526 Alberta Rep on the CCA Board

#RealisticRegenAg | A board position for the <u>Prairie Certified Crop Advisors</u> is open and I've decided to run for it. If you're a CCA check your emails and look for the announcement. The voting is done by email and needs to be in by **Friday July 14th** (not the 4th as originally stated in the email). If you didn't get the email send one to <u>Mary-Jane Debreuil</u>. This is what I'm running on. Let me know if you agree with this:

Scott has a Masters degree in Plant Science and has been practicing agronomy in Alberta for 16 years. He runs his own consulting company focusing on regenerative agriculture and sees it being the future of agriculture as consumers and food processors focus on climate smart agriculture. CCAs will need to learn this new way of doing things to become trusted advisers to farmers.

Welcome to Plants Dig Soil. My name is Scott Gillespie and I'm an agronomist specializing in climate-smart agriculture. I discuss scientifically proven practices that benefit both the planet and, just as importantly, farmers' economic sustainability. Be sure to visit my website, <u>www.plantsdigsoil.com</u>, for resources and information about the services I offer.

Transcript is available:

https://www.plantsdigsoil.com/podcast/alberta-rep-cca-board

My course: Profitable From the Start: Cover Crops for the Prairies: <u>https://plantsdigsoil.thinkific.com/courses/cover-crops-prairies</u>

My funding service offerings: <u>https://www.plantsdigsoil.com/pricing/#paperwork</u> SCAP overview: <u>https://youtu.be/0icitHJR2lk</u> SCAP program details <u>https://www.alberta.ca/sustainable-cap.aspx</u>

My consulting packages: https://www.plantsdigsoil.com/pricing/#consulting

Newsletter signup: https://mailchi.mp/plantsdigsoil/newsletter

Email: scott@plantsdigsoil.com

Twitter (Scott): <u>https://twitter.com/scottcgillespie</u> Twitter (Company): <u>https://twitter.com/PlantsDigSoil</u>

LinkedIn (Scott): <u>https://www.linkedin.com/in/scottcgillespie/</u> LinkedIn (Company): <u>https://www.linkedin.com/company/plants-dig-soil</u>

PLANTS DIG SOIL

YouTube: (Company): <u>https://www.youtube.com/@scottcgillespie</u> Podcast Subscription Apps: <u>https://podcasters.spotify.com/pod/show/scottcgillespie</u>

As mentioned last month, the OFCAF (On-Farm Climate Action Fund) program has cut off applications. They are now saying they have more applications than money available. They have been contacting growers that were approved and telling them they can only apply to OFCAF or S-CAP (Sustainable Canadian Agriculture Partnership) under the RALP - Resilient Agriculture Landscape Program. (Sorry, there's lots of acronyms ...)

I don't believe this is true. While there are some components of each program that overlap, and those definitely shouldn't be applied for twice, there are many things that do not. If you are not sure which to apply for or have received this email (even if I wasn't on your application) please contact me. I'll help you sort it out and get clarification. These programs can be tough to navigate but I know them well and can help you get the money you need to try new practices.

Finally, don't forget about my course: Profitable From the Start: Cover Crops for the Prairies. Unlike many of the free courses out there I'm not trying to sell the idea of making cover crops work. That is getting it backwards. The goal is to solve problems, not to use cover crops. It should take less than a day or an hour a day for a week to complete it. While there is a small window before harvest comes, take the time to learn where they could fit. In the areas where drought has left your crop nearly dead, they probably aren't a fit. In fact, in most cases they are not. In my course you learn the places that they can work so any money you spend on them returns back more than pay.

Content Summaries from June:

https://www.plantsdigsoil.com/podcast/523-cow-patty-critters

1. "Cow Patty Critters" sheds light on the often overlooked community of organisms that inhabit cow patties in Western Canada. Dr. Kevin Floate's research explores the impact of ivermectin, a commonly used medicine in animal agriculture, on these critters and highlights the significance of studying the post-cow-patty ecosystem.

