

Canadian Organic Growers Regenerative Organic Oats

ROO Monitoring
February 27, 2025

Objective

- Monitoring
 - Why is monitoring an important part of the regenerative journey?
 - How is monitoring used in managing with a regenerative mindset?
 - What is involved in ROO monitoring strategy?

ROO Context

- The role of ROO is to provide a platform for a community of practitioners to nudge participants to solve their problems.
- **Knowledge** - understand and develop place based knowledge
- **Connection** - like minded community who share similar purpose

Knowledge

- Knowledge – we are all uniquely endowed to solve problems
 - no secret knowledge to acquire before we can act
 - no need to wait

Regenerative

- Shift from food systems that do more to degrade than enhance the very resources that we depend on for LIFE
 - Ecology – air, water, soil, plants, non human organisms
 - Social – behavior, cultivating relationships
 - Economics
 - Culture

Farming with a Regenerative Mindset

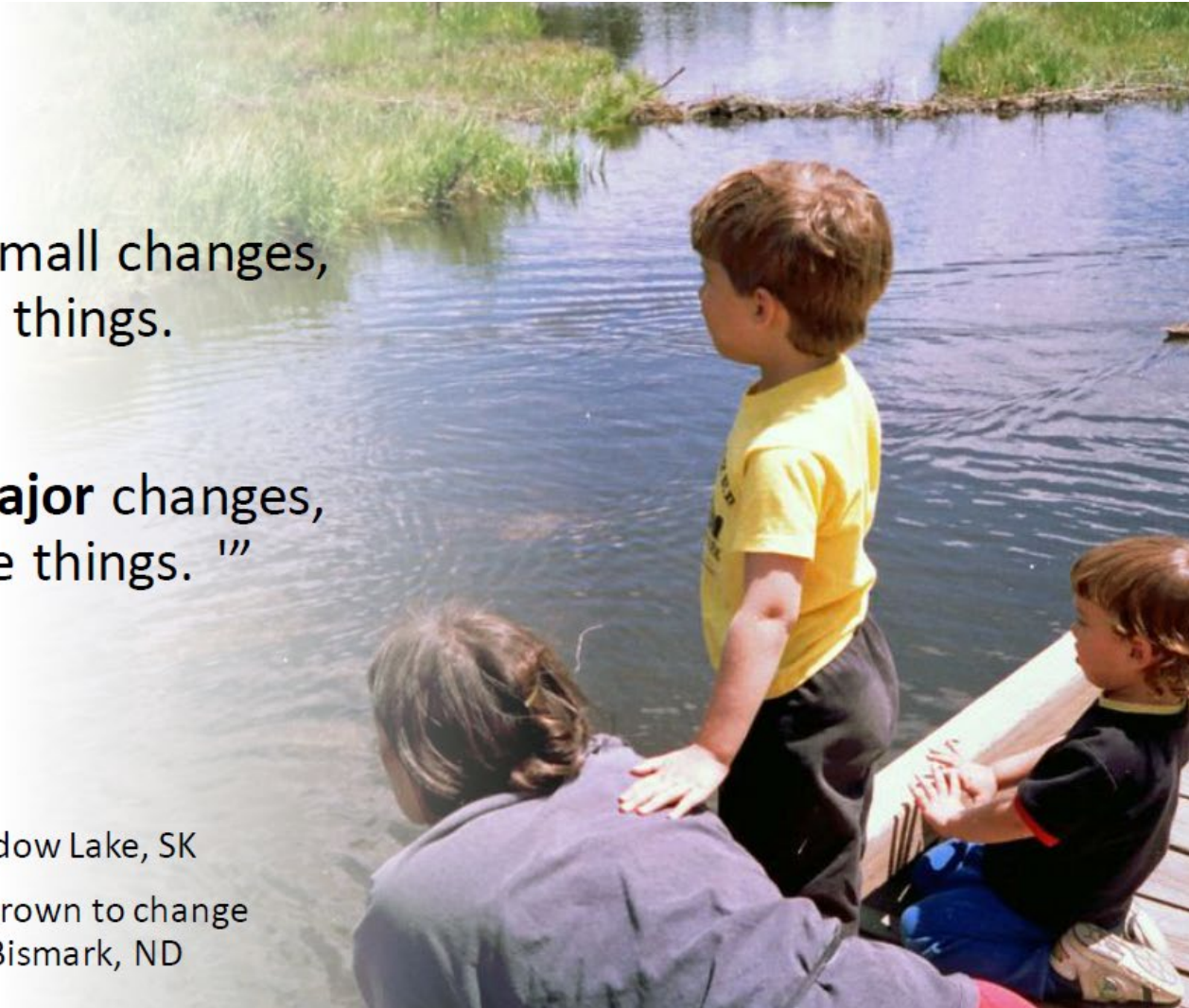
- Attention to the resource base that is creating profitability versus focusing solely on profitability.
 - Understanding – Ecological Mindset, Complexity, Non Linear
 - Time – Limited resource, Investment
 - Present – Intention, Practice

