

2.2 Reduce demand

Balance cow condition and pasture cover at calving

Balance cow condition with feed at calving. Aim to get all cows to a minimum body condition score (BCS) 4.5. The greatest return from extra feed is increasing the BCS of the lightest cows as shown in tables below. Sort mobs and feed better conditioned cows maintenance.

Table 5.

BCS Change	MS Response	\$4.50 payout	Reproduction Benefits	Total Value at \$4.50	Total Value at \$5.50 payout
3.0 to 4.0	17.5	\$79	\$40	\$119	\$136
3.5 to 4.5	15.0	\$54	\$40	\$108	\$123
4.0 to 5.0	12.0	\$68	\$40	\$94	\$106
Rule of Thumb	15.0	\$54	\$40	\$108	\$123

Aim to get APC at calving to minimum of 2100 kg DM/ha.

Month before calving

A month out from calving (or when a springer mob is formed) the priority needs to be building APC. Two years of trials at DairyNZ (formerly Dexcel) shows a loss of about 0.2 BCS units and 4 kg MS/cow for cows fed 50% of their energy requirements each day during the last month before calving. A similar restriction (in kgDM terms) after calving cost 30 kg MS/cow.

Rotation length

Use the Spring Rotation Planner to allocate area to be grazed. Refer to Section 1.0 or FarmFacts 1-12 and 1-13. Where APC is below target the quickest way to get back on track is to hold the rotation at the opening rotation length for the SRP (normally 80-100 days) until cover is back on target.

This was demonstrated in a trial at DRC in the 1980s (*Figure 1*, page 6) where the herd that started with low cover at calving but went slow, had the same cover at balance date as the herd that started with enough grass at calving. This compares with the herd that started with a low cover at calving and was on a fast round after calving with the feed cover on the farm not recovering until December. If not able to hold the cows slower than the SRP, the area grazed must not be greater than allocated by the SRP.

Feed intakes after calving

If cows have to be restricted due to APC being short of target, restrict cows at the start of calving to minimise the impact. Prioritise feeding: colostrum and milkers first, springers, then dry cows. Aim to offer colostrum and milking cows 12 kg DM Friesian; 10 kg DM Jersey. Minimum feeding levels for milkers are 10 kg DM Friesian; 8 kg DM Jersey at the start of calving. Monitor residuals to determine that minimum intakes are being achieved.

Cow intake at calving is significantly less than intake at peak, with cows reaching peak intake 10-12 weeks after calving. However, average herd intake does not peak until 10-12 weeks after mean calving date, 13-16 weeks after the planned start of calving (PSC) as shown in *Figure 8*. Many farmers over-budget what the average herd intake is at the start of lactation, allocating too much feed resulting in higher residuals and wastage of feed. Therefore as calving progresses, cow intake increases and therefore minimum intakes also increase (*refer Figure 8*).

These feeding levels for milkers will reduce subsequent milk production. The extent of the carry-over effect on milk production from underfeeding depends on the length of time cows are restricted. The longer the period of underfeeding, the greater the loss. Where the minimum feeding levels given above cannot be met, supplement must be purchased or stocking rate reduced.

If possible, get late calvers and any dry stock off the farm. Review cow numbers and cull any cows that are just making up the numbers. However, do not reduce numbers so you limit the potential production for the season.

To monitor progress, plot the actual APC against the target APC. The target covers are easy to establish by drawing a line from the APC at the start of calving to the APC at balance date (as shown in *Figure 7*). Hold the rotation as slow as possible until the APC is back on the target line and then go back to the area allocated as per the SRP from that date onwards. For example, in *Figure 7* the actual APC is back on target by 19 August.

Figure 7. Target average pasture cover

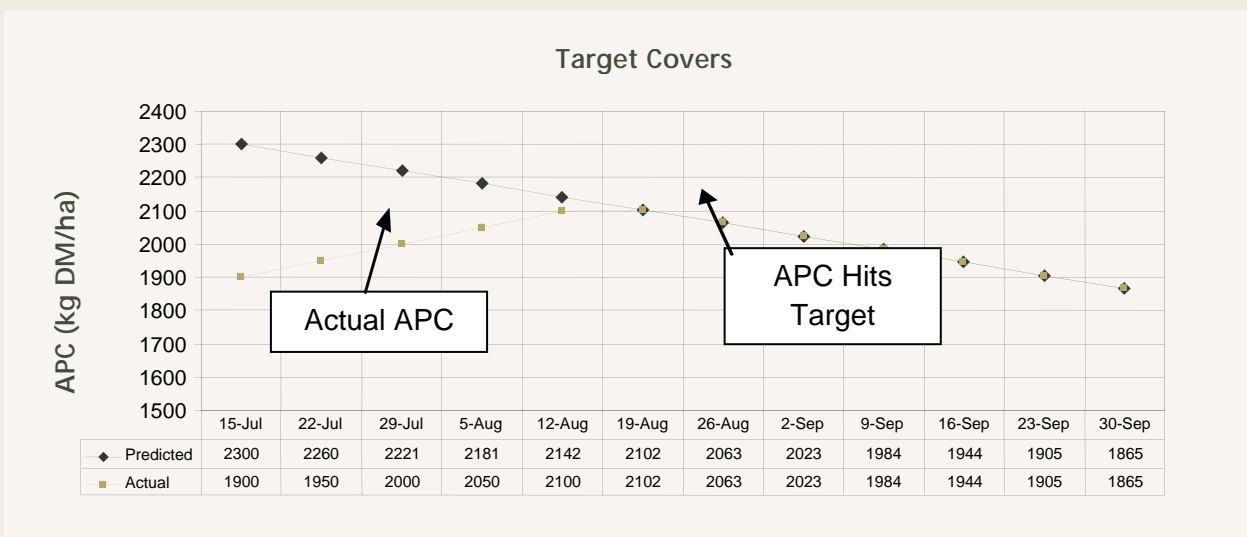


Figure 8. Cow intake from calving to mating for a peak intake of 18kg DM/cow

