Lakeland Agricultural Research Association

The Verdant Element

DIVERSITY = PROFITABILITY

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Volume 10, Issue 1

2019

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LARAWRRP

Is the age of monoculture coming to an end? Probably not, but more and more producers are seeing the benefits of inter-cropping and cover cropping. Using different species to naturally capture nitrogen instead of spending money on fertilizer, having species hunt for nutrients required in deeper soil zones, and truly working with mother nature to provide all your crops' nutrient requirements without adding chemical fertilizers. Utilizing the potential of AMF (arbuscular mycorrhizal fungi ) to create a vast network that can bring macro and micro nutrients to the plant in a mutualistic relationship between the fungus and the plant. By changing our tillage practices to not break up and kill the AMF, as well as all the other microbes that provide a benefit to soil health and plant productivity. In essence, using all the tools that mother nature provides with biodiversity to suppress the pests and disease that harm yields and productivity. The "traditional" methods of farming are slowing changing; and sustainable is not the buzz word any longer, regenerative is.

Large corporations are being more vocal for their farmers to move to regenerative agriculture, which comes at the insistence of the consumer. General Mills, one of the largest food companies in North America has pledged to have their producers utilizing regenerative agricultural practices on one million acres by 2030.

You may say that it is only semantics is the difference between sustainable and regenerative agricultural practices, but in reality it is much more than that. The very definition of sustainable is "pertaining to a system that maintains its own viability by using techniques that allow for continual reuse". In other words you can 'sustainably' farm a system that is not economically or environmentally viable. Regenerative farming however encompasses an improvement in all aspects of the operation including water quality, soil health, reduced carbon footprint/increased carbon capture, increased biodiversity, farmer profitability and economic resilience.

## Diversity = Profitability

So what does this mean to you as a farmer? The innovators and producers willing to try new things will be using practices that the consumer and companies are desiring. The rest of you may end up having to change while kicking and screaming.

Some of the methods that companies like General Mills is working with its' farmers on is for the use of cover crops after harvest, allowing for plants to protect the soil, adding nutrients and improve soil structure. Adding livestock is another regenerative agricultural practice as it adds nutrients to the soil. Increasing the number of crops in rotation also is recommended as it breaks disease cycles, increases variation in rooting depth and increases the nutrient diversity in the soil.



I am not saying that all producers are going to have to change, but small changes now might make a difference in profit down the road. Producers today have the method of farming monoculture in the bin, and this practice may be 'sustainable', but not improving your natural capacity to have economic viability.

Baby steps may be needed, such as first knowing what your cost of production really is and if you can afford to farm using your traditional practices. When you talk to people like Gabe Brown, they will tell you what inspired



Degenerating

Soil is degrading, biodiversity is

decreasing, water is evaporating

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them to change, to start using cover crops and integrate livestock, was the fact that they were to the point of financial ruin and could not afford to farm while relying on traditional methods, and heavy use of chemical fertilizers and pesticides.

So start small. If you have a few minutes watch a video of Allan Savory, he has an amazing TED talk. From there you can start your journey

of regenerative agriculture. Try adding a cover crop to your silage/green feed, or adding cover crops to your cropping rotation. You could also fence off a quarter of grain and add livestock after you harvest to add nutrients and bacteria that help break down organic matter. You could even add a pollinator strip, increasing biodiversity, and creating a natural refuge for beneficial organisms. We all had to learn to walk before we could run, much like adding diversity to your operation, but it still all started with taking that first step.

### SUSTAINABILITY IS A BRIDGE. **REGENERATION IS THE DESTINATION.**

Sustainable

The land is in a

steady, static state



#### Regenerating

Soil is restored, biodiversitu grows, water and carbon are absorbed



https://www.savory.global/land-to-market/eov

## Cover Crops

*What are cover crops and why would you utilize them?* The goal of cover cropping is to have plants growing for as long as

possible, increasing biodiversity throughout the growing season within your rotation, and increase production while improving the soil and not just maintaining it. The goals of cover cropping can be as diverse as the crops that you plant. These can include: producing more forage; soil cover (soil armor); address soil physical issues (such as compaction); address soil chemical issues (access nutrients in different soil profiles); feed the microbes and earthworms; cycle nutrients; control pests; replace chemical or summer fallow; cover for winter cereals; reduce erosion and weed control.

