

Outputs

- Sheep and Goat meat production systems
- Sheep and Goat fibre production systems
- Sheep and Goat milk production systems
- Important to note that many sheep/goat systems will have outputs in at least two if not three of the systems above, depending on breed and environment



Sheep meat

Lamb category	Liveweight (kg)	Hot Standard Carcase Weight (kg)	Market segment	Estimated growth rate (average grams/day from birth)
Weaned (4–6 months)	35	–	Store lamb	200
Weaned (3–3.5 months)	33		Feeder	300
Unweaned (4 months)	40	18	Domestic supermarket	300
Carryover (8 months)	45	20	Diverse	150
Carryover (8 months)	55	25	Heavy export	200
Merino (11 months)	47	20	Diverse	150

http://www.makingmorefromsheep.com.au/module_download/Mod_3_2011_v_7a.pdf



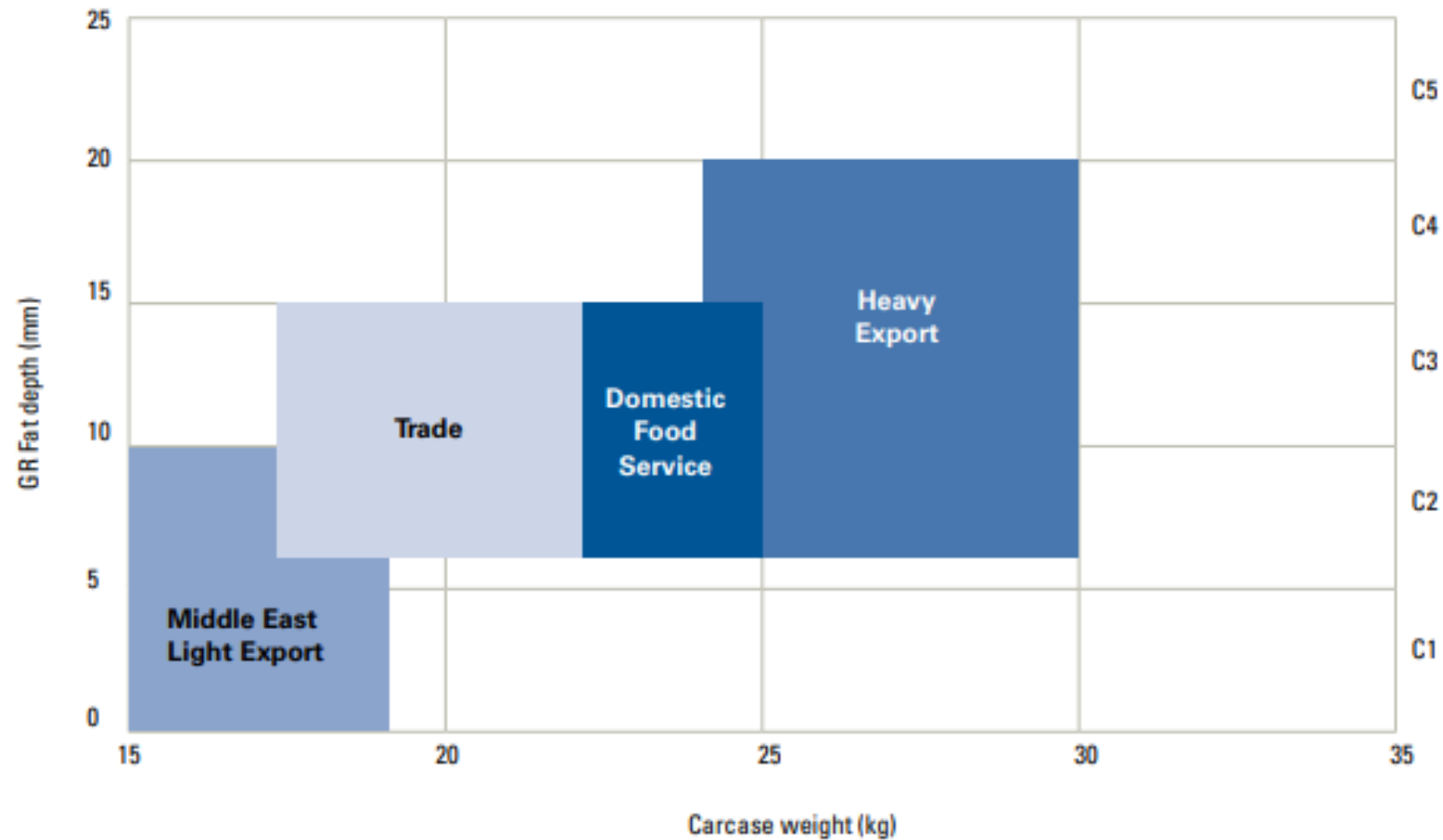


Figure 3.2
Guide to lamb
processor
specifications



1. Domestic lamb

Market segment	Carcase weight (kg)	Preferred Market fat scores	Comment
Supermarket lamb	18 to 22	2 and 3	Second cross preferred
Food service lamb	20 to 25	2 and 3	Lean and high yielding preferred
Other domestic lamb	Variable weights	2 to 4	Range of lamb types depending on end user requirements

Note: MSA prefers a fat score of 2-3

