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THE VERDANT ELEMENT

Lakeland Agricultural Research Association

Hope Springs Eternal

Mother nature keeps on storming back in muttering "and another thing..." with recurring blasts of cool temperatures and tiny bits of snow flying. Seeding seems to be off to a slower start this year, but in a blink of an eye it will be over. This spring has provided a host of challenges; from sourcing seed, chemical and fertilizers to weather and uncertainty from global unrest. As dependable as the tides, farmers' hopefulness in spring returns for another growing season.

Last year's heat dome and drought made for tough conditions and our soils bore the brunt of it. Feed was limited so pastures were pushed to the brink, and every piece of straw seemed to be moving out of fields for livestock. Recovery after a drought takes time and management. Winter bale grazing is a great way to rejuvenate pastures with the addition of organic matter and livestock waste. Feeding some forbs or legume seed in your mineral this spring to help bring some biodiversity and plant establishment back; feeding the microbes below the soil and increasing pasture productivity.

In February we hosted a few intercropping webinars, which would benefit your crops to reduce fertilizer requirements (especially important as fertilizer is limited and \$\$\$\$!), improve soil health and water infiltration. I know a few producers who are going to be intercropping this year, for those reasons and several others as well.

In any case, I wish you timely rains and sunshine this upcoming growing season and hope to see you out at a few events to continue our learning journey together.

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How to write a will with joy! - Elaine Froese

I want you to read this column and act. I recently did a virtual presentation [with LARA and other Associations on March 15th] with 120 farmers and many of them [53%!] did not have wills in place.

Stop procrastination now!

I've encountered folks who are all dealing with different kinds of loss. One is a husband whose wife is suffering from a stroke. One is a woman whose nephew is suffering from a mental illness. One who has just buried her mother a few short weeks ago, and is thankful that she got to celebrate her loved mum's life with a funeral. She is also glad the will was in place. Everyone has a story of loss. We are all going to die. I recall the tombstone in an Irish cemetery that said "Meet me in heaven". That's a joyous thought to Christ-followers who accept the gift of Resurrection Sunday that we recently celebrated.

April is wills month. How on earth can you write a will with joy?

1) Know that writing a will document and signing it will not kill you. A 1997 University of Guelph study discovered 20% of farmers did not have a will for reasoning, "if I make I will then I will die !". Pretty strange logic if you ask me. Writing a will did not kill my mother at 65, an asthma infection did. During the season of her passing, (she was palliative for 2 weeks) her new drafted will was not signed, as she was comatose. Even the best laid out transition plans are derailed when new documents are not signed.

2) Have you signed your current will? Do it. Remember to finish off the work you started with your lawyer. It will likely take 3 visits to the law office. The good news is you can now visit your lawyer over Zoom and can sign the documents digitally, so you don't have to physically leave your remote farm to get this done! One visit to draft the will or update your current one. A next visit to talk about the new draft to make sure it meets your intentions. Finally, a third visit to sign the will and take your copy home to read to your family. Ask on the first call to make your appointment what the range of costs is going to be. The more complex your will is, the more expensive, but it is still a worthy investment.

3) Seriously, Elaine, do I have to read it to my family? This is where the joy part comes in. Most folks I know don't relish surprises. When you drafted your will you had to choose a trustworthy executor. Hopefully, this is an adult successor or adults in your family circle who are good with details, timely, and accountable for their actions. One of our executors is a lawyer family member plus our successor. In order to get ready to execute a will with timely skill, it helps to know what is in it. Our son knows which law office holds the original will and where the copies are in my office. When people know the plans you have upon your death, you get to explain your intent as to why you laid out your wishes the way the will states. This is a healthy conversation where you get to talk about your "why" in how you did your will.

4) Eliminate confusion of terms. I recently coached a farm family who found an older will years after the father's passing. This created huge conflict when the family realized that Dad had changed his original intentions. Are folks allowed to change their plans? Yes. The problem is when dead people's wishes keep fueling the fire of conflict for those beneficiaries who have made financial decisions based on the current reality of the legal will presented. I am not a lawyer, and this column is not to be taken as legal advice. leave that good work to my CAFA colleagues who are excellent agricultural lawyers. Find them here It is a good idea to destroy old copies of old will documents. I am a great advocate of giving gifts with a warm hand, not a cold one.

https://elainefroese.com/2022/04/21/how-to-write-a-will-with-joy/

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Canadian Agricultural Partnerships https://cap.alberta.ca/CAP/Programs

The Canadian Agricultural Partnership (CAP) Farm Technology Program supports the adoption of innovative technology that minimizes agricultural waste, optimizes farm efficiency and results in the digitalization of an operation and sensors for the purpose of data collection. The farm security component of the program encourages the adoption of security devices that help protect farms.

