



Member of ARECA 

Grain, Grass & Growth *April 2018*

www.chinookappliedresearch.ca

CARA and Local Ag Societies Bring Hi Voltage Speaker to the Area

CARA partnered with the Big Country, Buffalo, Empress and Neutral Hills Ag Societies to bring double amputee Curtis Weber to share his story and safety message to students at 10 local school presentations as well as one adult audience.

A serious electrical accident involving a high voltage power line on a farm in Saskatchewan nearly killed Curtis when he was 17 years old helping put a hopper under a steel grain bin. Curtis was not expected to survive the incident as he received 3rd and 4th degree burns to 60% of his body and lost his right hand and forearm as well as the lower part of his left leg. But survive he did after months of surgery and rehab. Although he initially shied away from sharing his story, he was eventually convinced to speak about his accident, challenging recovery and most importantly what he has learned from it. He now speaks to companies, conferences and groups of all ages across North America encouraging audiences to recognize risks, make a plan to mitigate the potential danger and plan for the 'what if's'. He knows his accident could have been prevented and he hopes to help others from putting themselves and others into dangerous situations.

The CARA/Ag Society partnerships enabled Curtis to speak to Youngstown K-6 and 7-12; Prairieview Colony and the Oyen Public and Assumption Schools (K-6 and 7-9) on January 29 and 30th. He was the guest presenter at CARA's Cooperator Appreciation evening January 29 and came back into our area March 7 when he met with both K-6 and 7-9 groups at Warren Peers, Acadia Valley and the Jenner School. Grades 10-12 students at South Central High School in Oyen met him the morning of March 7. The last stop of his tour to this area was the afternoon of March 7 when he presented at the Consort School, including students from Altario as well.



CARA's Soil Health Lab Initiative is slowly moving closer and closer to opening!

CARA's Soil Health Lab Initiative is slowly moving closer and closer to opening! Progress to date has been made possible by the contributions of many people and organizations – including many donations and volunteer hours. We are pleased to now add Dr. Jackeline Salazar to the volunteer list. Jackeline recently retired from her role as researcher and professor of Biology and Botany at the University of Santo Domingo, and is now here assisting Yamily with final preparations for our Soil Health Lab.



Jackeline is a biologist from the Dominican Republic who is passionate about plant biology, conservation and the environment with more than 30 years of study, research and practical field work experience. Her work had focused on plant taxonomy, plant conservation, riparian forests, wetlands and invasive species. Jackeline also has experience in mined land reclamation and commercial greenhouse production. She has worked in Brazil, Costa Rica, USA and the Dominican Republic during her career.

Jackeline's formal education includes a Master Degree at the Universidad Federal de Vicosa, in Brazil, where she studied forestry ecology focusing on land reclamation and riparian forest conservation. She earned her Ph.D at Cornell University, USA in Plant Biology and Ecology.

8 TIPS TO IMPROVE YOUR FARM SECURITY

Producers have a lot at stake when it comes to personal property, and their property is often spread across multiple locations, in different buildings or in different fields. You cannot be everywhere at once, but there are still things you can do to be proactive.

1) **Install a camera**

Digital camera technology is much more affordable and reliable than it used to be. A picture, or even a video, of suspicious activity is valuable evidence. Place your camera somewhere where it will not be noticed by a perpetrator, and set it up so that it captures the angle you want. Consider buying a camera that is motion-detected, which will save on recording time, and the amount of video you need to review if there's ever an incident.

2) **Use ample lighting**

One of the simplest things you can do is install and maintain good lighting. Security lights and motion-detected lighting can make a big difference, but make sure your lights are working and functioning properly.

3) **Post warning signs**

If you want to restrict access to your property, make sure a sign is posted, and in a highly visible way. This includes signs about hunting, trespassing, biosecurity, dangerous dogs, etc. A sign can be a good defense, often deterring potential thefts from stopping in your yard.

4) **Carry enough insurance**

The right amount of insurance will differ with each farm, but you need to consider the many ways you could be liable and at risk. This not only includes your possessions and personal property, but also the transport and use of that property on roadways, on other properties, etc.