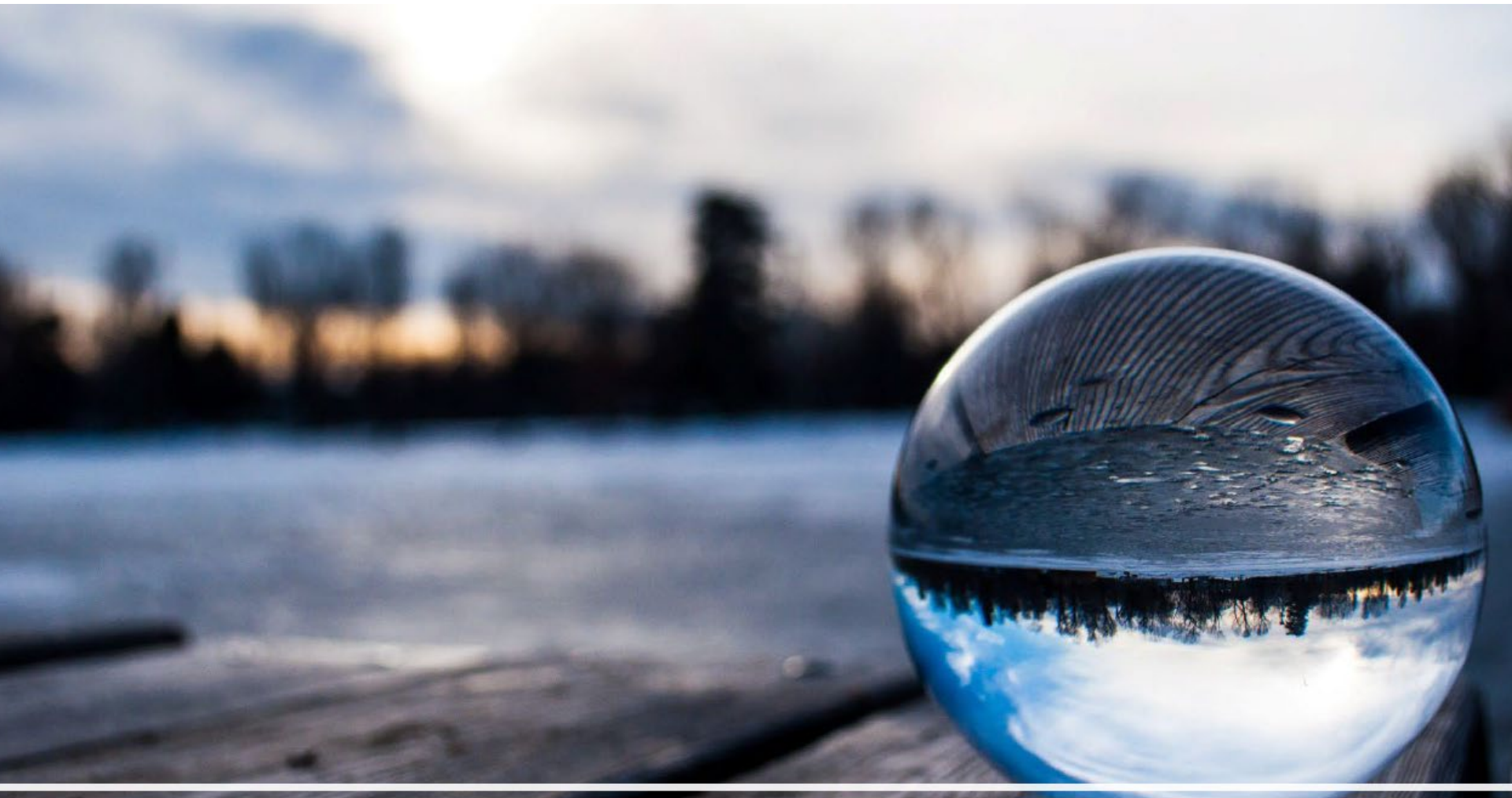
“If you want to make small changes,
change the way you do things.