With some exceptions, many components of 'Smart systems' are eligible - Smart systems can feature: Digital sensors, Data collection, Connectivity, Automated data analysis, Efficiency improvement. Any system, item, or equipment that is considered to be business as usual for a given farm type is ineligible under the program. Digital Sensors are electrical input instruments for measuring or monitoring conditions with the ability to transmit data to data logs or to other applications. They differ from analog sensors (i.e. non-electrical measurement devices that use physical components like dials). Data Collection refers to the logging and storage of measurements and conditions. Once collected, datasets can be analyzed to assist in decision making, often in real time. Connectivity allows various components within the smart system to communicate with each other. Connections may be hard-wired, or wirelessly, through Bluetooth, Wi-Fi, radio frequency, or cellular service. When systems utilize the internet for connectivity, they increase the potential for automation and digital intelligence capacity. Automated Data Analysis is what allows smart systems to make real time decisions and adjustments. Data collected by sensors is analyzed by a computer and new outputs are generated. Outputs could be recommendations, information for decision making, or automated action. Agriculture-specific drones (e.g. Multispectral imaging drones; Thermal imaging drones) · Farm/Barn/Herd management software or apps - first year of subscription eligible (on-going subscription costs are ineligible) · Digitally connected weather stations (and first year subscription costs of weather station analysis software or apps) · ISOBUS Universal Terminals – for connecting to any ISOBUS-equipped implement, as an interface · ISOBUS Task Controllers – goes on the implement, stores settings, and sends info to the Universal Terminal

Electronic soil sensors. Electromagnetic: Salinity, organic matter, moisture data. Electrochemical: Nitrate, potassium, hydrogen ion (pH) data. Soil compaction sensors. Solar powered soil sensors.

Farm equipment-mounted sensors and cables: Vegetative index data, Grain protein, oil, starch content data. · Drone-mounted agriculture specific sensors & lenses (e.g., thermal imaging; multispectral imaging) · Sensor based fertilizer spreader components that optimize granule distribution · Yield sensors retrofitted onto equipment to gather real-time data for yield maps. Including hay bale · Weed detection and elimination systems.

Farm equipment-mounted data collection and data storage units for: • Accelerometers • Gyroscopes • Magnetometers • Altimeters • Remote monitoring cameras (i.e. remote monitoring for existing water sites

Internet Boosters – MAXIMUM \$2,000 GRANT

Electronic livestock ID readers that allow data collection for individuals animals \cdot E.g. ID reader wands that are linked to weigh scales \cdot E.g. Herd management handheld devices

Other sensors · Leaf wetness sensors · Bee hive temperature, humidity, audio and movement sensors · Livestock body movement and body temperature sensors

OPEN Activities which are not explicitly ineligible and which can be shown to meet or exceed the program goals.

Farm Security Eligible Expenses

- GPS Equipment Tags and Trackers
- Remote Monitoring for Fixed Cameras
- Remote Fuel Tank Monitors
- Wireless Base Stations (Gateways)
- Motion Detectors/Driveway Alert Systems
- Door Sensors

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 Canadian Agricultural Partnerships Programs. 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

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@laraonline.ca







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4R Nutrient Stewardship and AFFIRM

4R Nutrient Stewardship provides a framework to achieve cropping system goals, such as increased production, increased farmer profitability, enhanced environmental protection and improved sustainability.

To achieve those goals, the 4R concept incorporates the:

- Right fertilizer source at the
- Right rate, at the
- Right time and in the
- Right place

Did You Know?



Alberta growers can use the online AFFIRM decision support tool to help optimize nutrient management for profitability.

