



Take another look at ryegrass management

Dairy is back operating in a low milk price environment requiring low cost production options. "For dairy farmers in temperate regions, it is an ideal time to revisit ryegrass management and look for opportunities to get more from their existing ryegrass pasture", says Greg O'Brien, extension leader with Project 3030. "Fortunately, there is still potential to get more from ryegrass. For the majority of south eastern Australian rainfed farms, it is still likely to be the easiest and most efficient way to improve the bottom line".

Over the last three years, dairy research Project 3030 recorded between 7.5 and 20% return on assets from a perennial ryegrass-based dairy farmlet operating at DemoDairy, Terang, SW Victoria. Profit is obviously affected by milk price and feed price. But even at \$4/kg milk solids, the 3030 ryegrass system still returned 4% on assets during the drought year in 2006/07. In 2007/08, the return was 6% using the same milk price and the actual feed prices paid. A 10% return was achieved where grain was costed at \$225 per tonne, pasture hay at \$150 and lucerne hay at \$200.

"The ryegrass-based production system can stand up to seasonal and price shocks very well," says David Chapman, project leader for 3030. "The good news for farmers is that pasture management used on the 3030 ryegrass farmlet can readily be applied on commercial farms".

A key principle behind making more money from perennial ryegrass pasture is to convert extra growth into milk at lower cost than the feed it replaces (eg concentrates or purchased fodder). This is not to say supplements weren't important in achieving the result in the 3030 farmlet: around 1.4 tonne of concentrate and 0.6 tonne of home-grown silage was fed per cow along with some purchased hay.

"Profit doesn't automatically come from growing ryegrass pastures, says David Chapman. "Timely decision making and the right management plan is required".

A series of four articles will track the seasonal ryegrass farmlet management throughout this year. The following focuses on winter management.



Winter

Winter management is about having a pasture wedge that optimises growth and getting high utilisation at each grazing. 3030 uses simple grazing management guidelines to get the best from pasture in winter.

Winter growth can be highly variable and management must be flexible in response to this.

1. *Achieve target pasture cover at grazing.* Rotational grazing is used (via adjustment of the area of pasture offered each milking) to allow the pasture enough time to reach a mass of 2500 -2800 kgs DM/ha at grazing. This is about the 3 leaf stage of growth. If the target mass is not achieved, the rotation is lengthened (slightly less area per grazing and more supplements offered). If the target is about to exceed the upper cover, the rotation is quickened (slightly more area per grazing and less supplement offered). This is a key factor in achieving high pasture growth rates over winter and hence reducing dependence on supplements (hence reducing overall feed costs).
2. *Achieve target post-grazing residue.* The winter residual is the same as at other times of the year (5-6 cms between the clumps). Supplement feeding is adjusted to achieve the desired pasture height after grazing.
3. *Minimise pugging damage.* Pugged pastures will obviously grow less feed for the remainder of the year. It may not be possible to avoid pugging entirely, but an effort is made to minimise pugging by grazing better drained pastures whilst wet paddocks dry out and by increasing the daily allocation by about $\frac{1}{4}$ if a wet paddock must be grazed.
4. *Use nitrogen tactically* Nitrogen is used in 3030 as a supplement. If extra feed is required, nitrogen fertiliser is applied if the expected response makes it cheaper than the next best feed alternative. When needed, nitrogen is applied at 30-50 kgs N/ha after grazing. For environmental reasons, nitrogen fertiliser is not applied if run-off is likely around the time of application.



Project 3030 seeks to increase the return on assets in dryland dairying regions by 30%, through a 30% increase in the consumption of home-grown forage.

The project is supported by dairy farmer R&D levies through Dairy Australia, DemoDAIRY, WestVic Dairy, GippsDairy, Murray Dairy, and Dairy SA, along with the Gardiner Foundation, the Department of Primary Industries Victoria and the University of Melbourne.

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