

The impact of a rigid sale lamb policy on ewe flock performance

This case involves a 950 ha hill country property on the east coast of the North Island running 8500 stock units.

The property engaged with the StockCARE programme in 2006 because of a declining animal performance in the sheep flock.

After the first year's involvement with the StockCARE programme, the main limiting factor for the sheep enterprise identified was the very high priority placed on generating income from selling lambs for processing at high carcass weights.

- The sale lamb policy was to take every lamb to **above 17 kg** carcass weight (40kg liveweight)

There were several issues related to this overall policy:

- The property faced a high risk of low summer rainfall which can have a significant impact on post-weaning lamb growth rates.
- Facial eczema was also identified as a risk to post-weaning lamb growth rate.
- All the replacement ewe hoggets were being mated to drive up lamb production

The key sheep production performance indicators for Year 1 (Table 1) showed their actual sale lamb policy was not that successful (average sale weight only 27kg and average daily growth rate of 6g/day) but their efforts to reach their sale lamb targets were having a major impact on other production systems.

- The high priority on sale lamb performance had a negative effect on the ewe flock performance reflected by low reproductive performance, which in turn was associated with sub-optimal ewe mating weights and depressed growth of ewe replacements.
- The focus on the sale lambs reduced the amount of flexibility to manage difficult seasons. In those difficult seasons the ewe flock and ewe replacements suffered.

Year 1 served to confirm what the property's management team had been thinking.

Table 1 Key performance indicators Year 1 and Year 3

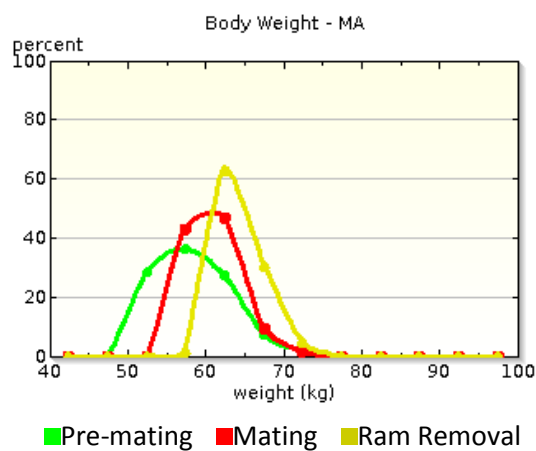
	Key Performance Indicator	Year 1	Year 3
Ewe flock performance	Scanning performance (%)	135	142
	Lambing performance (%)	113	131
	kg lamb weaned/ewe mated	32	38
	Ave weaning weight (kg)	28	29
Ewe lamb replacements	Ave weight winter (kg)	35	41
	Two tooth mating weight (kg)	49	55
Post-weaning Sale lamb performance	Ave sale weight (kg)	27	33
	Ave days to sale (days)	104	95
	Ave growth rate (g/day)	6	46

Policy changes were made with the following targets to be achieved by end of Year 3:

- Increase lambing performance to 130%
- Increase lamb weaning weight to 29kg liveweight

- Have a major focus on developing strategies to minimise the risks associated with the dry summers, the main one was being flexible with the sale lamb policy to off-load retained sale lambs to avoid compromising the ewe mating weights and depressing growth of ewe replacements. The target carcass weight for the sale lambs was reduced from 17kg (40kg liveweight) to 15kg (35-36kg liveweight) enabling more lambs to be sold “off mothers” at weaning.
- Grow out hoggets better to improve life time performance, with two tooth ewes to scan 135%. This involved selective mating only ewe hoggets that reached a 41kg target weight prior to hogget mating and having the flexibility to not mate any at all in a dry summer.

In Year 3 they achieved weight gain (+3kg) over mating of the MA ewes to achieve a record 142% scanning.



They achieved their lambing performance target of 131% without decreasing lamb weaning weight.

As planned 35% of the sale lambs were sold off mother at 34kg average liveweight.

The 2009 bred two tooth ewes also achieved their target by scanning 136%. The scanning result for the whole ewe flock was 142%. The projected lambing for 2009 was 132% and they achieved 131%.

In September 2009 the ewe hoggets were 46kg and well on track to meet their two tooth mating weight target (58kg) in 2010.

This property was now better positioned to manage the difficult summer dry years but remain positioned to “cream it in the good years” such as experienced in 2009. This has been achieved by understanding the core drivers of the sheep enterprise for this particular hill country property and developing plans with very specific targets and goals.