5) **Protect your computer**

In addition to tangible personal property, you also have your farm records and financial data to safeguard. Remember to keep your passwords in a safe place, and when you lose an employee — even a good one — consider changing the passwords that employee may know. You also want to safeguard your computers with the latest virus protection and avoid any obvious security risks.

6) **Lock your locks and keep the keys**

A lock is only good if it works, and when it's in use. Keys left in the farm truck, or even the tractor, are asking for trouble. You may need to periodically change your locks and keys, if you've terminated an employee.

7) **Don't advertise your vacation**

Since most robberies take place when people are out of the house, don't make thieves' jobs any easier by telling everyone and their mothers that you'll be away on vacation! It's also a good idea to make sure your house doesn't look uninhabited. Set lights or TV's on a timer, have the post office hold your mail, and ask a friend to come by and pick up the paper. It may sound silly but it could help protect your home from being burglarized.

8) **REPORT suspicious activity**

If you see something that doesn't look right, let someone know. It could be nothing at all, or it could be a valuable lead that helps prevent a future crime.

Retiring Board Member George Doupe receives a picture from CARA Technician Dan Rude in appreciation for over 25 years of service on the CARA board.



The Importance of Soil Sampling for Nutrient Requirements

Every area is different when it comes to soil types and nutrient contents in soil. Soil sampling and testing can show you the plant available nutrients and other soil chemical factors important for crop production.

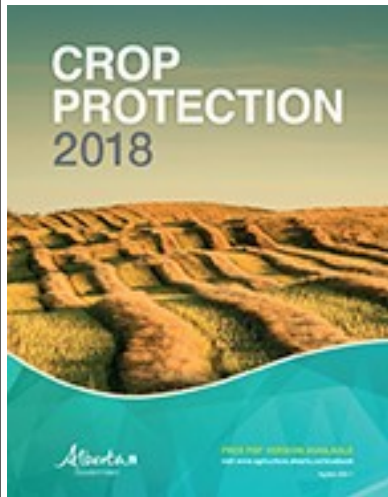
Nutrient levels in soil also vary from year to year, so it is important to perform soil sampling and testing prior to planting any new field. It is important for farmers to follow certain recommended steps for soil sampling and testing to develop a fertility management program.

To ensure accurate results, standards must be set for performing soil sampling and testing. Here are some guidelines set out by Alberta Agriculture:

- Begin by evaluating each field to determine representative areas
- Major areas within fields that have distinctly different soil properties, such as texture, should be sampled and fertilized as separate fields because of the potential for different nutrient requirements
- Samples should be taken at 0 to 6, 6 to 12, &/or 12 to 24 inch depths from 15 to 20 locations within each field
- Each depth should be bulked into composite samples, air dried and sent to a reputable soil testing lab

Key Points For Planning For Profit

- Have the first fields seeded in spring be the crops to precede early maturing crops
- Direct seed into standing stubble
- Be aware of post-seeding snow trapped potential
- Book seed and fertilizer early and have it on-farm
- Have equipment serviced and ready to seed
- Seed during the optimal window for your area
- Don't wait for rain
- Wait to assess crop viability until all spring seeding is complete
- Look for new root growth and healthy crown tissue
- Experienced growers manage the crop intensively to maximize profit
- Capitalize on opportunities to seed during harvest delays



CROP PROTECTION 2018

Crop Protection 2018 (Blue Book) is now available!
Order online through Alberta Agriculture or stop in at the CARA office to pick one up.

