



VOL. 16 ISSUE 1 • 2025

THE VERDANT ELEMENT

Lakeland Agricultural Research Association



Here Comes the Sun!

As the seasons shift, so do the challenges and opportunities in our fields, gardens, and minds. With some late-season snowfall already making an appearance, we're holding onto hope for much-needed moisture to replenish the land. In this issue, we highlight innovative local producers, explore strategies for reducing soil compaction, and dive into the benefits of growth mindset. Whether you're digging into the science of soil aggregates, starting seeds with soil blocks, or discovering new podcasts to inspire your journey, we hope you find something here to spark curiosity and growth!

Calling Local Innovators

Are you or someone you know a Local Innovator? We want to hear your story! Whether you're finding creative solutions in agriculture, sustainability or rural living, The Verdant Element is looking to spotlight those making a difference.

Share your journey with us by emailing kristy@laraonline.ca

GARDENING FORUM

Join us for a full day of engaging and informative workshops designed to inspire and support gardeners of all experience levels.

SMOKY LAKE

DATE: THURSDAY, APRIL 10, 2025
TIME: 9:00AM - 4:30PM
LOCATION: UKRAINIAN NATIONAL HALL

GET YOUR TICKET

Phone Number: 780-426-1190
Website: www.laraonline.ca

\$20 for members
\$40 for non-members

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THE VERDANT ELEMENT

Your Mental Health Dashboard:

Recognizing the Warning Lights Before Burnout

As we move into the busy season, it's easy to get caught up in the demands of farm life—long days, unpredictable weather, and the constant pressure to get things done. In the rush to take care of everything else, it's easy to overlook one crucial aspect of the operation: your own mental health.

Mental health can be hard to quantify. Unlike a physical injury, there aren't always clear, visible signs that something is wrong. But just like a tractor or truck, we all have a dashboard—indicators that tell us when we're running low, overheating, or in need of maintenance. When those warning lights start flashing, ignoring them can lead to burnout, injury, or deeper struggles like depression and anxiety.

Imagine your mind and body as a machine. When everything is running smoothly, you're in optimal health—productive, focused, and able to handle challenges. But stress, exhaustion, and emotional strain can cause warning lights to come on. The more indicators that show up, the closer you are to burnout.

My dashboard				
By Dr. Georges Sabongui © 2018				
Balance is extremely important when dealing with stress. When you look at your internal dashboard, do you see all green lights? Are there any red lights tipping you toward overload and stress? Let's all take care of ourselves so we can continue to do what we enjoy most.				
	Green Healthy Optimal	Yellow Reacting Stress	Orange Injured Burnout	Red Illness Depression Mental illness
 Physical	Good sleep Good appetite, want to eat healthy Want to take care of physical health Rarely or never sick	Mild insomnia Tired Attracted to junk food often Unmotivated to exercise Trouble relaxing without a drink	Moderate insomnia Exhausted Binge eating Drinking too much alcohol or using drugs to relax Various aches and pains	Constantly sleeping or periods of no sleep at all Constant aching in body Immune compromised: always sick Trouble getting off the couch or getting out of bed Only moments of relief come from excessive drinking or drugs, or over-the-counter medication
 Mental	Mentally clear Focused Good concentration Creative problem-solving Sees solutions	Easily distracted Excessive worry Procrastination Avoidance Sees obstacles	Chronically preoccupied Inability to concentrate Impaired decision-making Memory loss Constant focus on problems Always negative	Impaired judgment Paralyzed decision-making *Suicidal thoughts or actions *If you're having suicidal thoughts, seek help immediately and call 911.
 Emotional	Motivated Excited Good social network	Irritability Loss of sense of humour Discouraged Impulsive Seeing people is a chore	Anger Anxiety Low mood Overwhelmed Avoiding social situations	Apathy Hopelessness or helplessness Out of control: explosive-impulsive, holding it all in Feeling like a burden Isolating yourself from friends, family, and your community
 Strategies	Self care: physical, mental and emotional Serotonin boost Take a work break or vacation	Reaching out to friends and family Doing something to relax Seeing your family doctor	Peer support, assistance programs, mental health first aid	Professional or clinical support: doctor, psychologist
© Dr. Georges Sabongui 2018. All rights reserved.				



Ignoring these signals doesn't make them go away. Just like with machinery, small issues can turn into bigger problems if left unchecked.

Key Mental Health “Dashboard Warnings” to Watch For:

Low Fuel (Exhaustion) – Constant fatigue, struggling to get out of bed, feeling like no amount of sleep is enough.

Overheating (Stress Overload) – Feeling easily frustrated, irritable, or overwhelmed by tasks that used to be manageable.

Check Engine (Persistent Anxiety or Depression) – A lingering sense of worry, hopelessness, or disinterest in things you once enjoyed.

Loss of Traction (Lack of Focus and Motivation) – Trouble concentrating, making decisions, or feeling like you're just going through the motions.

Battery Warning (Social Withdrawal) – Avoiding conversations, skipping community events, or feeling disconnected from family and friends.

