# Strategic feeding lifts flock fertility

Victorian producers Charles and Liz de Fegely are currently evaluating the findings of the Lifetime Wool Project and after nine months in the programme are starting to reap the benefits of strategic feeding to improve flock fertility.

#### Farm information



#### Farmer

Charles and Liz de Fegely

Location

Ararat, Victoria

**Property size** 

800ha

**Enterprise** 

Merino sheep

Annual rainfall

575mm

Soil type

Basalt clay loam

Soil pH

4.3-5 (calcium chloride)

## Anne Cullinan, KONDININ GROUP

M erino sheep producers Charles and Liz de Fegely, Ararat, Victoria, expect their flock numbers to rise significantly, particularly with increased twin lamb percentages, as a result of adopting findings of the Lifetime Wool Project.

After just nine months of using the project's principles, the condition score of ewes has picked up from 2.3-3 to average more than 3. During 2005 the flocks are achieving conception rates of 145 per cent for Merino ewes and 175% for first-cross ewes. The average lamb weaning percentages for the latest joining were about 115% compared with an average of 85% in previous years.

#### At a glance

- · Managing the ewe flock according to condition score is a key to higher production per hectare.
- · The de Fegelys condition score their flock at least five times a year to identify animals that require target feeding and to achieve condition score targets.
- The de Fegelys have reduced their supplementary feeding bill by targeting the animals that need it.



Liz de Fegely, Ararat, Victoria, assesses the condition score of sheep. The strategy is to consistently maintain sheep in a score 3 condition through targeted feeding.

Producing an extra 3-4 lambs per hectare lifts income by \$90-\$120/ha at \$30 per lamb.

All this has given the de Fegelys confidence in the philosophy that ewe nutrition plays a pivotal role in higher production, along with sheep genetics.

#### In control

The de Fegelys believe the Lifetime Wool Project has allowed them to take more control over their sheep production enterprise.

They have gone from obtaining staggered condition score results among the flock some sheep above and others below par - to holding almost all sheep in a score 3 condition throughout pregnancy.

The key has been a new management strategy of drafting ewes according to their condition score and manipulating stocking rates, grazing management and supplementary feeding to meet the needs of individual ewes. The strategy is to maintain ewes in condition score 3 throughout pregnancy, in conjunction with improving flock genetics.

One of the de Fegelys' first actions when they started trialling the programme during early 2005 was to draft the breeding flock of Merinos according to condition score.

About 70% of the ewes were in condition score 3 or above and the remainder were in the lighter category (condition score 2-3).

#### Boosting condition score

To build the condition of the lighter ewes these animals were placed on the best pasture available and supplementary fed the appropriate rate of feed.

In Charles' case, the feed rate was two kilograms of a oats and lupin mix per week but it is important to note that rates will vary according to ewe condition and pasture availability. The balance of the flock was fed a maintenance rate of 1kg/week.

Sheep are generally fed oats with lupin added at the required amount according to feed tests for the desired quality for the different types of stock. High-protein barley is added, depending on price.

The ability to target feed requirements reduced supplementary feeding by 30–50%, representing significant savings on his previous feed bill of \$2/dry sheep equivalent across the flock when all ewes were fed at the same rate.

It also has seen sheep go from condition score 2.3–3 to 3 and above. Charles and Liz assess condition score at least five times a year (using the hands on back method) for about 30–50 randomly selected sheep per flock. (For more information on assessing condition score see *Farming Ahead* No. 167, page 58).

Sheep are first checked at weaning during November, at drenching (February and again during August), at shearing (April) and during pregnancy scanning (June).

### Improving fertility

Pregnancy scanning of the drafted mobs also showed the lighter ewes that were fed to boost condition score had a conception rate of 160%, while those in condition score 3 recorded 145%.

These results showed that twin-lambing ewes had not been catered for sufficiently. Under the old system many of the light ewes might not have returned into lamb.

To better manage the ewes, all twinbearing ewes are kept together and fed according to their condition and the amount of feed in the paddock.

Charles and Liz budget for 1500kg of dry matter per hectare in these paddocks for twinbearing ewes where previously it was 1000–1100kg/ha.

The pasture potential is boosted with an application of urea five weeks before lambing.



Charles de Fegely is trialling the principles of the Lifetime Wool Project to help improve flock fertility. He is encouraged with half the ewes producing twins.



While Charles de Fegely had believed the sheep (inset) had sufficient feed under the old regime, the Lifetime Wool Project showed it was enough for single-bearing pregnant ewes but not enough for twin-bearing ewes.

### Lifting production

Charles and Liz are pleased with the early results but realise it is a long-term programme.

Their interest in the Lifetime Wool Project was triggered after they witnessed the results other producers had achieved.

Charles and Liz buy rams from the Bundilla Merino stud, Young, New South Wales, which targets high fertility. This has helped Charles and Liz develop a dual-purpose Merino flock and first-cross ewes for the prime lamb market.

During 2000, he bought a neighbouring property to increase sheep numbers to 2000 ewes per flock. His breeding programme is expected to reach a 5000-ewe breeding flock within the next few years.

To help meet this goal Charles followed the Prograze scheme focusing on flock fertility and lamb survival percentages and subsequently added the Lifetime Wool Project principles to his strategy.

#### **Finding solutions**

What the Lifetime Wool Project has shown Charles and Liz is that while their sheep production was considered reasonably high, it could be better.

The solution was in managing sheep according to condition scores and manipulating the feed-on-offer in lambing paddocks to meet ewe nutritional needs.

Sheep graze on subclover-dominant pastures which includes phalaris, short-term ryegrass and tall fescue.

Paddocks are set stocked for lambing at about 6–11 ewes per hectare. The rate is set according to pregnancy status and feed availability.

#### Lambing management

The Lifetime Wool Project has also shown the de Fegelys the need to review the timing of lambing. During 2005, a late seasonal break (mid-June) was tough on ewes and lambs as, unfortunately, several paddocks failed to reach the 1500kg DM/ha target due to dry conditions, resulting in lower lamb survival.

Despite the ewes being fed extra to maintain condition, it was not adequate to cater fully for the seasonal gap.

#### Matching lambing and pasture

Charles and Liz will consider pushing back joining by 2–3 weeks to coincide lambing with pasture availability for improved lamb survival.

With 50% of the flock producing twins in the past season, it is essential to have more feed available at the start of lambing, otherwise Merino ewes often leave one or both of their lambs in search of food.

The net gain will be that Charles and Liz will spend less on feed overall as each sheep will receive the correct amount to maintain condition score, negating any wastage that could have been occurring in the past when all sheep were supplementary fed the same amount, regardless of individual needs.

Strategic feeding will also benefit the couple's prime lamb enterprise where they aim for a growth rate of 375–400 grams per day and a target carcass weight of 20kg.

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For information on the project contact national co-ordinator Andrew Thompson on andrew.thompson@dpi.vic.gov.au or phone (03) 5573 0949.

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