



FACT SHEET

JUNE 2018

OPTIMISING FLOCK PERFORMANCE IN CHALLENGING ENVIRONMENTS

Farm advisor Peter Young spent 25 years farming in the extreme climate of Central Otago. Despite the challenging conditions, Peter's sheep performance was exceptional. This fact sheet outlines the principles behind Peter's approach and is based on a June 2017 B+LNZ podcast (available at www.knowledgehub.co.nz).

TWO BASIC PRINCIPLES:

- 1) **Genetics:** Find the right genetics for your operation – that is, your production goals and your farming environment.
- 2) **Management:** Every day, keep your stock stress free. That means adequate feed, freedom from animal health problems, access to clean water, good stockmanship (awareness of changes in stock behaviour), etc.

Genetics

Customise to your operation

Cull and select on traits and qualities that deliver production under your specific management and environmental constraints.

Rapid genetic turnover vs. longevity

Peter's view: The more challenging the farming environment, the more weight should be given to longevity and proven performance (assuming a rigorous production-focused flock culling process is already in place).

Management

Great genetics alone only take you so far. You need great management and attention to detail to realise the potential of those genetics.

Do you understand the threats and limitations of your farming operation? When you have identified them, then:

- a) Monitor those threats and limitations; and
- b) Manipulate your management to address anything compromising performance.

Peter's approach to winter management

- Maintain all ewes above a body condition score (BCS) threshold all year, with a goal of reducing the variation in BCS throughout the year and across the flock. Treat all ewes as individuals, not as a mob. N.B. It's equally important to manage the heavier end of the mob.
- On 1 April: Peter targeted an area sufficient to flush all ewes for four weeks, from two weeks prior to ram entry. On his property, that meant pasture covers were 3000 kgDM/ha on at least 50 ha of his irrigated land (10% of his total operation) and he was effectively down to winter stock numbers.
- From 1 April: at least 70% grazing residuals were left on pasture. This made the most of leaf area to grow more grass.
- Paddocks were grazed once only from mid-May – for not longer than four days.
- Mid-May is also when supplement feeding begun. Sometimes just on days three and four of a shift, depending on pasture covers. "This was to the constant amusement of my neighbours. I still had all this feed ahead of me, yet I was feeding supplements out." Why? Leaf area and sunlight still yield pasture growth over winter, albeit at limited rates. "I have yet to see a silage stack get bigger if it isn't used. By pushing feed ahead, I reduced the supplement content of the diet as winter progressed, leaving our best young pastures until last in the rotation. That way, we were able to provide quality feed, that was more frost tolerant and a better fit to the ewes' nutritional requirements in late pregnancy."
- No crop was used for wintering ewes – just pasture and supplements.



- Use of ram harnesses helped manage pasture in spring. Lambing was split 9 days, 9 days, then the remainder of the 2nd cycle. This provided more management options over late pregnancy and lambing.

Flexibility during key periods

Develop a farm system that provides flexibility. For example:

- Include a component of trading cattle.
- As a strategy to maintain flexibility, consider not mating hoggets, so they grow out early and/or there's the option to graze off.
- Carry a feed buffer in the form of silage. It can be fed in February or March, to ensure the 1 April feed cover target.
- Lamb birthweights – twins 5-6 kg, singles up to 6-7 kg – protected against sometimes harsh spring conditions.

Peter's attention to detail – examples:

- Exercising ewes in the last two weeks before lambing. Make them walk briskly to their feed breaks so any at-risk ewes are identified and managed separately, earlier.
- Set stock only two or three days before due date, to maintain fitness and give pastures as long as possible to grow. To that end, lambing in separate mobs – within nine-day bands (based on ram harness records) – means the ewes lamb while still fit.
- Fence off hazards, such as trees or dams, over lambing.
- Strategically fence individual “problem paddocks” temporarily over lambing. Sheep behave differently in different paddocks. The need to fence depends on paddock shape, contour and ewe behaviour.
- Pay close attention to ewe deaths and record details, so you can fine tune management.
- Peter did find a lambing beat was necessary on the flat, due to cast ewes. “I was prepared to intervene if necessary, but kept it to a minimum. I favoured constructive – rather than destructive – interference.”

ACKNOWLEDGEMENTS AND MORE INFORMATION

B+LNZ would like to thank Peter Young with the development of this fact sheet.

B+LNZ RESOURCES

 www.knowledgehub.co.nz

PDF DOWNLOADS

- Feed fundamentals
- Principles of feeding mating to lambing sheep
- Principles of feeding weaning to mating sheep
- Body condition scoring sheep

PDF DOWNLOADS

- Better Sheep Breeding: Ram buying decisions resource book
- A guide to feed planning for sheep farmers resource book
- Making every mating count resource book
- Growing great lambs resource book

PODCAST

- Peter Young: More profit from sheep
- Better Sheep Breeding: Buying the right rams for your flock by Annie O'Connell

VIDEO

- Body condition scoring sheep

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