2. The fate of nitrogen in cow patties is a crucial aspect to consider. Initially tied up in bacteria upon deposition, a significant portion of nitrogen can be lost to the atmosphere as gas. While this loss can pose challenges for ranchers, the presence of legumes in pastures can help replenish nitrogen over the long run.

3. Dung degradation is a fascinating and complex process influenced by various factors. From temperature conditions to the succession of different critters, the breakdown of cow patties

involves a diverse range of organisms. Understanding this intricate process provides valuable insights into nutrient flows and ecosystem dynamics.

https://www.plantsdigsoil.com/podcast/the-27-inch-precipitation-threshold

1. Precipitation Rule: A groundbreaking study establishes the 27-inch precipitation threshold for successful cover crops. This rule of thumb sheds light on the impact of rainfall on cash crop yields, soil water content, and soil mineral nitrogen. The study highlights significant variations across climates, soil types, and crop management conditions.

2. Regional Considerations: The study's findings emphasize the importance of regional factors in determining cover crop feasibility. Tropical climates show a remarkable 15% increase in cash crop yield with cover crops, while continental climates experience a 4% gain. However, dry and dryland climates see a decrease of 11-12% in cash crop yield, indicating the need for careful economic evaluation.

3. Economic Viability: The study highlights the crucial role of cost-effectiveness in cover crop adoption. While cover crops can provide long-term benefits such as improved soil structure, the upfront investment must be economically justified. Farmers need to weigh the expenses against potential gains and consider factors like crop insurance and income stability in their decision-making process.

https://www.plantsdigsoil.com/podcast/regenerative-research-results

1. Slow release fertilizer research: Timed release fertilizers aligned with potato needs show climate-smart benefits without yield reduction, improving product quality.

2. Urea fertilizer strategies for winter wheat: Nitrogen stabilizer products offer advantages in high rainfall or irrigated systems, while dry land areas may not benefit significantly due to fewer loss mechanisms.

3. The legacy of phosphorus and fertilizer reduction: Optimizing phosphorus placement and utilizing existing soil reserves can help reduce current fertilizer applications without compromising productivity.

4. Beneficial insects in agriculture: Quantifying and categorizing beneficial insects, including spiders, aids in understanding their role in pest control and ecosystem services, informing pest management decisions.

5. Wetlands' role in agriculture: Preserving wetlands absorbs rainfall, reduces flooding, and supports biodiversity, enhancing farm productivity and sustainable land management.

6. Wireworm behavior and management: Investigating wireworm management without insecticides highlights the potential of specific cover crops like buckwheat and brown mustard in reducing wireworm populations and crop damage.

7. Seed selection for regenerative agriculture: Choosing potato varieties that require less nitrogen promotes regenerative practices, with seed farmers and companies driving sustainability efforts.

8. Gene editing for late blight resistance: CRISPR technology holds promise for enhancing potato resistance to devastating late blight disease, but ongoing discussions surround its use, regulation, and labeling in agriculture.

S-CAP = Sustainable Canadian Agricultural Partnership

Many things are covered but the highlights are:

- New technology, farm security, grain handling
- Buying new or upgrading existing centre pivots,
- Installing drip irrigation
- Digging a well, developing water supplies for crops or livestock, decommissioning old wells
- Developing a food safety plan or upgrading existing ones, developing new products or markets
- Fencing in riparian areas, adding fencing (perimeter and internal)
- Increasing legumes or establishing native or tame forages
- Adding in shelterbelts, eco-buffers, and pollinator strips,
- Intercropping annuals for grain harvest
- Cocktail cover crops for green manure or forage
- Establishing or enhancing wetlands.

Consulting Packages

Pricing reflects the independent structure of the business. You pay for the advice and that's it. I do not sell any products. I will recommend them where I see fit but I make no money from your use of anything I recommend.

We can work remotely or in-person, or a combination of the two. You are not tied to long term commitments. I give you everything and you are free to implement on your own or with another company. Of course, I always love to work with people over the long term.