Learning Circle

A Peer-to-Peer Discussion on Livestock Integration





In the early months of 2026, the Regenerative Organic Oats (ROO) program hosted a series of virtual gatherings called Learning Circles that became a place for farmer-to-farmer learning opportunities, focused on key topics in regenerative organic agriculture. They are designed to reflect on previous guest presentations, share on-farm experiences, explore curiosities, and provide a space to learn collectively within a regenerative organic agriculture framework.This resource shares the experiences, insights, and advice of ROO farmers on livestock integration, highlighting their unique experiments, methods, and practices that supported their soil’s health and built on-farm resilience.

Grounding in the Reiterative Process

The ROO learning circles provide a supportive space to share knowledge, build confidence, and adapt to new practices, grounded in regenerative principles. These principles focus on improving soil function, such as water infiltration, nutrient cycling, soil structure, and carbon storage, while also supporting productivity, profitability, and healthy landscapes.





Linking Livestock Integration to the Regenerative Principles

Livestock are a core regenerative tool, and they play a unique role in:

- Recycling carbon and nutrients within the system.
- Enhancing soil biology and nutrient cycling.
- Increasing biodiversity above and below ground.

Integrating Livestock

There are many different ways to integrate livestock into your farm system, and some of these methods include:

Grazing livestock on pasture, crop residue, and cover crops	Incorporating monogastrics (poultry, pigs) as lower-cost, scalable entry points
Using manure or compost (on-farm or off-farm inputs)	Important consideration: they rely mostly on cereals



Management, Monitoring and Compaction

Management over livestock type is a crucial consideration to make when integrating livestock. Compaction risks depend on timing, soil moisture, stocking density, duration, and the presence of living or dead roots. Healthy soil can be seen as a “sponge,” where pore space is essential for air and water exchange. Key strategies to reduce compaction include:

- Maintaining root mass and plant diversity.
- Moving feeders, water, and shade regularly.
- Allowing adequate rest periods.
- Using bale grazing strategically on vulnerable areas.





Considerations to Make When Desigining Livestock Systems

It is important to design systems where food, water and shelter are mobile to help prevent compaction. The time animals are in vulnerable spots is a factor as well, so it is also important to consider total positives and negatives with practices. On the other hand, one producer from Sturgis, SK shared his reflections on livestock impact, emphasizing that high-impact areas (e.g., around water sites or bale grazing locations) can be acceptable sacrifices when they deliver broader benefits to the farm. From his experience, bale grazing has significantly increased pasture productivity (often far beyond expectations) even in low-moisture years.

Farmer Experiences Shared

One producer from Nipawin, SK described transitioning former pasture to organic oats, facing uneven yields and concerns about missing soil biology, compaction from fall grazing, and challenges with wet conditions. He shared positive results from bale grazing and winter feeding, noting strong crop performance in those areas.

Another producer from Balcarres, SK shared innovative practices including grazing corridors seeded with diverse cover crop blends, integrating mobile chicken coops, pigs, sheep, and bale grazing. Observations included improved soil biology (e.g., mushrooms appearing on sandy soils), weed suppression (notably bindweed), and lessons around animal density, timing, and infrastructure limits.





Compost Methods: Bokashi

Bokashi is a fermentation-based composting approach with origins in Japan. An agrologist working on a farm in North Battleford, SK shared some experience using it at a small scale, describing it as a fermented compost made from materials such as alfalfa, green plant matter, and fermentation inputs (e.g., food waste or yeast-based materials). She also noted strong results in vegetable production but highlighted cost and scalability as major limitations. She is interested in exploring Bokashi further through small trials, potentially with results shared at a future field day.

On-Farm Trials: Setting them Up for Success

Designing simple, realistic comparisons (i.e., treated vs. untreated areas) using easy-to-monitor crops is critical when setting up on-farm trials. Some monitoring approaches include:

- Biomass measurements
- Soil impacts
- Plant response
- Nutritional analysis through forage or tissue testing
- Tracking results across the growing season

Trials must be doable and relevant to farm context, but sharing results strengthens collective learning among producers.

Grazing, Cover Crops, and Soil Function

While plowing down green manure is known to boost nutrients, there is a question around whether grazing cover crops could improve soil structure and biological function without tillage. It can be concerning to graze cover crops late into the fall and potentially impact the following cash crop. Here are a few points to ease these concerns:

- Tillage can enhance nutrient cycling but may negatively affect water cycling and soil structure.
- Grazing introduces both hoof action and plant tugging, which stimulates root exudates and soil biology.
- Grazed forages often recover faster than cut forages due to increased biological activity.





The Risk of Grazing

The key risk is overgrazing – removing too much residue and not leaving enough biomass to protect and feed the soil. Monitoring and adaptive management are essential, and outcomes may vary widely by soil type, moisture, timing, and management intensity.

