



ONTARIO



SOIL



NETWORK

“The Ontario Soil Network is a farmer-led network, aimed to improve Ontario's soils, by linking and supporting farmers across the province with training, research and opportunities. Farmers are able to bring the resources of the whole organization back to their communities in the individualized ways that are needed to support lasting adoption of environmentally and financially sustainable practices.”



Diagnosing Systemic Issues and Designing High-Leverage Interventions



Moving from Reactive → Proactive methods of response

Structural Archetypes give us a blue print for understanding systemic issues

The Toddler Method

THE ICEBERG MODEL

Use this tool to help you think more systemically!



EVENTS

What is happening?

PATTERNS OF BEHAVIOR

What trends are there over time?

SYSTEMS STRUCTURE

How are the parts related?

What influences the patterns?

MENTAL MODELS

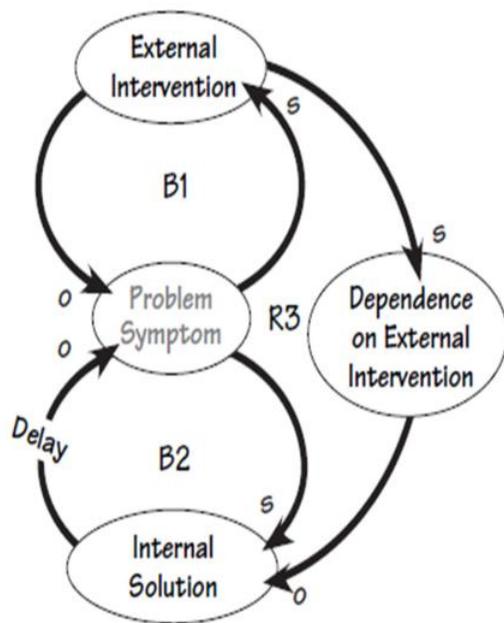
What values, assumptions, + beliefs shape the system?

Increasing Leverage

1. Why?
2. Why?
3. Why?
4. Why?
5. Why?

Teaching Farmers to Fish

Shifting the Burden/Addiction

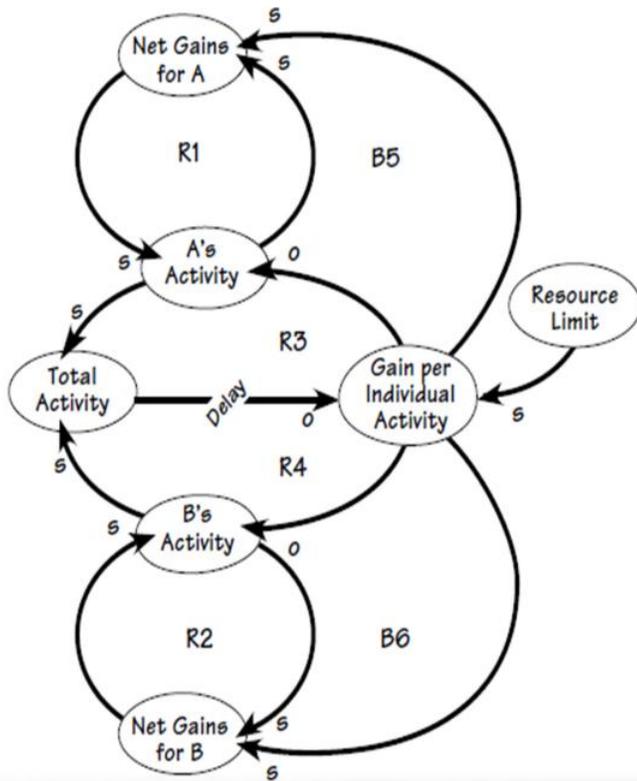


In a “Shifting the Burden,” a problem is “solved” by applying a symptomatic solution (B1) which diverts attention away from more fundamental solutions (R1). (See *Toolbox*, September 1990). In an “Addiction” structure, a “Shifting the Burden” degrades into an addictive pattern in which the side-effect gets so entrenched that it overwhelms the original problem symptom. (See *Toolbox*, April 1992.)

