

Calf rearing survey shows up differences

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To say that the beef industry is dependent on the dairy industry is stating the obvious.

About 63% of beef originates from the dairy industry via bobby calves, bull beef and surplus cows.

What is surprising is the large number of bull calves reared by dairy farmers. In 2004, Meat & Wool New Zealand funded on-farm research to survey 300 dairy farmers throughout the country about their calf rearing practices. It found that the average dairy farm reared 106 calves and of these, 24 were bull calves for sale. Extrapolated over 12,271 dairy farmers nationally, this amounts to nearly 300,000 bull calves reared for the bull beef industry.

In 2005, rearers outside the dairy industry were surveyed. Most of these were rearers who purchased calves from dairy farmers and then reared them and on-sold to finishers. On average, they each reared 259 calves, with some operations rearing up to 5000 calves.

There were large differences in rearing systems between the two operations. Most (71%) of calf rearers fed milk on a once-daily basis whereas most dairy farmers (79%) fed milk twice-daily. Calf rearers also weaned their calves earlier (6.5 weeks) compared with a 9.7 week weaning age for dairy farmers. The combination of twice a day feeding and later weaning means that calf

rearing meant a significantly higher input on dairy farms—probably as much as twice as much labour to rear each calf on the average dairy farm.

Calf rearers tended to use compartment milk feeders, feed their calves significantly less milk and get them onto meal at a much earlier stage (Fig 1). Once calves are eating meal and to a lesser extent grass it means that it is possible to wean them at an earlier stage—hence the three-week difference in weaning date.

Meal/concentrates are much more useful than grass at developing the rumen and this is all part of the early weaning strategy.

The combination of less milk, more meal and early weaning means that bull calf rearers feed a lot less milk than dairy farmers. The typical bull calf rearer uses 155L of milk (or milk replacer equivalent /calf) and the average dairy farmer feeds 316L of whole milk (Fig 2). Much of this will be colostrum and mastitis milk but on many farms significant amounts of vat milk will be fed to calves. There is clearly scope to reduce the amount of milk fed to dairy heifers and make more milk and/or colostrum available for sale. Fine tuning calf rearing systems and leaving more milk in the vat would be one way to increase national milk production.

What we don't know is what the impact of changing the rearing system will be on longer term performance and even on



If a survey of 300 dairy farmers is extrapolated out nationally, about 300,000 bull calves/year are reared for bull beef.

subsequent milking ability of dairy heifers. This is now the subject of work being undertaken by Poukawa as part of the calf rearing programme being funded by Meat & Wool NZ and Dairy Insight.

Dairy heifers are being reared on low milk volumes (155L) and high milk volumes (310L). Heifers will be farmed together to look at growth rate, reproduction and lactation yield.

The use of scales to monitor progress was relatively common, with 40% of bull calf rearers using scales to monitor progress and as a decision making tool. These tended to be larger rearers but what was most interesting was that they were able to wean their calves a week earlier (Table 1) than those who used eyeball assessment to determine weaning time. This week earlier weaning would have saved these rearers about \$10-\$15 in milk input costs.

In spite of having efficient rearing systems and being closely focused on economics, calf rearers outside the dairy industry had a 20% turnover between 2000 and 2005. This is because there is no effective supply chain within the industry and calf rearers often finish up being price takers. Every year presents new challenges for calf rearers, with 2007 being no exception. This year higher milk powder prices in particular mean that there will have to be a real focus on costs.

figure 1: age (weeks) at which calves are offered concentrates

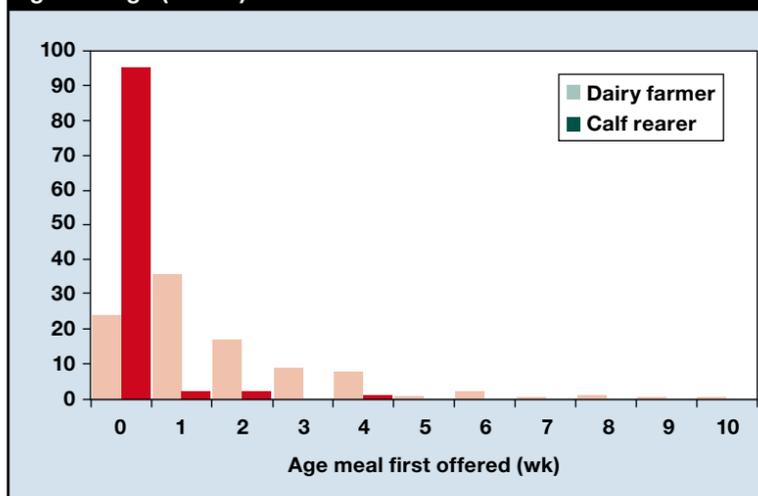


figure 2: total amount of milk fed (L/calf)