The Alberta Farm Fertilizer Information and Recommendation Manager (AFFIRM) Version 3.0 is a web-based decision support application. It helps land managers evaluate fertilizers and livestock manure management options, and formulate a fertilizer program that fits within the farm budget. This in turn:

- optimizes crop production
- minimizes nutrient losses
- supports profitable and sustainable crop production in Alberta

Optimizing production for profitability

AFFIRM helps land managers optimize crop production by determining appropriate nutrient application rates. Nutrient application rates are dependent on the principle of identifying the limiting growth factor and diminishing economic returns based on crop price, fertilizer nutrient costs and the farm fertilizer budget.

"What if" scenarios

The application allows the user to compare nutrient management scenarios based on the 4R nutrient stewardship principles for right nutrient source, right time of application, right placement and right rate. The user can enter information specific to their situation into AFFIRM to test various cropping, nutrient management and climatic scenarios to optimize nutrient management decisions.



Twine – it's one of the easiest ag plastics to recycle. Really!

Of all the agricultural plastics on prairie farms, baler twine is one of the easiest to overlook when it comes to a commitment to recycle. Unlike grain bags, which when empty, are a massive amount of plastic laying in the field, baler twine accumulates in smaller bunches, seemingly innocuous, until they start to take over a corner of the barnyard or wrap around farm equipment axles. Some farmers relegate baler twine to the burn barrel, but that's one of the worst options for managing it because burning twine releases toxins into the air.

So, what can farmers do with used ag twine?

In Alberta, a pilot, 'Alberta Ag Plastic. Recycle it!', is underway to give farmers the option to take baler twine to one of dozens of collection centres throughout the province, giving that old twine a new life. Cleanfarms, which operates the pilot program on behalf of Alberta's Agricultural Plastics Recycling Group (APRG), sends the used baler twine to recycling facilities in Canada and the U.S. where it is turned into pellets to be used in the production of new materials. Twine is made of polypropylene, which is a plastic that can be easily remanufactured into new products such as car parts, dimensional lumber, flowerpots and composite decking. Down the road, as technology continues to evolve, twine may be remanufactured back into new baler twine, a process that fuels the emerging regenerative circular economy...and one that contributes to farmers' sustainability goals.

Waste analysis studies in the province estimate that Alberta farmers generate just over 14,000 tonnes of various types of ag plastic annually including pesticide and fertilizer containers, grain bags, plastic baler twine, bale wrap, silage bags and bunker covers. That includes about 2,200 tonnes on average of baler twine.

The pilot was introduced in 2019 for used grain bags and baler twine to test the collection, transportation and recycling of these ag plastics. The study also aims to determine if Alberta farmers will participate and take used twine to the collection centres.

Assar Grinde, a cow-calf producer in Ponoka County, says used twine can be collected for recycling with minimal additional effort.

"After a winter of collecting twine for recycling, I was surprised at how much clean twine I collected with no extra work," he says. "If the twine comes off the bales clean, it goes in the recycling bag, if it comes off How to Prepare Twine for Recycling The pilot program enables twine recycling by offering large, free, twine collection bags. The next three steps are straightforward: 1. Shake – Remove as much debris, snow or ice as possible. Excessive organics and other materials (such as net wrap) mixed with the twine will cause it to be rejected or result in the material being sent to the landfill. Recycling processors wash and shred the plastic, so they need it as clean as possible.

2. Bag – Place loose twine in a clear collection bag. They are available at no cost to farmers and can be obtained from pilot collection sites and select County/MD offices. If using your own clear bag, poke holes in the bottom to drain moisture. With any bag, once full, secure it closed with twine or a zip tie.

3. Return – Please contact your local pilot collection site prior to dropping off material if unloading assistance is required and if you are unsure if you have prepared it properly.



Farmers place used twine in ag collection bags to help keep it clean and make it easier to transport to collection sites. Source: Cleanfarms

Twine – it's one of the easiest ag plastics to recycle. Really! - continued from previous page

dirty with frozen lumps, it goes in the garbage. I would say, don't worry about getting 100%, just collect what is easy and that will have a big impact."