- Problem symptoms are usually easier than the other elements of the structure.
- If the side-effect has become the problem, you may be dealing with an “Addiction” structure.
- Whether a solution is “symptomatic” or “fundamental” often depends on one’s perspective. Explore the problem from differing perspective in order to come to a more comprehensive understanding of what the fundamental solution may be.

The Real Issue

Tragedy of the Commons

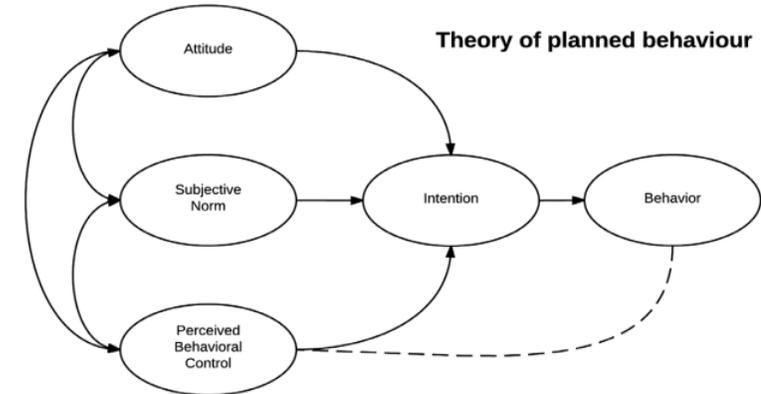
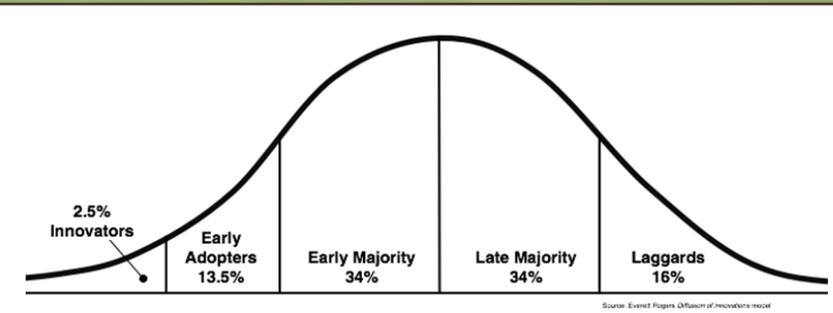


In “Tragedy of the Commons” structure, each person pursues actions which are individually beneficial (R1 and R2). If the amount of activity grows too large for the system to support, however, the “commons” becomes experiences diminishing benefits (B1 and B2). (See *Toolbox*, August 1991.)

- Effective solutions for “Tragedy of the Commons” scenario never lie at the individual level.
- Ask questions such as: “What are the incentives for individuals to persist in their actions?” “Can the long-term collective loss be made more real and immediate to the individual actors?”
- Find ways to reconcile short-term cumulative consequences. A governing body that is chartered with the sustainability of the resources limit can help.

Innovator to Influencer

- Goal: the tipping point (17%)(27,200 people)
 - Influence the early majority to adopt healthy soil practices by showcasing innovators and early adopters
- Giving communities the resource of a “go-to” person that meets their needs, improves engagement
 - Social norms & mental models
- Networks support the individual, the Soil Network elevates the individual



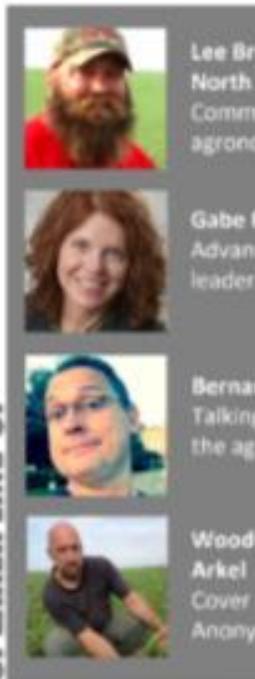


ONTARIO SOIL NETWORK **2019 Leadership Challenge** **APPLY NOW**

January 17-18, 2019 - Kingston, ON
www.ontariosoil.net

Calling all farmers! Grow your network, learn from your peers, improve your soil. Join us for a one-year experience to support your leadership & learning.