The basis for cover crops and improving soil health is feeding The Soil Food

*Web.* Checking soil health involves nothing more complex than a shovel. Go and step out onto your land. Look at what is beneath your feet. Take note of the texture, colour, and smell. Feel the soil between your fingers. Soil is complex and wonderful, and we should be doing our best to take care of it and improve it. Use the shovel to dig down 15cm, look for earthworms. If you find them, your soil is doing well. Take note of the temperature and the moisture. The earthworms' greatest enemy is recreational tillage, especially in the summer when the soil will then heat up and dry out. Also look at the aggregation and structure of your soil.

The fungi of the soil, especially AMF, are important for plant health. These fungi act as extra roots for the plant and actively transport nutrients to the plant from further locations than the plant roots can access. They can link grasses and legumes and exchange phosphorous and nitrogen between the species.

## It is all about the roots. Go and pull a plant, if the roots are clean that plant is not communicating with the soil.

Organic matter is not all created equal. The carbon to nitrogen (C:N) ratio is very important in determining nutrient availability, and bacterial and fungi populations. The C:N ratio will indicate how quickly something will rot. Tight C:N ratios will rot quickly, cycling nutrients and promoting the populations of bacteria. Wide C:N ratios, from materials such as straw, decompose slowly providing soil armor, and feeds the fungus in the soil.

With cover crops, it is the integration of grasses, broadleaf, forbes and legumes with species selection based on the goals that you set . Grasses produce high amounts of biomass, with a fibrous root system that supports mycorrhizae. Broadleaves are typically nutrient scavengers that tend to rot quickly. Some broadleaf species such as *brassicas* do not support mycorrhizae. Legumes add protein and fix nitrogen and have a strong relationship with mycorrhizae.

Often cover crops require a lot of ingenuity and thought as to when and how you will plant them. Depending on your goals, this will change the time of seeding and species selection.



C:N Ratio Material rye straw 82:1 wheat straw 80:1 oat straw 70:1 57:1 corn stover rye cover crop (anthesis) 37:1 29:1 pea straw rye cover crop (vegetative) 26:1 Relative Decomposition 25:1 mature alfalfa hav Rate Ideal Microbial Diet 24:1 rotted barnyard manure 20:1 legume hay 17:1 beef manure 17:1 13:1 young alfalfa hay 11:1 hairy vetch cover crop soil microbes (average) 8:1 Source USDA

