

Sustainable Autumn Milk Production

The Farm

Mclnnes Bros

Radford, Queensland

Production Challenges

Milk production is affected the most through the late summer and autumn period.

'This is due to a combination of factors including; hotter weather, lower quality tropical grasses, increased fibre in the diet, and more parasites, particularly flies and ticks,' said Ross Mclnnes.

Milk Production

Total milk production in 2009/2010 was around 3.5 million litres with an average 3.9% butterfat and 3.3% protein. Milk volume varied by up to 27% either side of the average month. Although total milk volume has

increased since 2007, the seasonal pattern is consistent, with the lowest milk volume in February each year.

Herd Management

The herd is split into fresh and stale cows. 'The fresh cows are fed a high energy low fibre diet to maximise dry matter intake, while the stale cows spend more time grazing to keep the costs down,' said Ross. 'During summer the grazing component contributes up to 25 – 40% to the fresh cow's diet and about 50% to the stale herd.'

Ross said 'Splitting the herd has also reduced the time cows stand around off feed by up to 3 hours per day.'

Feeding and Nutrition

The aim of the nutrition program is to increase energy density and

Business Snapshot

Herd: 470 Cows (90% Friesian, 10% cross bred)

Farm Size: 190 ha, 305 ha leased

Dairy: 16 double up herringbone

Production: 3.5 million litres
7400 L Rolling Herd Average

Feeding System: Partial Mixed Ration

Calving pattern: February to mid October

Irrigation: 800 ML from Moogerah dam

Soil type: Creek flats to forest ridges.

Pastures/Crops: Rye, Clover (W), Kikuyu, Cowpeas, Rhodes, Paspalum (S)

The fresh herd is fed under a 48m x 14m shade shed



Key Strategies

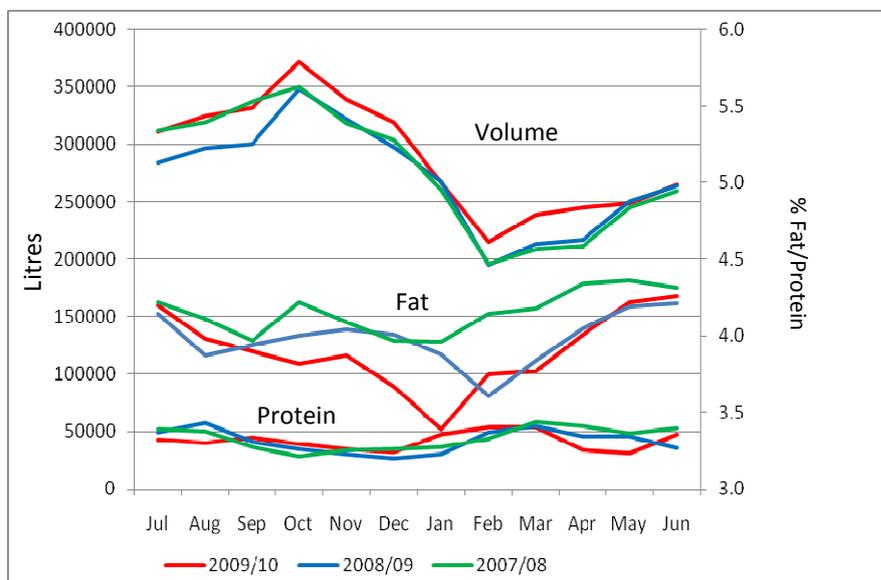
- Split herd
- High quality temperate silage fed to fresh cows from January - June
- Switching from forage sorghum to cow peas
- Shade shed over feed pad
- Calve heifers and young cows from late January
- Allocating more irrigation water to corn silage rather than summer grazing

to reduce the NDF (Neutral Detergent Fibre) content in the fresh cow herd diet and maximising the DMI (Dry Matter Intake). 'All cows receive 2.5 – 3 kg grain in the bales,' said Ross. 'Fresh cows are fed up to 7 kg of grain and 2 kg of cotton seed per day, while the stale cows receive around 4 kg grain per day.'

The fresh cows are fed the highest quality ration available from January to July, or until there is sufficient rye grass. This is when we feed out a higher protein rye, clover, barley and lucerne silage.'

Reproduction

Ross said 'We don't like cows calving over summer and avoid the mid-October to mid-January period. We stop the AI program around Christmas time. The heifers and young cows are calved from late January.'



Monthly milk production, 2007 - 2010

Forage and silage

Rye grass is the main winter pasture, with a small amount of clover. In spring rye, clover, forage barley and lucerne are ensiled into one pit. 'This is a valuable component of the fresh cow diet,' said Ross.

'Forage sorghum has been replaced by cow pea to increase

protein and reduce fibre content. Cow peas are also good in the rotation improving soil fertility. About 8 ha of Kikuyu are grazed in rotation for the night feed. Because summer irrigation is often limited, more water is being used to produce corn silage rather than summer grazing.'

Heat Stress

Recently a 48m x 14m shade shed was erected over the feed. A 2.5m gap in the roof apex improves ventilation keeping the shed cooler and dryer.

Future Plans

There are plans to delay calving of the late heifers from August/October to late November, increasing the number of early lactations in the herd during autumn.

To complement this more paddocks of rye grass may be planted purely for silage purposes.

More emphasis on parasite control is planned over the summer and autumn period.

Fresh cows are fed a high energy and low fibre diet

