of moisture curtailed pasture and hay production in many areas of Alberta this year. As a result, feed and hay prices have risen dramatically from a year ago.

Producers are faced with either buying expensive feed or moving their livestock to feed if they want to keep ownership and equity in their animals. Choosing an option depends on the economics of each alternative. The first step is to calculate the cost of putting feed into the feed bunk. This is the sum of (1) the cost to purchase the feed, (2) shipping costs, (3) yardage charge on the farm, (4) the opportunity cost of labour for feeding the animals, and (5) shrink and waste.

For example, if each cow needs about 35 pounds of hay per day to maintain her, it will take about 7,500 pounds or approximately 3.75 tons of hay over 215 days. Feeding days are suggested to be longer this coming winter due to a lack of fall grazing opportunities and to give pastures time to recover from lack of moisture. If good quality hay costs about \$200 per ton, the total cost of the hay will be \$750 per animal. Shipping charges to transport the hay to the farm need to be added. According to Alberta Agriculture and Forestry's custom rate survey, freight charges are approximately \$6 per loaded mile. If hay is picked up 100 miles away, the cost will be \$600 per load. Assuming 18 tons per load, the freight cost is \$33 per ton or \$59 per animal for the 6 months.

Yardage charges on the farm include the cost of operating equipment, corral cleaning, utilities, and wear and tear on facilities. Using approximately \$0.70 per head per day for "at home" yardage, the total cost of hay delivered to the farm is \$959 per animal for 215 days. This example assumes that there is less than 15 to 20 percent of wasted hay per day and that the farmer has no opportunity cost for labour. That is, if the owner can use the labour to generate alternative income, then the opportunity cost of not feeding cattle must be added to the cost of purchasing and hauling feed.

The second step is to calculate the cost of moving the animals to a custom operator and pay for the feed and care there. This is the sum of (1) shipping the animals to and from the lot; (2) the cost of feed at the facility; and (3) the yardage charge by the feeder to care and feed the animals.

If the price of hay is the same at the custom feeder, the cost of feed would be \$750 per animal. However, the cost of freight for moving the cattle to and from the feed yard has to be factored in. The average custom rate for hauling cattle is about \$5.50 per loaded mile with 50 cows per load. A 100 mile round trip cost will be \$22 per head, making the total cost of hay and hauling \$772 per head for 215 days. If the feeder charges \$0.85 per head per day in yardage, the total cost will be \$954 per head for 215 days, or \$5 per head lower than the cost of buying feed.

These are examples and you must figure your own costs including the purchase price of feed and the cost of shipping hay and cattle. Comparing the two options, if the cost of feed is the same for the producer and the custom feeder, the primary factors in making your decision are (1) the distance and the cost to ship the hay or cattle, (2) the yardage charge, and (3) the amount of feed waste. If you are considering custom feeding, both parties should agree on a body condition score going into and coming out of the feed yard as well as a fairly accurate estimate of pregnancy.

Saving the most equity in the cows should be the primary goal. Evaluate your decision based on your risk-bearing ability, market outlook and distance/availability of feed or custom feeding operations. After considering all the factors, choose the best single or combination of alternatives that will give you the best change at preserving equity.

Dean Dyck, P. Ag.
Farm Business Management Specialist

Grain Bin Safety - Safety Precautions

University of Illinois

Whenever possible, don't enter a grain bin. If you must enter the bin, as a farm owner/operator you should:

- Break up crusted grain from the outside of the bin with a long pole. When using a pole, check to see that it doesn't come into contact with electric lines.
- Wear a harness attached to a properly secured rope.
- Stay near the outer wall of the bin and keep walking if the grain should start to flow. Get to the bin ladder or safety rope as quickly as possible.
- Have another person, preferably two people, outside the bin who can help if you become entrapped. These people should be trained in rescue procedures and should know and follow safety procedures for entering the confined space.
- Grain fines and dust may cause difficulty in breathing. Anyone working in a grain bin, especially for the purpose of cleaning the bin, should wear an appropriate dust filter or filter respirator.
- Stay out of grain bins, wagons and grain trucks when unloading equipment is running.
- If it is necessary to enter the bin, remember to shut off the power to augers and fans. It is a good idea to lock out any unloading equipment before you enter a bin to prevent someone from unintentionally starting the equipment while you are in the bin.
- Children should not be allowed to play in or around grain bins, wagons or truck beds.
- Where possible, ladders should be installed inside grain bins for an emergency exit. Ladders are easier to locate inside a dusty bin if there are brightly painted stripes just above or behind the ladder.