#### COVER CROPS TO CONSIDER, BUT THERE ARE SO MANY MORE...

Crop	Species Benefits	Crop	Species Benefits
Oat	<ul> <li>Cool season grass</li> <li>Tolerates dryer conditions</li> <li>Nitrogen scavenger</li> <li>Good erosion control</li> <li>Good grazing and hay characteristics</li> <li>Large seed size</li> </ul>	Sweet Clover	<ul> <li>Cool season biennial legume</li> <li>Drought and salinity tolerant</li> <li>Bloating hazard</li> <li>Can reseed itself in the second year</li> <li>Small seed size</li> <li>Aggressive tap root</li> <li>Excellent for pollinators</li> </ul>
Fall Rye	<ul> <li>Cool season winter cereal</li> <li>Drought and saline tolerant</li> <li>Nitrogen scavenger</li> <li>Excellent erosion control</li> <li>Good grazing characteristics</li> <li>Large seed size</li> </ul>	Sun- flowers	<ul> <li>* Warm season broadleaf</li> <li>* Some drought and salinity tolerance</li> <li>* Better for stockpiled grazing and green feed</li> <li>* Good snow catch potential</li> <li>* Large seed size</li> </ul>
Proso Millet	<ul> <li>* Warm season grass</li> <li>* Tolerates some drought</li> <li>* Ready to cut in 60 days good for hay or swath grazing</li> <li>* Small seed size</li> </ul>	Sorghum Sudan- grass	<ul> <li>* Warm season grass</li> <li>* Tolerates some drought</li> <li>* Better for hay or swath grazing</li> <li>* Very fast growth in July/August</li> <li>* Small seed size</li> </ul>
Lentil	<ul> <li>Cool and warm season legume</li> <li>More drought tolerant than peas</li> <li>Large seed size</li> </ul>	Peas	<ul> <li>Cool season vining legume</li> <li>Best for stockpile grazing or green feed</li> <li>Prefers cool conditions, no flooding</li> </ul>
Faba Bean	<ul> <li>Cool season legume</li> <li>Tall plant</li> <li>Tolerates wet conditions</li> <li>High nitrogen fixation</li> <li>Very large seed size</li> </ul>	Hairy Vetch	<ul> <li>Cool season vining legume</li> <li>Quite winter hardy</li> <li>Slow early season growth</li> <li>Small hardy seeds (will volunteer)</li> </ul>
Kale	<ul> <li>Cool season broadleaf will winterkill</li> <li>Tallest canopy of <i>Brassica</i> species</li> <li>High RFV, good grazing potential</li> <li>Nitrogen scavenger</li> <li>Small seed size</li> </ul>	Forage Brassica	<ul> <li>Cool season broadleaf</li> <li>Good regrowth after grazing (high RFV)</li> <li>Nitrogen scavenger</li> <li>Small seed size</li> <li>Lots of leaf vegetation</li> </ul>
Forage Radish	<ul> <li>Cool season broadleaf, frost tolerant</li> <li>Large tuber, small seed size</li> <li>Aggressive growth, early maturity</li> <li>N, P, K and S scavenger</li> <li>High grazing potential</li> </ul>	Turnip	<ul> <li>Cool season broadleaf</li> <li>Large round bulb, small seed size</li> <li>Aggressive growth, later maturity</li> <li>N, P, K and S scavenger</li> <li>Grazing potential, high RFV</li> </ul>
Phacelia	<ul> <li>Cool season broadleaf</li> <li>Fairly drought tolerant</li> <li>Flowering forb, excellent for pollinators produces very high quality honey</li> <li>Production of glomulin, improves soil aggregates</li> </ul>	Crimson Clover	<ul> <li>Cool season legume, small seed size</li> <li>Not winter hardy</li> <li>Fine stems and medium height</li> </ul>
		Buck- wheat	<ul> <li>Cool season broadleaf, small seed size</li> <li>Aggressive growth, early maturing</li> <li>Accumulates phosphate</li> </ul>



abinvasives.ca info@abinvasives.ca

## **Field Scabious**

Knautia arvensis Bachelor's buttons, Gipsy rose

Last Updated January 2014 Provincial Designation: Noxious



#### **Overview:**

Field scabious is native to Europe and was introduced as an ornamental plant. It is a tall perennial that favors grassy areas and develops a deep tap root. The flowers very closely resemble those of another ornamental perennial, Scabiosa (butterfly plant, pincushion flower) but each plant belongs to a different genus.

#### Habitat:

Prefers nutrient-rich and moderately dry soils, but can also establish in gravelly soils.

#### Identification:

Stems: Are erect, hairy, sparsely branched, and grow up to 1.5 m tall. There can be one or several stems per plant, with little or no branching in the upper stem.

Leaves: Are hairy and the degree of the lobes is highly variable. Young rosettes leaves tend to be lance-shaped, have pointed tips, and the margins can be entire or coarsely toothed - sometimes a few leaves will be

Chemical: Metsulfuron-methyl alone or in a product mix with Aminopyralid are registered for use on field scabious. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pest Management Regulatory Agency. Always read and follow label directions. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

**Biological:** None researched to date.

pinnately lobed. Stem leaves are opposite, pinnate (deeply lobed) and attached directly to the stem. Lower leaves are 10-25 cm long but become smaller higher on the plant.

