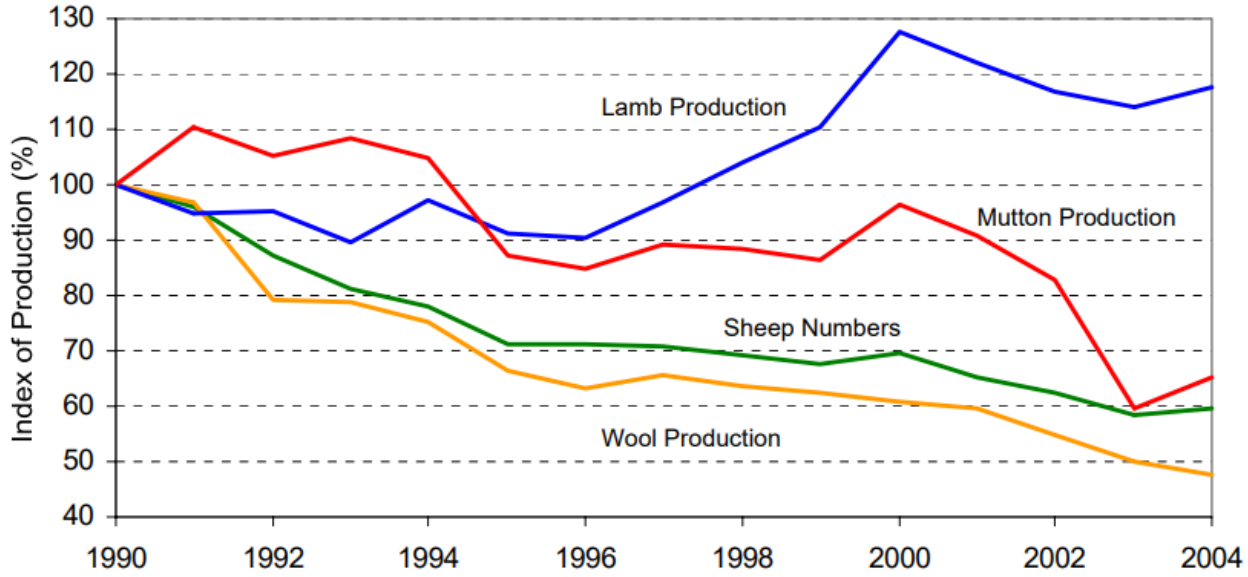
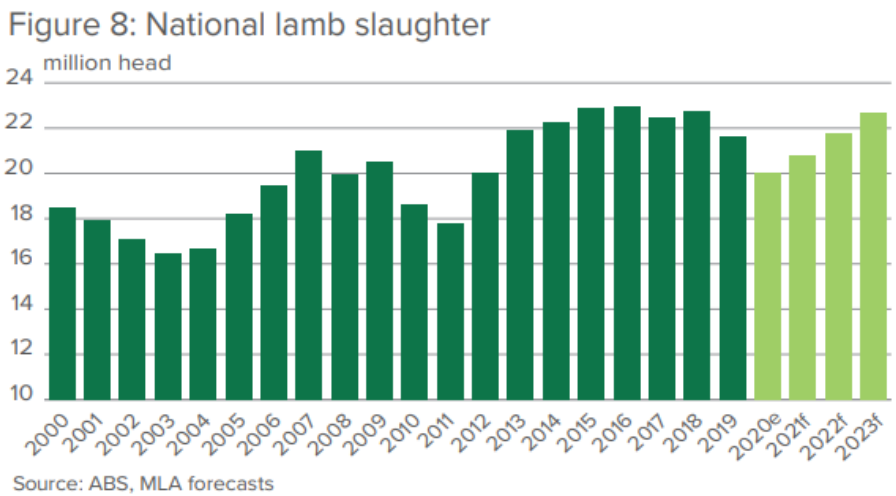
Small Ruminant industry demographics

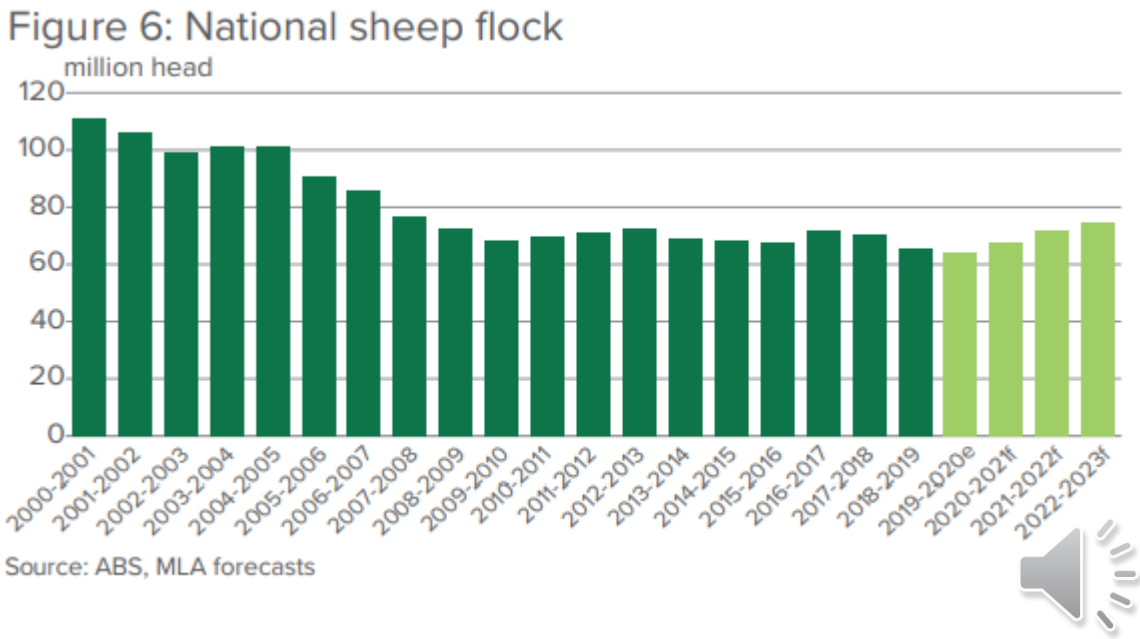
Figure 4 Australian sheep industry trends – 1990 to 2004



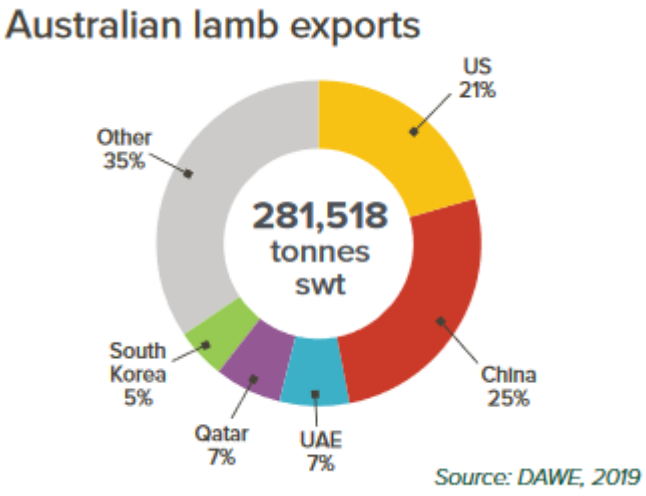
Note: Wool production and sheep number indices are based on financial year data, with base year 1989/90 and Lamb and Muttor Production Indices are based on calendar year data with base year 1990 = 100%.

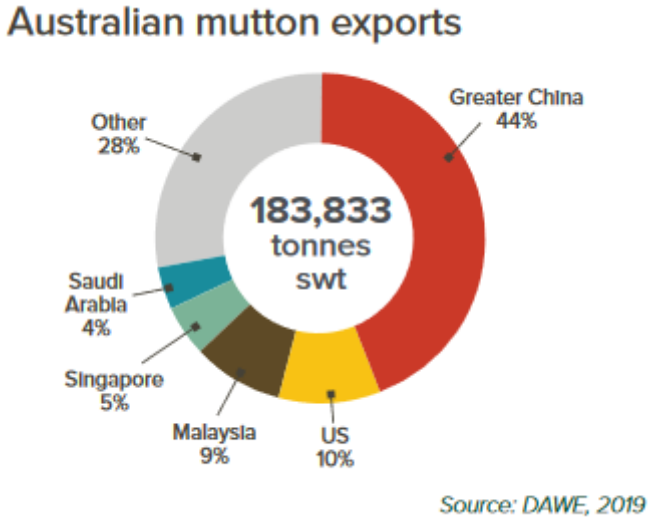
Source: ABARE 2005a.