SPEAKER LINE-UP



Lee Br... North... Comm... agron...

Gabe F... Advan... leader...

Bernar... Talking... the ag...

Wood... Arkel... Cover... Anony...



The Network Challenge Launch Event

- Networking
- Leadership theory & skills
- Soil Health Agronomy
- Presentation skills
- Media & communication skills
- Defining *the challenge*

Toastmasters & tours



5 minute presentation to the group, with feedback following, video- recorded for the speaker. Got great ideas of how to improve presentations: Keep it simple, less text, more pics, engage audience with questions, start strong with why you're working to improve soil.



Adult Learning Principles

Learner-centered approach

Goal-oriented

Community

Autonomy &
Empowerment

Relevance

Adoption
pathway
catered to
needs

Social learning
environments

Social
outcomes and
motivators

Existing social
relationships

Education in
the hands of
the learner

starting with
strengths &
ending with
plans

Field days



Dave McEachren



Randy Dykstra



Rob Luymes



Rick Kootstra



Alan Willits



Keith Martin



Woody Van Arkel

Year 1
*40 on-farm events
reaching 700 farmers
& 100 industry reps*

Year 2
71 on-farm events
reaching 3,003 farmers &
454 industry reps

Let's Talk Soil

Small group chats between 5-22 farmers means the highest quality dialogue.



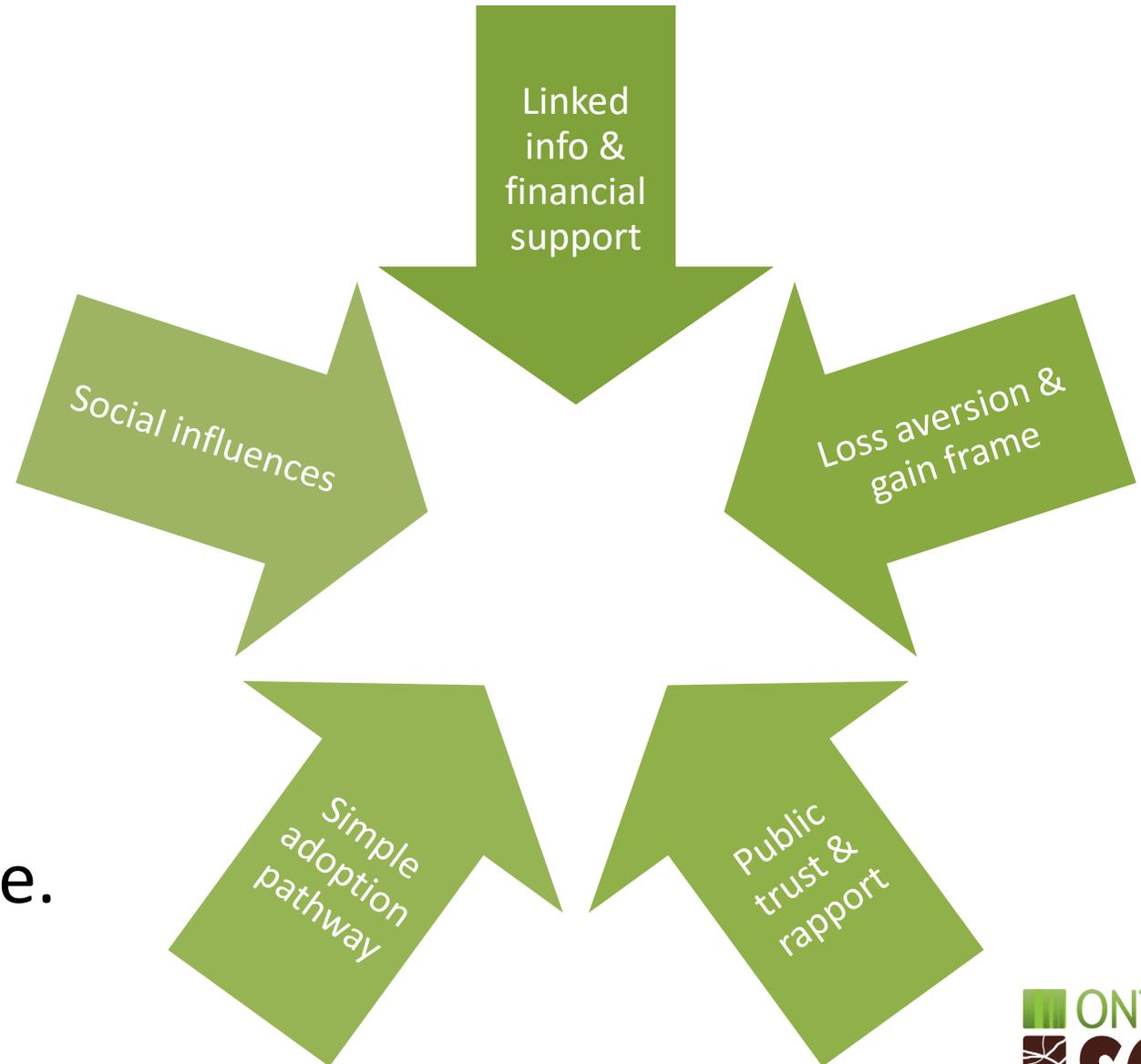
Great meeting today Rick, It was a pleasure to have a conversation with a group of guys that know the importance of soil health. I liked the size of the group, it felt like a COFFEE SHOP atmosphere. I was able to take home some great cover crop tactics for this fall. Maybe this meeting could possibly turn into a monthly event. Keep up the good work.