If **you want to make major** changes,
change the way you see things. ”

Don Campbell (HM Educator)- Meadow Lake, SK

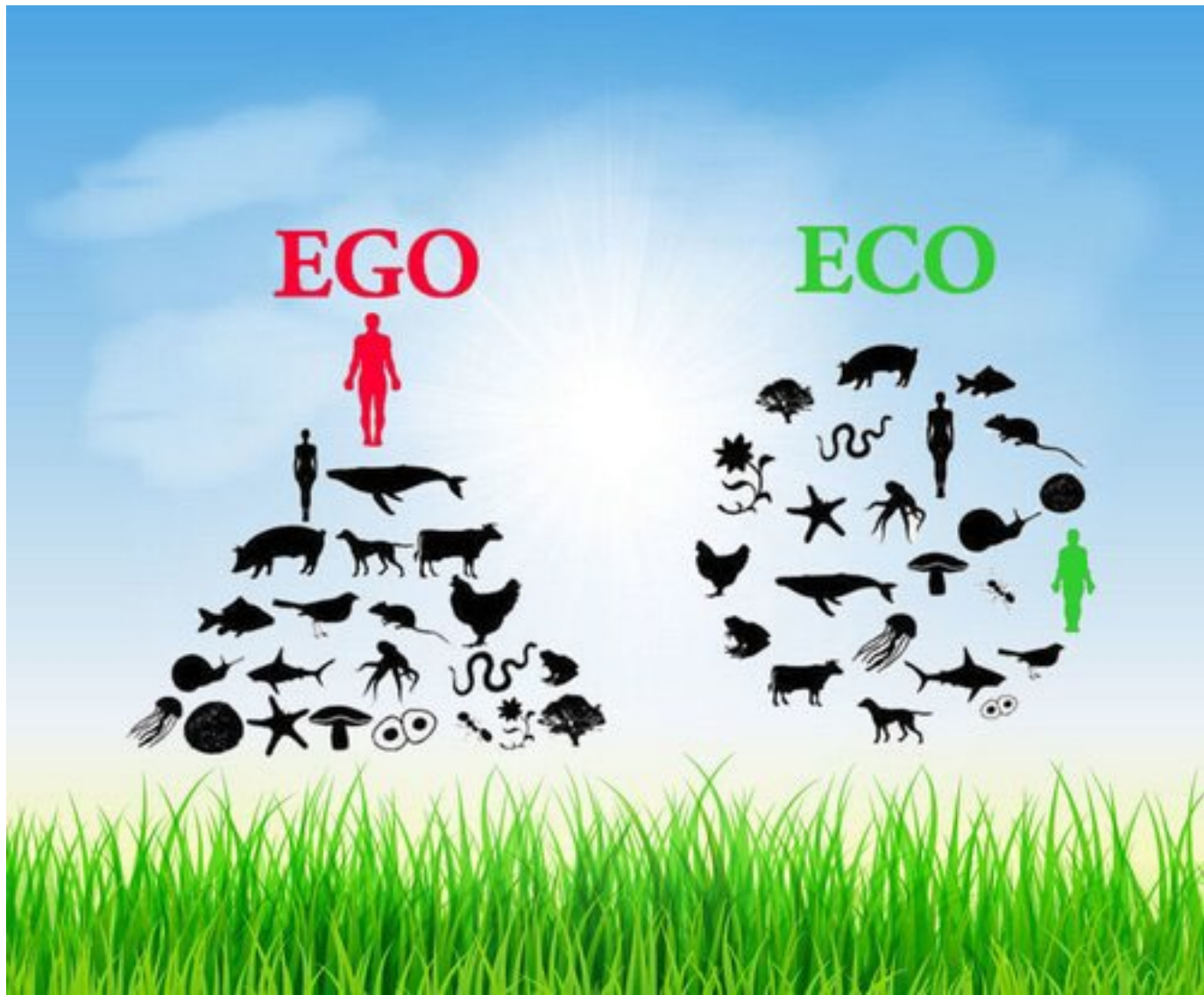
This statement that inspired Gabe Brown to change
everything! (Regenerative Farmer) Bismark, ND