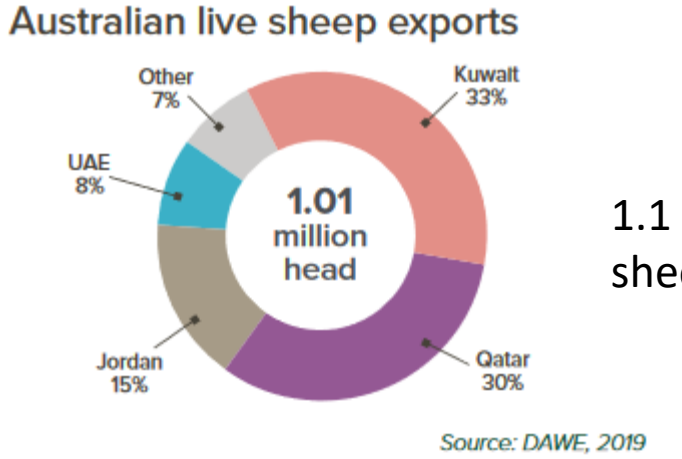




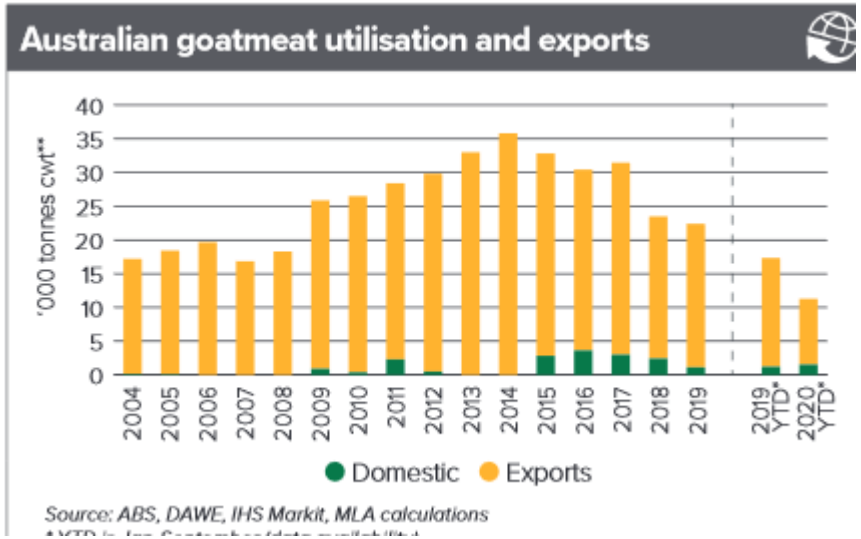
Small ruminant output – where to?

