Economies of scale deliver extra $200,000 benefit

Lifting lambing rates by 30 per cent by following Lifetime Wool Project recommendations has increased annual benefits by $200,000 for Nareen Station at Coleraine in western Victoria.

Farm information

Owners
Gordon and
Alexandra Dickinson

Manager
Grant Little

Location
Nareen via Coleraine, Victoria

Property size
Nareen: 3634ha
Barrama: 2571ha

Enterprise
22,000 Merino ewes

Annual rainfall
Nareen: 675mm
Barrama: 610mm

Soil type
Undulating red gum soil

Soil pH
5-5.5 (calcium chloride)

by Tracy Lefroy,
KONDININ GROUP

Victorian station manager Grant Little has increased the profitability of the Merino sheep enterprise he runs by matching feed to animal condition.

Using skills learnt from the Lifetime Wool Project, Nareen Station, owned by Gordon and Alexandra Dickinson, now has a stocking rate to 13.5 dry sheep equivalents (see Figure 1).

Although stocking rate has decreased slightly, Grant is confident using the hands-on approach of measuring ewes will enable him to increase rates in time with lower risk.

Grant has lifted lambing rates by up to 30 per cent across the flock — an additional 4000 lambs — which has delivered an extra $200,000 to the business, without considering the lifetime value of better progeny.

Applying Lifetime Wool Project outcomes also has halved the mortality rate, saving $20,000 annually.

Nareen Station breeds big framed, medium–fine wool Merinos that thrive in the wet conditions in western Victoria.

Grant has made simple management changes at Nareen and Barrama that have been low cost to implement.

Nutrition management

Grant said the Station changed management practices for pregnant ewes after staff witnessed increased lambing percentages achieved on a Lifetime Wool Project experimental farm during 2003.

The Lifetime Wool Project highlighted the importance of the relationship between ewe nutrition, high mortality and low lambing percentages.

Grant described his old management style as pushing the boundaries with stocking rate and trying to cut as many kilograms as possible per hectare.

Following his involvement in the Lifetime Wool Project, Grant has defined his boundaries and now knows that below condition score 2.8 in his environment there is a detrimental effect on production.

He now condition scores his ewes every 4–6 weeks with the aim of maintaining them close to condition score 3.

Grant believes the most important lesson he learnt was that the farmer needs to invest more time in monitoring the flock, so any health problems that arise can be treated early.

Adopting Lifetime Wool Project recommendations has increased lambing rates by up to 30 per cent and lifted incremental income by $200,000 for Gordon and Alexandra Dickinson, Coleraine, Victoria. Manager Grant Little has used closer flock monitoring and improved nutrition to halve the flock mortality rate from 4% to 2%, saving $20,000 annually.

Each time Grant condition scores the sheep, he drafts off the tail and gives them additional feed to bring them up to condition score 3. While the top end of the flock has not changed much under the new management style, the bottom end has lifted tremendously. Grant has noticed after two years in the Lifetime Wool Project, the tail of his flock is becoming smaller and this has increased productivity.

About 7–10% of ewes are drafted off and fed at the higher rate. Drafting sheep into condition score mobs means that poor ewes can be fed at a higher rate without competing with larger, healthier sheep for feed.

The feeding regime

Before Christmas, Grant drafts ewes into two condition groups. He feeds the poorer ewes 500 grams of barley per head per week to increase condition score. He checks the mature ewes during mid-February and again drafts them into mobs above and below condition score 3.

Before joining in March, Grant changes the amount of lupin supplementary fed to 600–1000g/head/week for ewes below condition score 3 and 300g for ewes above condition score 3. He weights the maiden ewes during January and drafts them into two groups. Ewes less than 45 kilograms are fed lupin at 1kg/head/week and ewes more than 45kg are given lupin at 500g/head/week. These rations remained unchanged until after joining.

One week after joining he drafts the ewes into three mobs — below condition score 2.5, from condition score 2.5–2.8 and above
condition score 2.8 — and changes the supplementary feed from lupin to barley.

Grant feeds ewes below condition score 2.5 barley at 1.5kg/head/week, the middle mob receives barley at 700g/head/week and those above condition score 2.8 receive barley at 400g/head/week. One month before lambing, Grant increases supplementary feeding rates by 200–250g/head/week for each mob. This rate remains until three weeks into lambing.

Grant feeds lupin to the ewes two weeks before joining to stimulate ovulation and then one week into joining.

If the ewes are in poor condition during pregnancy they receive 2.5kg/head/week of barley to build them up.

During the year Grant budgets feeding costs at $4–$4.50/head. He is confident this money is well spent as he is only feeding the ewes that need it. He has achieved higher lambing rates and reduced mortality rates with more targeted feeding.

The improved feeding and drafting of lower condition score ewes increased marking rates from 60% during 2003 at Nareen to 91% during 2004. During the tough 2005, marking rates were 84% at Barrama and 87% at Nareen. Grant said the lambs were larger and healthier than the previous year. The improvement in lambing percentage means that Grant can now place more selection pressure on his mob and build a larger flock sooner.

**Pregnancy testing maidens only**

The scale of the sheep operation makes pregnancy testing the whole flock a logistical nightmare. In addition, Grant said the problem was not that the ewes were not becoming pregnant but the lambs were dying early in life.

He decided to pregnancy test only maiden ewes. Pregnant ewes go into the main flock; dry ewes go into a separate flock which is mated and pregnancy tested the following year. Any ewes that do not become pregnant during the second year are sold.

Grant believes pregnancy testing only his maiden ewes gives him confidence that his young ewes are reproducing and saves money on the older ewes that he can spend on supplementary feeding. The cost of pregnancy testing 22,000 ewes is about $10,000. For this amount of money, he can buy 62 tonnes of grain to feed his pregnant ewes. He condition scores the ewes regularly so those losing condition will be identified and put on a higher nutrition diet.

**The skill of condition scoring**

As Grant is condition scoring his ewes as often as every four weeks, he has become skilled at judging ewes in condition score 3. It now takes him longer to fill the race than it does to condition score the ewes and draft them. He weighs only maiden ewes during condition scoring at pre-joining to determine their feed requirements based on target bodyweight. The target bodyweight for Nareen maiden ewes is 44–45kg, while at Barrama it is 43–44kg.

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**About the author**

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