2. Export lamb

Market segment	Carcase weight (kg)	Preferred fat score	Comment
Heavy export	20 to 30	2 to 4	North America for prime cuts. Large volume markets for lower value cuts
Light export	10 to 16	2	Mainly Middle Eastern markets
'Haj' market	35 to 41 liveweight		Market is for lambs (6 to 12 months). Entire male animals with 'long' tail intact are preferred



Table 3: Fat score table

Score	GR tissue depth	Assessment over the long ribs
1	Up to 5mm	Individual ribs are easily felt. Cannot feel any tissue over the ribs
2	Over 5mm up to 10mm	Individual ribs are easily felt, however some tissue is present
3	Over 10mm up to 15mm	Individual ribs can still be felt. Can feel more tissue over the ribs
4	Over 15mm up to 20mm	Can only just feel ribs. There is fluid movement of tissue
5	Over 20mm+	Ribs cannot be felt. Tissue movement is very fluid

Source: AUSmeat

Figure 1: Reference point used for assessing fat cover on sheep and lambs

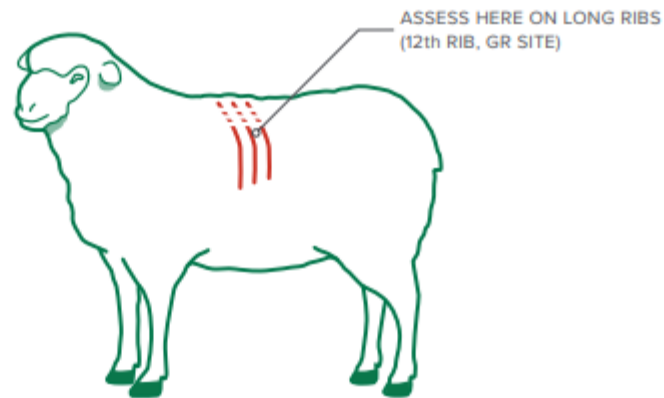


Figure 2: Location of the GR site

There are two GR sites one on either side of the carcass. Either may be used. Each is located 110mm from the mid-line of the carcass along the lateral surface of the 12th rib.

