LESS HAY IS WASTED WHEN FED IN COVERED RACKS TO PRIME LAMBS IN WET WEATHER

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Prices for weaned prime lambs in Western Australia generally peak after the break of the season in early winter before large numbers of sucker lambs are available for slaughter. To ensure weaned prime lambs meet market specifications at this time they are often trail fed a restricted amount of a grain mix with hay fed *ad libitum* on the ground. Tudor *et al*. (1994) demonstrated there was considerable wastage due to spoilage when hay was fed to cattle on the ground in wet weather. This paper reports the value of feeding hay in covered racks to reduce wastage when finishing weaned prime lambs during wet weather in early winter.

Seventy White Suffolk x Merino ewe lambs weighing 33.8 ± 0.45 kg and condition score 1.7 ± 0.04 were trail fed a grain mix of 88% lupins and 12% oats (385 g/d, 32.2% CP & 13.4 MJ ME/kg DM) with *ad libitum* access to scheme water and a complete mineral mix. In addition, the lambs were fed round bales of oat/pea hay (9.7% CP & 9.2 MJ ME/kg DM) either on the ground (n=35) or in a covered rack (n=35) in adjoining paddocks for 55 days commencing in early winter. There were 22 wet days (>1 mm of rainfall) giving a total of 140 mm of rain during the study. The paddocks were sprayed with a herbicide before the study so that the grain mix and hay would be the only feeds available to the lambs. The total quantity of grain mix and hay fed was recorded and the cost to feed the lambs during the study was calculated. The lambs were weighed and condition scored each week and their carcase attributes were measured at slaughter. Four lambs fed hay in the covered rack and one lamb fed hay on the ground were unsuitable for slaughter. To calculate the net return per lamb fed for each group these lambs were assigned a lower value based on their liveweight and condition score.

Table 1. Growth and carcase attributes and economics for lambs fed a grain mix with hay either in a covered rack or on the ground

Attribute	Hay in a covered rack	Hay on the ground
Growth rate to slaughter (g/d)	189 ± 7.0	178 ± 6.5
Condition score at slaughter	2.6 ± 0.09	2.6 ± 0.08
Hot carcase weight (kg)	19.4 ± 0.37	19.6 ± 0.29
GR tissue depth (mm)	9.9 ± 0.52	10.4 ± 0.52
Eye muscle area (cm2)	14.0 ± 0.32	14.2 ± 0.24
Hay DM fed per lamb (g/d)	1,128	1,995
Feed cost ($ per lamb fed)	8.96	12.16
Net return per lamb fed after feed costs ($)	25.89	24.72

Hay valued at $67/T DM, grain mix at $204/T DM and minerals consumed at 50 cents/lamb.

Both groups of lambs grew at a similar rate and had similar carcase attributes, but the amount of hay fed on the ground to achieve this was 77% higher than that fed in the covered rack (Table 1). The cost of feed for the lambs fed hay in the covered rack was 26% less and their net return was $1.17 higher than the lambs fed hay on the ground. If all 35 lambs in each group had the same value per lamb as those slaughtered, the net return after feed costs would have been $2.87 higher for the lambs fed hay in the covered rack. The difference between the two groups in net return per lamb fed would have been greater had the hay been more expensive. The cost of the covered rack was not included in the economic analysis, but the recovery of this cost would depend on the number of lambs fed from the rack. It is concluded that feed costs can be lowered and profits increased by feeding prime lambs hay in a covered rack to reduce wastage in wet weather.

TUDOR, G.D., THORNILEY, G.R., MCMULLEN, G.R. and TELFER, R.B. (1994). *Anim. Prod. Aust.* **20**, 89-92.

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