Renovation planning

Summary

- **Consider the farm's potential and identify poor producing pastures.**
- **Rectify the causes of existing poor pasture growth.**
- **Manage new pasture appropriately to capture benefits.**

Rate of renovation

Pasture renewal programmes vary widely across NZ, typically ranging from 0% to 10% of farm area each year. The amount of new pasture that should be sown depends on the performance of existing pastures, and the potential gains that can be delivered by new pasture in the system.

The percentage of a property renovated each year determines how long a pasture must last before it is renewed again. For example a 5% rate of renovation will mean a rotation of 20 years.

How much pasture is being grown?

Pasture growth varies widely between individual paddocks on every farm. Differences of 6-8 t DM/ha are common. This means the poorest paddocks on a dairy farm could produce 300-500 kg MS/ha less than the best. On a sheep and beef farm the poorest paddocks could be carrying 30-50% fewer stock with slower animal growth rates. Identifying these paddocks quantifies the potential gain from renovation for the farm.

Measuring paddock performance

How much do individual paddocks grow? One way to find out is to record the grazings. See Table 1 as an example. Use a plate meter, pasture cage measurements or visual yield estimates from farm walks.

Table 1: Example of recording grazings

Paddock	Grazings	Silage made	Other grazings	Total grazings	Size paddock	Total grazings/ ha*
A	✓✓✓✓✓✓ ✓✓✓✓✓✓ ✓✓✓✓✓✓		✓✓	20	4.0ha	5.0
B	✓✓✓✓✓✓ ✓✓✓✓✓✓ ✓✓✓✓✓✓	✓✓		20	5.0ha	4.0
C	✓✓✓✓✓✓ ✓✓✓✓✓✓			12	5.0ha	2.5

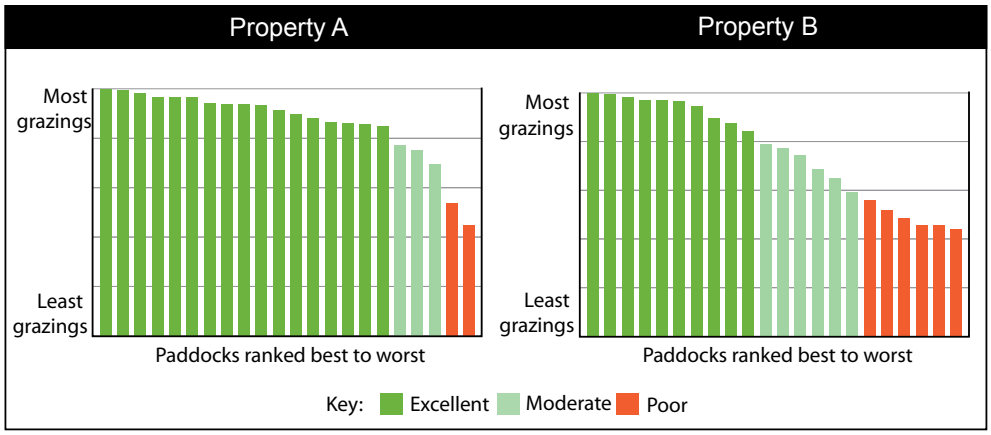
*Total grazings/ha calculated may be quite different from the figures in this example because they depend on the number of paddocks on the property. What is important is the difference between the paddocks.

At the end of the season, grazings for each paddock can be added up to identify total grazings. Include other growth such as silage made.

As the paddocks are different sizes, divide the total grazings by the paddock size, so you can compare total grazings/ha.

Create a paddock profile

This data can be used to build an efficient renovation programme by ranking paddocks in order of most to least total grazings/ha, and graphing them for a paddock profile. Here are two examples:

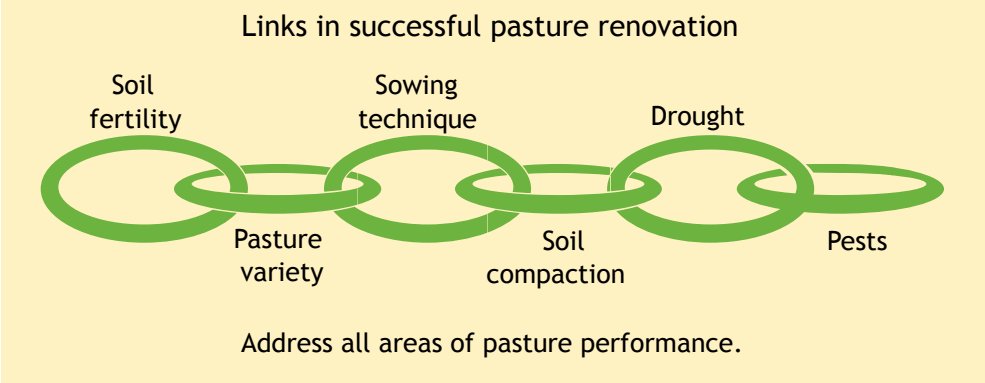


The paddock profile for Property A is above average. Most paddocks have excellent performance. But there is still potential for renovation, starting with the two poorest paddocks.

Property B has a greater number of paddocks that could be severely limiting production. This farm would gain from an agressive renovation programme over the next few years to correct this situation and give large productivity gains.

Rectify causes of poor pasture

Before commencing any pasture renewal, the reasons behind poor paddock performance must be addressed. There is no point just sowing new pasture, for example, if drainage is the fundamental problem.



Capture benefits of new pasture

New pasture grows more so:

- A higher stocking rate may be needed.
- More fertiliser will be required.
- New management systems may be needed.