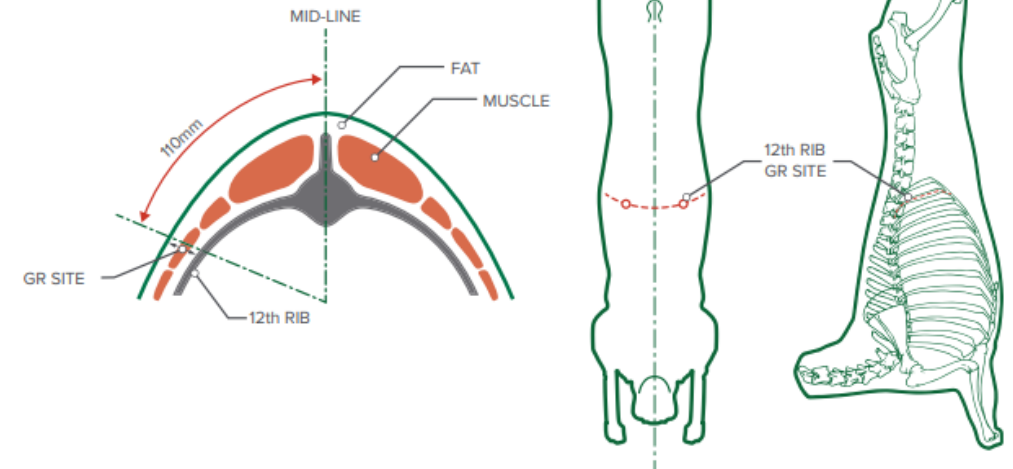
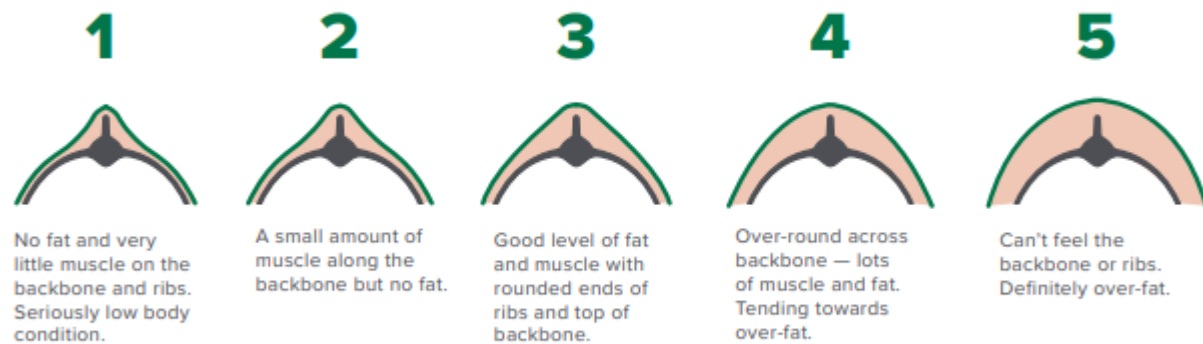


Figure 3: The five fat scores



Figure 3: The five fat scores



Source: Department of Agriculture

Figure 6: Fat class



Source: AUSmeat



Grid prices example from 2019



TFI Group Lamb Pricing - LOBETHAL

Grid Ref - Week:		24	Grid release date: 11/6/2019										
XB/Dorper Lambs			Grade Price / HSCW Range										
Grade	Fat mm	-14	14.1-16.0	16.1-18.0	18.1-20.0	20.1-22.0	22.1-24.0	24.1-26.0	26.1-28.0	28.1-30.0	30.1-32.0	32.1+	
S1	0 - 5	\$3.00	\$4.10	\$6.90	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$7.70	
S2	6 - 10	\$3.30	\$4.40	\$7.20	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.00	
S3	11- 15	\$3.30	\$4.40	\$7.20	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.00	
S4	16- 20	\$3.30	\$4.40	\$7.20	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.00	
S5	20+	\$3.30	\$4.40	\$7.20	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.50	\$8.00	
Merino/Dohne/SAMM Lambs			Grade Price / HSCW Range										
Grade	Fat mm	-14	14.1-16.0	16.1-18.0	18.1-20.0	20.1-22.0	22.1-24.0	24.1-26.0	26.1-28.0	28.1-30.0	30.1-32.0	32.1+	
S1	0 - 5	\$2.30	\$3.60	\$6.40	\$7.70	\$7.70	\$7.70	\$7.70	\$7.70	\$7.70	\$7.70	\$7.20	
S2	6 - 10	\$2.80	\$4.10	\$6.90	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$7.70	
S3	11- 15	\$2.80	\$4.10	\$6.90	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$7.70	
S4	16- 20	\$2.80	\$4.10	\$6.90	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$7.70	
S5	20+	\$2.80	\$4.10	\$6.90	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$8.20	\$7.70	
Hoggets			Grade Price / HSCW Range										
Grade	Fat mm	-12.0	12.1-14.0	14.1-16.0	16.1-18.0	18.1-20.0	20.1-22.0	22.1-24.0	24.1-26.0	26.1-28.0	28.1-30.0	30.1-32.0	32.1+
H1	0 - 5	\$1.00	\$4.30	\$5.50	\$6.20	\$6.20	\$6.20	\$6.20					
H2	6 - 10	\$1.00	\$4.30	\$5.50	\$6.20	\$6.20	\$6.20	\$6.20					
H3	11- 15	\$1.00	\$4.30	\$5.50	\$6.20	\$6.20	\$6.20	\$6.20		OVER 24.1 kg / POA			
H4	16 - 20	\$1.00	\$4.30	\$5.50	\$6.20	\$6.20	\$6.20	\$6.20					
H5	20+	\$1.00	\$4.30	\$5.50	\$6.20	\$6.20	\$6.20	\$6.20					