Year 2
110 Lets Talk Soil Chats
reaching 6,228 farmers and
589 industry reps

Communication strategies for influencing behavioural adoption can be complicated.

Network-driven communication strategies make these themes intuitive.



Improving the farm. Let's talk soil.

"I've farmed here conventionally all my life and in the last few years I've made some changes to improve the soil. If a farmer wants to remain a farmer, he needs to seek continuous improvement."



Alan Willets
Wingham, Ontario

Farming: Cash crops, background cattle

Soil health strategy: Strip-till corn, no-till beans and wheat, cover crops, bio strips after wheat

Soil story: One of the main reasons I'm doing organic is to help with the weather. I'm looking for ways to either a lack of sun or too much of it. I find it interesting, there is so much information available on how to improve things here on my farm.

Last word: Cover crops are an easier way of farming. I think it's just a matter of time for more people to get onto them.

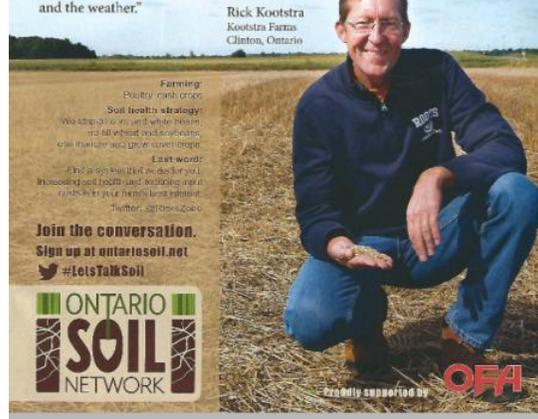
Join the conversation.
Sign up at ontariosoil.net
#LetsTalkSoil



Ontario Soil Network is supported by the following:

Weathering hard times. Let's talk soil.

"A decent goal, as a farmer, is to be able to withstand an economic downturn. Soil health and economic sustainability have a parallel line here. With poor soil, you'll always be at the mercy of the weather and markets. With strip-till and cover crops, we're cutting back our nitrogen, fuel, labour and equipment costs — and our yields are increasing. We can weather the markets... and the weather."



Rick Kootstra
Kootstra Farms
Clinton, Ontario

Farming: Quality cash crops

Soil health strategy: No-till corn and soybeans, cover crops and green manure, strip-till, no-till wheat

Soil story: One of the main reasons I'm doing organic is to help with the weather. I'm looking for ways to either a lack of sun or too much of it. I find it interesting, there is so much information available on how to improve things here on my farm.

Last word: Cover crops are an easier way of farming. I think it's just a matter of time for more people to get onto them.