Flowers: Are a composite of small, violetblue to purple florets clustered into a head resembling a single flower up to 4 cm wide, and occur singly at the ends of stems. Occasionally flowering stems arise from leaf axils lower on the stem. Below the flower head is a ring of narrow green bracts. Flowers are hermaphroditic (having both male and female organs).

Seeds: Once flowering is complete the seed head is domed and covered with short, bristly hairs. The fruit is nut like, cylindrical and hairy, 5-6mm in size. Seeds fall around the parent plant. A single plant can produce up to 2000 seeds that remain viable for many vears.

#### Prevention:

Field scabious can invade undisturbed plant communities, and once established is very difficult to control, but maintaining healthy cover can help to prevent against invasion.

Alberta Sustainable Resource Development

Any field scabious infestation that has been allowed to go to seed a few times will require many years of diligent control work to eradicate. Since this plant favors grassy areas such as hayfields, it can be widely dispersed in baled for age.

#### Control:

Grazing: Field scabious is not palatable and seeds can be transported by animal movement. Invasive plants should never be considered as forage.

Cultivation: Discing before flowering is effective in crop land situations.

Mechanical: Mowing is effective to prevent seed production but would likely need to be repeated in the season because of re-sprouting. The deep tap root is difficult to remove in anything but loose soils; therefore hand pulling usually results in the stem breaking off at ground level and then resprouting occurs. However, any removal of seed is beneficial. Wear long sleeves and gloves as skin contact with the hairy plant causes considerable itching.



Alberta Sustainable Resource Development



Alberta Sustainable Resource Development

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#### The Verdant Element

### SERBEN FARMS: FROM FARM TO TABLE

As you head west out of Smoky Lake along Highway 28 a few miles, it is hard not to notice all the pigs alongside the highway. There, nestled behind the pig pens and the trees, is Serben Farms store. "The pigs are the best advertising, as they draw people in and they enjoy seeing where their food comes from", says Julia Serben.

Serben Farms is currently operated by Jered and Julia Serben, along with their three kids, aged 12, 7 and 4. Jered is a 3<sup>rd</sup> generation farmer who grew up with his family raising hogs and grain farming. In 2010, Jered and Julia started farming on their own, direct marketing free range hogs raised on their land. They regularly attended farmers markets in Edmonton and are excited that the Edmonton 104<sup>th</sup> Street market is moving to an indoor venue two days a week year round which will make logistics much easier to sell products. A few years back they purchased a seacan that had been retro-fitted into a butcher shop in order to do their own processing, but out-grew that space and built their own permanent butcher shop, with a commercial kitchen and store front.

The farm is a labour of love. The hard work and long hours are made up for with the people and relationships that they form with their customers.. "It is very fulfilling to sell directly to the consumer, who eat what we grow and make", says Julia; the relationship that forms creates returning happy customers. The Serbens really get to know their customers and have the freedom to make changes and customize their products. Julia has a background in nutrition, and brings that knowledge, as well as a love of cooking to develop her own recipes, creating a unique line of sausages, flavoured with fresh herbs and spices. Food has always been important to their family, and sharing that love of food is just as important.

Most of their farm has been a learning experience, but Jered brings a lot of knowledge with him from raising pigs as a child into adulthood The pigs that the Sebens now raise are a Yorkshire - Landrace X Duroc. They usually have 15 sows. The pigs are outside all year, having insulated sheds with plenty of straw bedding to keep them warm in the winter and to farrow in. The first farrowing in their outdoor system was in December when it was -40°C, and even in that weather the pigs thrived. Pork that is raised outside definitely has a different flavour. The Serbens also have 300 ISA Brown laying hens, and grew 4 acres of vegetables last year. The farm at one point was certified organic, however the price point of the end product to the consumer was not marketable. As they outgrew their seacan butchery, they decided since they needed new infrastructure that adding a retail side made sense. On December 19<sup>th</sup>, 2018 they opened up Serben Farms Store.

