

Winter Grazing Management – Malanda



Winter Grazing Management field walk at James and Kasey Johnston's farm, Hillcrest Rd, Malanda

In late June, Subtropical Dairy in conjunction with the C4 Milk project and the Dairy and Fodder Water for Profit project, hosted a Winter Grazing Management workshop in Malanda. Further workshops were held in Southern Queensland and Northern NSW during July. Ross Warren and Ray Murphy from DAFQ presented the workshop which was followed by a field walk at James and Kasey Johnston's farm. The event was well attended by 11 farmers from the region.



Ross Warren – DAFQ presenting the Winter Grazing Management Workshop in Malanda on the 21st June 2017

Ross and Ray covered a range of topics including: key options to make more profit per cow through better grazing management, soil health, and winter grazing management technical principles and practices. Some important take home messages from the workshop are listed below:

- Soil fertility, feed wastage and grazing management are all areas in which profit improvements can be made.
- The importance of pasture utilisation as a key driver of profitability for grazing and Partial Mixed Ration farms.
- The grazing recommendations for annual ryegrass pastures are to graze at 2.5 to 3 leaf/tiller stage, while leaving 5cm of pasture behind.
- The rate of leaf appearance for annual ryegrass is temperature dependent.

- If grazed below 5cm, the ryegrass roots contract and are therefore unable to take up nutrients.
- The overall aim is to harvest as much volume as possible at the right time while maintaining the population of ryegrass plants.
- It is very important not to overgraze early in the season.

Ross covered nutrient removal rates for annual ryegrass and provided the following information. For an annual ryegrass pasture producing 10 tonnes dry matter per hectare, 420 kg Nitrogen, 50 kg Phosphorous and 230 kg Potassium are removed per hectare each year with some recycling as manure and these nutrient removal rates in conjunction with soil test results, can be used to develop a tailored fertiliser program.



Grazing Management — Annual Ryegrass Practice Audit

This checklist enable farmers to compare their pasture management to targets and assess their performance in key aspects of pasture management.



+	TARGET	BEST PRACTICE	CHANGE?			WHEN CAN I CHANGE?	
			Yes	Need to Review	No. Not right for my business	Now	Later
Grazing Management	Grazed at 2 1/2 - 3 leaves / tiller Post-grazing residual: 5cm (1,000kg DM/ha) Utilise 80% of pasture on offer	You walk paddocks every week, taking measurements of: <ul style="list-style-type: none"> • Pasture cover in all paddocks • Pre and post-grazing covers with a rising plate meter or an automatic, ATV-mounted pasture meter 					
		Paddocks are grazed at 2 1/2 - 3 leaves / tiller, and prior to canopy closure (If canopy closure occurs before 2 leaf stage, N application is reviewed)					
		Cows are removed from paddock before they graze down below 5cm					
		If post-grazing residuals are too high, dry cows or young stock are used to utilise the excess pasture or topping is considered					
		Cows are not given access to a paddock or section of paddock for more than 2 days					
		When strip grazing a large paddock for more than 2 days, a back fence is used to stop cows re-grazing the 2-day growth					
Pasture allocation	Allocate pasture based on current growth rate, to match pasture demand	Grazing interval is set using the current leaf emergence rate (LER) in each paddock					
		The maximum area to be grazed each day is then calculated, and the order of paddocks to be grazed determined based on leaf stage and pasture cover					
		Total kgs DM that cows must harvest each day to maintain the grazing interval set it calculated					
		Checks are made that the quantity of pasture DM to be harvested and the number of cows are as per the feed plan					
		Daily adjustments to pasture area allocated are made if: <ul style="list-style-type: none"> • post-grazing residual is higher or lower than target • daily milk yield falls for no obvious reason • excessive wastage of supplementary feeds is occurring 					
Cow intake	Cow intake per day: > 9-12kg DM	Cows' daily time budget provides at least 8 hours for resting and at least 4-5 hours for each grazing					
		Pasture's NDF content at grazing is less than 45%					
		Diet is well balanced, especially for protein. Types and feeding levels of supplementary feeds are adjusted as pasture quantity and quality change					
		Nitrogen is only applied to a paddock immediately following grazing or within 1-2 days of the next grazing, to minimised risk of nitrate toxicity					
		Drinking water is readily accessible to cows at all times					