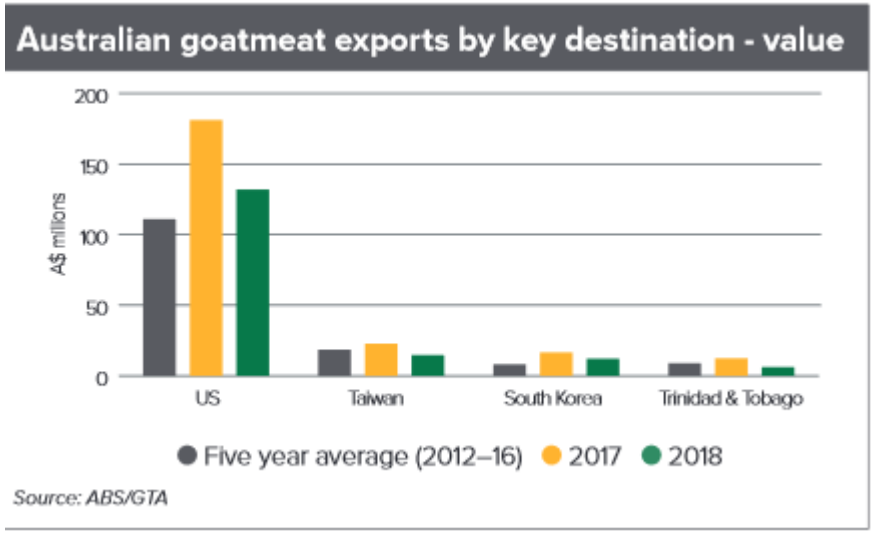




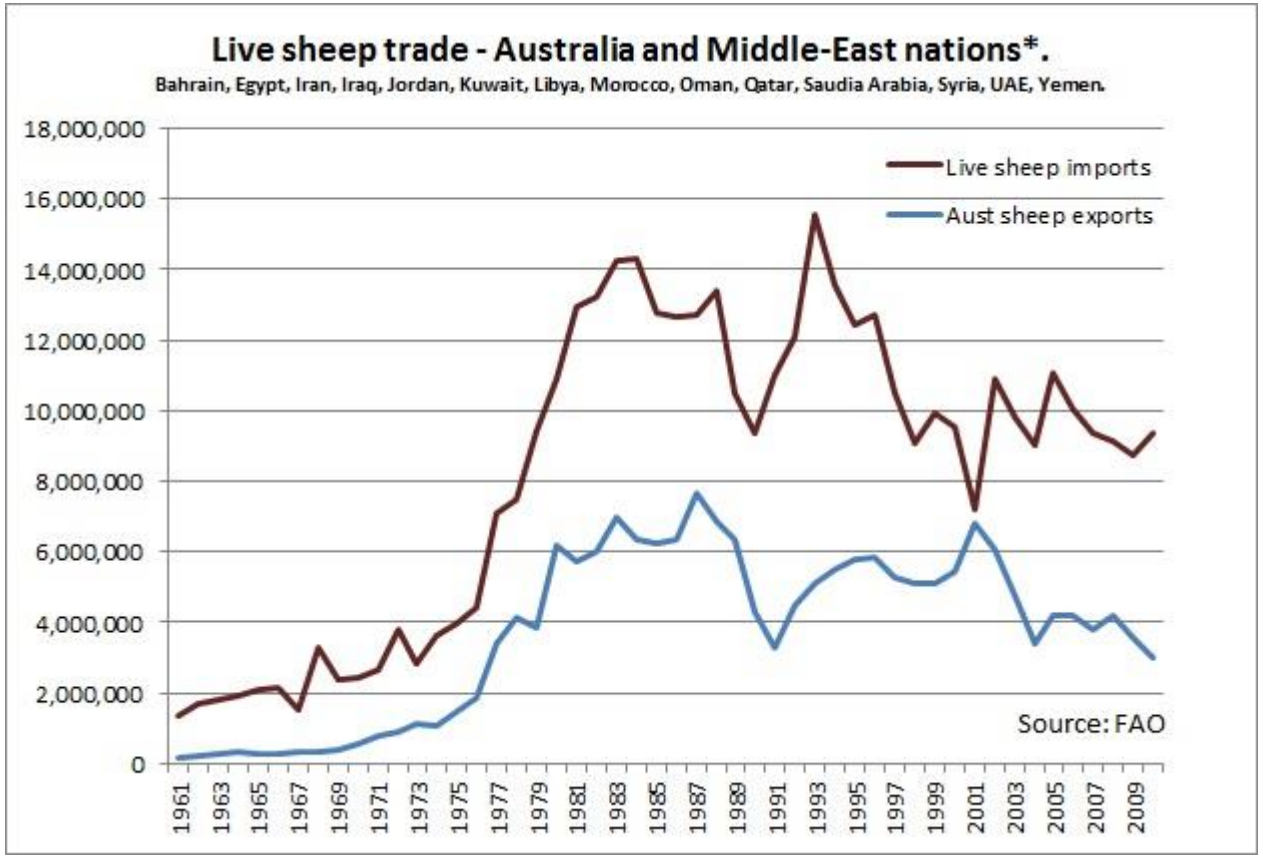


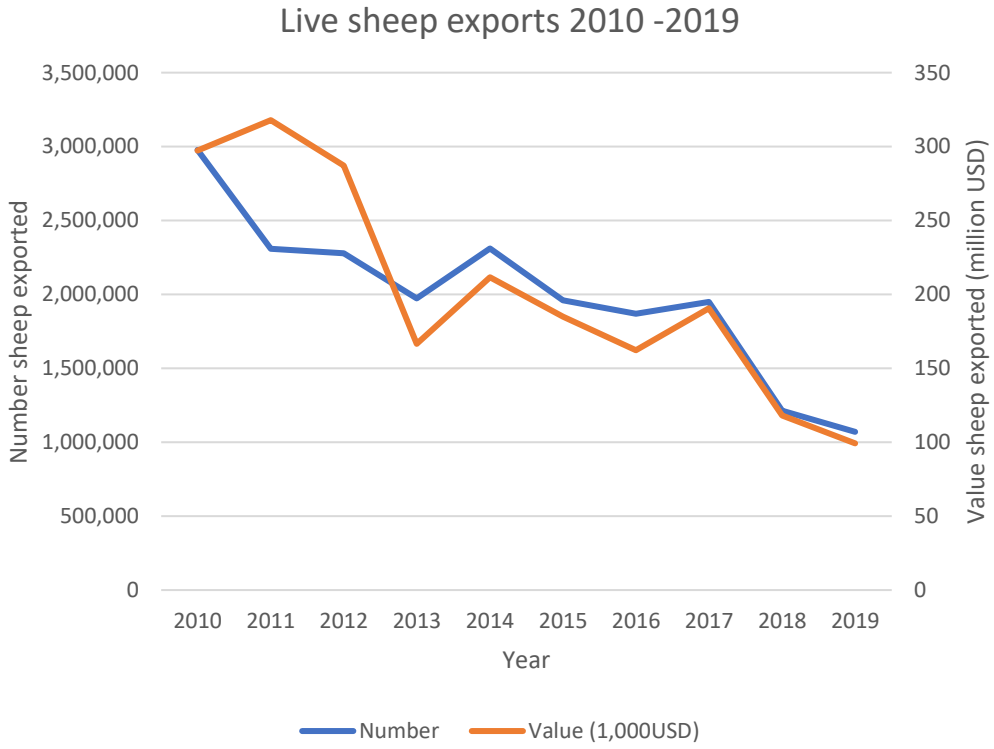
1.1 million sheep 2019





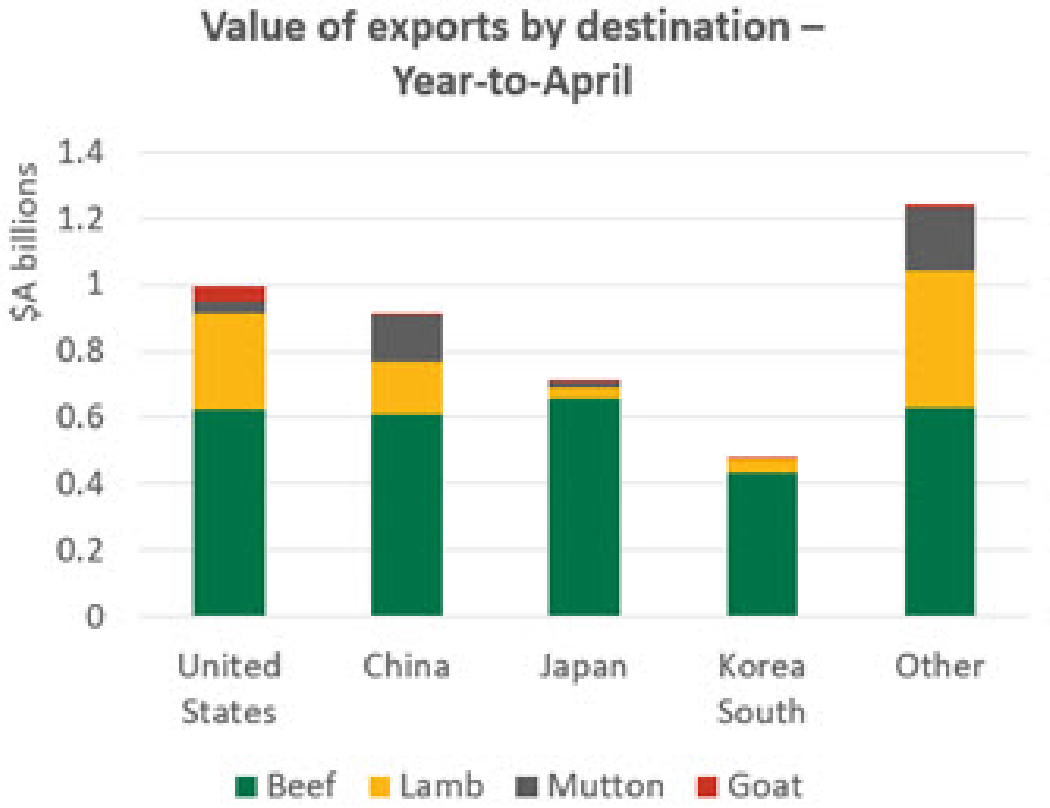
Live sheep export change over time





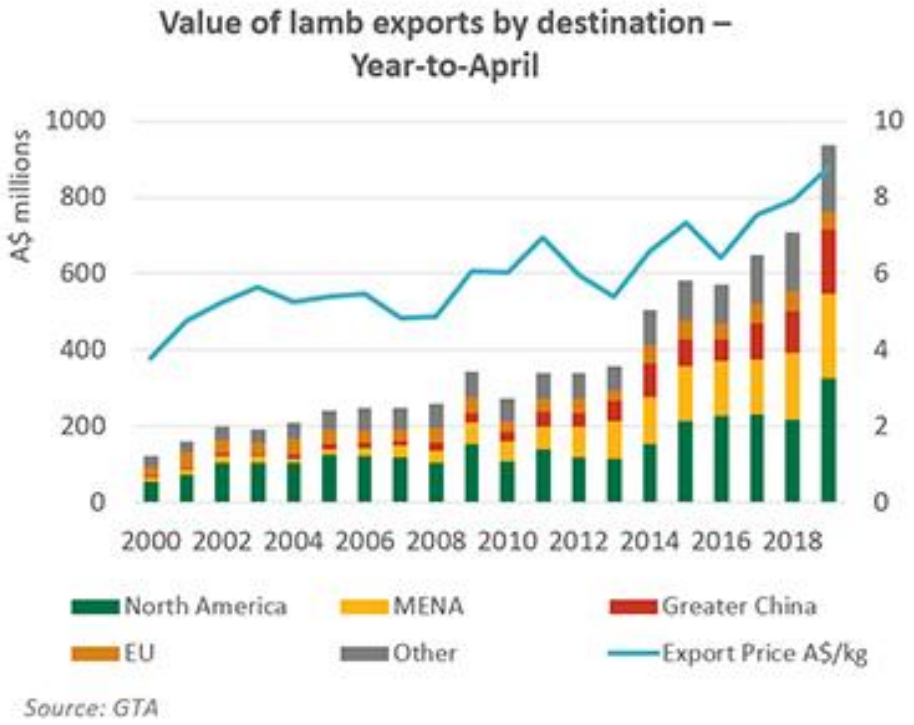
Data from
http://www.fao.org/faostat/en/#data/TA

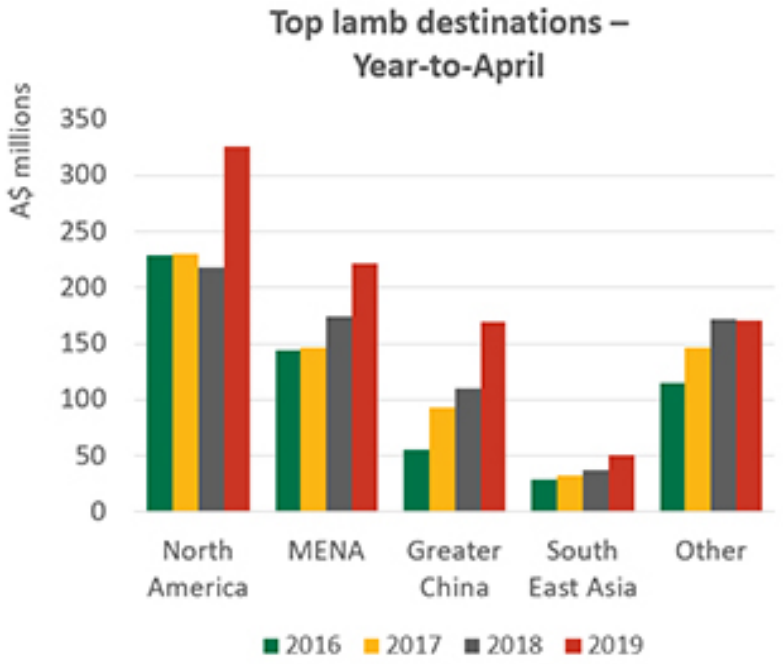
Red meat exports by time/destination



https://www.mla.com.au/prices-markets/market-news/2019/export-values-hit-new-highs/