Example abattoir feedback

SLAUGHTER STATISTICS						
VALUE/CARCASE ...	\$209.57					
VALUE/SKIN ...	\$0.00					
VALUE CCS+SKIN ...	\$209.57					
CARCASE WEIGHT ...	28.32 KG					
VALUE/KG ...	\$7.40					

73 (47.1%) of your carcasses were 18.1-28kg Fat Score 2-4

	Fat Score 1	Fat Score 2	Fat Score 3	Fat Score 4	Fat Score 5	Total
<18.1kg						0 0.0%
18.1-28kg		7 4.5%	63 40.6%	3 1.9%		73 47.1%
>28kg			71 45.8%	11 7.1%		82 52.9%
Total	0 0.0%	7 4.5%	134 86.5%	14 9.0%	0 0.0%	155 100.0%



Goat meat

- Most widely consumed meat in the world
- a 14-16kg carcass target with a 45 dressing percentage would need animals to weigh in the 32-35kg live weight range on-farm to meet the market target
- Range goats checked for weight and meeting abattoir target carcass range pre transport (kept if too low) – similar dressing percentage to sheep depending on meat goat infusion

https://www.nuffieldscholar.org/sites/default/files/reports/2010_AU_Christine-Ferguson_The-Australian-Rangeland-Goat-Management-And-Opportunities.pdf



Wool

- Wool output varies with breed of sheep
- Merino
 - As micron increases GFW also tends to increase
 - Lower micron lower GFW, Higher micron higher GFW
 - Medium wool micron fleece weights about 5kg
- Longwool British breeds
 - Higher wool production, low value
- Shortwool British breeds
 - Lower wool production – 2-3kg per animals



Mohair

- Angora goats are shorn twice a year
- Typically yield an adult fleece of between 5kg and 6kg per annum
- 120–150 millimetre, lustrous and resilient luxury fibre, which can be blended with other natural or synthetic fibres to give texture and lustre to a finished fabric
- Fibre diameter varies between 20 and 40 microns and increases as the goat ages
- 4.5 kiloT production worldwide in 2013 (reduced from over 6 kT in 2004)



Cashmere

- 11-20 micron (similar to finer end of Merino)
- Generally less than 500g per animal, but depends on selection pressure on cashmere production

