



Ontario Soil Network

Handbook to Leadership and Change

Executive Summary

For decades, Ontario's public institutions have researched agricultural soil degradation and erosion, have produced fact sheets and presentations to promote better field management and have even offered cost-share funding. But research, education and funding can only go so far without understanding the social and systemic factors, the erosion of visionary leadership and communities, that have got us here.

The Ontario Soil Network believes that restoring connection and leadership will help to support the public efforts to improve soil health and the sustainability of Ontario's agriculture.

From March 1-9, 2021 the newest cohort of 15 farmers and several invited speakers created a soil conference like no other. It was a series of online discussions on networking, research, leadership, communication and goal setting.

The challenge of the Ontario Soil Network, now 60 farmers strong, is not only to improve soil on their own farms, but to improve their communication about soil health and their ability to lead and work with others. Sometimes it seems our only options are to be self-righteous evangelists or to get overwhelmed by ideas and innovation. Our challenge is to create an Option C: leadership that inspires action.

- Leadership that **listens** to understand, that seeks out and includes ideas from the outside.
- Leadership that **sees** a vision for regeneration, looks past bias and sees opportunities.
- Leadership that **speaks** to connect, speaks passionately, succinctly, and humbly.
- Leadership that **acts**, that works together, leveraging each other's personality and skills.

This is the challenge posed to the Ontario Soil Network 2021 cohort, and it is a challenge to us all. The real crisis of leadership and of soil health is when we believe it is someone else's job to do it. We are all leaders, and our mission is to inspire and connect a community to make a difference.

Introduction

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has. – Margaret Mead

From March 1-9, 2021 the newest cohort of the Ontario Soil Network (OSN) met online with a number of invited guests for a series of presentations and discussions on networking, research, leadership, communication and personal goal-getting. The following is a summary of the 35+ hours of discussions in and around the 'conference'. This is a people-centred approach to improving soil. And it is just the beginning.

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Our goal is healthy soils, farms, and families. We believe that leadership and collaboration are the keys. Improving soil takes a willingness to see things differently and do things differently, at the individual, community, industry and government levels. During the conference, we heard a collective desire to improve soil on our own farms, promote soil health in Ontario and share our time, talents and knowledge with each other to get there.

“Is it our job to push soil health or to just lead by example?” asks Laurent (Woody) Van Arkel, a Dresden area farmer and co-founder of OSN. “Trying to convert someone just creates animosity. I don’t want to judge anyone, but create a support group for ourselves to make our farms successful - and that will be our message.”

Keep defining the problem.

The first step to solving a problem is to deeply understand it; but we are naturally quite attached to our pre-existing ideas about the problem. We have been educated to believe that there is one right answer, one best way to see the world. We assume that others see things the way we do so we feel threatened when they don’t. We dismiss them as either stupid or evil.¹

Much of our efforts at understanding problems (and solutions) are merely attempts to filter out, educate or control others that don’t see it the way we do. There is evidence to justify nearly every perspective out there, but this kind of inquiry is a dead end, rooted in ‘confirmation bias’. As illustrated by the six blind men & an elephant metaphor, we will never understand the complexity of a problem until we start inviting new perspectives into our worldview. We don’t know what we don’t know.

In his Nuffield project, Mark Brock set out to look at farmer collaborations around the world, but was often met, at least in North America, with farmers saying ‘that will never work.’ While he met with successful farmer collaborations in Australia, New Zealand and Tasmania, his forthcoming report also examines our unconscious bias against collaboration. Whether influenced by the status quo or overconfidence bias, farmers fear the loss of control more strongly than they realize the benefits and gains of collaboration.

In his experience, collaborations emerge to solve a common problem; creativity emerges from necessity. Without government support or extension services, Australian farmers felt the problem more acutely, had a common ‘why’ and saw their neighbours as potential allies. So, do we need ‘more problem’ before we can find the solution? What *is* the problem? Why is soil being eroded and degraded in the first place? It will take many different perspectives to fully answer that question and the assumptions and biases behind our answers also need to be made explicit.

¹ Riel & Martin. Creating Great Decisions

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Networking to gain support and know-how.