6th Annual CATTLEMEN CLINIC



Tuesday, November 17th
Senior's Centre, Oyen
10:00 a.m. – 4:00 p.m.
Lunch included

Agenda Highlights:

Making Winter Rations from Miscellaneous Feed Sources
Barry Yaremco, Beef/Forage Specialist, Alberta
Agriculture

Cattle Handling Systems – A Vet's Perspective
Dr. Cec Ruschkowski, Oyen Vet Services

"The top ten game changers for the world's farmers &
Canada's beef industry"
Brenda Schoepp (Farmer, Author,
Inspirational Speaker, BEEFLINK Newsletter)

Genomics – What it Means to the Cow/Calf Operation
Dr. Les Byers, Zoetis Animal Health



Plus Mini-Tradeshow!

Partners:



Pre-registration is appreciated:
Call CARA at 403-664-3777
or email us at cara-1@telus.net

\$25.00 CARA Members
\$30.00 Non-members

Contact CARA if you would like to set up a booth at the mini-tradeshow!

Applying your nitrogen in the fall

By Ross McKenzie
Grainnews Columnist

Applying nitrogen fertilizer at the time of planting in spring is usually the best option for most Prairie farmers. But that means applying a lot of product, which can really slow down the seeding process. Getting the seed in the ground at the optimum time is important, and delays can reduce crop yield potential. Some farmers are weighing the advantages and disadvantages of applying all nitrogen fertilizer at seeding with other options.

One option to consider is banding N fertilizer in late fall. But keep in mind that fall N application can range from very effective to very disappointing. Effectiveness depends on environmental conditions after application including soil, moisture and temperature.

The products

The two best fertilizers for fall application are urea 46-0-0 $\text{CO}(\text{NH}_2)_2$ and anhydrous ammonia 82-0-0 NH_3 . When urea or anhydrous ammonia are banded into moist soil, both convert to ammonium NH_4^+ . Ammonium is positively charged and is relatively immobile in soil and will not leach under wet conditions. In warm, moist soil, specific bacteria will convert ammonium to nitrate $[\text{NO}_3^-]$ over a several week period. This process is called nitrification.

Nitrate is negatively charged, is mobile in soil and will leach with excess precipitation, particularly in sandy soils and can be lost to denitrification (gaseous loss of N in very, wet soil).

Banding ammonia or urea creates an environment within the band that slows the activity of soil bacteria that convert ammonium to nitrate, delaying nitrification. When urea or anhydrous ammonia are banded in late fall after the soils have cooled in temperatures less than 5 C to 7 C and micro-organism activity has slowed, most of the fertilizer N will remain in the ammonium form over winter until the soil warms up in the spring. The ammonium form is relatively stable and won't leach or denitrify.

If urea is broadcast and incorporated or banded in early fall when soils are still warm and moist, much of the ammonium can potentially be converted to nitrate before freeze-up. Excess precipitation in late fall or spring could then cause the nitrate to leach below the crop root zone, particularly in sandy soils or be lost due to denitrification. The denitrification process occurs when N fertilizer has converted to nitrate, soil conditions become very wet or saturated after snow melt in spring or due to heavy precipitation events. Soil N is lost when soil microorganisms in anaerobic conditions (very wet soil without oxygen) convert nitrate-N to nitrous oxide — a gaseous form of N that is lost to the atmosphere.

All soil types and regions of the Prairies are susceptible to losses of fall-applied N fertilizer. However, the risk of N loss is highest in regions with moister climates when soils can be very wet, such as the black and gray soil zones, and risk is lowest in regions that tend to be drier, such as the brown and dark brown soil zones.

Alberta research has shown that nitrate losses through denitrification in drier regions are usually low, and fall-banded N is usually equally effective to spring-banded N. But if spring wet conditions occur, N losses can still be high even in low risk regions, after heavy precipitation events. Each fall, a farmer must look at specific local environment conditions to weigh the risks versus benefits of fall fertilizer application.

Some issues to consider:

- Late fall-banded N can be as effective as spring banded N, if there is no extended period of very wet or saturated soil conditions in the spring.
- Early fall application of N fertilizer has a greater chance of converting to nitrate-N before freeze-up and would be more susceptible to N loss in the spring.
- Fall-banded N can be more effective than spring-banded N when springtime seedbed moisture is limited, and spring banding would dry out the seed-bed.
- Fall-banded N can be less effective than spring-banded N when spring moisture is wet for extended periods.
- Fall fertilization shifts workload from the hectic spring to the fall. This can increase spring seeding operation efficiency.
- Nitrogen fertilizer prices tend to be lower in the fall than in the spring, providing an economic advantage with fall versus spring fertilization.
- It is wise to get opinions from soil and crop experts in your region including your fertilizer dealer, industry agronomist and government agronomist to consider all the pros and cons of fall fertilizing before you make your final decision.

Water Well Management for Well Owners

WORKING
WELL

Clean water.
Well protected.

Join us at a Working Well Workshop

Hosted by: CARA

Date: December 2, 2015

Location: Sedalia Community Hall

Start Time: 10:30 (lunch is included)

Please call or email to pre-register:

CARA at 403-664-3777 or email us at cara-1@telus.net
\$20 CARA members
\$ 25 Non-members



Fall Grazing – Proceed with Caution?