Preventative Maintenance: Taking Care of Your Mental Health

Farmers and ranchers are known for their resilience, but even the toughest machines need maintenance. Here are some ways to keep your mental health in check:

Routine Maintenance – Prioritize rest, nutrition, and hydration, even in the busiest seasons.

Monitor Your Dashboard – Take note of warning signs early. If you're feeling overwhelmed, talk to someone you trust.

Oil Changes (Breaks and Recovery Time) – Step away from work, even for short moments. A walk, a coffee break, or a conversation with a friend can help reset your system.

Call a Mechanic (Seek Support) – Whether it's a friend, family member, or professional, don't hesitate to reach out when things feel unmanageable.

Check the Owner's Manual (Learn More About Mental Health) – Understanding stress, burnout, and mental health challenges can help you recognize when to take action.



Local Innovators

Weat Local Market:

A Farmer' Market in your Pocket



At a time when connecting consumers with fresh, local food is more important than ever, Weat Local Market has emerged as an innovative solution. This app, created by Cadziana Beyer, a local Plamondon women and fourth-generation cattle and grain farmer, bridges the gap between producers and consumers—essentially bringing the farmers' market to your phone, 24/7.

Beyer has spent the past four years refining the app, and its latest version arrives at the perfect time. Designed to cut out the middleman, Weat Local Market allows farmers to sell their products directly to consumers without any listing fees. Instead, there's only a small 5% commission per sale—3.5% of which covers credit card fees, leaving just a modest amount for the app itself. Payments are processed immediately, with funds deposited directly into the seller's bank account.

What makes this app stand out is its user-friendly design. It's built for mobile use, eliminating the need for complicated online shop setups. Farmers simply list their products, and potential buyers within a set geographic radius see them automatically. This localized approach ensures that fresh food stays close to home, strengthening local food systems and reducing unnecessary transportation.

With over 200 vendors and more than 1,000 downloads already, Weat Local Market is poised to revolutionize farm-to-table sales. As more producers and consumers discover the app, its impact is expected to grow significantly—making it easier than ever for people to support local agriculture and enjoy the freshest food available.

*Weat
Local Market*

**“I created Weat Local Market to help producers and makers connect to local consumers the whole year round so they could feed their families and their passions”
-Beyer**

Check out Weat Local Market online at weat.ca or by downloading their app, available for both iPhone and Android.

Seed Starting With Soil Blocks

Starting seeds indoors is a great way to get a jump on the growing season, but traditional plastic trays and pots can create waste and lead to root-bound plants. A soil blocker offers a sustainable alternative, promoting healthier seedlings while reducing plastic use.

What is a Soil Blocker?

A soil blocker is a handheld tool that compresses a soil mixture into small, compact blocks. These blocks hold together without the need for containers and provide an ideal environment for seed germination and early growth.

Benefits of Using a Soil Blocker:

- Eliminates Plastic Waste – No need for plastic pots, making it an eco-friendly option.
- Prevents Transplant Shock – Roots grow naturally to the edges of the block without circling, reducing stress when transplanting.
- Saves Space – Blocks can be placed close together, maximizing space in seed-starting trays or greenhouse setups.
- Better Root Health – The air-pruned roots encourage stronger, more resilient plants.
- Cost-Effective – After an initial investment in the tool, soil blockers can be used indefinitely with homemade or purchased soil mixes.

How to Use a Soil Blocker

1. Prepare the Soil Mix – Use a well-draining seed-starting mix with added compost moisture retention. The mix should be wet enough to hold together when squeezed.
2. Pack the Soil Blocker – Press the soil blocker into the mix, ensuring each cell is fully packed. Scrape off excess soil and press the plunger to release the blocks onto a tray.
3. Plant Your Seeds – Place one or two seeds in the small indentations on top of each block. Cover lightly with soil if needed.
4. Keep Moisture Consistent – Mist the blocks regularly to prevent drying out, but avoid overwatering, as they can lose structure if too wet.
5. Transplant with Ease – Once seedlings develop strong roots, move them directly into the garden or larger containers without disturbing their root systems.



Soil blockers are an excellent investment for gardeners looking to reduce plastic waste and grow healthier seedlings. With a bit of practice, they can streamline the seed-starting process while supporting sustainable gardening practices.

Check out the how-to video on Instagram @lara_agreasearch

Soil Aggregates

The traditional image of a well-managed field—smooth, black, and freshly tilled—is giving way to a new understanding of soil health that prioritizes soil aggregation over intensive tillage.

Soil aggregation is the process by which soil particles—sand, silt, and clay—bind together into stable clusters, held together by organic matter, root exudates, and microbial activity. This shift reflects growing awareness that frequent tillage disrupts soil structure, breaking apart aggregates, exposing organic matter to rapid decomposition, and reducing microbial diversity. By contrast, maintaining strong soil aggregation supports water infiltration, reduces erosion, and enhances microbial habitats, fostering a thriving soil ecosystem. Good soil aggregation is your number one defense against soil compaction.

The traditional image of a well-managed field—smooth, black, and freshly tilled—is giving way to a new understanding of soil health that prioritizes soil aggregation over intensive tillage.

