

Your guide to healthy soil

Everything we grow and eat depends on healthy soil – our whenua. When we get the balance right, healthy soil grows healthy food, protects our water quality, and can even help to mitigate the impact of greenhouse gases.

How can deferred grazing promote healthy soil?

Deferred grazing is when you temporarily remove an area of pasture from your grazing rotation, to help maintain pasture quality, over the whole farm. It's a low cost, low risk way to improve your soil health and the resilience of your farm system.

Promote healthier soil

One of the most significant benefits of deferred grazing is the higher moisture levels that are retained in the topsoil. This is critical in summer dry areas where there's the risk of prolonged drought.

Research also shows pasture quality improves significantly in the following season after deferred grazing. By letting the pasture go to seed and removing grazing pressure, you're

allowing the plants to divert their energy into growing root mass. With this improved pasture quality, you'll start to improve your soil health too, as roots can penetrate deeper into the soil, and moisture is retained year-round.

Improve farm system resilience

Deferred grazing also helps you build in some resilience around summer feed by providing an extra feed wedge at the end of the dry season. This can help reduce the cost and workload of buying and feeding out supplementary feed.

By removing some paddocks from the grazing round, the stocking rate is increased over the rest of the farm. As a result, the spring feed surplus is better utilised and pasture quality is maintained.

Deferred grazing tips & tricks



Select 10–15% of your farm's pastures to defer, choosing paddocks that are not overrun with weeds



Shut the gates from mid-spring when pasture is starting to go to seed until early autumn after seeds drop



Break feed the paddock back into rotation but expect utilisation to be as low as 50%



Treat deferred paddocks like new pasture and graze them lightly again before winter

How does deferred grazing work on farm?

Jon Sherlock is a 3rd generation sheep and beef farmer on a challenging 1000ha block just out of Te Akau in the western Waikato. He chats to Ballance Science Extension Officer **Angus Dowson** about how deferred grazing has improved his soil health.



Angus Dowson



Jon Sherlock

What are the benefits of deferred grazing?

"There are two main benefits – the first is it moves a bit of excess feed from spring to late summer – so you can hold pasture quality in spring and then get a valuable chunk of cattle feed in late summer. The second benefit is it helps improve the overall quality of your pasture and soil for the following years."

How and why did you get into deferred grazing?

"The first year we did a small trial in two paddocks – one was rolling and one was fairly steep. There were droughts that year and when you've been through a dry period, you really see it. Everything else is bare and brown and the deferred paddock comes back really lush and thick – it's like new pasture."

What are the timeframes you're looking at when you defer?

"After docking time in October, that's when we closed up the paddocks. You wait for the ryegrass to seed, then get in for the first grazing again after that – sometime around late February. We were able to hold 150 R2yr heifers on 15ha of deferred grazing for around a month – you'll probably get about 50% utilisation. Then do a pull test on the new grass coming up, view it as new pasture to see when it's ready for a gentle second grazing, probably around May after some decent rain."

What would you say to other farmers thinking about giving deferred grazing a try?

"It's so easy to try, it doesn't cost anything, just try it on a paddock or two. If you end up needing that pasture for stock if things are getting tight, you can always just open the gate."

Let's talk soil health. What changes have you seen in the deferred paddocks?

"Yeah – so it's having an effect on not just the soil moisture but the aeration and the structure of the soil, too. You don't get that when you cut silage! The new pasture growth comes in thick, like lush new pasture – so I was a bit worried about the clover. But the clover comes back really well too, after the first graze has opened things up a bit. That was really satisfying to see. It's better than a re-grassing programme, because of that retained soil moisture – which is crucial given the volatile summers we've had."

What excites you most about the future of farming?

"Pastoral farmers in New Zealand are already doing a fantastic job working with nature, and now there's the science to prove its benefits. When you have a team of scientists working together with a team of farmers, that's really cool. We need to look to use the challenges of compliance and regulations to our advantage, to really set New Zealand farmers apart in international markets."

Over the coming months, we'll be meeting farmers all across the country, celebrating success stories and sharing ideas. Scan the QR code to find out more about soil health.



Ballance with Nature

Making it easy for you to care for and protect your natural resources. If the natural world is healthy, so too are the people. *Taiao ora, Tangata ora.*