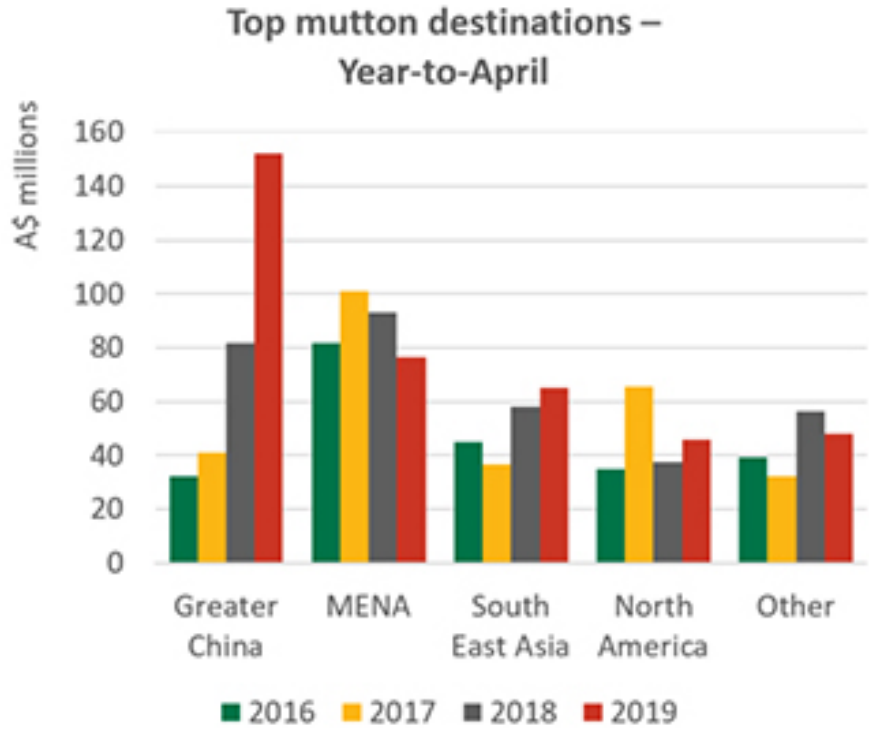
Lamb export by time/country





https://www.mla.com.au/prices-markets/market-news/2019/export-values-hit-new-highs/

Mutton export by time/country

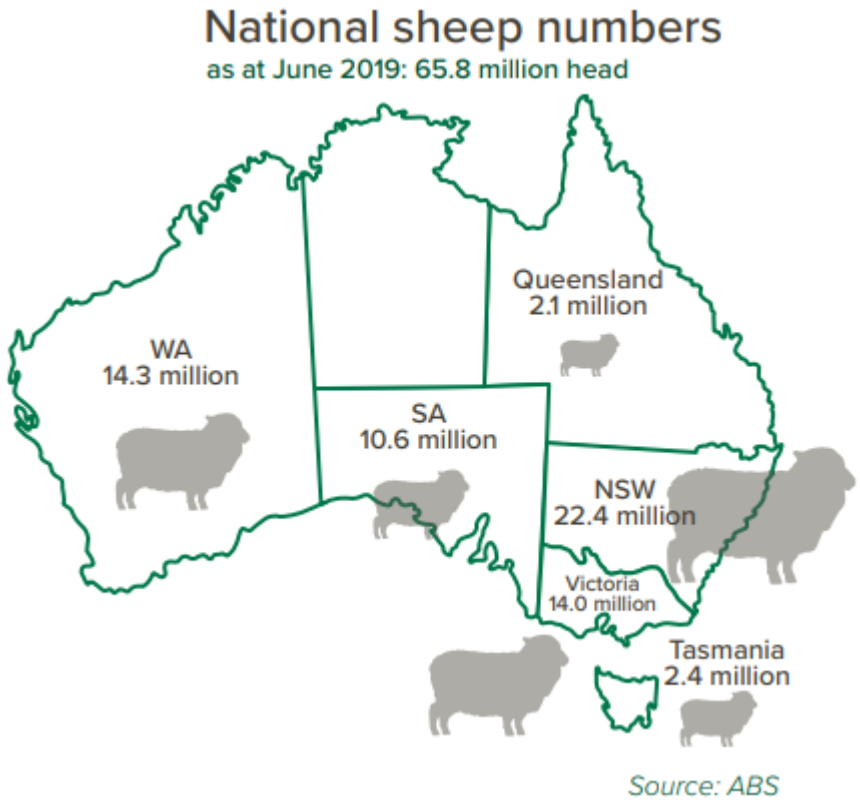


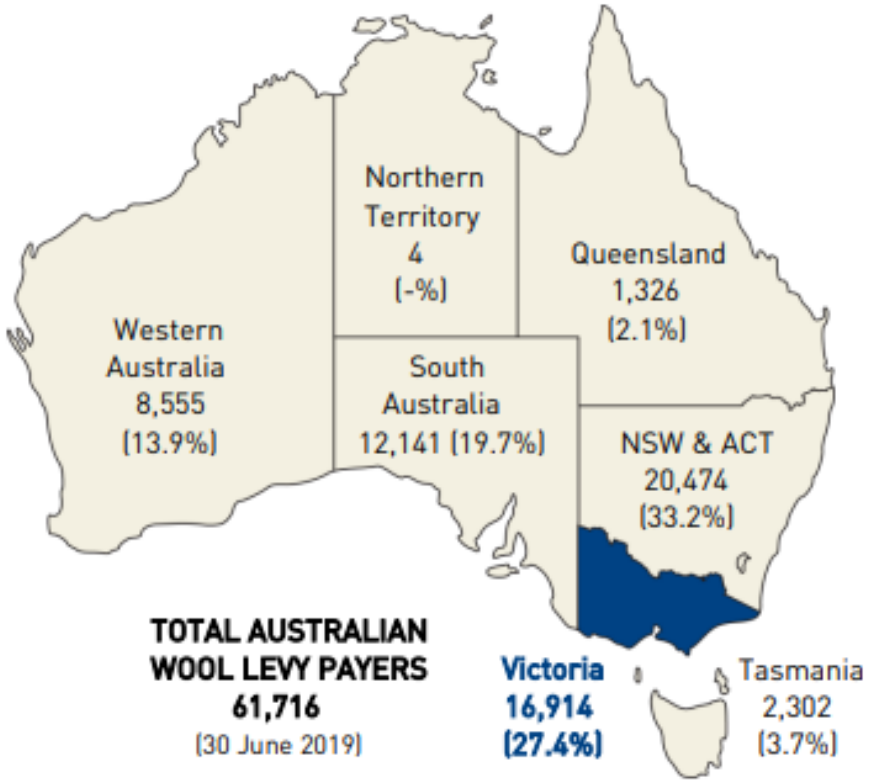
Goat exports by time/country

Source: GTA

Distribution of sheep and wool producers in Australia

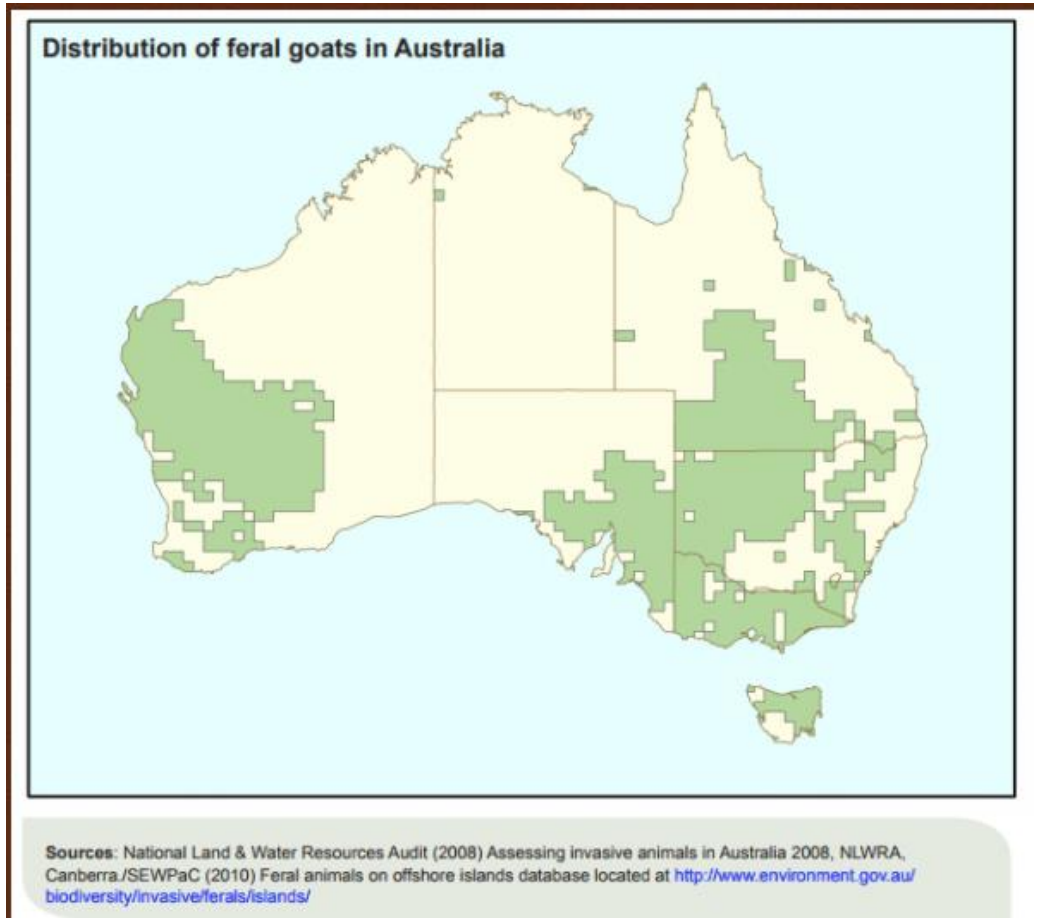
- https://www.wool.com/market-intelligence/sheep-numbers-by-state/