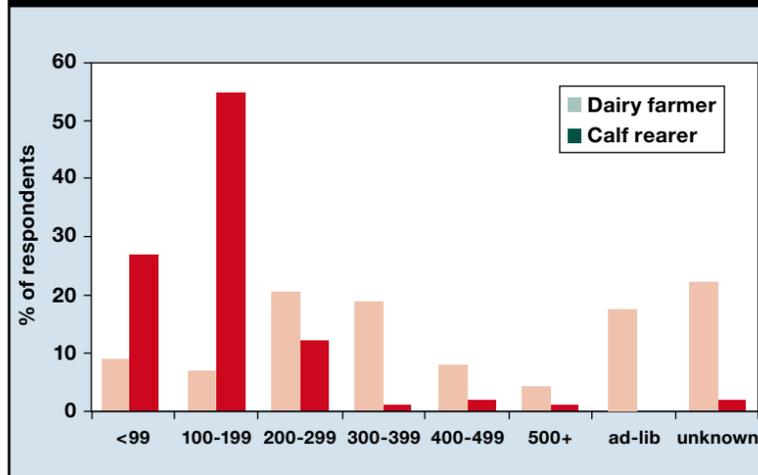


table 1: performance recording of calves

Monitor	% Rearers	Calves Reared	Age weaning
Scales and use to wean	40	431	45
Scales, don't wean on weight	13	213	51
Weigh bands	13	75	50
Observation	29	117	52
Don't	3	27	75

Winter no time to relax

It is that time of the year when the end is in sight for most dairy farmers and the countdown begins towards a well deserved holiday.

However Dexcel consultant Dr Dawn Dalley says research has shown the winter period is as important in terms of cow management as calving and mating.

She says the first thing farmers have to think about is the feed budget and setting up the milking platform for the following season.

If the cows are grazed off, as most are, crop yields need to be measured to get an idea of the available feed, as crops can be highly variable.

"Make an assessment now and see how it goes with the level of feed you were expecting in winter."

The quantity of supplements on hand also needs to be measured in order to work out the energy intake of the cows over the coldest months.

She says the drying off decisions are related to the body condition score (BCS) and farmers need to be realistic about how much BCS can be gained over winter.

When drawing up a feed budget, farmers

need to allow for the transition period from milking feed to winter crops.

"You can't expect cows to go from a milking diet to kale in one day.

"You will need around a week and therefore will need more hay and silage available to make up the difference."

If graziers are being relied upon to look after the cows over winter they need to understand what they are expected to achieve in terms of lifting BCS.

There needs to be clarity around who is responsible for increasing the BCS and who is responsible for checking the cows on a regular basis to ensure goals are being met.

In winter, feed utilisation becomes particularly important and an effort has to be made to stop the cows tramping feed crops into wet ground.

To help improve feed utilisation, Dalley suggests feeding the cows straw before letting them on to the crops and feeding long thin breaks.

In very wet conditions, moving the cows two or three times a day and only feeding very small breaks at a time can prevent crop loss.

There are also issues of public perception

to consider, especially when feeding crops close to a main road.

Ideally feed crops working towards the road rather than away from it and try and feed out very wet, visible paddocks earlier in winter when it is not so wet.

When feeding crops animal health issues need to be taken into consideration. Crops should be checked for nitrate levels and the mineral status of the cows should be monitored to ensure their mineral needs are being met.

Transport or cattle movements need to be booked or planned well in advance to ensure the animals are moved on time.

If walking, the route needs to be planned and local authority rules around stock movements on public roads need to be complied with.

If transport is being used book the trucks early as everyone tends to want transport at the same time.

Of course staff holidays are important, but winter is also a good time to familiarise new staff with the farm and is an opportune time for all staff to receive extra training.

Finally winter is the perfect time to check and maintain equipment.

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