The greatest benefit is not only having highway frontage, but having the pigs visible to do the marketing for them. Social media has not only had a great benefit to advertising, but also being able to interact with consumers. Branding has also been beneficial in the ability to connect with their consumers as well. Opening the store has also meant that they get to be home more and are not out making deliveries 5 days a week. It has also allowed them to be much more entrepreneurial and flexible in their ability to try out different things. Other products featured in the store are locally sourced such as Beef from Tower Farms, cream from Johnson Family Farm, Cheeses from Winding Road Artisan Cheese, honey from Bear Lake and River Rock Apiaries, as well as other treats such as Pinocchio ice cream , baked goods, Ukrainian foods, and prepared foods such as fruit pies, tourtiere and shepherd's pie.

#### The Verdant Element

Like most farming operations, labour is still a big issue. Aside from Jered and Julia there is only one other permanent staff member. The kids also help out on the farm with caring for the animals, growing vegetables , and trying out their entrepreneurial skills by selling lemonade, tomatoes to even rocks. The Serbens love the farming lifestyle and feel fortunate to farm and raise their children on their operation. Of course there are always lots of difficulties to continue building the farm and have it succeed, but at the end of the day having a happy customer who has purchased products that you produced makes it all worthwhile.

For more information on Serben Farm Store and products go to <u>www.serbenfarms.com</u>



SERBEN FARMS

STORE

# SERBEN FARMS





# Environmental Farm Plans

The environment is becoming a more prominent issue. It is a large factor in marketing agriculture and food products in today's global markets. Consumers are demanding more transparency and are demanding high quality and safe products. Reputation of food safety is critical to retain and gain access to domestic and international markets.

Environmental Farm Plans (EFP) provide a tool for producers to self analyze their operation and identify environmental risks, current standards, areas for improvement and also highlight what they are doing well.

Having a completed EFP allows producers to access different funding opportunities, such as the Growing Forward Stewardship Program. It is also useful in product branding that demonstrates specific environmental standards.

#### The EFP Process

An EFP can be completed through workshops, online or one-on-one session(s). The EFP first identifies the soil and farm site characteristics. Following this, the producer completes only the relevant chapters that apply to their operation; such as wintering sites, fertilizer, pesticides, crop management etc.

Upon completion the EFP is submitted to a Technical Assistant for review. Once reviewed the EFP will be returned along with a letter of completion.

The EFP is a living document and should be reviewed and updated periodically.

If you wish to complete an EFP or have any questions regarding EFP please contact Kellie at the LARA office at 780-826-7260

Effective April 1, 2018, producers will need to have an EFP completion letter dated within the last 10 years to be considered current and eligible for cost-share funding with the Environmental Sustainability and Climate Change programs of the Canadian Agriculture Partnership (CAP). That means, for example, if you apply in September 1, 2018, your EFP will need to have been approved on or after September 1, 2008 to be considered for current funding.

## **Riparian Health Assessment**

The riparian zone is the interface between the upland and a water course. A healthy riparian area: traps and stores sediment; builds and maintains banks and shorelines; stores water; recharges aquifers; filters and buffers water; creates primary production and much more!

A riparian health assessment is a tool designed to evaluate the site and can provide a foundation to build an action plan and identify priorities.

If you would like a FREE Riparian Health Assessment conducted on your property or more information please call Kellie at 780-826-7260 or email sustainag.lara@mcsnet.ca

### CANADIAN Agricultural Partnership

The Canadian Agricultural Partnership is a five-year, \$3 billion federalprovincial-territorial investment in the agriculture, agri-food and agri-based products sector set to begin in April 2018, and is the successor of the 2013-18 Growing Forward 2 partnership. In Alberta, the Canadian Agricultural Partnership represents a federal - provincial investment of \$406 million in strategic programs and initiatives for the agricultural sector.

Currently accepting funding applications is the Environmental Stewardship and Climate Change program and Farm Water Supply.

