

MAXIMISE RETURNS FROM PASTURE RENEWAL BY SELECTING THE RIGHT PADDOCK

By Tim Wood, Pasture Renewal Charitable Trust project manager

ANALYSIS OF YOUR PASTURES' GROWTH DATA AND THEIR CONDITION WILL HELP YOU PLAN THE MOST PROFITABLE RENEWAL PROGRAM.

DairyNZ analysis has shown that on dairy farms the difference between the best paddocks and the worst ones is commonly 100 percent. In other words, the best paddocks produce twice the amount of dry matter as the worst. Or to put some numbers on it: if the best paddock produces 16 tonne DM/ha, the poorest produces only 8.0 tonne DM/ha.

It is therefore important to establish accurately which paddocks are performing the worst, because if they are successfully renewed, the return on your investment in renewal is the greatest.

While you may instinctively know your best and worst paddocks, without measuring or assessing pasture growth you cannot accurately rank them to identify best and worst performance.

Owl Farm, Lincoln University's demonstration dairy farm at St Peters School in Cambridge, has confirmed that when it comes to renewing pasture the best paddocks to renew are the poorest producers. These have the PERCENTAGE OF OWL FARM PADDOCKS PASTURE CONDITIONED SCORE AT 1-5 ON THE PASTURE RENEWAL CHARITABLE TRUST GUIDELINES.



NOTE: Results are expressed as percentage of paddocks on farm in each condition score category.

potential for greatest improvement. The trick is to know which they are.

Analysis of their pasture growth data has helped plan the most profitable renewal program.

Owl Farm Focus Day has a systematic pasture renewal program. They have very good pas-ture performance records, which they obtain by regular farm walks, but their results can potentially be confused by resident weed population.

To improve their decision making on which paddocks to renew they have been using the Pasture Condition Score Tool (PCST) which is available on the Pasture Renewal Charitable Trust's website Using the PCST, Owl Farm has achieved great results.

PGG Wrightson Seeds product specialist Emma Bell says scoring can identify your poorest performing pastures and that it is a similar process to condition scoring cows. "By ranking your paddocks from best score to poorest, you can identify the worst performing paddocks and earmark them for cropping and/ or regrassing."

Staff at Owl Farm carry out pasture condition scoring twice a year. The pasture condition data are now available from scoring done in August 2015, February 2016 and August 2016.

Scoring aims to not only identify poor performing paddocks, but also to track paddock performance as part of a review of investment by Owl Farm in pasture renovation.

With a complete year-on-year comparison (August 2015 vs August 2016), they can understand the effect of the investments made over the last 12 months to renovate pastures.

The Owl Farm pasture scoring team follow a protocol identified and endorsed by the Pasture Renewal Charitable Trust and DairyNZ (See Figure 1). By scoring paddocks on a 1-5 scale, the process is repeatable and comparable within and between years.

"Investment in pasture renovation in autumn 2016 has resulted in a substantial lift in the pasture condition scores at Owl Farm this

- pugging. With careful management, feeding stock on the slope can cause less mess than on the flat in the same conditions.
- Once the crop has been grazed it is possible to put in another brassica crop for the following season, or follow with a plantain and clover crop to provide a lamb fattening opportunity.

When regrassing after the cropping program, always consider the availability of moisture. Better to sow later in the autumn when moisture is assured, and/ or set up a summer fallow with two Roundup sprays, to guarantee moisture.

After two crops of brassica, the changes to soil fertility (phosphate) allows clover to compete

and enables higher value grasses to survive.

"If you are new to this approach, I would encourage you to test the waters slowly and gradually. Walk in; don't run," Murray says.

"Spend time planning. Attention to detail at establishment is important. It is not an option to cut corners with fertiliser, seed or pest control." Good planning to enable efficient use of flying time is vital. Experience suggests crop costs will be around \$1000/ha. This is largely driven by helicopter costs and the area involved.

By working closely together, hill country farmers and helicopter contractors can turn this into a win-win opportunity, Murray concludes. **RC**