Your Farm is a Reflection of You – Gabe Brown





<https://silvotherapy.co.uk/articles/from-ego-to-eco>



**Creating space to be present
and see and reflect.**

Monitoring

- How you see Things – Outer World
- How you see Yourself – Inner World
 - Mindset
 - Monitoring
 - See/Observe
 - Management Decisions
 - Impact
- Focus on management within your control and reduce degradation and or improve resource base

Challenges – Log Jams

- **Benefit or Value**

- focus on the resource and determine if management is making a difference
- Focus Output – Input = Profit OR
- Focus on Profit is result of managing inputs
- Branding – Verification in food value chain

- **Cost**

- Cost of Doing the Same or Doing Something Different
- Risk

Takeaways from Cover Crop Discussion

- Diversity – multi species cover crops help to de-risk variables –soil, weather, environmental conditions
 - Function – Relationship Carbon Pump – Photosynthesis, Root, Soil, Microbe
 - Diverse root structures
 - Symbiosis and collaboration – nutrient access, N fixers, nutrient scavengers, decomposition
 - Diversity landscape
 - Soil formation

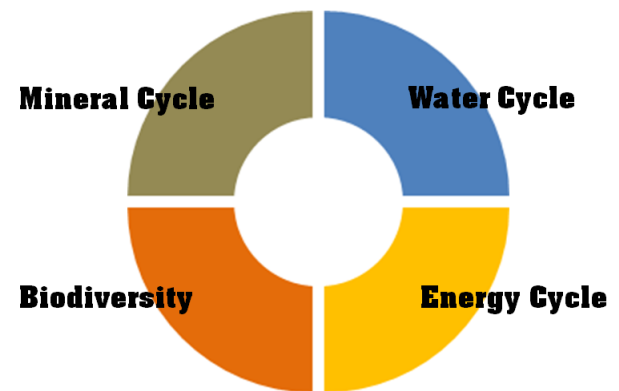
Takeaways from Cover Crop Discussion

- Impact – change in function of the resource base as management changes
 - Water Infiltration
 - Carbon capture
 - Integrating Livestock
 - Reducing Tillage

Principles of Regenerative Agriculture

- Context
- Diversity
- Livestock Integration
- Principles - Inter-related
- Cascading Effects

Soil Function Involves 4 Ecological Processes



Regenerative Organic Oats Monitoring

- Objectives:
 - Determine impact of management.
 - Develop understanding and community of practice.
 - Spark curiosity.

ROO Monitoring Strategy

- Monitoring Strategy (based on 3 year program cycle)
 - Baseline Monitoring – New Entrants Cohort 2025
 - Interim Monitoring – Cohorts 2024 and 2023
 - Investment 25 to 33% of program budget
 - Every farm has its own baseline with a focus on improving your results

Baseline Year Monitoring

- **Select Areas/Fields to Monitor Year over Year**
 1. Best or Most Consistent Performing Field
 2. Most Challenging or Inconsistent Performing Field
 3. Unmanaged Area – closely represent 2 selected fields
 4. *Option for ROA participants*

IMPORTANT NOTES

- **Note:** We ask that you select comparison fields based on:
 - Knowledge of the selected fields (not necessarily crop performance)
 - You have committed to an action plan or follow-up to an action plan that is in progress.
- **Note:** We ask that you commit to participating in the monitoring

Limitations of Monitoring Strategy

- Limitations
 - Use a limited number of sites within management area.
 - Comparisons may reveal relative trends versus direct correlation/cause and effect.