Funding Opportunities Stewardship covers projects such as:

1		
Riparian Area Fencing and Management	Permanent fencing and potentially cross fencing	Funding Maximum: \$75,000 Cost Share: 30%, 50%. Or 70%
Year-Round / Summer Water- ing Systems	Portable or permanent systems that are not in your yard site	Funding Maximum: \$50,000 Cost Share: 30%, 50%. Or 70%
Watercourse Crossings	Construction materials needed for watercourse crossing in accordance with the Water Act	Funding Maximum: \$10,000 Cost Share: 30%, 50%. Or 70%
Grazing Management Strategies or Innovative Solutions	Consideration will be given to projects that provide solutions to improve grazing management. The projects must meet the objectives of Environmental Stewardship and Climate Change Program and significantly improve the grazing management performance of an operation.	Funding Maximum: \$100,000 Cost Share: 30%, 50%. Or 70%
Manure and Livestock Facilities Management	Construction of surface water management system; engineering assessment; improved storage facilities; relocation of livestock facility; improved land application; manure and livestock facilities management	Funding Maximum: \$15,000 - \$100,000 Cost Share: 30%, 50%. Or 70%
Agricultural Input and Waste	Improved pesticide management; improved nutrient management (sectional controls); plastic rollers; shelterbelts; wetland assessments	Funding Maximum: \$7,000 - \$15,000 Cost Share: 30%, 50%. Or 70%

#### More Information On Funding Opportunities

For more information on these funding opportunities go to: <u>https://</u> <u>cap.alberta.ca/CAP/index.html</u>

Call the LARA office to set up a time to go over funding possibilities and for assistance with the application forms.

Please note that applications must be approved prior to work being done or purchases made to be eligible for the funding.



Stuck in the mud? Consider an offsite watering system.

## Working Well Workshop - Well Pits

#### The Mysterious Well Pit

It was a warm summer day in 1999 when a teenaged girl went down into her family's central Alberta root cellar to gather some vegetables for dinner and collapsed. When her father attempted to rescue her, he also passed out. The teenaged son who attempted to retrieve both his sister and father was also overcome. Of the three family members who entered the cellar, only the father survived. At first, investigators suspected that the vegetables had rotted and emitted a toxic gas, but the real problem proved to be something else. Investigation into the incident revealed that the root cellar was actually a well pit and the two teenagers died of asphyxiation, caused by a depletion of oxygen in the air within the pit due to the release of gases from the well.

This unfortunate situation is, thankfully, not a common one. But it serves as a very important lesson for owners of well pits. Before the advent of pit-less adapters, it was common practice to put wells inside pits to protect them from freezing in cold weather. Since 1993, it has been illegal to enclose a well in a pit in Alberta, but there are still hundreds of old well pits throughout the province. Some land owners are completely unaware of the hazards these pits pose.

#### Why are well pits a problem?

Well pits are a safety hazard for anyone who enters to service or repair the well. Some wells breathe, meaning they take in air under certain conditions and release gases under other conditions. In Alberta, well pits have exploded due to the build-up of methane gas and people have died from asphyxiation after entering oxygen depleted well pits.

Well pits also increase the risk of contamination to the water

source (groundwater) because they provide a place for water and contaminants to collect. They are particularly dangerous when flooding occurs, because contaminated water can collect inside the pit and make its way inside the well. These pits also appeal to animals and small insects searching for water, warmth and food. From the well pit, these animals and their waste can find their way directly into the water you drink. If water is in the bottom of the well pit, it can also pose a risk as an electrical conductor.

#### Manage and upgrade your well pit

Well pits pose many hazards and landowners are encouraged to upgrade or replace existing well pits to help protect themselves and valuable groundwater resources. "Well pits can be dangerous," says Ken Williamson, a water expert and presenter with the provincial Working Well program. "They should be upgraded and replaced if possible."

In the interim, Williamson advises that you should ventilate the pit and use a probe to test air quality before you enter it. Never store anything inside the pit and keep it as clean as possible so as not to attract mice and insects. A sanitary well seal will protect the well and prevent contaminants from getting from the pit into the well. Landowners should hire a licensed water well contractor to properly upgrade the well with a pit-less adapter and backfill the pit.