Distribution of goats

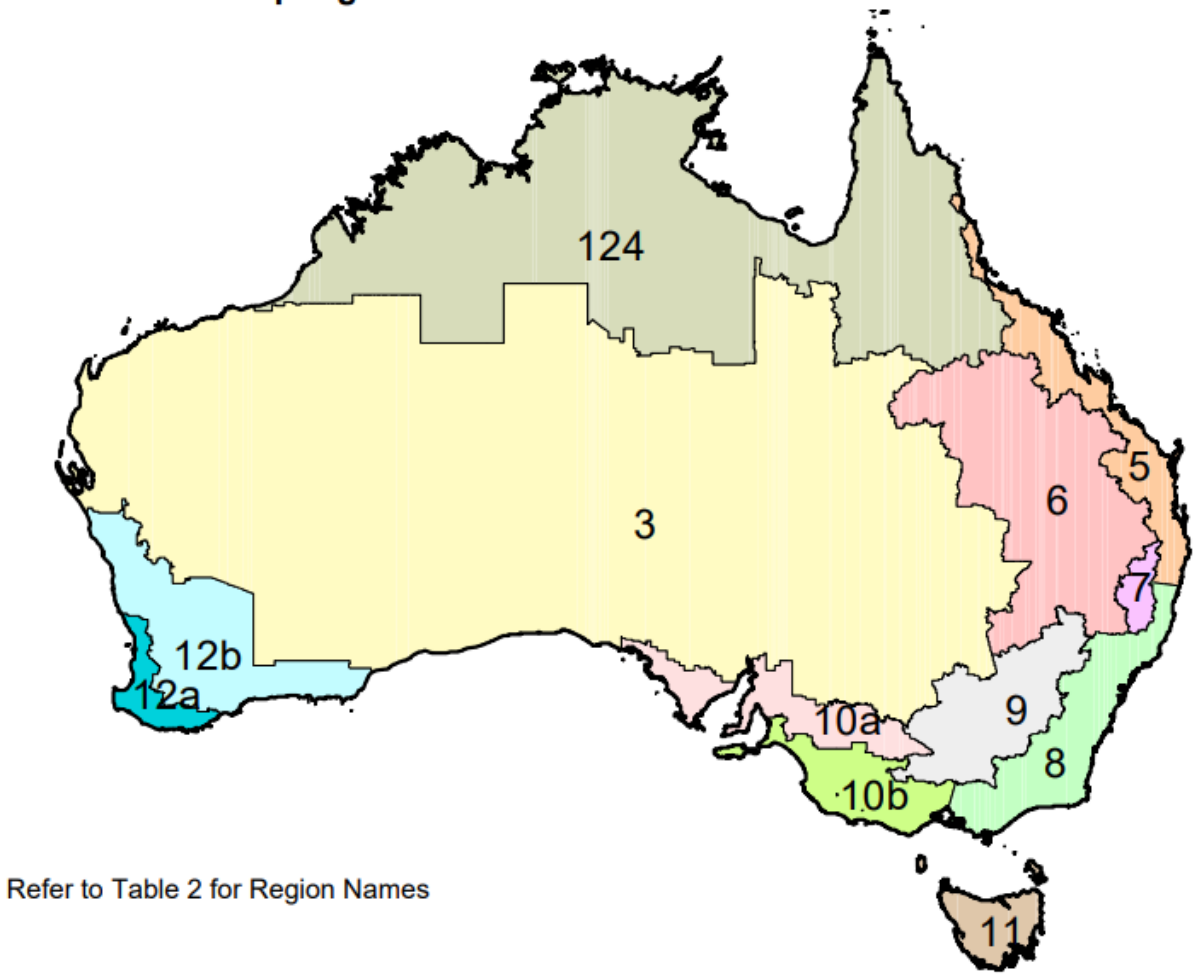
- Vast majority of goats in Australia are feral goats
- Fibre and meat goats have similar range to sheep
- Dairy goats tend to be concentrated in higher rainfall zones although often fed in the dairy to remove parasite burdens



Australian sheep regions

	Sheep Region	Sheep Numbers (2004/05 - Million)	ABARE survey regions
124	Northern tropics	0.44	311, 712, 511, 313, 714
3	Central pastoral	7.40	711, 599, 111, 512, 411, 312
5	Northern high rainfall	0.00	332, 331, 18% 132
6	Northern wheat/sheep	7.11	121, 314, 321, 322
7	Armidale high rainfall	3.40	29% of 131
8	Eastern high rainfall	10.36	71% of 131, 82% of 132, 57% of 231
9	Eastern wheat/sheep	20.31	122, 123, 223
10a	Southern wheat/sheep	9.62	221, 421, 422
10b	Southern high rainfall	21.69	222, 43% of 231, 431
11	Tasmania	2.40	631
12a	Western high rainfall	3.22	531
12b	Western wheat/sheep	18.30	521, 522

Australian sheep regions



Refer to Table 2 for Region Names

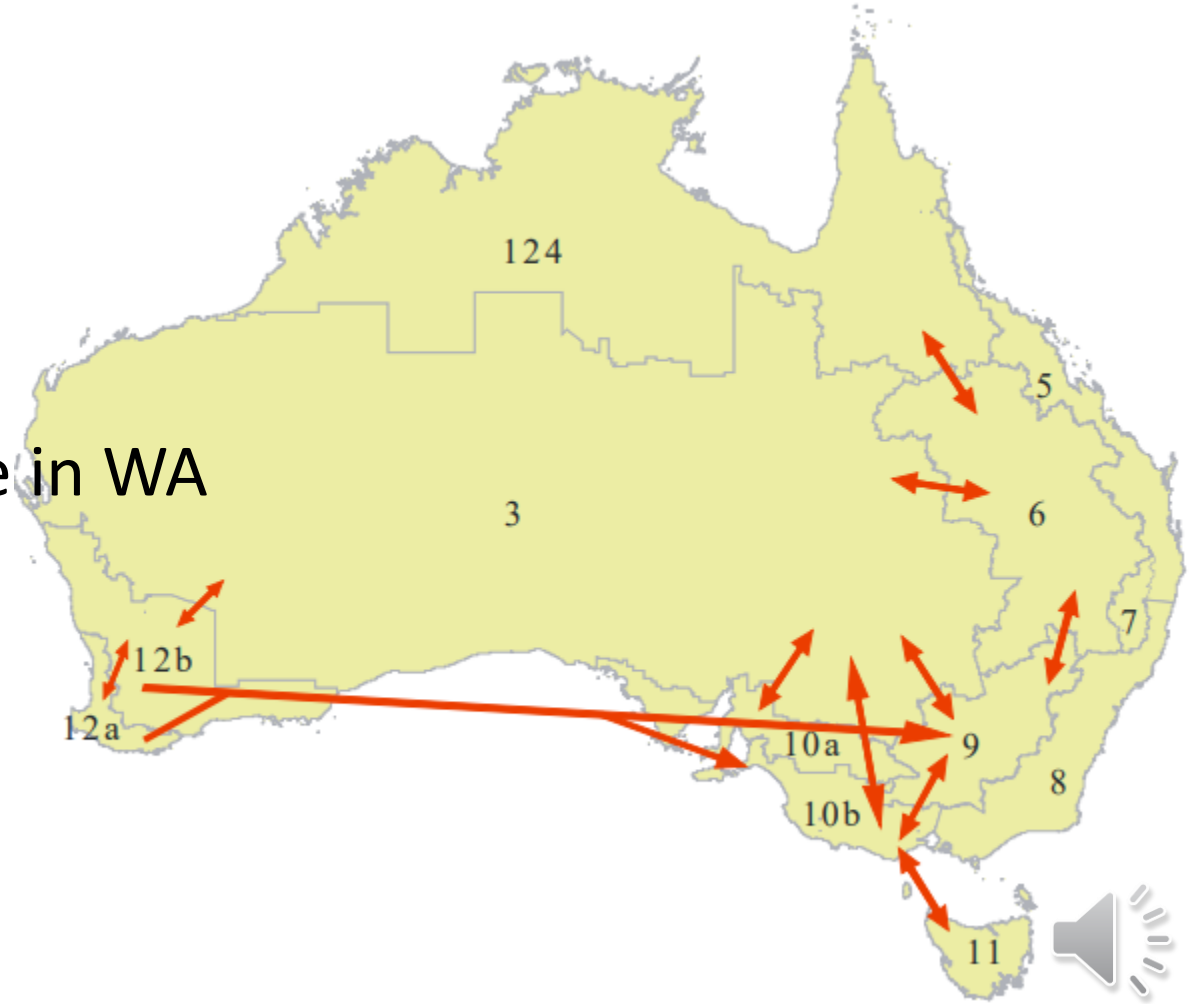
- 2004/05 data (numbers reduced by 30% since)
- Compare numbers to previous slide which is current numbers