While some knowledge can be learned from books, farmers possess a ‘tacit’ knowledge that can only be gained from experience and shared through interaction over time. This interaction is also where new ideas come from. “Chance favours the connected mind,” says Steven Johnson, who argues that great ideas are born when our ‘slow hunches’ meet others.²

The Ontario Soil Network was a solution born from a lack of this ‘generative’ interaction on cover crops and no-till. When Woody didn’t have any neighbours using cover crops, he reached out to Anne Verhallen (OMAFRA) and they pulled together five farmers from surrounding counties for a cover crop discussion that ended up going on for three hours. From that, ‘Cover Crops Anonymous’ was born and became more formalized across the province in 2017 as the Ontario Soil Network.

“All the learning happens over a beer,” says Vicky Robinson. Food and drink create a relaxed atmosphere where this ‘tacit’ knowledge can be shared more easily. A Nuffield Scholar from England, Vicky traveled and [wrote about farmer networks for knowledge sharing](#). She says there is no silver bullet to a network because it is all about people and relationships, which are innately complicated. She notes that while disruptive people and ideas are crucial to learning, people will leave if the disruption gets too uncomfortable.

All the farmers in the Ontario Soil Network have made tweaks to their farming practices to improve soil and know first-hand the importance of learning from their failures... and from other’s failures as well. Many also owe their inspiration and ideas to traveling, conferences or having new visitors on their farm that question the way they do things.

We discussed some of the keys to learning: **Ask questions and keep an open mind.** “*You won’t learn anything if you think you already know everything,*” - David Cousens. **Stay humble** “*We stop learning the moment we get righteous about what we’re doing*” – Thomas Farrell **Seek differing opinions.** “*I follow my skeptics, even though it hurts a bit.*” – Mike Groot **Pay attention.** “*I learned something from someone because I paid attention to ALL of it – even if they were a bit ‘crazy’.*” – Lee Breise and Henry Denotter.

Perhaps building a learning network follows the same principles as building healthy soil.

- **Time.** Trust and structure are built over time and can’t be forced.
- **Reciprocity.** Like the carbon cycle, we get what we give. People that dominate or don’t contribute won’t get as much from a network.
- **Diversity.** Monocultures of the mind are vulnerable, so bring in people with different opinions, farm types or from different parts of the value chain.
- **Amendments.** We need new ideas, changes and food for thought, even though we might first dismiss it.

Networks happen naturally, but with intention, leadership, and resources, they can be even more powerful. Thomas Farrell signed up for OSN in 2017 in hopes to meet other innovative farmers in the

² Where Good Ideas Come From

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province, but he went beyond his comfort zone to speak at SWAC and was featured in a #LetsTalkSoil ad. In putting himself 'out there', he now has people in his own neighbourhood approaching him and has strengthened his own 'off-shoot' network. All of us have these networks too!

Doing better research.

Without a clearly defined vision and goal, research is a candle in the wind. Dr. Tim Boring has done his fair share of such research at the Michigan State University and articulated how universities struggle to bridge the gap between well-funded research projects that support the university, and objectives that will impact farms in Ontario. *"We're researching fertilizer rates and largely disregarding biological systems, because they are too complex to publish," says Tim.*

Several solutions emerged from our discussion:

- 1) **Lead on commodity boards.** Research funding decisions are often made by farmers on commodity boards, so it is crucial that leaders with a strong vision for soil in agriculture step up to the plate.
- 2) **Communicate the importance of soil health.** Let's inspire researchers and funders with our vision. Perhaps they are just looking for a place to put their passion and talents that will also help farmers achieve their soil management goals.
- 3) **Build relationships and collaborate with researchers.** The tacit knowledge that farmers have, can bring a lot of value to researchers. With solid research partnerships (including diverse teams of pedologists, agronomists, pathologists, entomologists, economists and their biases), we could leave the research to researchers and the farming to farmers. *"We work with who we know, who we like and who we trust," says Dr. Laura van Eerd. "And the benefits of these relationships accumulate over time."*
- 4) **Do better research on our own farms.** While most of us were curious about the grand complexity of biological systems, Laura challenged us to **keep it simple (thank you)** and find the nugget we need to be confident about a management decision. Ian MacDonald stressed planning and communication, random, replicated plots, understanding soil variability, stand counts, and making the time for research. [The EFAO's Farmer-Led Research program](#) is an excellent example and see [10-steps of on-farm research](#) here!
- 5) **Collaborate on research.** There are several examples of farmer-focused research in Monitor Farms around the world, in Cuba and Brazil and even Quebec. What about making our own research organization that could access government, commodity, and industry (including solar industry) funding?

Being better communicators.

