ADVANTAGE FEEDERS

CREEP FEEDING EXPERIMENT

How much faster will creep feeding grow lambs and how much more profit will be made?

$3,893
ADDITIONAL PROFIT FROM FEEDING PERIOD

2.7
MONTHS TO PAYOFF FEEDER INVESTMENT

$33,323
NET PRESENT VALUE OF THE FEEDER INVESTMENT

12.1 : 1
BENEFIT TO COST RATIO

1. Lambs per feed input which was increased from 132 lambs to the commercial application of 200 lambs per feeder
2. The outputs were calculated at www.advantagefeeders.com.au/roi/creep-feeding-sheep
3. The outputs include the costs associated with filling, monitoring and depreciation

BACKGROUND

The primary objective of creep feeding is to transform infant lambs to have the ability to convert pasture, other forages and supplements into nutrients. This results in higher growth rates.

METHOD

Average lambing date:	25th of August
Average age of lambs at commencement of creep feeding:	15 days
Duration of creep feeding:	115 days
Breed:	Poll Dorset rams over Merino ewes producing 1st X lambs
Ewes per group:	90 ewes in the creep feeding group and 157 ewes in the control group. Both groups were stocked at 7.7ewes/Ha
Feed type:	Barley
Target feeding quantity:	Avg. of 200g/lamb/day
Mineral supplementation	CalMag offered to both groups for the duration of the experiment
Ewe supplementation	The ewes in the creep feeder group were supplemented with barley to train their lambs. All this supplement has been attributed to the lambs
Pasture type	Ryegrass and clover

OBSERVATIONS

Graham Klemke, the experiment operator, had the following observations throughout the experiment:

- 2020 was the first year we had creep fed all our lambs except for the control group within this experiment. In previous years, it had been opportunistic based upon how much grass was present. This year we took a more strategic approach by cutting off the ewes shortly after adding the feeder, so they trained their lambs to eat from the feeder. We were surprised at just how little the lambs eat, with the average daily intake at about 200g per lamb per day.
- When supplementing ewes at lambing with the feeders prior to commencing creep feeding, we can have a few lambs die close to the feeders. It is hard to quantify the mismothering associated with trail feeding because the lambs are left in all areas of a paddock. As we have had our best lamb survival by far this year, it suggests that the overall mortality is significantly less when using feeders.
- Initial concerns with some lambs getting acidosis at an ad-lib setting and heads getting stuck under the creep panels have not occurred.
- At weaning, it is easy to put lambs into a feed lot or onto Lucerne pasture with a grain supplement. The lambs are on grain already so there is a short, easy induction with no losses. This year we were able to wean lambs straight onto Lucerne with a moderate ration of barley.

CONCLUSIONS

Creep feeding can have a very efficient feed conversion

As pasture is often the most cost-effective feed source, once the rumen is developed, livestock can absorb nutrients from this feed source and prompt growth in a cost-effective manner. This is because the additional growth not only comes from the creep feed intake but also the added pasture consumption. The experiment showed that the creep fed lambs weaned 9.6kg heavier after an average consumption of 22.77kg of barley, having a very efficient feed conversion of 2.37.

Creep fed lambs can lead to higher weaning rates

The creep feeding group and the control group were set up with the same proportion of twins and single ewes. The control group weaned 188 lambs from 157 ewes equating to a weaning rate of 120%. The creep feeding group weaned 132 lambs from 90 ewes equating to a weaning rate of 147%. This difference has led to a significantly higher income and profit per hectare that have not been included in the calculations of increased profit from creep feeding.

FINDINGS

Cost of feed per tonne delivered	$250
Avg. daily intake - 115 days (g/lamb/day)	198
Total avg. intake per lamb (kg)	22.77
Avg. cost of feed per lamb	$5.69
Avg. daily weight gain over control group	83
Total additional weight (kg/lamb)	9.6
Feed conversion*	2.37
Avg. gain in value over control group per lamb (@$4.00/KgLW)	$38.40
Net profit per lamb**	$32.71

* Feed conversion: Kilograms fed to achieve 1kg of liveweight gain.
** Note: This does not include filling, monitoring or depreciation costs.

RECOMMENDATIONS

Creep feeding has a high return on investment

The experiment shows that the creep fed group of 132 lambs grew considerably faster than the control group and were more profitable. Using the values observed during the experiment and calculating the profit for 200 lambs, a return of $3,893 is possible for a feeding period of only 115 days. This return would see an Advantage Feeders 1800HD with Creep Panels paid off in as little as 2.67 months. Significant annual gains can be gained by expanding creep feeding across all mobs within a commercial farm.

Experiment operator:
Graham and Kate Klemke, Fairview, Henty, NSW

Graham and Kate run a mixed sheep and cropping farm. They run 1500 merino ewes that are mated with Poll Dorset rams. Lambing is split into two periods, starting in June and August. Depending on the season, lambs are sold between 52-60kg liveweight.