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#LetsTalkSoil



Ontario Soil Network is supported by the following:

Fast-track the learning. Let's talk soil.

"I joined the Ontario Soil Network to get ideas from farmers who have more experience with soil health than I do."

Soil story: I'm not your typical farmer. I worked with weather and agronomy technology for decades and I've come back to my 200-acre farm in my retirement. Because of my research, I know first-hand how critical soil health is to water infiltration, so I'm applying compost, minimizing compaction and moving to a no-till system.

I'm retired and only have so many years left to farm. I want to leave a legacy and the Soil Network helps me fast-track the learning process.

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It's not about the paint colour. Let's talk soil.

"Soil is where the ROI is. It isn't a piece of equipment, you just wear out and get a new one eventually. Can't do that to the soil."

Farming: Corn, soybeans, wheat, buckwheat, no-till, nutrient stewardship on 1500 acres

Soil story: I started no-till 25 years ago. We switched our equipment over the years and are now doing corn and beans on 20-inch rows. It saves a lot of time and fuel not plowing and cultivating.

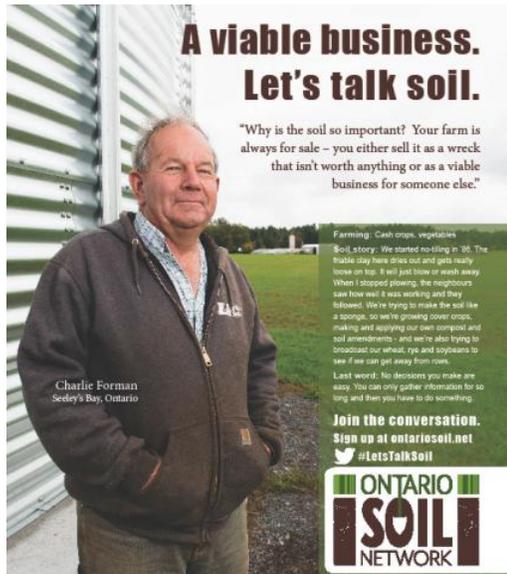
Advice? Try a bit and talk to someone who's doing it. Every piece of equipment we have has a buddy seat. Come along.

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A viable business. Let's talk soil.

"Why is the soil so important? Your farm is always for sale — you either sell it as a wreck that isn't worth anything or as a viable business for someone else."



Charlie Forman
Seely's Bay, Ontario

Farming: Cash crops, vegetables

Soil story: We started no-till in '98. The trible day here dries out and gets really heavy on top. It just just flows or wash away. When I stopped plowing, the neighbors saw how well it was working and they followed. We're trying to make the soil like a sponge, so we're growing cover crops, making and applying our own compost and soil amendments — and we're also trying to broaden our wheat, soy and corn to see if we can get away from them.

Last word: No decisions you make are easy. You can only gather information for so long and then you have to do something.

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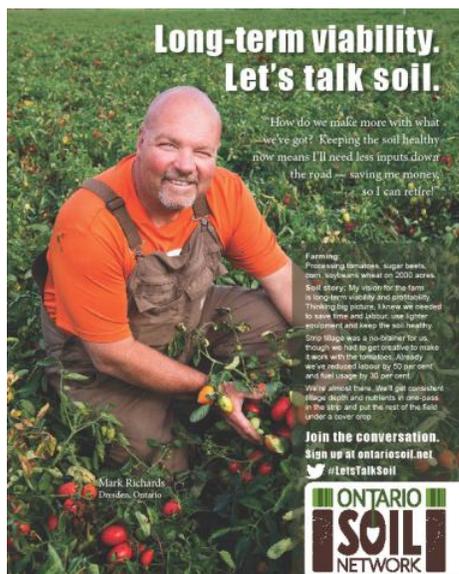


Ontario Soil Network is supported by the following:



Long-term viability. Let's talk soil.

"How do we make more with what we've got? Keeping the soil healthy now means I'll need less inputs down the road — saving me money so I can retire!"