<p>NEW FUNDING PROGRAM</p> <p>FARM ENERGY & AGRI-PROCESSING PROGRAM</p> <p><u>Eligible Projects</u></p> <ul style="list-style-type: none"> • Wall & ceiling insulation • LED lighting • Natural gas furnaces • Ag ventilation fans • Energy free or low energy outdoor livestock water fountains • Timers • Photosensors • Irrigation systems with VFD • and more! <p>For more information visit the Alberta Agriculture & Forestry website</p> <p>Looking for assistance? Contact the CARA office or email cara-3@telus.net for assistance</p>		<p>NEW FUNDING PROGRAM</p>  <p>ENVIRONMENTAL STEWARDSHIP & CLIMATE CHANGE - PRODUCER</p> <p><u>Eligible Projects</u></p> <ul style="list-style-type: none"> • riparian area fencing • improved pesticide management • improved nutrient management • shelterbelts • plastic roller • improved manure storage • and more! <p>For more information visit: WWW.CAP.ALBERTA.CA</p> <p>Looking for assistance? Contact the CARA office for assistance or email cara-3@telus.net</p>	
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How To Clean Your Nozzles

www.sprayers101.com

When operators winterize their sprayers, they should remove all the tips and store them separately. Many store them in large pails with lids. Calibrating the sprayer just prior to winterizing will indicate if the nozzles should be stored, or replaced. Let's assume the tips are still within 5% of the average output, and 5% of the manufacturer's pressure tables.

Just like any other part of the sprayer that comes in contact with spray mix, nozzles should be cleaned regularly. And, just like any other part of the plumbing, the best way to do that is to dilute any residues via a series of rinses. One of the intermediate rinses should include a detergent, and soaking during this step is an excellent practice.

The orifice of any nozzle is very delicate, either machined or moulded to exacting standards. Even small changes to the orifice shape results in distorted spray (e.g. spray comes out at undesirable angles), and a change to the rate (typically more volume per minute) and the spray quality (typically larger median droplet size). If foreign objects or residues remain in the tips, the subsequent spray job may be less accurate and even damage the tips.

In the case of air induction nozzles, which are essentially the standard on most boom sprayers and even some airblast sprayers, debris and weed seeds can plug the air-intake ports. When that happens, the nozzle will not function as intended. So, while the occasional soaking of nozzles does a great deal of good, they also have to be scrubbed. There are nozzle cleaning tools out there, but they're basically toothbrushes. Soft bristles are the way to go for removing stubborn residues and cleaning any tip orifices. Don't use picks or reamers.



Here's a step by step:

1. Wearing gloves, remove all nozzles, rubber gaskets and tips from the sprayer.
2. Put them in a large plastic pail and cover them in warm water. Leave them to soak.
3. Drain the pail, but be aware that the rinsate will have pesticide residue.
4. Fill a second pail with a solution of the same commercial detergent used to clean the sprayer.
5. With a toothbrush, scrub the caps, gaskets and nozzles to remove any residue. Some nozzles can be pulled apart to expose the mixing chamber and facilitate cleaning.
6. Once scrubbed, leave all the parts to soak in the detergent solution.
7. Drain the solution, which will contain trace amounts of pesticide, rinse the parts with water and reassemble the nozzles.

This may seem extreme, but of all the technology on a sprayer, the nozzle has the biggest impact on the effectiveness and efficiency of the spray job. Take the opportunity over the winter months to clean and inspect the tips for damage so the sprayer is ready for calibration in the spring.

About the Author: **SPRAY_GUY**

NEW FUNDING PROGRAM



CANADIAN
AGRICULTURAL
PARTNERSHIP
Innovate. Grow. Prosper.

FARM WATER SUPPLY

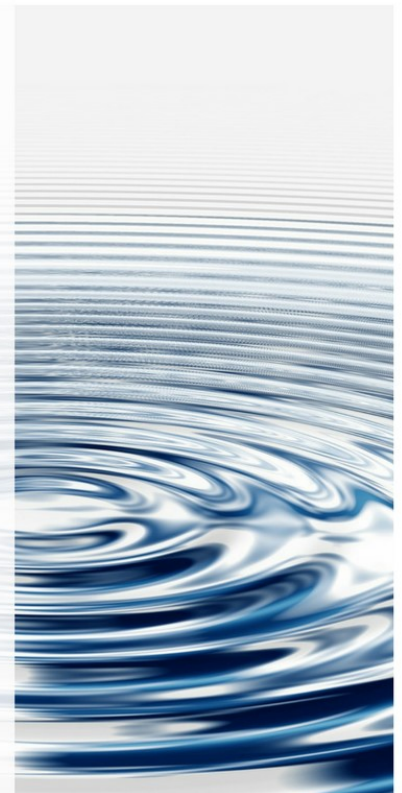
Eligible Projects

- New water well construction
- New dugout construction
- Spring development
- Tie-in into multi-user water supply
- Water treatment
- Well pit conversions
- Well decommissioning
- and more!