It doesn't take more than a few minutes on Twitter to see how our soil crisis might be exacerbated by a communication crisis. While we all care about soil, how we manage our farms has become a polarized debate. Promoting cover crops or no-till through 'evangelism' may be doing more harm than good

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(causing mis-learning), but, on the other hand, excessive contemplation (navel gazing) leads to no learning at all.³

The first step is to understand and be open about your own motives for farming the way we do and for communicating about it, says Lee Briese, an independent agronomist from North Dakota. And communicating isn't about changing behavior, but about inspiring others with a vision for their own farms. *"If you want to build a ship, don't drum up the men to gather wood, divide the work and give orders. Instead, teach them to yearn for the vast and endless sea."* - Antoine de Saint—Exupery

Start with listening

Most people don't want to get advice, but yet we *give* unsolicited advice all the time. Lee is paid for his advice but has had far more success using a peer-coaching technique that begins with curiosity and questions. We naturally want to control conversations to achieve our own objectives and get the 'right answer', but coaching means letting go of all that. *"Most people listen to respond," says Lee, "but we need to start listening to learn."*

Just like unsolicited advice, Lee stresses to not give unsolicited coaching, especially not over social media. But if you *are* coaching, start with questions that clarify the other's 'why,' their goals and their capabilities (ie. time, labour, access to equipment). Don't assume you know anything about their farm or that what works for you will work for them; ask genuine questions and reflect it back to them clearly so they can sort through their thoughts and articulate their next steps. Lee says it is usually a seven-year journey with his growers moving towards cover crop adoption. Ultimately, they will only learn by doing it themselves. Just like the yo-yo, we only learn by practice, practice, practice.

"Sometimes a right answer for one farmer is a wrong answer for another," says Lee. "And there's no destination either. We are all just trying to do things better for the soil."

"If neighbours come to me for some help, I start them simple, so they start with success," says Woody. "Understand their comfort level, their resources and what soil and system they are dealing with."

Building connection... with anyone!

NonViolent Communication™ is a process of communication in which the goal is not to *convince* the other but to *connect* with them and their needs. Once connection has been made at this level, the problems are obvious and solutions come naturally. We all have common needs, and our behaviours are strategies (most often futile ones) to get these needs met. Communication often stays at the level of judging this

³ MIT modeling study

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behaviour without seeking a deeper understanding. NV Communication teaches how to 1) Observe without evaluation, 2) Express feelings, not thoughts and 3) Discover needs, not strategies and 4) Make requests that aren't demands. [More here.](#)

While we agreed that preaching to our neighbours about soil health will turn them off, we wondered if waiting for neighbours to maybe one day approach us was too passive. Making the first move to ask someone for a favour (especially around a common interest/ value they have) puts yourself in their debt and is a tried-and-true way of building connection and trust.

Be willing to see people differently. We may have been hurt by someone's comments to us in the past, but people change (even if it is only our perception of them that changes). Perhaps there are toxic relationships that need to be managed appropriately but holding people in a certain 'camp' is what makes these camps so harmful in the first place. Perhaps nothing more powerfully illustrates this than Daryl Davis, a black man who approached KKK members with genuine respect (see Accidental Courtesy and Davis' TED Talk).

As Lee says, the pre-requisite to good communication is to (actually) care about the other person and their journey, and if you do not care, refer them to someone else. Be approachable, humble (self-deprecating humour can work wonders) and really get to know your audience by asking questions.

Treat your audience like adults (unless they are kids)

"They promise me I'm going to learn something new but then they kill me with Powerpoint!", says Amy Hays, the Adult Education Manager at Oklahoma's Noble Institute. We are used to getting 'presented at' with a firehose approach and we often present that way ourselves, but it doesn't promote learning. Farmers aren't children. Children don't have experience, so they are taught by an expert who does. Adults, however, *do* have experience and learning is unlocked through interaction.

The principles of guiding adult learning are: **Involve learners** in the planning and evaluation of a session that is about **sharing experiences – including mistakes** that have **relevance and impact** on their lives and is centred on a **problem**.

It is a presenter's job to honour the learner, to guide the learning. Amy has a 60:40 rule for adult learning: 60% of the time should be discussion, feedback, or activities and 40% (max) for the presentation. If you want an interactive session, it starts by having a question to the audience from the get-go, says Lyndsey Smith, a farmer and journalist (and now teacher) on the outskirts of Ottawa. And getting feedback from the audience at the outset means you can tailor your content on the fly and ensure they are getting what they need from the time spent with you.