Mark Richards
Dresden, Ontario

Farming: Processing tomatoes, sugar beets, corn, soybeans, wheat on 2000 acres

Soil story: My vision for the farm is to be long-term viable and profitable. Thinking big picture, I knew we needed to take time and invest in long-term investment and keep the soil healthy. Strip tillage was a no-brainer for us, though we had to get used to making a work with the tomatoes. Already we've reduced labour by 50 per cent and fuel usage by 30 per cent.

Last word: We'll get consistent, higher yields and healthier soil down the strip and get the rest of the field under a cover crop.

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Ontario Soil Network is supported by the following:



No one's selling you anything. Let's talk soil.

"Everyone's willing to share and no one is trying to sell a technique or a technology. I don't want to be sold all the time, I want to learn. The network is about a free exchange of ideas so we all do better."



Terry Clark
Barrie, Ontario

Farming: Hogs, soy

Soil strategy: Hater soil does worse here and we see the long term benefits, low yielding knots, etc. We've got to hold the soil in place, so its about covers and manure. I would weight those both 50-50. There is a lot more in manure than N, P, and K, and there's a lot more to cover crops than just the roots.

Business story: I've hired my yield on this farm over the last 20 years. The difference between a good farm and a bad farm is 40 years of a good farmer's about management. That can be a right farmer.

Last word: The experience that in this network gives me the confidence to keep trying. You've gotta keep going forward.

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Ontario Soil Network is supported by the following:



Let's Talk Soil ad campaign

Solving the whole puzzle. Let's talk soil.

"There are other ways of farming that work. And these days, there are so many people doing cover crops and strip till that it's easy to get it custom done to start. You'll see for yourself!"



Jill Dwyer
Parkhill, Ontario

Farming: Corn, soybeans, wheat, high oil soy

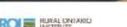
Soil story: I've been no-till for 10 years. I've been looking for a better way to do it. I've been looking for a better way to do it. I've been looking for a better way to do it.

Last word: I've been looking for a better way to do it. I've been looking for a better way to do it. I've been looking for a better way to do it.

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Ontario Soil Network is supported by the following:



Constant improvement. Let's talk soil.

"Fifty years in we are still looking for ways to improve what we're doing. Everything evolves here — nothing happens dramatically."



Eric Kater
Napawa, Ontario

Farming: Eggs, corn, wheat on 1000 acres

Soil story: I've been a no-till farmer for 50 years. I've been looking for a better way to do it. I've been looking for a better way to do it. I've been looking for a better way to do it.

Last word: I've been looking for a better way to do it. I've been looking for a better way to do it. I've been looking for a better way to do it.

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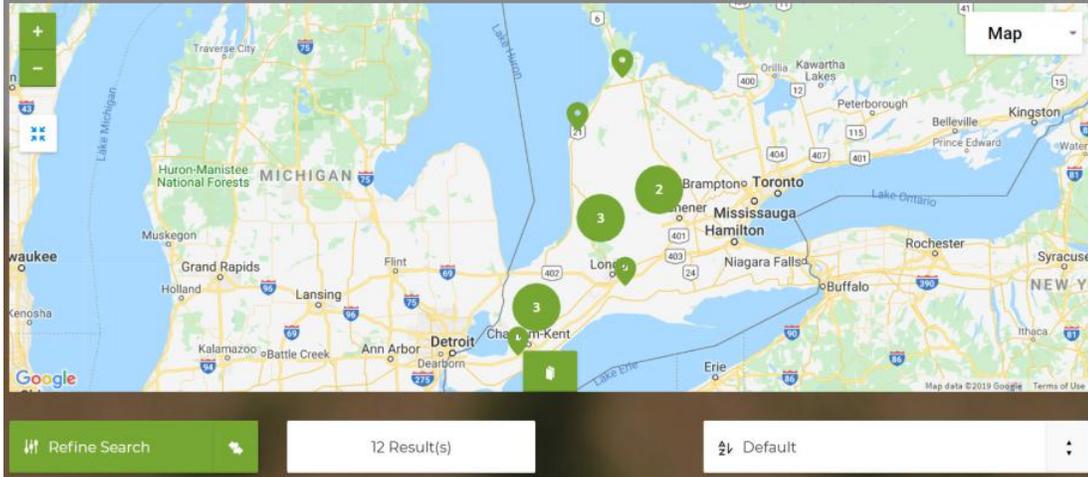


Ontario Soil Network is supported by the following:



PLUS 47 times in the media

CROP TOURS



HELP US GROW OUR NETWORK

Include your farm in Ontario Soil Network's directory.