Government funding is available to assist agricultural producers under the Canadian Agricultural Partnerships program. For more information, please visit <u>https://cap.alberta.ca/CAP/index.html</u>



#### Understand your well and learn how to manage it

Online resources and free community-based workshops offered by the Working Well program provide well owners with the information and tools they need to properly care for their water wells. For more information, visit the Working Well website at www.workingwell.alberta.ca, call toll free Alberta 310- 3773 or email ESRD.Info-Centre@gov.ab.ca.

LARA Watershed Resiliency and







# Restoration Program

Watersheds are unique, come in many shapes and sizes and can cross many different land uses. The simple definition of a watershed is the area of land that catches precipitation, and drains into a wetland, stream, river or groundwater. The riparian zone is the interface between the upland and a water course. This area is heavily influenced by water, how and where it flows and is reflected in the plants, soil characteristics and wildlife that are found there. Riparian areas have a large role in water quality, quantity and biodiversity. They provide eight key functions to: trap and store sediment; build and maintain banks and shorelines; store

water; recharge aquifers; filter and buffer water; reduce and dissipate energy; create primary production; and maintain biodiversity by providing habitat for plants, wildlife and fish. These Ecological Services benefit people, other living organisms, and the overall functioning of interconnected natural systems within watersheds. Conservation and restoration of wetlands and riparian areas in Alberta are needed for sustainably functioning watersheds.

Over the next year and half LARA has funding available for: offsite watering systems, riparian fencing, watercourse crossings, and wetland enhancements such as pond levelers, exclusion fencing and riparian plantings.

Forms and information for the program are available online at: <u>http://www.laraonline.ca/farming-</u> resources/environmental/funding-opportunities/

Or by emailing sustainag.lara@mcsnet.ca



#### Lakeland Agricultural Research Association

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#### Follow Us on Twitter! @LakelandARA

Regenerative farming encompasses a wide range of practices and principles; combining environmental stewardship with profitability and ensuring that the family farm will be there for generations to come.



**NWW.LARAONLINE.C** 

Like us on Facebook: <u>https://www.facebook.com/pages/Lakeland-Agricultural-Research</u> -Association/316266591732449

#### Food For Thought

- \* Agriculture is the largest employment industry in the world
- \* In Canada 1 in 8 jobs is in the agriculture and agri-food industry.
- \* Fruit farming began sometime between 6000 and 3000 B.C. Figs were one of the first cultivated fruit crops.
- \* More than 6,000 different kinds of apples are grown around the world. Canada grows over 50 varieties.
- \* Guinea pig farms can be found in South America in places such as Peru. In Peru, they eat about 65 million guinea pigs annually.
- \* 1 kilogram of Canadian beef creates 15% fewer greenhouse gas (GHG) emissions in 2011 compared to 1981.
- \* Canada exports about half of its annual honey production to 27 countries.

*To report prohibited noxious weeds call the Alberta Pest Surveillance System at :* 

310-APSS (2777)

### AG in Motion Bus Tour July 15 & 16

#### SEE Technology. TOUCH Innovation. BE Empowered.

Ag in Motion is the largest agricultural trade show in Western Canada that provides an outdoor venue for progressive farmers that want to see and feel the latest in agricultural innovations—all in one place.

The Bus will depart from the LARA office in Fort Kent at **11:30** AM on July 15th. Once we arrive in Saskatoon, you will be checked into your room and then supper will be served. That evening you have the opportunity to attend the optional tour and tasting at the Black Fox Farm and Distillery. On July 16th after breakfast you will be dropped off at AG in Motion to spend the full day there before loading the bus and heading back to Fort Kent (approx. arrival at 10 PM).

Single Room: \$295.00 Double Occupancy: \$450.00

Fees include: transportation, hotel, meals (expect for lunch on the 16th), and entrance fees

Registration is REQUIRED by June 10<sup>th</sup>, 2019 Tickets available: <u>https://www.eventbrite.com/e/</u>

experiencing-agriculture-bus-tour-tickets-61302714068