Networking is so important, so put it first! Anne Verhallen starts presentations by getting to know the audience and pulling out who is doing what. This starts on the right foot, but also allows for the quieter participants to know who they might want to chat to in the hallway after the meeting. Jason Deveau says

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the best presentation he ever gave was when he had to ditch his slides completely and just had a full-out discussion with tomato growers. It led to research connections and learning for all, including Jason.

We all have different ways we learn (and this varies across generations too!), so Jason's rule of thumb is to say things in several different ways (as a concept, a metaphor, visually, a hands-on demo, with numbers and through discussion). This may seem redundant, but it doesn't feel that way to an audience because they will only latch on to their way of learning. Also important to note, however, is that most people can either read or listen, not both at the same time. So, use text on slides with care.

The science, numbers and methodology are important, and they can help build trust, but shouldn't be the only focus in a presentation. It is OK to use other people's data, but make sure it is local, be sure you know the research methodology, trust the research, ask for permission and properly cite. Follow up with links for more information, or put data on a handout.

As Amy explained, there is not a simple or immediate link between awareness or knowledge and action. Our presentations often just 'transfer knowledge' but might be more influential if they also moved into to the realm of problem solving and decision making.

Watch your language!

Innovative farmers get a rush from trying new things, but the words that resonate with us might terrify the average farmer. Ryan Stockwell, a farmer from Wisconsin, spoke with the 2017 Ontario Soil Network cohort about putting ourselves in the shoes of the audience. He says to avoid words like 'try' and 'experiment' but to instead convey that these practices are tried and true ways to manage risk. We often talk about cover crops or soil management like they are risky, but the real risk is soil erosion. So, he suggests we talk about cover crops, no-till etc as risk management tools.

Watch that your language isn't over people's heads, or isn't demeaning and arrogant,⁴ but everyone loves a good story! Or present like you are sharing a problem that you and the audience can solve together. And be willing to have your mind changed, says Jason Deveau, who reflected on several times he left a presentation being less sure of his material than when he started. *"I'm hoping my journey will create another way of doing this, but even I'm not convinced, definitely not enough to try to convince someone to do it my way,"* says Larry Dyck, who is planting green on some tough Niagara clay.

Appreciate your personality, and others'.

⁴ People might not want shiny tractors and quota rubbed in their face

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We naturally gravitate to people like ourselves, but our teams and our vision for healthy soil won't go anywhere without a diversity of talents, perspectives and, yes, personalities. We all have strengths and weaknesses, which is why we need each other. Great leadership means connecting all kinds of people! Communication begins by understanding yourself and your impact on others, then appreciating others and adapting your communication style to them. Angela Leach led us through [a DISC assessment](#) in which we better understood where we fit on a quadrant between fast-acting and more methodical, between task-focus and people-focus, how to work better with others in different quadrants than ourselves.

Start with the point, and keep to it.

We all have a habit of building up a backstory to get to the point, but (let's just be honest) our audience often tunes out before we reach it. That's why great communication starts with the point. Whether you are giving a presentation, taking with the media or just chatting with someone after a meeting, brevity is key. Get clear on what it is you want to communicate, practice it and distill it to one or two sentences. Lead with the points and keep coming back to them. This keeps you (and your audience) from getting lost.

Media tips

In doing media interviews, know who you are talking to, what it will be about, etc. and always buy yourself some time before doing it. Keep your answers brief and to your points. If you don't know the answer, don't pretend to. Stay honest. Don't say 'no comment' or go 'off the record', don't run on with large words or jump into the silence. If you are asked a question you can't answer, redirect the conversation back to where you want to go with statements like "I can't speculate on that but what I can tell you is..." Practice keeping on point. The media love soundbites that last a few seconds, but well worth spending time to develop those soundbites. Remember Lee Brieese's 'three knows': Know what you know, know what you *don't* know and know where to go to get the info.

Managing nerves and self-talk

Important to note is that we *all* have 'imposter syndrome' and get nervous speaking to audiences, even people with decades of in-field and in-front-of-crowd experience still have this feeling. As many people have said, courage is not the absence of fear, but doing it anyways, despite the fear. People innately trust farmers and, remember, the audience came to see you - they are rooting for you! "What makes someone credible has more to do with caring and empathy than being an expert and having all the facts," says Len. And if all else fails, call Dan Petker for a pep talk!

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Taking care of ourselves.