Learning from Unexpected Outcomes

A producer from Foam Lake, SK shared an example where removing a late-seeded, diverse cover crop for silage resulted in lower canola yields the following year. He noted that the subsequent crop was managed conventionally with high fertilizer inputs, likely limiting any biological benefits left by the cover crop. This experience reinforced the importance of:

- Leaving sufficient regrowth and residue.
- Aligning management decisions with biological goals.
- Avoiding overuse of otherwise beneficial practices.

These examples reinforce the value of peer-to-peer learning, especially when results are unexpected.



Livestock Infrastructure and Practical Lessons

One producer from Balcarres, SK shared detailed, practical lessons from integrating poultry and pigs into cropping systems:

- Mobile chicken coops must be pushable rather than pullable to avoid driving over cash crops.
- Coop width should align with drill and corridor widths to avoid logistical issues.
- Broilers do not move well when coops are pulled, requiring design adaptations (e.g., “fluffers”) to prevent bird losses.
- Infrastructure design choices can significantly impact labour, animal welfare, and profitability.

Mobile Pig Pens

This producer has also tried mobile pigs, and they terminated crops as they went. He described mobile pig pens built on heavy frames to prevent animals from escaping, emphasizing the value of durable, adaptable designs. A potential action to recover degraded land is to reseed the land as the pigs are moved to a new section.





Integrating Goats and Sheep

Goats are notorious for escaping fences. They will eat burdock and willow to termination if grazed well enough. Investigation into shock collars is encouraged for considering the integration of goats into a farm system. Additionally, sheep can surprisingly create a lot of compaction and they may need to be moved more often.



Alternate Winter Feeding Strategies

One producer from North Battleford, SK shared an alternative winter feeding strategy that uses border strips, lowland areas, and crop residues to support livestock while improving poorer-performing land. Instead of hauling feed into barns, material such as straw, chaff, hay land residues, or border strip biomass is tub-ground, blended, and transported to sandier knolls or hilltops where cattle are fed directly. While he prefers swath or bale grazing overall, this system offers a portable, flexible option that can be used anywhere on the farm.



This approach allows producers to:

- Move feed and animals without concentrating manure in barns or dry yards.
- Blend lower-quality and higher-quality feed to extend overall feed supply.
- Return nutrients to underperforming areas through feed residue and manure.
- Reduce spring manure handling by spreading residues lightly if needed.

Building the Movable Feeders

This producer described using a low-cost tub grinder and movable feeding panels fabricated by local welding shops. Panels are adjusted incrementally as cattle feed forward, minimizing waste. The system can be scaled up significantly and works particularly well during deep snow conditions or after swath, corn, or bale grazing options are exhausted. It also provides a way to bring livestock onto farms that may not yet be set up for summer grazing, such as for dry cows.



Observed Impacts on Soil and Cropping

When asked about field outcomes, he noted that areas treated this way often showed:

- A poorer crop response in the first year, as residues take time to break down.
- Improved performance in subsequent years, with benefits lasting several seasons.

He emphasized that patience is required, but the trade-off is worthwhile when reclaiming consistently poor-performing areas like sandhills or weedy patches. If one weaker year leads to several stronger years, the system represents a sound long-term investment.



Learning from Diversity and “Accidental” Outcomes

There is a lot of validity in learning from unexpected results. For example, one producer described a mixed seeding of faba beans and hairy vetch that was grazed and later seeded through a saline area. While the faba beans failed under saline conditions, hairy vetch thrived, and the area went on to produce strong oat crops for several years. Diversity increases the chance that at least one species will be well-suited to challenging conditions, delivering benefits even when outcomes differ from original intent.

Long-Term Thinking in Regenerative Systems

Regenerative practices are not quick fixes. Benefits from practices like bale grazing often take time to materialize and contrast with the expectation of immediate results common in conventional systems. While all systems rely on tools and inputs, biological processes tend to deliver longer-lasting impacts when managed well.



Session Highlights

- Trust, openness, and peer learning are foundational to regenerative practice.
- Livestock are powerful tools for improving soil health when management is intentional.
- Diversity (plants, animals, timing) is critical to resilience.
- Compaction is manageable with roots, rest, and adaptive planning.
- Monitoring guides better decisions, but management is the true driver of change.
- Bokashi shows promise but faces cost and scalability challenges.



Session Highlights

- Small, well-designed trials are critical for learning and confidence-building.
- Grazing can enhance soil biology and structure when residue is managed carefully.
- Overgrazing, even with “good” practices, can undermine benefits.
- Infrastructure design matters as much as biological principles.
- Diversity drives resilience, productivity, and nutritional quality.



Thank You for Reading!

