

## Learning Series: Livestock Integration

### What to Expect from this Resource

In the early months of 2025, the Regenerative Organic Oats (ROO) program hosted a series of virtual gatherings that created farmer-to-farmer learning opportunities focused on key topics in regenerative organic agriculture. This resource shares the experiences, insights, and advice of ROO farmers on livestock integration, highlighting multiple approaches to incorporating livestock in a regenerative organic system. Explore this resource to gain first-hand insights into real-life scenarios and discover approaches that might be a perfect fit for your own context.

### Livestock Integration: Stacking Value and Cycling Nutrients

Integrating livestock can unlock multiple layers of value, such as building soil health, supporting biodiversity, and cycling nutrients through the system. Livestock integration is itself a core regenerative principle and is also tied to other principles including biodiversity, reducing disturbance, and keeping living roots in the ground. These principles work together – they don't stand alone.

### Why Integrate Livestock?

The value of livestock goes beyond meat or dairy; it creates financial returns through breeding or sales, and agronomic benefits by cycling carbon and nutrients through plants, animals, and soil. It also supports the microbial biome and improves landscape function.

Integration is flexible and should always be tailored to your farm system and scaled over time.

Options can include:

- Grazing perennials.
- Grazing annual crops post-harvest.
- Using crop residue for winter bale grazing.

### Key Considerations

Infrastructure and management matter. Fencing, water access, and handling equipment are key considerations. Livestock require care, and someone needs to be available, even when the rest of the farm is demanding attention. When animals or land are shared or rented, clarity is critical. Agreements should outline who manages livestock, how livestock are managed, and how day-to-day care will be handled.

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## What Producers Are Doing in the Field

The material discussed in the following slides was compiled in a producer-centric gathering in Spring 2025. In these slides, we share the perspectives of ROO farmers regarding their experience with livestock incorporation and how they have adapted their farm management based on their learnings, successes, and challenges. Each farmer's context is completely unique and emphasizes the necessity to apply changes within your own management based on your own context.

### **Canora, SK**

ROO participants from Canora, SK are farming cattle and goats alongside cereal crops, hay, and pasture. During the 2025 growing season, they planned to integrate livestock into the cereal side. The long-term goal is to run goats with the cows; however, this practice will require different fencing, so this will be addressed in the following year. For now, they planned to start with a field that needs less fencing — a chance to start small and see how it goes. They are hoping to improve soil organic matter, water infiltration, and nutrient cycling. The nutrients are there in the soil – present, but not plant-available.

### **Treherne, MB**

A ROO participant from Treherne, MB was looking to bring cattle back onto crop land. He sold the cows last summer, but recently found a cow-calf pair arrangement that might work for getting started again. He still has the infrastructure, which makes it easier to step back in. He is currently working on a plan to figure out which species to graze, how aggressively to graze, and whether a second grazing pass will be needed. He is not sure yet what a fair rental charge would be. The current idea is to manage the fencing and grazing rotation, while the people who own the cattle would handle the animal husbandry side.

### **Saskatoon, SK**

A ROO participant from Saskatoon, SK is ranching horses and is planning to get into cattle this spring. The goal is to eventually run a purebred Angus operation, but starting from scratch. He is renting pasture for now (doesn't own land) and currently has horses on it. Some areas have been overgrazed, so the focus is on regenerating soil, improving water infiltration, and reducing runoff. He is interested in how integrating different crops into the pasture might benefit the horses too. He is looking for advice as a young rancher who is trying to build up both the land and the herd at the same time.

## Grazing Strategy and Timing

Grazing systems are not a one-size-fits-all. They need to be adapted to the land, livestock, and

management goals. Whether the focus is on putting weight on animals, improving soil health, or supporting nutrient cycling, the timing, crop type, and intensity of grazing all shape the outcome.

**Options for integrating grazing include, but are not limited to:**

- Grazing under-seeded covers in the fall, after the grain harvest.
- Grazing full-season covers in mid-summer to prioritize animal weight gain.
- Grazing relay crop mixes in late June, July, or August, depending on crop stage and conditions.
- Grazing full-season covers twice: once in summer, then again after regrowth before terminating ahead of a cash crop the following year.

**Questions to consider when building out a grazing strategy include:**

- How aggressively do you want to graze?
- How much residue is being left behind?
- Will the timing of the first graze allow for enough regrowth to support a second pass later in the season?
- What is the size of the area being grazed, and how will you manage it to avoid selective grazing?

## Fencing Considerations

Grazing infrastructure needs to match both the scale of the land and the time available to manage it. Fencing is a key consideration (whether mobile or permanent) and decisions around paddock size, herd movement, and rotation frequency should reflect the producer's capacity. For example, one producer was able to divide a 100-acre field in half using mobile electric fencing and then grazed with 40 to 50 head of cattle. Daily moves weren't realistic due to family responsibilities, so the field was further broken into 20–30 acre blocks to maintain rotation without requiring constant labour.