<http://www.agrifutures.com.au/wp-content/uploads/publications/06-015.pdf>

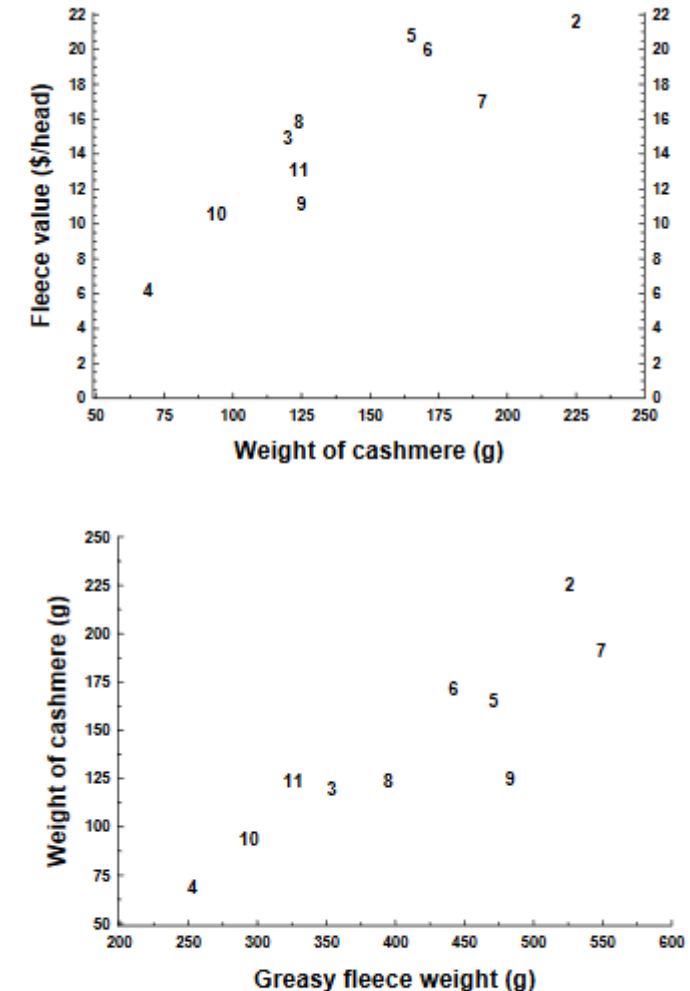
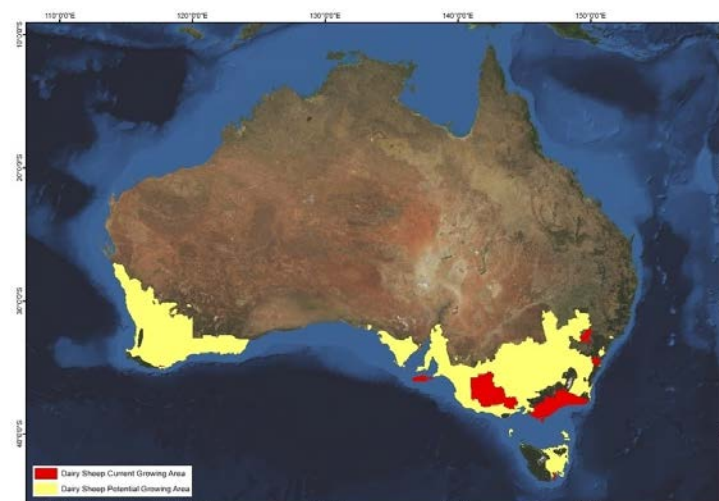


Figure 2.5. The relationship between the weight of clean cashmere and greasy fleece weight for 2-year-old does



Sheep milk

- Agrifutures information 2017
 - On average, around 5,500 sheep are milked in Australia on 13 commercial farms
 - Annual production is about 550,000 litres of milk of which more than half is used to make yoghurt and almost all the remainder is made into cheese, which is mainly processed on farm (suggests collected milk volume of 100 l/head – variable per ewe though depending on breed and selection)

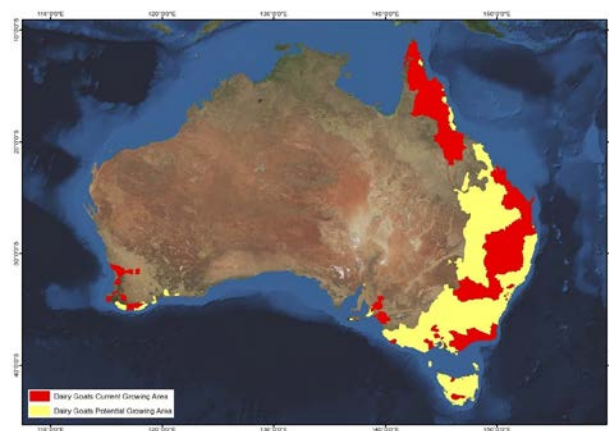


<https://agrifutures.com.au/farm-diversity/dairy-sheep/>



Goat milk

- At peak lactation, females may produce 4L of milk per day
- 68 dairy goat farms and 15 goat milk factories in Australia
- On average, lactation lasts 300 days and an average of 2-3L of milk is produced each day – 600-1000 litre lactation



RDC in sheep /goat industry

- Meat and Livestock Australia <https://www.mla.com.au/>
- Australian Wool Innovation <https://www.wool.com/>
- Agrifutures <https://agrifutures.com.au>

