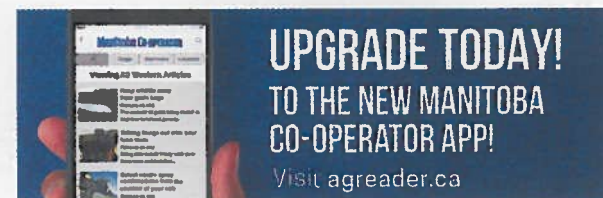


# LIVESTOCK

HUSBANDRY — THE SCIENCE, SKILL OR ART OF FARMING



## Implementing a rotational grazing system

A successful rotational grazing system can provide high sugar content forage for better gains

BY JENNIFER PAIGE  
Co-operator staff

Mimicking nature can improve feed value, reduce labour and put more money in a rancher's pocket, presenters at a series of workshops on holistic management say.

"All we are doing here is mimicking the animal's natural process of moving through pastures," said Ralph Corcoran, certified educator with Holistic Management International. "With a successful system you will start to see the benefits in all areas of your operation."

A number of industry experts explained the process of creating a rotational grazing system at a series of recent workshops as part of Holistic Management Canada's Open Gate Learning Series.

Specialists say a successful grazing system can provide feed that holds a high sugar content, increases soil nutrients, lowers labour demands, increases profits and builds resiliency to extreme weather.

### On-farm demonstration

Neil Dennis, operator of Sunnybrae Farm in Wawota, Sask., has been exploring pathways in the science of cattle grazing for the past 30 years.

Dennis has successfully rejuvenated a 1949 seeded pasture through the use of high stock density and managing recovery time.

He has increased the carrying capacity of his lands by 300 to 400 per cent. The pasture that was once seeded to crested wheatgrass now claims 40 species.

His land has achieved increased water infiltration, up to the level of five to 10 inches per hour, and an improved mineral cycle, which in turn has increased carbon sequestration.

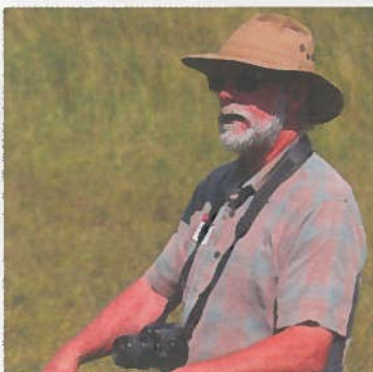
"Early on, I realized the higher the stock density, the faster things turn around," said Dennis. "And they say with this type of grazing, we are putting the CO<sub>2</sub> deeper into the soil and it is not coming out like it used to."

Dennis recently opened his farm for a tour as part of the learning series, where attendees were given the opportunity to have a first-hand look at his process and pastures.

### Moving through paddocks

Rotational grazing systems involve moving cattle through a series of paddocks that are intensively grazed for short periods of time.

"When you are making your fence, make your paddocks long and narrow and you will be able to get more animal impact on the land. That way you get better consumption of grass and more foot impact," said Dennis who is currently running 700 head on 10 acres a day.



Blain Hjertass, certified educator with Holistic Management International, discusses the benefits of rotational grazing at a recent workshop as part of the Holistic Management Canada's Open Gate Learning Series.

PHOTOS: JENNIFER PAIGE



Neil Dennis has been grazing cattle for the past 30 years at Sunnybrae Farm in Wawota, Saskatchewan.



A number of workshops has been held in recent weeks as a part of the Holistic Management Canada's Open Gate Learning Series.



Soil that contains diverse root systems and litter coverage enables greater nutrient cycling and availability, enhances water-holding capacity, biological activity and aids to protecting the soil in bouts of drought and excessive moisture.



Neil Dennis tests the sugar content of his pastures.

Producers use perennial pasture mixtures that are generally a minimum of 30 per cent legumes. Most often includes alfalfa, along with grass species that boast high quality and superior regrowth, such as meadow brome, orchard grass and tall fescue.

"It is key to know how much grass you have. Mark out one square foot and see how much grass is in that area. Then you know how many pounds of grass are in each paddock and you have an idea of how many cattle you want on that piece of land for how long in order to provide the right amount of feed," said Blain Hjertass, certified educator with Holistic Management International.

Pastures are generally grazed until the grass has been well picked and the field shows a visible herd effect.

As cattle are moved off of paddocks, pastures are left to rest and regrow. It is recommended to allow fields to rest for 80 to 100 growing days.

"What we are doing here is tricking nature to grow more, faster. Plant recovery time is the most important. It is not the number of animals in the field, it is the time that they are on the field and the time they are off of it, to allow the grass to recover," said Corcoran. "If

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you bring the cattle back on the land too early or leave the cattle on the land too long, you are overgrazing."

Most producers allow pastures to grow until the majority of plants has reached the flowering stage.

Allowing proper regrowth time will offer cattle the best feed and give the plant time to expand its root system, which will also support improved soil health.

"The one thing I have found is that the healthier the soil

gets, your sugar contents stay higher, longer and your plants stay vegetative a lot longer too," said Dennis. "In 60 days, my plants used to be all seed heads and drying out. Now I am going 80 to 100 days and they are still vegetative and have a higher sugar content."

Dennis said 12 per cent sugar content is considered a good level to graze.

"This field has over 20 per cent sugar content in the forage right now. If you are trying to gain weight with cattle, that's what you want," said Dennis.

### Soil improvements

Producers who have implemented a rotational grazing system echo the experience of seeing their soil systems flourish.

"As we bring up a soil profile from Neil's pasture, you can see why it feels spongy when you walk on it. If you look at the side view, there is over an inch of litter on the surface from all of the years of being high stock density grazed. And that is why there is so much nutrition in this land," said Hjertass.

Having litter cover on pasture land enables greater nutrient cycling and availability, enhances water-holding capacity, biological activity and aids to protecting the soil in

bouts of drought and excessive moisture.

"With plant diversity and litter cover you are able to hold more water in the soil, you have way more fungal activity, you're getting more aeration, which allows more water infiltration, air infiltration and CO<sub>2</sub> exit," said Hjertass.

During the farm tour, Hjertass took soil samples from Dennis's pasture land as well as a neighbouring cropland to compare the soil structure.

"If you also look at the soil samples that we placed in the water, you will see that the good healthy soil is maintaining its composure and very little soil has broken apart," said Hjertass. "Whereas the soil from the cropland, half of that soil is already broken apart. This is an example of what is happening in the field. In very dry conditions the soil blows away and in very wet conditions, it washes away, unless you have a healthy soil structure."

Those interested in learning more about rotational grazing are encouraged to register for an open gate learning day. For more information, visit [www.mfga.net/open-gate-learning-days-in-canada-7/](http://www.mfga.net/open-gate-learning-days-in-canada-7/).

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