Improved Reproductive Performance = Better Profits

It is no secret that reproductive performance has one of the biggest impacts on farm financial performance. Making improvements in your herd's reproductive performance to make more money should be your key motivating factor, not being forced to by the changes to the induction rules that will only let you induce 4% of the herd next season.

For many farmers the focus has tended to be on the empty rate as the best measure of success of a farms reproduction programme, as empty rates are easy to understand and measure. But in fact this is the wrong end of the mating period to focus on if you want to improve performance in your herd. Days in milk (DIM) is the key driver of profitable reproductive performance. For example, if cow A calves on the 20th of July and the herd she is in is dried off on the 10th of May, she has a total of 294 DIM. Cow B calves in the herd on the 20th of August has a total of 264 DIM, and cow C calving on the 10th of September has only 244 DIM. As the extra DIM are at the start of the season the cows will be producing more than at the end of the season. In this example lets say the cows are doing 1.5kgMS/cow/day at the start.

Cow A compared to cow B: 30 x 1.5 = 45 kgMS @ $6/kgMS = $270
Cow A compared to cow C: 50 x 1.5 = 74 kgMS @ $6/kgMS = $450

To achieve a high number of DIM you need to have a short period of time from the planned start of calving (PSC) through to the mid-point of calving (i.e. the time taken for half the herd to calve) and the length of the calving period needs to be reasonably compact. The current industry target for PSC to mid-point is 14 days (assuming heifers are due to calve 7 days prior to the herd!) so a more realistic figure might be 18-20 days. The other key figure is the calving spread. To maximise total DIM for the herd you need to aim for a spread of 8-10 weeks. If you have a mid-point closer to 30 days or a calving spread of 12 weeks then there is definitely room for improvement. Start with an analysis of your calving spread, in particular the 3 week and 6 week calving rates. If these are not up to targets, then doing nothing at mating time may result in things being worse next season.

What is the financial cost from delayed calvings?
If your mid-point is 30 days then effectively you could be losing, on average, 10 days milk production from every cow. In a 250 cow herd averaging 1.5 kgMS/day this is 15 kgMS per cow lost or 3750 kgMS. At a payout of $6.00 this is $22,500 of lost milk income, at an $8 payout it is $30,000.

What are some strategies to solve this problem?
Without going into too much detail, you could consider options such as heifer synchrony (may be advantageous for sharemilkers trying to increase numbers), herd (or part of) synchrony, why-wait to mate programmes for increasing early submission rates, treating anoestrus cows at the start of mating or running anoestrus cows/part of the herd with bulls from the start of mating for improved heat detection.

In New Zealand, both synchrony programmes and treating non-cycling cows early have been conclusively shown to increase early calving rates and give an economic return. By focusing on early lactation you will extend lactation when there is more feed available (usually) and when you get a much better return from using supplements to fill any feed shortages.