For more information visit:

www.Cap.Alberta.ca

Looking for assistance?
Contact the CARA office or
email cara-3@telus.net
for assistance



What's In Your Calving Kit?

Regardless of whether producers are ready for the calving season, calves are being born. Being prepared is one of the best ways to ensure that the season goes smoothly. Here is a few things every producer's calving tool kit should contain:

- 1. Veterinarian's phone number** – Call if you are not sure about the calving.
- 2. Long plastic gloves** – These should be worn when examining the cow to protect you and the cow. If these are not available, be sure to wash your hands and arms thoroughly, keeping all materials as clean as possible.
- 3. Pail of warm water.**
- 4. Disinfectant** – Udder wash diluted in warm water or a suitable iodine preparation can be used to wash the plastic gloves and cow's vulva.
- 5. Clean towels and paper towels.**
- 6. Lubricant** – Local veterinarians recommend lubricant jelly for internal exams. Use a veterinary lubricant, J-lube, light mineral oil.
- 7. Calving chains plus two handles.** Put one loop above the dewclaw and the other below the dewclaw, using one chain for each leg.
- 8. Tags, notebook and pencil** to keep notes on tag numbers, difficult deliveries, etc.
- 9. Special Equipment** – a calving jack and calf snare – be familiar with and know how to use these pieces of equipment before calving starts.
- 10. String or dental floss** to tie off a bleeding navel cord.
- 11. To stimulate breathing** have a) cold water to put on the calf's head b) clean straw to put in nostril. Do not put your fingers in the calf's mouth – use a clean paper towel or apply pressure with your hand from the eyes on down to the nostrils to clear the nasal cavity of mucus.
- 12. Colostrum** – Have a supply of fresh, frozen or commercial colostrum available for calves: from thin cows, cows with large teats, twins, premature calves, from difficult or caesarean deliveries and/or uterine prolapses.
- 13. Nipple bottle & esophageal feeder** to ensure that the calf gets colostrum. Try the nipple bottle first but make sure that at least 4 litres of colostrum is given to the calf within 6 hours after birth.

SCOUTING FOR CUTWORM



Cutworm is the common name given to the larva of several noctuid moth species. Key species include: army cutworm, pale western cutworm, redbacked cutworm and dingy cutworm. Only larvae cause damage; adults, eggs and pupa have no impact on crop productivity.

Prevalence:

- Regions and crops impacted vary by species of cutworm. Timing of life cycle and feeding behaviour is also species specific.

When and how to scout:

- Check fields in spring and early summer for cutworm damage, which varies by crop
- Scout for notched, wilted, dead, or cut-off plants (crop seedlings or weeds). Look around damaged plants for cutworms. Use a trowel or shovel to carefully search through the top 5 cm of soil for cutworm larvae.

How to identify:

- Smooth-skinned, hairless caterpillars
- Colour ranges from pale to black, may have lines or spots
- 3 pairs of true legs, 5 pairs of false legs
- 3-5 cm long
- Often curl up when disturbed

Spray thresholds:

- Varies by cutworm species, crop type and stage of crop development



What can you do to prevent DED?

There are several things that you can do to help prevent the spread of DED and protect your elm trees. There are nearly 5000 elm trees within the boundaries of our municipality, so it is important that we protect these trees and prevent the spread of this disease.

Keep your trees healthy. Elm trees should be well watered from April to mid-August. Trees should not be watered after mid-August, but they should get a good soaking a few days before freeze-up.

Dead branches and trees should be removed to eliminate possible beetle habitat. There is a mandatory elm pruning ban from April 1 to September 30. Beetles are active during this time and are attracted to the scent of freshly cut wood. Dead branches should only be pruned from October 1 to March 31.

