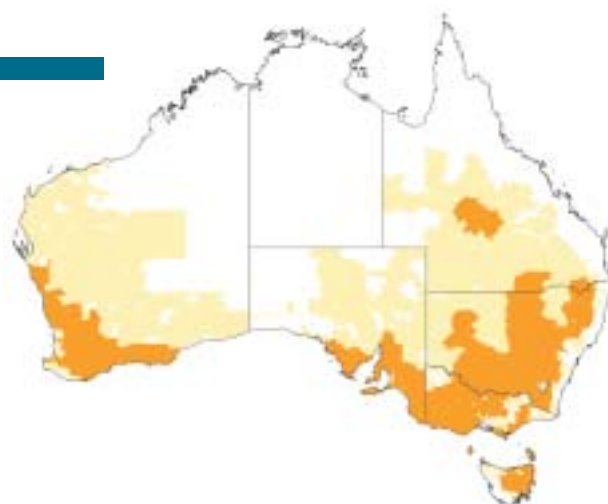


## 12 Wool



### Location

Wool production is the second most common enterprise on Australian farms. Most wool is grown west of the Great Dividing Range in the eastern states, in southern South Australia and in Western Australia, with a small contribution from Tasmania. The industry is widespread across the pastoral, wheat–sheep and high rainfall zones.

Most Australian wool production is merino wool with a fibre diameter of 19–24 microns. Australia produces nearly a third of the world's raw wool.

### Industry features

Table 21 shows the major features of the Australian wool industry, including its size, output, market orientation and position in the global market.

Table 21 **Overview of wool production and trade**

	Unit	1983–84	1993–94	2003–04
<b>World</b>				
Production <sup>a</sup>	kt	2 931	2 839	2 133
Trade <sup>a</sup>	kt	1 355	1 500	820
<b>Australia</b>				
Sheep numbers	million	135	133	94
Wool cut per head	kg	4.43	4.49	4.98
Production	kt	729	828	531
Share of world output	%	53.8	55.2	66.0
Gross value <sup>b c</sup>	\$m	4 450	3 186	2 394
Exports <sup>a</sup>	kt	675	917	487
Value of exports <sup>b</sup>	\$m	4 327	4 381	2 519
Share of world trade	%	49.8	61.1	57.8
Imports <sup>d</sup>	kt	na	14	11
<b>Employment</b>				
Production <sup>e</sup>	'000			23.9

a Greasy.

b In 2003–04 dollars.

c Includes shorn, dead, fellmongered and on skins.

d Carpet wool.

e Farmers/managers and other employees (including shearers) in the sheep farming industry (sheep meat and wool); an additional 18 000 people were employed in the mixed sheep–beef industry.

na Not available.

Sources: ABARE 2004, 2005; ABS 1990, 2001a,b.

### Markets

In farm-gate value terms, 98 per cent of the wool produced on Australian farms in 1999–2000 was exported.

Principal export markets are China (200 000 tonnes greasy equivalent in 2003–04), the European Union (105 000 tonnes) and Chinese Taipei (21 000 tonnes). In the late 1980s, the Soviet Union was a large customer, but shipments to that region dried up with the Soviet Union's dissolution as a political and economic entity.

- Market access for raw (greasy) wool in the Chinese market is affected by tariff quotas. In 2004, these were a 15 per cent ad valorem tariff that was agreed under World Trade Organization accession arrangements (but currently applied at a rate of 1 per cent) on the first 287 000 tonnes of total raw, scoured and carbonised wool, and a 38 per cent ad valorem rate on out-of-quota imports.
- In India, a market with considerable potential to be a major importer of wool, the bound tariff rate on raw wool imports in 2002 was 25 per cent ad valorem, while the applied rate in 2002 was 15 per cent.
- Removal of developed-country restrictions on trade in textiles and apparel resulting from the Uruguay Round of World Trade Organization negotiations may have some benefits for wool in expanded demand for raw fibres.

Competition from synthetic fibres and declining consumer demand for wool are likely to be the greatest challenges for the wool industry in the future.

- For synthetic fibres, downward trending prices and the development of handling and wearing properties equal to or superior to wool are making it increasingly difficult for wool to compete on price.
- Wide-scale adoption of central heating in homes, motor vehicles, workplaces and public buildings in the higher income developed economies means that woollen clothing is in much reduced demand for its thermal insulation properties.
- Wool is facing growing competition from other types of goods and services for a share of consumer lifestyle expenditures. Other competitors for personal spending include such things as household electronics, medical care, recreation and personal services.
- Aging populations and less formal fashions are resulting in declines in the market segments that favour wool.

### Farm businesses

Principal features of Australian sheep specialist farm businesses are shown in Table 22. Sheep specialist farms are those on which most income comes from the sale of wool and sheep (adults and lambs).

Since the collapse of the wool reserve price scheme in the early 1990s, there has been a substantial contraction in the size of the Australian sheep flock and wool production.

- A major part of the decline has been in cropping areas, where good returns for cereals relative to wool have encouraged farmers to shift resources into grain production.