Soil aggregation is the process by which individual soil particles—sand, silt, and clay—bind together into stable clusters, or aggregates, through the action of organic matter, microbial activity, and plant roots. This shift reflects growing awareness that frequent tillage disrupts soil structure, breaking apart aggregates, exposing organic matter to rapid decomposition, and reducing microbial diversity. By contrast, maintaining strong soil aggregation supports water infiltration, reduces erosion, and enhances microbial habitats, fostering a thriving soil ecosystem. Good soil aggregation is your number one defense against soil compaction, as well-structured soil resists compression, maintains porosity, and allows roots to penetrate deeply. As farmers move toward reduced tillage, cover cropping, and regenerative practices, they create conditions where soil life can flourish, nutrient cycling improves, and long-term resilience against drought and extreme weather is strengthened.

This paradigm shift acknowledges that soil is more than just a growing medium—it is a living system that functions best when its biological and physical structures are preserved.

Good soil aggregation is your **number one defense** against soil compaction.



Organic matter is the glue that keeps soil aggregates together.

LARA

GARDENING FORUM

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TIME: 9:00AM - 4:30PM
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\$40 for non-members

www.larainline.ca

QR code

Spring Farming Tips to Reduce Compaction & Preserve Soil Aggregation

- **Avoid working wet soils:** Tilling or driving on wet ground destroys aggregates and compacts soil.
- **Use controlled traffic lanes:** Limiting machinery to designated pathways reduces compaction across the field.
- **Utilize cover crops:** Their roots help bind soil particles and create channels for water infiltration.
- **Reduce excessive tillage:** No-till or strip-till methods help preserve soil structure.
- **Optimize tire pressure and equipment weight:** Lowering tire pressure and using larger tires or tracks can distribute weight more evenly, reducing compaction.
- **Incorporate organic matter:** Compost, manure, and crop residues feed soil microbes and strengthen aggregation.



WATER QUALITY & SPRAY DRONES

WHAT YOU NEED TO KNOW

Join us as we welcome spraying expert Tom Wolf (Nozzle Guy) who has 35 years research experience in the spraying business. Tom focuses on practical advice that is research-based to improve the efficiency of producers.

TOPICS INCLUDE:

-  Dissolved minerals in spray water can affect mixing and efficacy. We discuss how to understand a water quality test report and what to do about specific problems.
-  Spray drones are widely available but little is known about their performance. We present results from our deposition studies to show swath patterns and how to optimize performance.

WEBINAR DATE & TIME
April 2, 2025
12:00 pm - 1:00 pm

Register today at:
laraonline.ca/events



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MUNICIPAL DISTRICT

Summit Valley
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DRONE DEMONSTRATION

FREE EVENT

PRE REGISTRATION REQUIRED



Join us for an Agricultural Drone Demonstration, where cutting edge technology meets practical farm solutions. Discover how drones are transforming agriculture through precision spraying, crop scouting and field mapping - helping farmers save time, reduce costs, and optimize yields.

12 JUNE, 2025
9:30AM-12:30PM
Lunch Provided
LARA Research Farm
Fort Kent, AB

BROUGHT TO YOU BY LARA, IN PARTNERSHIP WITH THE MD OF BONNYVILLE

REGISTER BY CALLING 780-826-7260 OR EMAIL: DIRECTOR@LARAONLINE.CA



PODCAST

Field Notes: Ag Podcasts Worth a Listen



Dec 13, 2024 - Ep 209 - 52 mins left

The Power of No-Till Gardening with Kim Ross

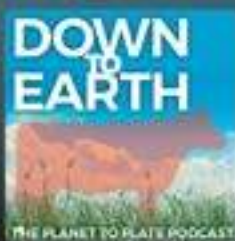
The Rural Woman Podcast >

In the fast-paced world of agriculture, staying informed and inspired is key to adapting and thriving. Podcasts offer a convenient way to learn from others in the industry, gain new perspectives, and explore innovative ideas. In this issue we are highlighting two insightful episodes that focus on stability, resilience, and the power of working with nature.

The Rural Women Podcast - “The Power of No-Till Gardening with Kim Ross”

Host Katelyn Duban shares the stories of women in agriculture, offering real-life perspectives of their challenges and successes. In this episode, she interviews Kim Ross of Rossdale Farm in Manville, AB, a no-till gardener dedicated to growing chemical-free food while conserving water and improving soil health. Kim’s approach to sustainable farming demonstrates how thoughtful land stewardship can increase yields and soil vitality on the Canadian prairies.

We are excited to be hosting Kim at our Gardening Forum in Smoky Lake on Thursday April 10, 2025. For more information on both Gardening Forums see pages 1 & 6.



January 21 - 48 mins left

Landscape restoration: letting nature do the work

Down to Earth: The Planet to Plate Podcast >

Down to Earth Podcast - “Landscape Restoration: Letting Nature Do the Work”

This episode interviews Bill Zeedyk, well known among the regenerative agriculture and land restoration community. The Podcast covers concepts from Bill’s book “Let the Water do the Work”. Primarily covering low tech regenerative concepts for riparian area restoration.

Do you have a favorite Agricultural Podcast? Share with us on social media so we can share with our community. Let’s keep learning, and growing together!



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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.

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