

CONTROLLED FEEDING INCREASES EWE STOCKING RATE MORE THAN 85% AND INCREASES LAMB MARKING BY 28%



An on-farm trial found that **mobs of twin bearing composite ewes supplemented in late pregnancy and into lambing were able to rear more lambs/Ha.**

A paddock was split in half and the ewes that were supplement **fed with Advantage Feeders ate significantly less pasture** compared to a group that were trail fed up to lambing.

This shows the potential to increase the winter stocking rate of ewes by 89%.

The Advantage Feeders supplemented ewes also marked 28% more lambs.

RESULTS SUMMARY

Ewes in the Advantage Feeder group:

- Ate significantly less pasture. The ewe stocking rate could have been increased by 6.6 ewes/Ha to 14.0 ewes/Ha
- Marked 28% more lambs, and
- Increased profit/Ha by \$630.40 (based on a reduced lamb marking increase of 15%)

TRIAL OUTLINE

	Advantage Feeders groups	Control groups
Quantity in each mob	115	115
Ewes/Ha	7.4	7.4
Ewe age	2 -3 yo	2 -3 yo
Foetuses	Twins	Twins
Average lambing date	10/08/2015	10/08/2015
Weaning date	10/11/2015	15/11/2015
Pre lambing supplement: 28 days	300g/day of oats	300g/day of oats (fed every 2nd day)
Post lambing supplement: 21 days	300g/day of oats	No feed

Note: It is common within the industry for weaning rates to vary within mobs and from year to year, despite having similar conditions. The results in this trial showed a 28% increase in marking rate however the sample size of the trial group is only one. The average increase in weaning rates from twin bearing ewes would more conservatively be 15%



Trail fed mob upon completion: 2000kgDM/Ha



Advantage Feeders mob upon completion: 3000kgDM/Ha

TRIAL BACKGROUND AND OBJECTIVE

There are a number of challenges facing profitable lamb production farms. These include:

- 1. Increasing the stock/Ha during the winter feed gap**
- 2. Reducing the amount of supplementation**
- 3. Increasing lamb survival**
- 4. Reducing mis-mothering**
- 5. Increasing lamb growth rates**

Ways the trial will attempt to address and overcome the above challenges:

1. Farms (especially mixed grazing and cereal farms) have their biggest deficiency in pasture availability and livestock consumption when ewes are in late pregnancy and early lactation. If stocking rates are increased during this period (based on lambs growing efficiently), the farm can often sustain this higher stocking rate for the remainder of the year. Stocking rates can be increased by supplementing stock with little and often amounts of starch based feeds as microbe populations increase and ensure high pasture utilisation.

- The stocking density of the Advantage Feeders group within this trial is the same as the trail fed control groups. Several other trials have shown a 50% higher stocking rate can be achieved.
2. Supplement can be reduced by feeding little and often. It provides an environment where microbes thrive. Trials have shown that the feed required to supplement mature stock can be reduced by more than 30%. As the control group had ceased being supplemented by the time the trial started, this doesn't affect the profitability of this trial period.
3. Supplementing ewes with starch at lambing thins its colostrum increasing the chance of its lamb receiving enough to survive past the first few days of its life.
4. Supplementing ewes through lambing makes them run away from their lambs to receive their feed, leading to mis-mothering. It is often the lesser of two evils to choose not to supplement them. The trail fed control mob in this trial has not been supplemented after lambing has commenced.
5. Lamb growth rates are increased from the higher milk production from ewes.

FULL RESULTS

	Advantage Feeders group	Trail fed group
KgDM FOO/Ha (2/7/15)	800	800
KgDM FOO/Ha (20/8/15)	3000	2000
Change in KgDM FOO/Ha	2200	1200
Pasture consumption of a ewe in late pregnancy (kg): 3.5% of body weight, 10% pasture waste, based on a 80kg ewe	3.08	
Additional ewes/Ha that could be run to reduce FOO by 1000kgDM/Ha (2200-1200) over 49 days	6.6	n/a
Total ewes/Ha for equal pasture FOO	14.0	7.4
Lambs marked	206	174
Lambs marking %	179%	151%
Oats cost/Ha: Based on ewes/Ha for equal pasture FOO and oats at \$250/tonne	\$55.88	\$14.16
Depreciation cost/Ha*	\$5.34	\$ -
Feeder filling cost/Ha (\$20/tonne)	\$4.47	\$ -
Trail feeding cost/Ha (\$50/tonne)	\$ -	\$2.83
TOTAL ADDITIONAL COSTS/HA	\$65.68	\$16.99
Marking weight (kg): 1/9/15	12.0	11.0
Value of lambs at marking (\$4/kgLW)	\$48.00	\$44.00
TOTAL ADDITIONAL INCOME/HA: Based on Equal pasture FOO (\$2.5/kgLW) and an increase of 15% of lambs marked	\$1,173.07	\$493.94
TOTAL PROFIT/HA	\$1,107.39	\$476.94

*This is calculated by multiplying the depreciation rate of 15% by the investment of \$2088 for one NGF1800 with Creep Panels and that the trial period makes up 50% of the feeder use per annum



Advantage Feeders



ABOUT THE TRIAL OPERATORS

Doug Laidlaw, owner, and farm manager Will Brand run a mixed farming enterprise in Tatyoon, Victoria. They lamb 4000 ewes in August and finish lambs to 43-45kg. Ewes are split into groups before lambing based on their estimated lambing dates. The ewe lambs, 2 and 3 yo. composite ewes are joined to maternal rams and the 4 and 5 yo. ewes are joined to Dorset rams. Approximately 2000 acres of the farm is cropped.

**1 X 1800 + 1 X CP
PAID OFF
IN JUST
11 DAYS**

OPPORTUNITY TO EXPAND THE TRIAL TO INCREASE PRODUCTION:

Creep feeding is the process of supplementing feeding lambs from 2-3 weeks of age. This system can follow the completion of the ewes being supplementing post lambing. Creep feeding increases farm production in a number of ways:

- a) Creep feeding lambs from 2-3 weeks of age starts the transition of their rumen so they can start consuming and converting pasture.
- b) Lambs that have been creep fed have a developed rumen by eight weeks of age. Feeding a controlled ration after this period will provide an environment to maximise growth off pasture.
- c) Weaned lambs that have been creep fed can transition through weaning better because they are less reliant on their mothers to feed.
- d) Ewe lamb conception is heavily reliant on the mating weight of ewe lambs. Higher growth rates of ewe lambs before weaning increases their conception rates, often by 20%.

COMMENTS FROM THE TRIAL OPERATORS:

One of the real benefits that we can see in this system is that it would enable us to increase our stocking rate. The pasture that had the feeder in it had noticeably more pasture in it all through all of lambing.

The pasture in the Advantage Feeders group ran out to 3000kgDM/Ha at marking. Normal practice would be to keep pasture availability lower to ensure it higher quality. For the purpose of the trial, the ewes were set stocked to evaluate the change in FOO.

The biggest difference we saw was in the range of weights in each mob. The mob without the feeder had less variation in the range of weights. This could have been due to the higher lamb survival rates in the Advantage Feeders mob.