It is expected that Alberta will follow other provinces and legislate a permanent recycling program for these materials. The approach, known as extended producer responsibility (EPR) involves legislation requiring the first sellers of the material to take responsibility to collect and recycle it after use – they develop, operate and fund the program. EPR has been in place for grain bag recycling in Saskatchewan for four years. Manitoba initiated an EPR approach for grain bags and baler twine last year. PEI has designated the ag materials for EPR and it is anticipated Quebec will pass EPR regulations on ag plastics soon.

cleanfarms

Abertan The pilot project is led by the multi-stakeholder Agr were granted by the Government of Alberta and are



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About

Cleanfarms and the Alberta Agricultural Plastics Recycling Group (APRG) are publishing a series of information articles for Alberta farmers to develop a shared understanding of the importance of used agricultural plastics resource management.

A common theme throughout this monthly series is an exploration of how ag plastics, once used, can be recycled to reclaim the natural resources and the invested energy, returning them to the economy where they can be remanufactured into new products.

This practice is important to Alberta farmers because it contributes to agricultural sustainability that begins and ends on the farm, providing stewardship for future generations, as well as environmental health. Future articles will feature discussions on change management such as first sellers and manufacturers taking responsibility for used materials (extended producer responsibility), and explore practical recycling, including opportunities and challenges, for products such as grain bags, silage and bale wrap and baler twine that have real-time applications for farmers.

Cleanfarms is operating a three-year pilot project for grain bag and baler twine recycling in Alberta. The project is led by the multi-stakeholder APRG. Funds were granted by the Government of Alberta and are being administered by Alberta Beef Producers. "I only feel angry when I see waste. When I see people throwing away things we could use."

-MOTHER TERESA

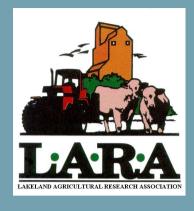


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Follow Us on Twitter! @LakelandARA Follow Us on Instagram @Lakeland_ag Follow Us on Facebook at LakalandARA Sustainable farming encompasses a wide range of practices and principles; combining environmental stewardship with profitability and ensuring that the family farm will be there for generations to come.



www.laraonline.ca

How to Write a Will With Joy! Continued from Page 2

5) Educate your executors. Use an executor checklist to get ready to be a great executor. Email me at elaine@elainefroese.com and I will send you Laura McDougald-Williams' checklist for executors. She's a rural lawyer who believes in getting ready. All lawyers I have met say "No way" to handwritten wills, so take your handwritten wishes to a legal office and have a legal will written up. DIY is great for house renovations but not for your multi-million-dollar estate. YIKES! I met this rancher this winter whose wife has gone to get her will done properly, but he is still dragging his feet!

6) Watch the "Finding Fairness in Farm Transition" video on YouTube at "Elaine Froese Farm Family Coach". I suspect you feel that writing a will with joy is impossible because you and your spouse are fighting about what to give your children. Firstly, you can draft your own will if your spouse refuses to do theirs. The deceased who dies intestate (without a will) is the one going to hoop the other spouse with chaos! I embrace the definition of fairness as "helping everyone be successful". Ask each of your beneficiaries to tell you what they expect from your estate, and ask "What does fairness look like to you ?" Your assets are yours. You get to choose regardless of the expectations of adult beneficiaries.

7) Find joy in giving gifts with a warm hand and tell the story behind the gift. Don't forget the heritage gifts from the garden plants. My mother had an amazing lily collection that met sudden death when sprayed with Roundup. I was not asked if I would like to transplant her decades of work to my garden. I did receive her mink coat 5 years before her passing, with her blessing, and I wear that coat with great memories of my mom's love for me. The new Swedish book on "death de-cluttering" says at age 65 we should downsize our stuff as a gift to our children so that they don't have to wade through it when we pass on. When you write your will, you can add a letter or list of possessions that you wish to go to certain folks. It would be helpful for the executor to have a copy of this list. I asked my family which pieces of art they would like and was surprised that only one piece was valued by my sister, and one by my children. Your treasured stuff might be junk to others!

8) Joy comes when you know you have enough money. Outdated wills were made decades ago when interest rates were different and land values much lower. A good financial plan to carry you into your nineties is wise. If you are going to run out of money, check with your beneficiaries and children to see who is going to help you continue to pay bills as you age and require more care. "That was then, and this is now" may be the response to promises you made when finances were flush and bread was under a dollar! Have a conversation being very transparent about your financial concerns with your family, and your financial planner. Remember to support charities if you have the means to do so.