Dispose of all elm wood by burning or chipping. Do not store elm firewood. Do not transport firewood into Alberta. If elm wood is chipped, the chips should be no larger than 1 inch.

If you suspect that a tree is infected with DED or if you notice beetle activity, contact the Agricultural Service Board or the DED Hotline at 1-877-837-ELMS.

Mental health checkups are for farmers, too

Feb 25, 2016

Farming is a unique way of life that offers many rewards. But many pressures also come with the territory, from market prices and debt loads to machinery upkeep and repair to weather and dealing with family. And unlike most jobs, farmers can't go home and leave those worries behind.

Stress and mental health

You don't have to be a rocket scientist – nor a psychiatrist – to get an inkling for the impacts that such relentless responsibilities can have on mental health. Many studies show a direct correlation between chronic stress and a multitude of mood disorders, including depression. It also increases the risk of developing a host of health problems, including diabetes, heart disease, cancer and weakened immune systems.

Trouble is, farmers have a reputation for being tough, and learn from an early age to put on a brave face and work through their problems.

"I fooled a lot of people," says Gerry Frieson, a prominent Manitoba farmer who struggled with depression a decade ago and now talks and writes about his recovery.

"Looking back, I now recognize it's ingrained in us that if we just work harder we will get rid of these problems, whether it's financial stress or depression."

Awareness is half the battle

It doesn't have to be that way. Awareness campaigns by various mental health care stakeholders, for example, have helped to both increase understanding and reduce the stigma of mental health conditions. Treatment methods, too, continue to improve, as has the access to mental health services and programs.

"Many more Canadians deal with mental health problems every year than cancer, diabetes and respiratory problems combined," says Mark Henick, program manager with Mental Health Works, an offshoot of one of Canada's oldest charities, the Canadian Mental Health Association.

According to Henick, who became a mental health advocate after a passerby stopped him from jumping off a Cape Breton bridge at age 15, most mental health conditions are treatable.

"The challenge for many people, especially middle-aged and older men," he adds, "is to realize mental health issues are normal." Henick says that realization can make it easier to seek help.

Help is available

While that help is more accessible for people who live in big cities, where most mental health services are concentrated, the Internet is breaking down the distance barriers to rural regions. Saskatchewan, for example, is the first and so far only Canadian province to offer an online counselling service for depression and anxiety called OnlineTherapyUser.ca.

In Alberta, resources are available include local FCSS offices that can be found in Oyen, Consort, and Hanna; Distress Line 403-266-4375; Mental Health Helpline 1-877-303-2642.

Help keep Alberta Dutch Elm Disease free.

**DON'T PRUNE ELM TREES
FROM APRIL 1 TO SEPT 30**



Government
of Alberta

1-877-837-ELMS
www.stoppeded.org



EMPLOYMENT OPPORTUNITIES



CARA's Summer Field Technician
The Chinook Applied Research Association (CARA) is still accepting applications for:
Summer Field Technician (May through August with the possibility of extension)

Summer Field Technician responsibilities will include:

- Assist with the establishment, maintenance and harvest of various applied research and demonstration projects
- Operate and assist with minor maintenance of facility, field and plot equipment
- Assist with development of tours, field days and other extension events

Qualifications:

- Valid driver's license
- Agricultural background & knowledge of crops and farming systems would be an asset
- Working knowledge of word and excel computer programs is beneficial
- Ability to work independently as well as contribute

to a team

- Self-motivated and organized.
- Committed to quality and getting the job done.

Why work for CARA?

- Learn skills in agricultural research and extension
- Lots of work in the great outdoors
- Opportunities for personal development

Compensation: Wage is dependent on experience.