The blessing of the recent rains is renewed growth (and in many fields the first growth for the year!) in our hayfields and pastures. This growth has provided significant relief for many cattlemen as they now have the opportunity to graze well into the fall rather than having to begin feeding right away. Unfortunately, the lush alfalfa growth is a huge bloat risk. This forage digests very quickly, enhanced by showers and heavy morning dew, and can result in rapid gas accumulation in the rumen.

The question is, how do we manage grazing to safely take advantage of the forage growth?

- Delay entry to full flower or later maturity of the alfalfa if possible (see also point below related to winter survival)
- Make sure cows are full before turning into fields containing alfalfa – do not give hungry cows access to lush alfalfa
- Move cattle into fields containing alfalfa mid to late afternoon rather than early morning
- Put some old hay or straw bales out in the field
- Provide access to products which will help reduce bloat although distribution of liquid formulations can be difficult in pastures with multiple water sources. Some producers have had success with rumensin boluses.
- Once accustomed to the alfalfa, it is recommended the herd not be moved in and out or the introduction process, and adaptation to the alfalfa, will have to be done again
- Check the cows often and get those who show signs of bloat moving around, giving them an opportunity to remove the gases

Another important point to remember is not to graze the hayfield too hard in the fall. Ideally, alfalfa should be left until after a killing frost to ensure the plants go into winter in the best possible condition. Cutting or grazing hard while the plants are still trying to grow puts them at risk for winter survival and will reduce the growth potential for next year's crop. Leaving at least 5 inches of growth will help protect the crowns of the plant. The growth will also trap snow which helps insulate the plants from the cold and provide early spring moisture.

Other Risks to Consider

- **Nitrates in annual crops.**

Many annual cereal crops have now become feed. Although the potential for nitrate accumulation is low in crops which were not highly fertilized, it still is a risk that should be addressed. Feed quality analysis is the only way to know for sure if the feed is safe or should be mixed off. Contact CARA for information on sampling and analysis.

- **Multiple Forage Materials**

A variety of crops (and weeds) have been baled for winter feed. Understanding the quality of these various sources is important so nutritional needs of the cows, calves, etc. are met this winter. Contact CARA for information on sampling and analysis.

- **Poisonous plants**

The risk of cattle grazing poisonous plants increases dramatically as desirable forage decreases. Several plants can be toxic to cattle so if your pastures have been impacted by drought, it pays to be diligent and watch for them. Refer to CARA's August Newsletter for information on a number of poisonous plants.

- **Water Quality**

Several factors contribute to water quality for livestock. Surface water sources can be particularly at risk in the fall. Access to shallow or low level containments, decomposing plant growth, algae and salinity are a few examples of conditions which can adversely affect consumption. Poor water quality translates into poor animal performance.



Photo Courtesy of Agriculture.com



Photo Courtesy of University of Saskatchewan
Hay sample Probe



Photo Courtesy of Sask. Ag.
Blue-green Algae

CARA Calendar of Events

Date	Event Details
October 26 & 27	Clean Farms: safely dispose of unwanted ag pesticide & livestock medication Oyen (26): Richardson Hanna (27): Fox Lake Agro
November 17 Oyen	6th annual Cattlemen Clinic Register by calling CARA at (403)-664-3777
December 1 Delia Community Center	ACPC Regional meeting Contact Marlene Caskey at gmcaskey@netago.ca for more information
December 2 Sedalia	Water Well Workshop Register by calling CARA at (403)-664-3777
December 8-10 Edmonton, Radisson Hotel	Western Canada Conference on Soil Health Register by visiting www.albertasoilhealth.ca
TBA	Ladies Calving Clinic
TBA	Crops Strategy Meeting
TBA	Managing Crops with Irrigation



Return your unwanted or obsolete pesticides and livestock medications

Farmers: safely dispose of your unwanted agricultural pesticides and livestock/equine medications from **October 26-30, 2015** at one of the following locations, for no charge.

Monday, October 26 Oyen Richardson Pioneer 403-664-2620	Tuesday, October 27 Hanna Fox Lake Agro 403-854-2820
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* Obsolete pesticides and livestock/equine medications will be accepted from 9 a.m. until 4 p.m. at each site on the date indicated.

Program supported by:  



For more information, please call CleanFARMS at 877-622-4460 or visit www.cleanfarms.ca



Alberta Barley




STOP D.E.D.

Dutch Elm Disease can be carried on firewood.
Protect our Elms.
Please do **not** transport Elm firewood into or within Alberta.

Alberta Society to Prevent Dutch Elm Disease

More of a Digital Person?

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



CHINOOK APPLIED RESEARCH ASSOCIATION

Box 690 Oyen, AB T0J 2J0

Ph: 403-664-3777 Fax: 403-554-3007

Email: cara-1@telus.net Web: chinookappliedresearch.ca

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