[Submit New Listing](#)



Woody Van Arkel

Woody Van Arkel

Location: Dresden, ON

Producing: corn, soy, wheat, sugar beets

Speaking, a lot of speaking



Year 1

80 speaking engagements reaching 6000 farmers & 2000 industry reps

Year 2

31 speaking engagements reaching 1,926 farmers and 358 industry reps and the winter meeting season hasn't even started...



What kinds of people participate and how?

Cost-benefit outcomes

We know that farmer networks are important for adoption of healthy soil practices, so by supporting people to impact their communities in the ways that best fit, our efforts can go a long way.

Approximately \$11.50/farmer



Measuring Cultural Impact

Network Mapping

This project delves into effectiveness of existing peer to peer learning on adoption, comparing other similar jurisdictions to Ontario and discovering techniques that can increase adoption.

Program Evaluation

This project will help us better understand our own farmer-led network and its peer learning work, how it contributes to adoption of soil BMPs, what some of its limitations are, and how we might improve and potentially expand the reach of our efforts. It will also give us insights into successful experiences from other jurisdictions and into the attitudes of Ontario producers who may be considering soil BMP adoption but are not (yet) active adopters.

#GOALS

▶ Short-term outcomes	▶ Mid-term outcomes	▶ Long-term outcomes
<p>Network influence: connection</p> <ul style="list-style-type: none">- Participants (leaders, learners) feel connected and supported (less isolated)- increase number of farmers in audience, connectivity between them	<p>Network influence: knowledge</p> <ul style="list-style-type: none">- Farmers throughout Ontario know how to reach the closest active soil network member (via online map etc)- Improved awareness and knowledge around soil BMPs- Better understanding of soil BMP benefits and challenges- Improved attitudes and motivation to adopt soil BMPs	<p>Network influence: action</p> <ul style="list-style-type: none">- More farmers join the OSN network- Farmers progress along the soil conservation adoption spectrum- More farmers adopt soil BMPs (via influence of network, innovators, leadership, partners)
<p>More leadership capacity</p> <ul style="list-style-type: none">- Improve leadership skills- leaders have more confidence knowledge around how to better implement soil BMPs- Improved capacity for outreach and peer engagement (funding, skills)	<p>More leadership outreach and impact</p> <ul style="list-style-type: none">- Local leaders are broadly accessible and trusted information source- More outreach and mentorship by farmers about soil BMPs- Ongoing adoption and innovation related to soil BMPs by leaders	<p>▲ Leadership drives adoption (across network)</p> <ul style="list-style-type: none">- Leaders better able to influence and support other farmers to adopt soil BMPs- Leaders recognized for their expertise in soil health and BMPs in the agricultural industry
<p>Improved research process and skills</p> <ul style="list-style-type: none">- Participants are supported through research; gain research skills- Farmers gain networks and knowledge,- Farmers have more ability and confidence to communicate about soil health	<p>More research findings and capacity</p> <ul style="list-style-type: none">- More context specific demonstration of in soil BMPs in Ontario (agronomic suitability, soil impacts for specific contexts)- Improved farmer capacity to co-create research	<p>▲ More research application (across network)</p> <ul style="list-style-type: none">- More uptake and application of context specific soil BMPs

the Ontario Soil Network has filled up on dessert.

The Ontario Soil Network is seeking to solve the foundational problems contributing to soil erosion and water quality

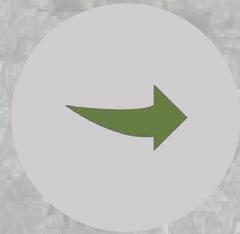
Addressing these issues at their foundation means: Creating farmer-owned solutions, leveraging social capital, sticking to adult learning principles

With these guiding principles, the Ontario Soil Network has influenced communities and created far-reaching communication strategies for a fraction of the cost

Sponsors Make This Possible



Questions?



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