For more information & to submit a resume:

Dianne Westerlund, Manager
Box 690
Oyen, Alberta T0J 2J0
Email: cara-dw@telus.net
Phone: 403-664-3777

Mattheis Research Ranch Foreman

The University of Alberta is recruiting a Foreman to oversee the extensive and complex daily operations of the Mattheis Rangelands Research Ranch. Located on a 12,000 acre parcel of rangeland about 40 km north of Brooks, Alberta, the research ranch has a custom grazing operation and about 700 acres of farmland under irrigation. The Foreman is responsible for the day to day operation of the custom grazing enterprise, including movement of up to 1600 head of cattle (800 cow/calf pairs) between pastures in a rotational grazing system. Offering support to research staff and students on site, the incumbent will coordinate ranch management activities with active and future research projects.

Duties

- Provides onsite direction for the implementation of research projects related to rangeland productivity, ecology, and management
- Speaks with custom grazing customers and integrates the use of their animals for the purpose of rangeland research
- Monitors oil and gas company activity and compliance with agreements
- Monitors and manages public access to land holdings
- Supervises contract farming operators
- Integrates small scale cropping research plots with farming operation as required
- Manages cropping inputs including irrigation of about 700 acres
- Supervises the movement of 2 large herds of cattle within 12,000 acres of land
- Maintains capability to handle cattle effectively (2 major corral systems)
- Assesses current pasture conditions and makes recommendations to the Off Campus Research Resources Coordinator concerning herds size and duration of grazing
- Supervises safe working environment for all staff and students
- Provides onsite training for all subordinates

- Works in a proactive manner to notify Off Campus Research Resources Coordinator of potential safety issues
- Acts as the decision maker when the Off Campus Research Resources Coordinator is not available for consultation

Qualifications

- Minimum Diploma in Natural Resource Management, preferably Agriculture, with either a Range Management or Animal Science major; undergraduate degree preferred; equivalent combinations of education and experience will be considered
- Minimum 5 years of practical experience
- Excellent communication, problem solving and organizational skills
- Ability to work independently and make day to day decisions, using strategy that will coincide with the overall management plan of the ranch

Competition No.- S108135369

Closing Date - Apr 26, 2018

Position Type - Full Time- Operating Funded

Salary Range - \$67,057 to \$92,809 per year

To view the full job posting please visit the University of Alberta Careers webpage.



FIELDS WANTED!

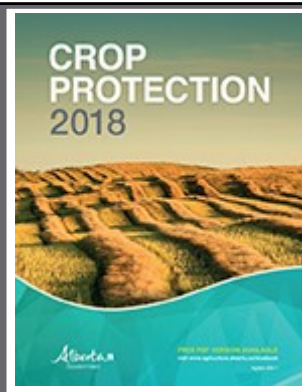
FARMERS & AGRONOMIST,
WE NEED YOUR HELP!

We are starting to plan for our 2018 insect survey season. We are working to have our fields pre-determined for all our insect surveys.

If you are planning on growing any of these crops, please email CARA at cara-3@telus.net with the LLD of the planned fields.

We are looking for these crops in 2018:

- **PEA** (Pea Leaf Weevil)
- **CANOLA** (Bertha Army Worm, Swede Midge & Diamond Back Moth)
- **WHEAT** (Wheat Midge and Wheat Stem Sawfly)



Crop Protection 2018 (the "Blue Book") is the most comprehensive, up-to-date guide for the selection and application of chemicals to protect your crop. Easy-to-use write-ups for all product registrations make finding information fast and efficient. The 2018 *Blue Book* features over 593 pages of the most current information, including full indexes, easy-to-use charts and tables. This book is a valued crop protection tool for Western Canadian farmers.

You can purchase the book through the Alberta Agriculture & Forestry webpage or stop in at the C.A.R.A. office to purchase a copy.

2018 Forecast Map

Alberta Insect Pest Monitoring Network



The Alberta Insect Pest Monitoring Network has published their 2017 forecasting maps for bertha armyworms, cabbage seedpod weevils, grasshoppers, pea leaf weevils, wheat midge and wheat stem sawfly. To view the forecasted maps visit the Alberta Agriculture and Forestry's Insect Pest monitoring network website. [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/prm13779](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/prm13779)

CARA's Soil Health Lab Update
Watch for updates as we move forward in the development of our NEW Soil Health Lab.

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



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