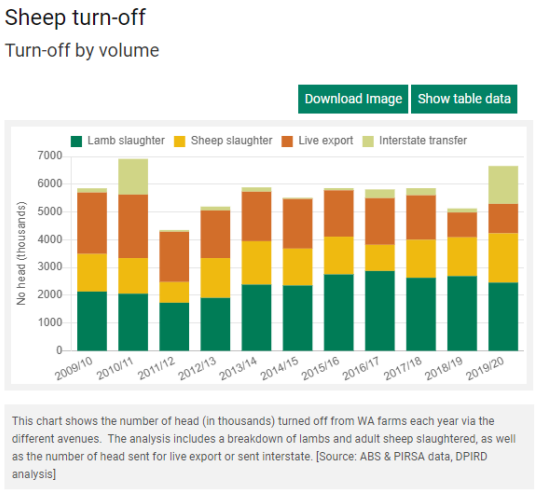
Patterns of sheep movement

- West to East (seasons)
- Pastoral to sheep/wheat & high rain

Local zone/seasonal

- Important for disease
- State based biosecurity eg liver fluke in WA





Stock movement

- The majority of sheep enterprises run a self-replacing system (there are a number of good reasons for this)
- Majority of animals entering are ram replacements
- Major movement off property = cull ewes, cull rams and surplus young stock (lambs/hoggets)
- Most sheep movements within 200km region of where born, some sales longer e.g. abattoir may be >200km. May be longer for stud animals
- Droughts, floods etc may make movement further
- Technology allows for greater movement with increased bidding e.g. Auctionsplus interface with live sale

Sheep production systems

- Self replacing wool (54%)
- Self replacing meat (25%)
- Wether based (6%)
- Crossbred (3%)
- Trading and other (12%)

Data from ABAREs with local knowledge

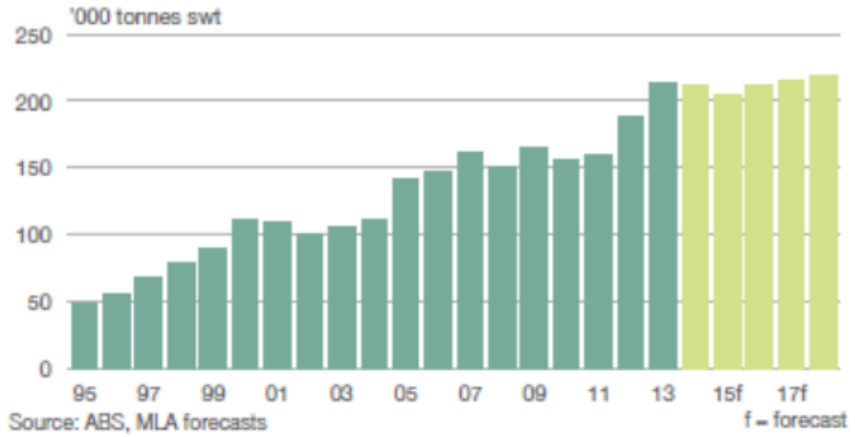


Figure 1.10: Australian lamb exports (MLA 2014).

https://www.woolwise.com/wp-content/uploads/2017/07/WOOL-300-300-14-T-01.pdf

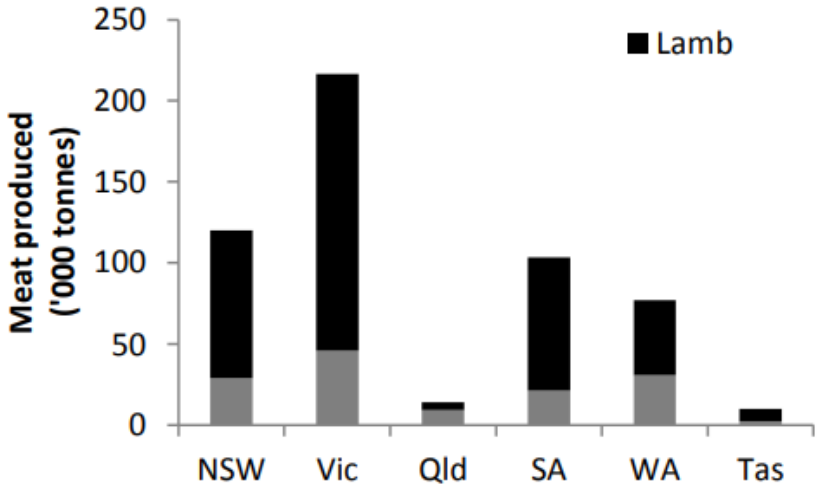
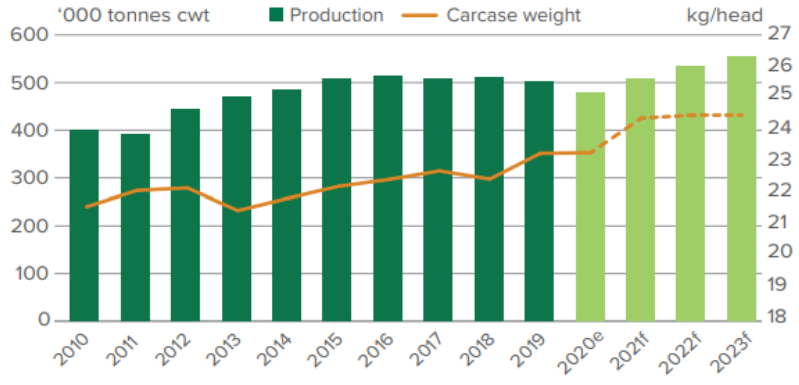


Figure 1.9: Lamb and mutton production (tonnes) by state (ABS 2013).

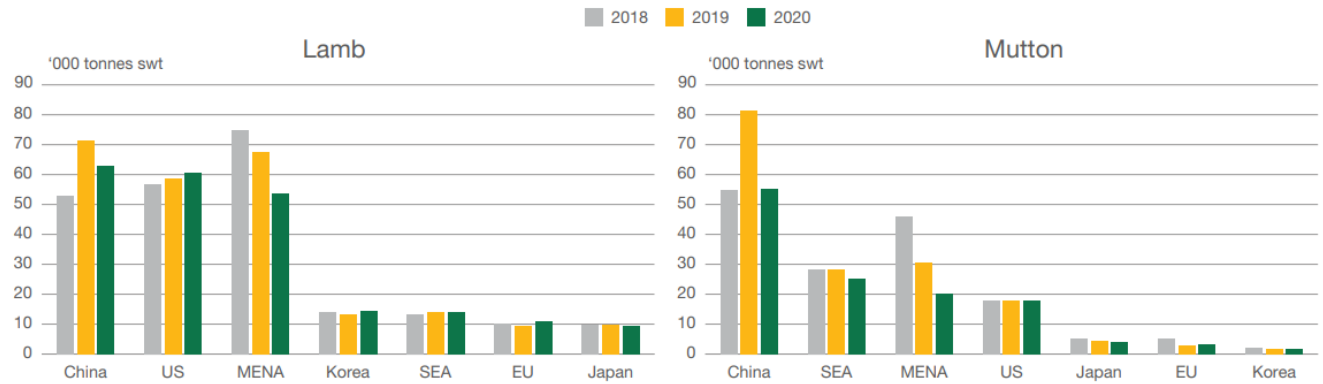
https://www.woolwise.com/wp-content/uploads/2017/07/WOOL-300-300-14-T-01.pdf

