How we are helping farmers produce more lamb

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What is StockCARE?

StockCARE is a programme designed to help sheep and beef farmers measure what they manage within their business. It is based on the core principles of adult learning, change management and business improvement.

The programme is unique in that it has a particular focus on the animal production systems because they are the real drivers of farm performance and profitability.

There are several production systems on most sheep and beef properties. StockCARE defines each of them with a start and end point, a measurable outcome and a series of drivers that affect the outcome. An example is shown in Figure 1.

Figure 1. Outcome, key drivers and sub-drivers of the ewe flock production system

Figure 2. Comparison of financial performance between the Pilot Farms and Meat & Wool Economic Survey farms
Underpinning all drivers of all the different systems are nutrition, genetics and animal health which are all involved in the programme as well as farm soil fertility and financial reporting.

The first year focus is collecting the information and using it to identify and define factors that may be limiting performance. A critical component of StockCARE is the focus on the individual farm and farmer. Every farm is different and the biggest difference is the farmer.

Business improvement by definition requires change. The farmer must have confidence any decision for change will be effective. The first stage is to ensure the farmer has a clear understanding of the factors that may be limiting performance and where potential opportunities for improvement are. Often advice and knowledge from a range of external specialists is utilised.

Plans are written ensuring all targets are realistic and achievable for that particular farm and farmer. Once implemented the plans are regularly reviewed.

StockCARE has been proven

The StockCARE model was tested over three years (2001–2003) prior to commercialisation. The pilot project involved 47 sheep and beef properties throughout New Zealand involving 124,500 breeding ewes over 34,500 hectares. The objective was to increase farm income by $12 per ewe by the end of the third year based on 2001 stock values.

Across all farms the Gross Farm Income increased by $12.37 per ewe. The financial performance was compared to the farms in the same regions in the Meat & Wool Economic Survey (M&WES). The pilot farms increased cash surplus by 48% compared to 21% for the M&WES farms (Figure 2).

The Pilot Farms increased Farm Working Expenses by 51% compared to 33% for the M&WES farms demonstrating the pilot farmers had confidence to invest in some of the key drivers of farm business performance.

Participating farmers were surveyed at the completion of the pilot project. They identified the following as key success factors:

- Farmer participants really wanted to commit to lifting their performance.
- Involvement of agribusiness partners to provide expertise and knowledge and foster the concept of creating business teams.
- Strong focus on the individual farmer’s property and personal goals so that limitations that exist can be allowed for.
- Initial focus on identifying and then understanding the factors that may be limiting performance, before solutions are applied.
- A disciplined approach to the information collection and reporting processes.
- One-on-one contact with each farmer to interpret and understand their own information to create effective action plans based on realistic and achievable targets.
The importance of utilising principles of adult learning and change management are demonstrated in this feedback from a participating farmer:

“The process of setting targets makes a difference and it works. To set a target to tail 120% in March 2002 and actually tail 118% speaks volumes. Then this year our target was to tail 2,322 lambs from the Romney ewes. We ended up with 2,687 because we have nailed what we need to do with the ewes to get their optimum mating performance.

Workshops have been very informative with experts talking to us in small groups ensuring everyone is involved. I believe we are getting information 2–3 years ahead of other farmers.

I have not been told what to do in three years. All my problems have become obvious through the monitoring done each year.

Data previously recorded and then left in the drawer is now giving us useful information.

Problems on the farm are now regarded as opportunities to grow the business.

After the first year we were in the bottom quartile for nearly everything. That gave us the incentive to improve and I gave myself 3–4 years to climb into or be very close to the top quartile for our sheep enterprise.”

How does it work?

A Between Farm Comparison is used to identify opportunities for improvement in all the production systems. The individual farm is compared to the top quartile, average and low quartile for the outcome and key drivers. The farms that make up the top and low quartiles are the same farms for the drivers. E.g. the top quartile weaned 45kg lamb per ewe, with an average weaning weight of 32kg and 142% lambing (Figure 3).
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Figure 3. Ewe flock performance report – Between Farms 2011

The outcome for the farm (35kg lamb per ewe mated) is below the average. Lambing performance (135%) is well above average but lamb weaning weight (26kg) is in the low quartile and the flock mating weight is very low.

Figure 4. Ewe flock performance report – Between years
A review of the key drivers for ewe flock performance showed the flock was very fecund (170% scanning at 55kg mating weight) but lamb wastage was 21% compared to 14% for the top quartile for lambing performance. Because only a small proportion of farmers scan accurately for triplets the StockCARE data analysis calls ewes scanned as triplets are regarded as having only two lambs which underestimates lamb wastage.

Plans and targets have been implemented over the past 4 years with the results summarised in Figure 4.

Ewe flock performance has increased by 8kg lamb per ewe mated and the number of ewes mated increased from 12,786 to 13,342. The most significant driver has been managing the body condition profile of the ewes throughout the production cycle each year (Figure 5) with particular focus from lambing until weaning aimed at increasing the weight gain of the lambs during lactation.

This is an East Coast Class 4 North Island property which experienced a significant drought during 2013. The ewe flock performance was down on the previous year mainly due to a 6% lower lambing performance which was similar to the result shown in the Beef & Lamb Economic Survey (B&LES). A significant investment was made by the property owners to ensure next year’s performance was not compromised by the drought. This is reflected by the 2014 lambing performance of 151% compared to 131% forecasted by the B&LES. The investment was made with confidence because the owners had a very good understanding of all the key performance indicators for their ewe flock.

**Figure 5.** Comparison of the body condition score profiles of mixed age ewes from pre-mating until weaning 2011 and 2014
Summary

StockCARE has been proven to be an effective programme for farmers who are committed to improving their performance. The programme has some important unique points of difference such as incorporating principles of adult learning, change management and business improvement. But its real strength is based on the premise 'Knowing what others do on their farms is interesting, knowing what you are doing on your farm is powerful'. 