If this all sounds overwhelming to you... yup! Vicky Robinson quoted Alfred Grande: *"You have to be optimistic to learn something new."* Alfred organizes meetings of Western Australia farmers and to discuss the issues that were keeping them up at night. Farming is stressful, and chronic stress impacts our bodies and our minds. It is critical that we take care of ourselves and take responsibility for our own happiness and our impact on those around us.

On our last day of the 'conference', we had a personal goal-setting journaling session with Abbey Wick, with North Dakota State's soil extension service. This may be something you revisit every year – What does success look like for you? What is changing in your life? What is the legacy you want to leave when you die? Who might help you create it?

Time management and good habits are important to minimizing stress and maximizing flow. Flow is that state when work and life is just fun and easy, purposeful and energizing. We lose sense of time, of ourselves when we tap into that frequency. All of us have a different way to get there, so find it! When do you work your best? In the morning? – Protect your morning. Alone? – Get yourself that space. With other people? – Work with other people.

For David Cousens, those most productive and enjoyable days happen when he forgets his phone at home. Our phones keep us connected, but also distracted - so if you can put it away for a few hours (or more), do it! For Brett Israel, flow is the planting season when he, his dad and his grandpa have clear roles for who is doing what and trust each other. Confusion over who is doing what, over-compensating for team-members or micro-managing are huge time (and energy) wasters.

There will always be things that can keep us 'busy' and for farmers, busy-ness can be a badge of honour, but what if it is a type of laziness? What if busy-ness and putting out fires is just another way of shirking responsibility for the things you really need to do to be successful and achieve your goals? Make time for your goals first. 'Hedgehog' and focus on the most important things, says Jim McComb.

A lot of our time is spent looking for things or doing small tasks that could be delegated or automated. Getting organized, preparing for what might be coming or teaching someone one of your jobs is an investment in time, but it's a good investment because it multiplies.

Take care of your health by eating well, getting a good sleep (when you can) stretching, meditating, and making the time for things that bring you joy. Give yourself permission to play, says Jennifer Doelmann.

And don't forget the power of saying no! We have a choice, a powerful choice, about how we spend our lives, our 24 hours every day and it is worth setting the boundaries to protect our goals. You don't have to do it all.

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Working together.

You don't have to do it all because you are surrounded by passionate, talented people with a variety of expertise and skills that also want to improve soil and make a meaningful impact on the world. The relationships we build with each other through the Ontario Soil Network is the foundation for collaborative learning and action to improve soil health in Ontario.

The biggest hurdle to collaboration is the *status quo* and our bias against working together, says Mark Brock, and fearing the potential loss instead of the gains. In his forthcoming Nuffield report, he includes a flow chart to go through before starting a collaboration, that includes both the human and structural components of a successful collaborative. On the human side there is trust, openness, curiosity, positivity, innovation and like-mindedness, etc and on the structural side there is the safety of the environment, a facilitator, accountability, relevance, exit plan, etc.

He quotes John Gladigau a fellow Nuffield scholar from Australia that merged his farm with another. John says, "If you get the people part of a collaboration right, the economics and structure tends to look after itself." Check out John's 2007 report [Collaborate to Survive and Thrive](#).

What efficiencies and opportunities can we build when we work together? Mark Brock visited several successful collaborations on his trip: a joint irrigation scheme in Tasmania, a knowledge-sharing & brand promotion group of cotton growers in Queensland, and the [Camden group](#) of dairy farmers in New Zealand that share labour and have helped their employees start their own businesses within the group. The [Dakota Lakes Research farm](#) is just one of many examples of private farmer-focused research collaboratives. And perhaps collaboration is even more common in countries with less resources. Peter Harvey toured Cuba and found that local farm groups shared equipment, veterinarians, agronomists, and "a lot of rum." Shelley Spruit has seen value-chain collaboration between agronomists, farmers, bakers and consumers with a common vision to bring back heritage grains. Some groups have built enough trust to share their financials. All of these collaboratives have a strong and common 'why.' "It helps to start with a goal, and then work backwards," says Lyndsey Smith.

Many people in the network are diversifying their crops and/ or marketing streams, like Tim Boring who is working to de-couple his success from the size of his land base by growing high value products. Building new markets and growing new crops can be a difficult road to walk alone.

But the next step is up to you! There is a place for each of us to come with our unique skills, ideas, networks, skepticism, personality and curiosity. Take an inventory of what we have, start dreaming of where we could be and let's start planning what we can do together.

"If we wait for the government, it will be too late. If we act as individuals, it will be too little. If we act as communities it might just be enough." – Rob Hopkins, From What is to What If, 2020