Figure 10: Lamb carcase weights and production



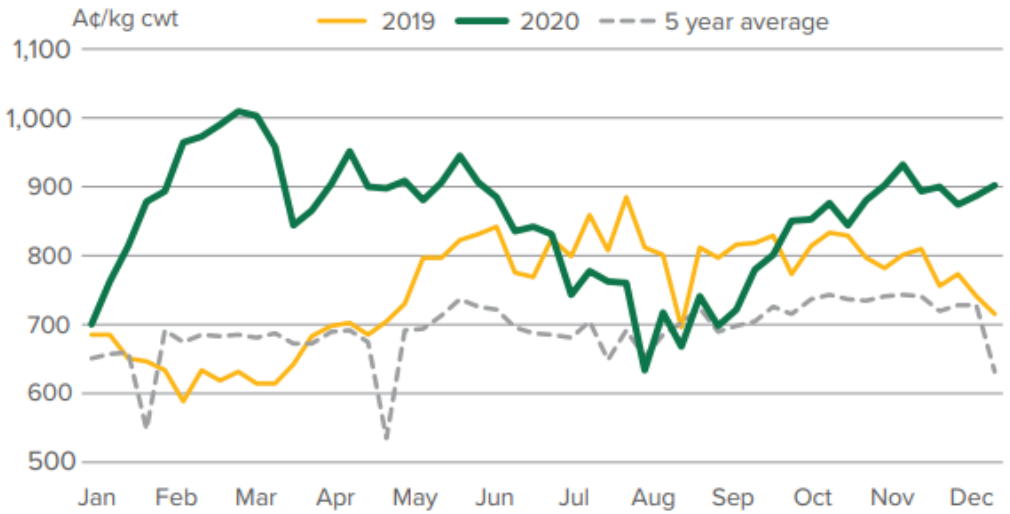
Source: ABS, MLA forecasts

Figure 12: Volume of Australian sheepmeat exports



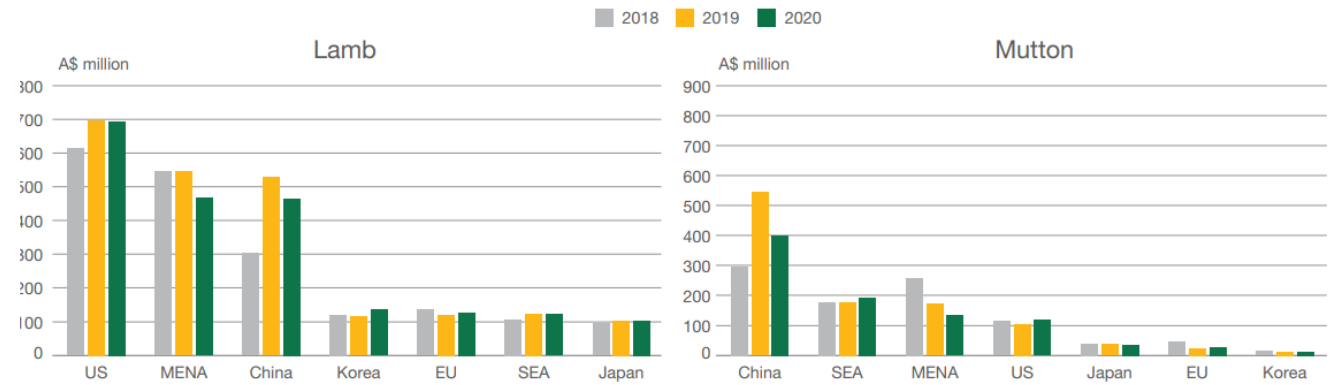
Source: DAWE
Note: Data is for CY2020

Figure 18: National saleyard restocker lamb indicator



Source: MLA's NLRS

Figure 13: Value of Australian sheepmeat exports



Source: DAWE
Note: Data is for the year-to-November

EMI – the Eastern Market Indicator

Major shifts identified by early 2000s

- 1. Shift to lower micron flocks, particularly in Merino production
- 2. Shift to overall higher bodyweight ewes
- 3. Reduction in overall wether numbers being retained past 2 years of age
- 4. Increased joining of older and cull (for type) Merino ewes to terminal sires such as Dorsets, BLs, WS – maybe finished on farm or sold as store lambs eg moving from sheep/wheat zone to high rainfall zone commonly

https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/animal-plant/animal-health/livestock-movement/sheep-movement-ead.pdf

Micron price differential

Table 1 Micron price differentials (% relative to 21 micron wool)14

Month and year	18 micron	19 micron	23 micron	26 micron	28 micron
July 1999	+125%	+88%	-22%	-29%	-29%
July 2001	+194%	+85%	-3%	-19%	-19%
July 2005	+30%	+18%	-3%	-25%	-38%
July 2009	+39%	+22%	-3%	-19%	-38%
July 2014	+4%	+1%	+0.2%	-28%	-41%
January 2015	+11%	+5%	-2%	-27%	-33%
10 year average	+30%	+16%	-5%	-32%	-46%

https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/543547/Paper-1-global-supply-and-demand.pdf

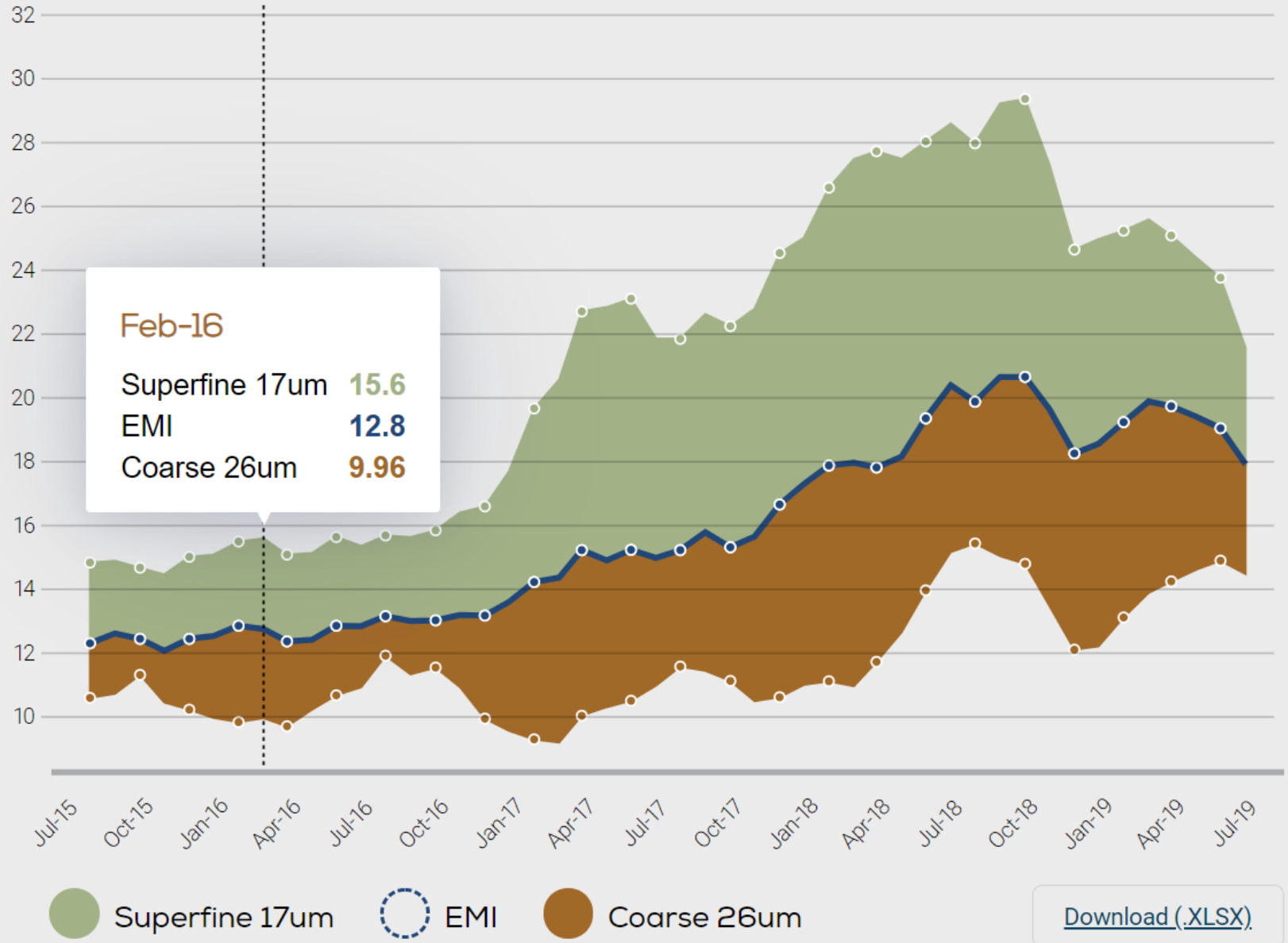
Table 1. **Indicative micron profile of ADULT FLEECE wool sold through auction in Season 2011/12.**

Micron	Bales	% of fleece	Micron	Bales	% of fleece	Micron	Bales	% of fleece
<=12	210	0.02	22	122,141	11.22	32	9,383	0.86
13	36	0.00	23	65,977	6.06	33	6,968	0.64
14	104	0.01	24	25,254	2.32	34	3,836	0.35
15	947	0.09	25	12,728	1.17	35	2,134	0.20
16	10,484	0.96	26	14,075	1.29	36	1,533	0.14
17	45,616	4.19	27	21,975	2.02	37	1,365	0.13
18	100,655	9.24	28	31,423	2.89	38	1,208	0.11
19	161,067	14.79	29	35,025	3.22	39	902	0.08
20	198,241	18.20	30	27,638	2.54	40	321	0.03
21	170,699	15.67	31	17,038	1.56	41	30	0.00
						42+	15	0.00

Convention: 18= 17.6 to 18.5 micron.

https://www.awex.com.au/media/1041/wool-buying-in-australia-2013.pdf

Wool price spread relative to EMI



Download (.XLSX)