## Timing Considerations

A key timing consideration when grazing is to target the stage when a crop's protein content is at its highest concentration. The crop may not be at full height at this point, but it offers the greatest protein value, making it an efficient time for livestock weight gain.

## Leasing and Calf-Share Models

Calf-share agreements and leasing can offer a practical and affordable way for producers to integrate livestock and build a grazing operation. Some start with just a few animals and gradually

expand through lease agreements. Long-term leases, ideally five years or more, offer stability and make it worthwhile to invest in the land. Keeping infrastructure minimal can help reduce upfront costs.

In one scenario, a producer keeps two-thirds of the calves each year, retaining heifers to grow the herd and selling steers to generate income that is reinvested into the operation. This approach helps create cash flow while gradually building ownership. Calf-share agreements can be tailored to meet specific goals, whether it is growing a herd, generating short-term income, or testing livestock integration before committing fully.

Clear agreements between landowners and livestock owners are essential: defining responsibilities for fencing, water systems, and animal care helps avoid confusion and conflict. Just as important are strong, two-way relationships between landowners and livestock owners; communication matters, and both parties need to be willing to adapt if issues arise. When expectations are not being met, it's okay to step back or ask for changes. Building strong relationships between both landowners and livestock owners supports long-term success.

## Cover Crops and Species Selection

Pairing cover crops with perennial pasture can help extend the grazing season and close early- or late-season gaps. One approach is to plant cover crops in the spring and graze perennial pastures early while the covers are established. Once the cover crops are ready, typically by mid-summer, livestock are moved onto those fields which gives the perennials time to rest. After the first graze, animals return to the perennials while the cover crops regrow, with plans to graze again later in the season. This rotation supports recovery on both ends and helps maximize forage availability throughout the year.

## Choosing the Right Species

Choosing the right crop blend plays a key role in grazing timing and management. Cool-season mixes can be seeded early, grazed in summer, and then grazed again in the fall after regrowth. Warm-season blends are typically managed as a single graze. Under-seeding cover crops beneath cash crops can also provide additional forage after harvest, supporting late-season grazing opportunities. Staggered seeding (i.e., making one pass, then coming back later) can add flexibility to the grazing window and help extend the period of usable forage.

## Considerations for Cover Crops

Insurance considerations matter. Some crop insurance providers may not support under-seeding

practices, so it is important to confirm eligibility before incorporating this into a grazing system. Cover crops are more than just livestock feed – they're a tool for improving the landscape through grazing.

## Incorporating Diversity in Your Grazing System

When planning a grazing system, consider that functional diversity is just as important as species diversity. Including nitrogen-fixers, deep-rooted plants, and a mix of annuals and perennials can improve forage quality, extend the grazing window, and support nutrient cycling, soil structure, and microbial activity, all of which benefit both the animals and the land.

## Mentorship, Learning and Peer Support

Mentorship can help speed up the learning curve. Having someone to ask questions or share experiences with can provide practical guidance and prevent common missteps, especially early on. Peer support networks can be just as important as formal training. Forming a small group to share grazing plans, compare notes, and support one another along the way can be an effective way to build confidence.

Context matters. Learning from people farming or grazing in a similar region or climate can make a big difference. Local mentors are more likely to understand the conditions you are working with and can offer advice that is directly relevant to your situation.

## Mentorship, Learning, and Peer Support: Holistic Management Course

Taking a [holistic management course](#) can be a valuable starting point for new or transitioning producers. These courses often bring together livestock managers and grazers, offering a space to share ideas, troubleshoot challenges, and learn from others. For many, the experience is worth the investment.

## Mentorship, Learning, and Peer Support: The ROO Program

The [Regenerative Organic Oats \(ROO\) program](#) brings together an incredible group of Prairie-based organic producers who are not just building resilient, regenerative organic farming systems – they are cultivating a thriving community of practice. Through peer networking with fellow farmers and supply chain partners, ROO participants gain invaluable knowledge that supports a smoother transition to regenerative organic farming practices.

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## Reflections and Takeaways

Modeling nutrient cycling in biological farming is a big riddle and requires more thought. There is a need for more data and science-based studies, particularly label studies, to better understand the transfer of nutrients and the cycling processes happening in the system. Nutrient cycling was once less of a concern, as organic farmers do not rely on synthetic inputs. However, it is now recognized as a valuable monitoring tool. If land management practices are working well, nutrient cycling should show up in soil and plant analyses. It can then serve as a guide to system function, rather than a checklist for what needs to be supplemented. If soil biology is functioning properly, there may not be a need for additional actions, as long as everything else is managed well.