



***Ewe fertility & stocking rate
translate to increased profit***

Connecting people in the business of sheep

Snapshot



Name: David and Michelle Farley
Location: Kybybolite, S.A.
Average Rainfall: 565 mm
Enterprises: 10,500 maternal & composite ewes
Farm Area: 2,023 ha
Philosophy: Good planning and spending major time on the things which improve productivity and profitability (stocking rate, fertility and growth rate) and spending less time on things of minor importance.

Background

Dave and Michelle Farley purchased the Kybybolite property in 2008 and manage it along with Dave's father and one fulltime workmen.

Dave said the key factors in having a successful property were to have a simple plan and to maximise the dollars per hectare. He also believes in spending major time on major things and minor time on minor things.

He previously ran first cross ewes, however over the last few years he has been changing over to a self-replacing maternal composite flock. He currently runs 10,500 ewes, stocked at 7.5 ewes per hectare. Forty percent of the ewes are joined to maternal composites and sixty percent joined to Poll Dorsets. Average maternal ewe weight is around 74kg.

Yearly Management Program

Dave follows the Lifetime Ewe Management (LTEM) principles of understanding and feeding to the ewes requirements throughout pregnancy and lactation and

believes he can better match ewe requirements with a winter lambing production system. He likes to benchmark his productivity against the 'traditional' production system of first cross ewe lambing on Anzac day and running 3.75 ewes per hectare.

Even with a 'normal' (Anzac Day) break to the season, there is normally minimal feed available until mid to late May across much of the state. This means that in the majority of years, lambing in April or early May will require supplementary feeding to meet the ewes' requirements, which can be expensive.

Dave finds that he can achieve a 50 percent higher stocking rate than the traditional system, through lambing later and the rest from being able to build a feed wedge after the break of the season. All sheep get moved to cropping and heavy country on the 1st May and remain in these 'sacrifice paddocks' being supplementary fed according to their nutritional requirements until the 8th of June (just prior to lambing). This allows the paddock feed to get to at least 2,000 kg of dry matter per hectare (kg DM/ha) which is adequate to fulfil the ewe requirements in late pregnancy and early lactation.

Pregnancy Scanning

One of the main profit drivers within the Farley business is the reproductive rate. Dave is aiming for a rate of 80 percent of twin bearing ewes and 20 percent singles. He joins from the 10th of January to the 30th of April and then scans and does a five-way draft for early-singles, early-twins and early-triplets, late pregnant and dries.

Ewe lambs are joined on the 1st March. When the ewe lambs are scanned, the late pregnant and dries that were identified at the first scan are re-scanned, with only one percent being dry at the second scan.



One of the advantages of splitting ewes into groups according to whether they conceived in the first or second oestrous cycle is that it gives a tight lambing period, which assists timing of other management operations such as vaccination, marking and weaning. With this system, around 70 percent of ewes conceive in the first cycle and lamb over a period of 25 days. A second period of lambing then occurs over the next 25 days.

At this stage his scanning rate is around 75 percent of ewes conceiving multiples, 25 percent singles. Of the multiples, approximately 10 percent are triplets. In the past he has achieved conception rates of up to 210 percent, but said it is easy for things to go wrong and only get 150 percent.

To achieve high conception rates, he uses teaser wethers to make ewes cycle together, as well as 'flushing' with lupins 10 days before and 10 days after rams go in. He mates in mobs of 300. From this management he attributes an extra six to eight percent of twins in the system.

Other management techniques use to gain extra lambs include the use of 'Ovastim' which is an injectable

product used to increase the ovulation rates of prime lamb producing ewes. The cost of this is around \$1.50 per dose, with ewes requiring two doses in the first year and then once every year.

Another factor that he said increases his conception rates is that dry ewes get sold every year regardless of age. Last year he did a trial with his ewe lambs joining them for 60 days at 7.5 months of age. Eighty six percent conceived in their first year and 14 percent were scanned dry. The following year he re-mated the dry ewe lambs, with the result of a massive 42 percent of these scanned dry, compared to those who conceived as a ewe lamb only scanning 7.5 percent dry in the following year.

Lambing through to Weaning

The optimum time for lambing in relation to trying to match the pasture curve for his district is around the 15th of July. However, he thought that this period it is normally too wet and cold for optimum lamb survival, so he compromised with a June lambing and a small amount of supplementary feeding where required.

Ewes are spread out into lambing paddocks at a stocking rate of 12 to 14 dry sheep equivalents per hectare (DSE's). Mobs sizes are normally 80 to 120; with no more than 150 in twin bearing mobs. Ewes bearing triplets lamb in mobs of 50 to 100, whilst ewes scanned with singles lamb in mobs up to 300 ewes.

His targets for ewe condition score are 3.0 for single bearing ewes and 3.5 for ewes carrying multiples, which he achieves through adequate nutrition. When it comes to lamb survival, he uses the rule of thumb of aiming for six percent of the adult ewes' body-weight for a birth-weight target. For a 75 kg ewe, the optimum birth-weight would four and a half kilograms.

Dave also puts effort into growing good balanced phalaris and sub clover pastures with a mix of capeweed and barley grass. With Olsen P levels around 30 mg per kg, he achieves 8.5 tonnes DM / ha of pasture growth per year. If feed is tight during the first lambing, the use of gibberellic acid, a plant growth promotion hormone is used to give extra dry matter

production through winter. It is possible to increase feed-on-offer by 400 to 600 kg DM per ha in one month through the use of gibberellic acid and nitrogen application to actively growing pastures.

As well as building a feed wedge prior to lambing, he begins preparing weaning paddocks in August. He aims to wean on the 25th of September at a lamb age between 8 to 14 weeks. Weaned lambs are rotationally grazed through paddocks containing deep (>1500 kg DM /ha) fresh clover.

Growth rate of the lambs

Lambs are sold at lighter weights with the average carcase weight being 18 kg. Growth rates of 293 grams per head per day can be achieved to these weights.

When compared to the 'traditional' April/May lambs that may be 53kg at the start of November, 43 kg may seem low, but when these weights are spread over the number of hectares, the figures for his bottom-line speak for themselves.

He has worked out that he produces 451 kg of live-weight per hectare, which translates to 203 kg per ha. At a price around \$5.18 it equates to \$1,052 per hectare, not including lamb skins or costs.

He also has cropping in the system, of which two thirds is fed back to the livestock as supplementary feed to ewes or to lambs within his feed-lot facility. He estimates that the cost is \$25 of feed put through the sheep.