Source: AWI (2019)

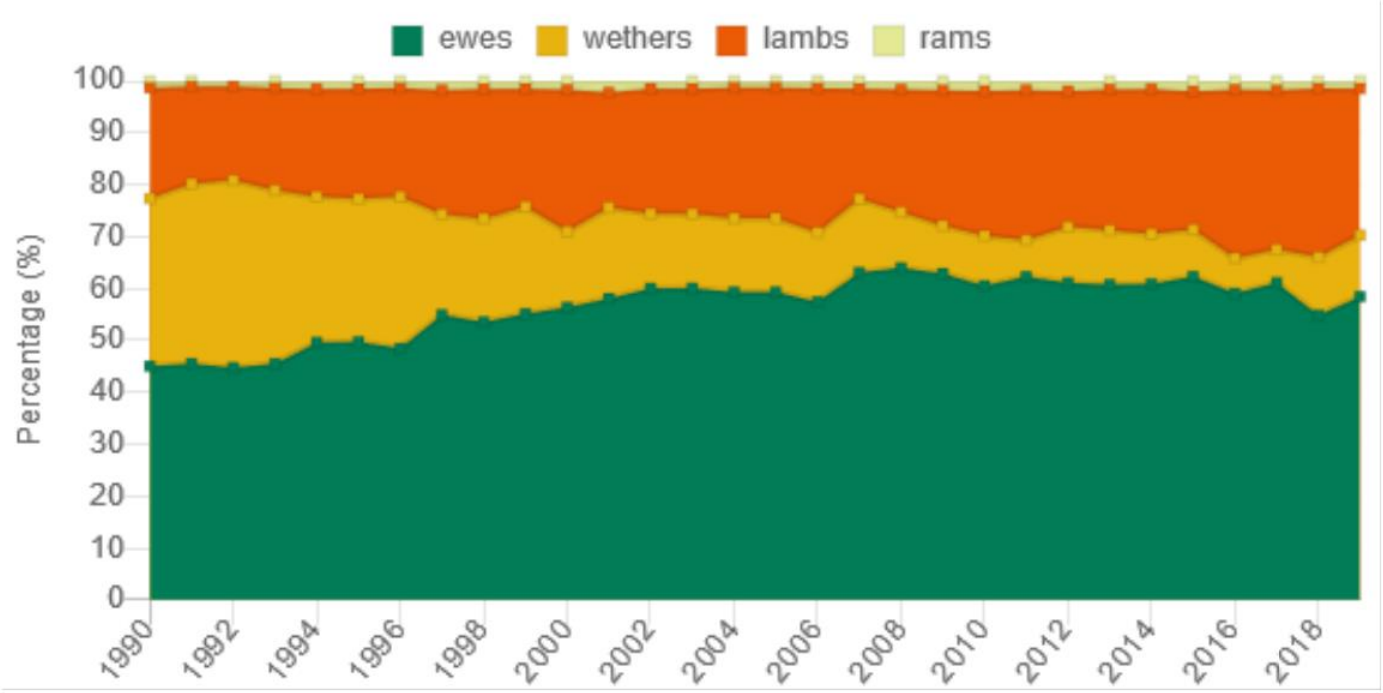
1 Australian flock composition, at 30 June

	Sheep numbers					Proportion				
	1992	a	2002		change	1992	a	2002		change
	million		million		%	%		%		%
Breed composition										
Merino	127.2	(3)	87.4	(6)	*–31*	89.4	(2)	85.1	(4)	*–5*
Crossbred	11.5	(10)	10.7	(11)	*–7*	8.1	(8)	10.4	(9)	*29*
Other	3.6	(20)	4.6	(34)	29	2.5	(16)	4.5	(21)	79
Merino flock profile										
Ewes	50.0	(3)	40.3	(5)	*–19*	39.3	(2)	46.0	(3)	*17*
Wethers	35.9	(5)	14.7	(8)	*–59*	28.2	(4)	16.8	(7)	*–40*
Lambs	21.2	(4)	18.2	(8)	*–14*	16.7	(3)	20.8	(4)	*25*
Hoggets	18.8	(5)	13.3	(8)	*–29*	14.8	(4)	15.2	(5)	*3*
Rams	1.3	(7)	1.0	(8)	*–29*	1.1	(6)	1.1	(6)	*4*
Age distribution of adult merino ewes										
Under 4 years	26.4	(3)	20.8	(7)	*–21*	52.8	(2)	51.6	(5)	*–2*
4 and 5 years	16.5	(3)	13.9	(6)	*–16*	33.0	(3)	34.4	(5)	*4*
6 years and over	7.1	(7)	5.6	(9)	*–21*	14.2	(5)	14.0	(7)	*–2*
Age distribution of adult merino wethers										
Under 4 years	23.1	(6)	10.0	(9)	*–57*	64.2	(5)	67.7	(7)	*5*
4 years and over	12.8	(6)	4.8	(12)	*–63*	35.8	(5)	32.3	(10)	*–10*

a These are final estimates and thus differ from estimates previously published in Rudwick and Turnbull (1993).
Note: Figures in parentheses are standard errors, expressed as percentages of the estimates. A guide to interpreting these is included in 'Survey methods and definitions'.

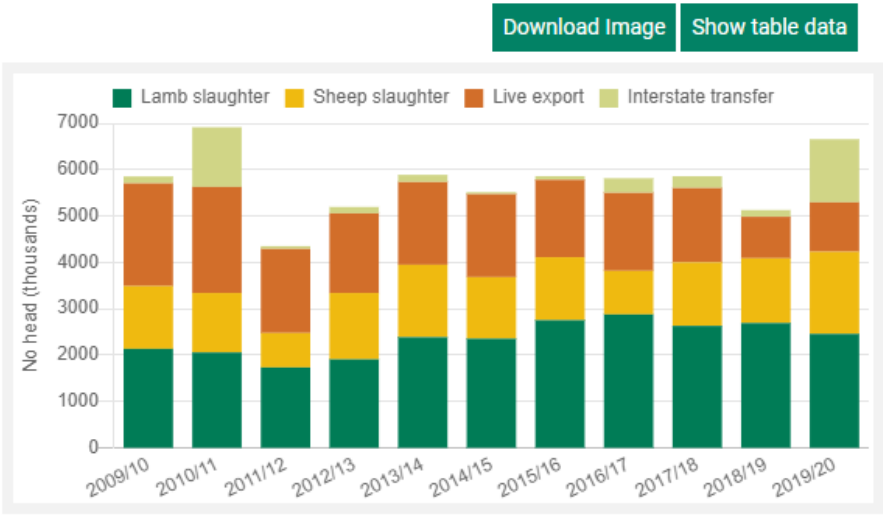
http://data.daff.gov.au/data/warehouse/pe_abarebrs99001007/PC12614.pdf

Change in national flock structure – WA example



Sheep turn-off

Turn-off by volume



This chart shows the number of head (in thousands) turned off from WA farms each year via the different avenues. The analysis includes a breakdown of lambs and adult sheep slaughtered, as well as the number of head sent for live export or sent interstate. [Source: ABS & PIRSA data, DPIRD analysis]

https://www.agric.wa.gov.au/sheep/western-australian-sheep-and-wool-industries

Why increase bodyweight in Merino?

Table 12.3: Estimates of genetic correlation (average and range) between clean fleece weight and a number of production traits in Merino sheep (Davis and McGuirk 1987).

Trait	Genetic Correlation	Range
Greasy fleece weight	0.83	0.77 – 0.88
Yield	0.52	0.41 – 0.69
Body weight	0.27	0.13 – 0.37
Wrinkle score	-0.05	-0.38 – 0.14
Fibre diameter	0.15	0.05 – 0.31
Staple length	0.53	0.37 – 0.89
Follicle density	0.14	-0.02 – 0.30

https://www.woolwise.com/wp-content/uploads/2017/07/WOOL-412-512-12-T-12.pdf

Composite and terminal sires in demand as wool prices flounder

Fiona Myers, July 3, 2020

COMPOSITE and terminal sires could be in hot demand this spring as Merino producers consider turning their backs on fibre production.

A horror 12 months for the wool industry where the benchmark Eastern Market Indicator fell from 1715c/kg to 1110c/kg (or 35 percent) has wool growers crunching the numbers on what they can do to be profitable.

Queensland-based consultant and former Queensland Department of Primary Industries sheep officer **Lloyd Dunlop** said pure Merino enterprises could not come close to producing the gross margins that other sheep breeds could.

"When I do gross margins, composite sheep are top, then goats, then Merinos and then cattle," Mr Dunlop said.

"There have been only two years in the past 20 years that I have done GM analysis where cattle returns have topped Merinos, and the cattle returns this year are creeping up on wool sheep."

Fertility is one area where Merino breeders could make gains as well as weaning percentages if commercial producers wanted to stick with the breed.