Managed versus Unmanaged

- Discern - relative
 - Impact of management within similar context
 - Degree of resource degradation
 - Learn how a functional system is able to generate

Managed - Best versus Challenging

- Discern - relative
 - Challenge some bias
 - Reveal what is the limitation of the resource versus management approach
 - Improve the challenging areas more quickly as we expand our knowledge

Monitoring Toolbox

Lab analysis and in-field observations

Soil Analysis – Samples analyzed at Lab

Soil Biology

- Total Fungal biomass, Total Bacteria biomass, Protozoa functional groups, Nematode functional groups

Soil Physical Properties

- Active Carbon, Wet aggregate stability, soil respiration, total organic carbon, total carbon, total nitrogen, C:N ratio % sand, % silt, % clay and textural classification, bulk density

Soil Chemistry

- Macro and Micro, Organic matter, C.E.C, percent saturation of cations, K:Mg ratio

Plant Analysis Lab

- Plant Tissue – nutrients
- Forage Analysis - optional

In Field Observations

- Water Infiltration
- Soil compaction
- Soil horizon depth
- Soil colour
- Soil crusting
- Water ponding
- Soil feel
- Soil smell
- Root growth
- Ground cover
- Brix
- Plant health
- Diversity Macro Life – soil and landscape

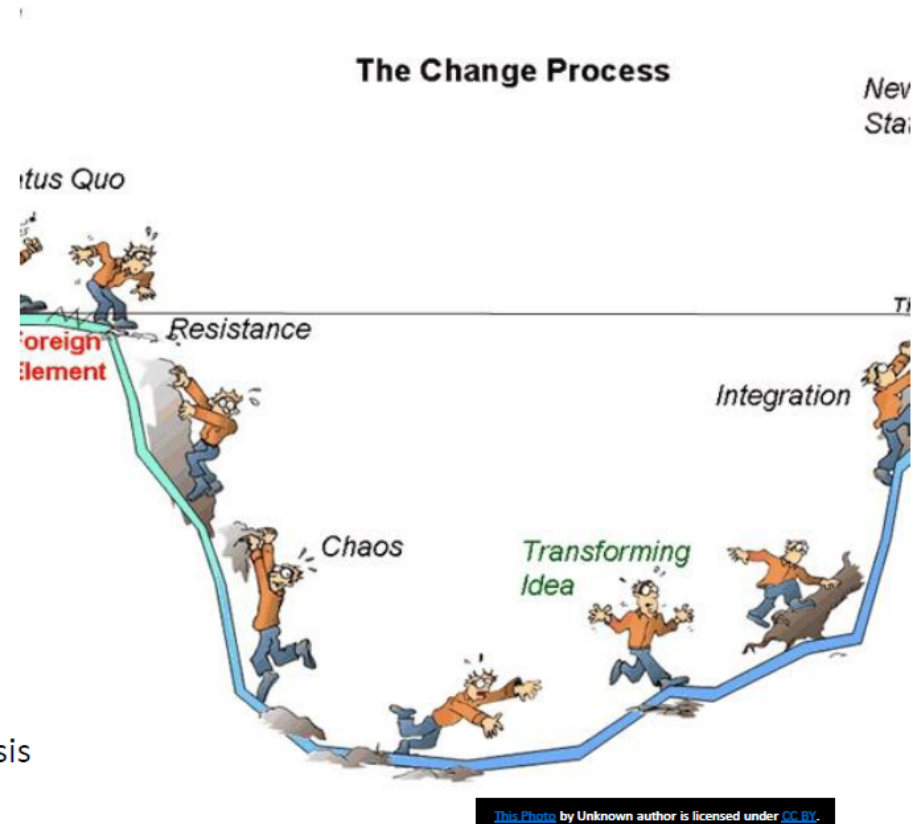
Compile Monitoring and Share

- Compile monitoring into a data set for your records to enhance the value and use of the results
- Create a dashboard to help you compare monitoring results over time
- Share monitoring with ROO community so we all can expand our knowledge and understanding

The Change Process

Beliefs do not change our actions. Actions change our beliefs. Stress is your brain telling you to act, a signal urging you to do something.


Paul Hawken, 2021. *Regeneration: Ending the climate crisis in one generation.* Penguin Books



Reflections

We are excited to hear about your reflections.

- In what way did this presentation change your understanding about ROO and the role of monitoring? Any surprises?
- What excites or challenges you about including monitoring in your farm management plan?
- What modifications do you have that will improve the value or experience of monitoring?



"There is a way
that nature speaks,
that land speaks.

Most of the time we are simply
not patient enough, quiet
enough, to pay attention to the
story."

Source- Linda Hogan

Thank you