

536 Research and Innovation Highlights

#RealisticRegenAg | This week's episode is an audio and video version of my monthly newsletter. If you want to receive it to your email or to LinkedIn, check out the links in the episode description. If you've got behind on listening to episodes, I'll be summarizing the past month's work of episodes.

Welcome to Plants Dig Soil, a podcast about #RealisticRegenAg. I'm your host, Scott Gillespie, and I'm an agronomist from the western Canadian prairies specializing in climate-smart agriculture. I discuss scientifically proven practices that benefit the planet and, just as importantly, farmers' economic sustainability. Be sure to visit my website, www.plantsdigsoil.com, for resources and information about the services I offer.

Resources mentioned:

<https://www.plantsdigsoil.com/podcast/root-microbes-farmer-innovations>

<https://www.plantsdigsoil.com/podcast/making-drip-irrigation-work>

<https://www.plantsdigsoil.com/podcast/deep-work>

Transcript is available:

<https://www.plantsdigsoil.com/podcast/research-innovations>

My consulting packages:

<https://www.plantsdigsoil.com/pricing/#consulting>

My funding service offerings:

<https://www.plantsdigsoil.com/pricing/#paperwork>

SCAP overview: <https://youtu.be/0icitHJR2lk>

SCAP program details <https://www.alberta.ca/sustainable-cap.aspx>

My course: Profitable From the Start: Cover Crops for the Prairies:

<https://plantsdigsoil.thinkific.com/courses/cover-crops-prairies>

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YouTube: (Company): <https://www.youtube.com/@scottcgillespie>

Podcast Subscription Apps: <https://podcasters.spotify.com/pod/show/scottcgillespie>

Every month, on my podcast (and YouTube channel), I cover regenerative agriculture news. I try to focus on just the most interesting items and boil it down to the essentials. This month, I was really happy with what I found on research and innovation. Scroll down to the bottom for the summary.

There wasn't much engagement on the community survey (from last month), so I take it to mean there isn't enough to make it work. It really needs to involve more than just a few people and have full engagement.

The funding season is winding down. If you applied and were approved, you need to get your receipts in soon. If you are planning to do something next year, the intake isn't until February of 2024, so we can work on applications through the coming months.


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.


Content Summaries

Roots, Microbes, and Farmer Innovations

 Unearthing Root Secrets: While mixed crops explore different areas of the soil their root mass is no different than a single species mix

 Microbial Mysteries Unveiled: Delve into the world of microbial inoculants and the reasons why lab success doesn't always translate to the field.

 Innovative Farming Solutions: Learn how farmers are using cover crops as strip tillers and even employing sheep as solar panel vegetation managers.

 Rethinking Kochia: Explore the idea of using this "weed" as animal feed for your harshest lands.

Making Drip Irrigation Work

1 Efficiency at its Core: Drip irrigation minimizes water losses from wind dispersion and evaporation, closing the gap on efficiency.

2 Infrastructure Challenges: One of its primary challenges is the infrastructure required for effective implementation.

3 The Role of Rainfall: Drip systems work well when supplemented with moderate rainfall, but can fall short during droughts.

4 Understanding Drip's Reach: Drip irrigation wets a limited soil area, requiring frequent watering during peak growing seasons.

5 A Cost-Effective Solution: I explore an innovative system combining drag lines with pivots, offering both a drip and sprinkler option.

6 Concerns and Solutions: Disease transfer and wear and tear on pivots are potential drawbacks of this system, but they can be mitigated.

Deep Work

🕒 Time Blocking: Cal's main premise is that the ability to focus deeply for extended periods significantly boosts productivity. In an era of constant distractions, this approach helped me reclaim valuable reading and work hours

📅 Balancing Deep Work: Not all tasks require deep concentration. By dedicating the first part of my day to demanding tasks and saving shorter ones for later, I've found a rhythm that works for me.

🧠 Attention Residue: Switching off from work on weekends is vital. Even seeing work-related messages can keep your brain tethered to the last task. I've personally benefited from having a separate personal phone to maintain boundaries and take notes when inspiration hits unexpectedly.

S-CAP Funding (\$150,000 per farm)

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.

My fees can usually be included in the funding.

Profitable From the Start: Cover Crops for the Prairies

You'll make a Cover Crops FIRST (TM) Plan:

1. Fit
2. Implementation
3. Return-On-Investment
4. Species
5. Termination.

CCA Continuing Education Credits (CEU) available.