Prices received by sheep producers for their outputs (wool, mutton and lamb) have been declining relative to the prices paid for the farm inputs used in their production, and are expected to continue to do so over the longer term.

- Between 1977–78 and 2001–02, prices received by sheep producers increased on average by 2.7 per cent a year, but prices paid for inputs rose more rapidly at an average of 4.8 per cent a year.

Therefore, productivity gains will be a key factor in determining future changes in the wool industry. They will be important for international competitiveness and in determining the resources split between segments of the sheep industry and other agricultural industries.

- Over the period 1977–78 to 2001–02, sheep specialist producers increased productivity by an average 0.9 per cent a year. This was substantially lower than the average for grain specialist farms (3.3 per cent a year) and only half that achieved by beef specialist producers.
- Productivity growth for specialist sheep producers was higher in the latter part of the period (1988–89 to 2001–02), averaging 1.2 per cent a year. This was driven (at least in part) by the increased use of objective measurement in the selection of breeding stock.

Table 22 **Features of Australian sheep specialist farm businesses** Average per farm

	Unit	1983–84	1993–94	2003–04
Number of businesses	no.	17 916	12 945	15 379
<b>Average performance</b>				
Area operated	ha	5 582	7 741	5 630
Sheep numbers		2 840	3 359	2 949
Wool sales <sup>a</sup>	\$	86 052	76 441	66 705
Sheep sales <sup>a</sup>	\$	40 408	19 841	58 698
Net farm cash income <sup>a</sup>	\$	31 815	14 915	24 680
Farm business profit <sup>a</sup>	\$	-4 904	-35 568	-24 210
Capital investment <sup>a</sup>	\$'000	1 176	1 062	1 846
Farm debt <sup>a</sup>	\$'000	106	179	154
Off-farm income <sup>a</sup>	\$	na	24 987	24 180
Return on capital <sup>b</sup>	%	0.9	-1.6	-0.6
<b>Largest 30% of farms <sup>c</sup></b>				
Share of industry output	%	67	66	70
Wool produced	kg	30 132	33 948	29 635
Net farm cash income <sup>a</sup>	\$	101 303	42 184	101 817
Farm business profit <sup>a</sup>	\$	40 584	-27 380	36 228
Return on capital <sup>b</sup>	%	3.2	0.6	2.3
<b>Other 70% of farms <sup>c</sup></b>				
Share of industry output	%	35	35	30
Wool produced	kg	6 382	8 430	6 637
Net farm cash income <sup>a</sup>	\$	3 952	3 479	-3 044
Farm business profit <sup>a</sup>	\$	-23 143	-39 003	-44 250
Return on capital <sup>b</sup>	%	-2.0	-3.9	-3.6

a In 2003–04 dollars.

b Adjusted to full equity by adding interest paid to farm business profit and excluding capital appreciation.

c Ranked by value of output.

Source: ABARE Farm Surveys.

## Flock management

Animal health and welfare issues, such as blowfly strike and lice, have implications for both productivity and market access.

- In line with animal welfare concerns, the industry has recently announced that surgical mulesing as a control method for blowfly strike will be phased out by 2010 (AWI 2005).

The composition of the Australian flock has changed as a result of market demands.

- From the early 1990s to 2002–03, production of fine wool (19.5 micron and finer) rose by 140 per cent, albeit from a relatively low base.

## Natural resource management

Priorities for the sheep (including meat) and wool industries include:

- maintaining pasture productivity and reducing wind erosion
- controlling woody weeds and feral animal populations
- managing for climate variability and change
- controlling and managing for emerging salinity in some regions
- controlling runoff to maintain or improve water quality
- maintaining biodiversity through vegetation management and conservation.

In 1999, some 47 per cent of sheep producers were members of Landcare, with greater numbers in the high rainfall zone and fewer in the pastoral zone. Sheep are an important natural resource management and weed management tool in grain production.

## Employment and infrastructure

Wool industry employment comprises specialist wool enterprises (which increasingly also produce prime lambs), and mixed wool–grain or wool–beef enterprises.

- Employment in the sheep industry (sheep meat and wool) accounted for around 8 per cent of all employment in agriculture in 2001. About 65 per cent of those in the industry were employed in New South Wales or Queensland.
- Employment of skilled agricultural workers, including shearers, is an important feature of the industry. The number of full-time shearers is estimated to be around 5500, with a similar number operating at a support or casual level.

## Institutional arrangements

### *Peak bodies*

WoolProducers is the peak industry body providing national representation for wool growers.

### *Marketing and research and development arrangements*

Australian Wool Innovation (AWI) is the industry research and development body and provides these services to improve the viability of the Australian wool industry. AWI receives levy income from wool growers and matching research and development funding from the Australian Government. In 2003–04, AWI spent \$55.8 million on research and development activities, which equals 2 per cent of the industry's gross value of production. Key research and development areas are:

- wool production, focusing on more profitable grazing systems for sheep and improved animal health and welfare
- textile technology, focusing on improving the cost competitiveness, quality of appearance and versatility of Australian wool
- improving market access in key trading partner countries
- information and adoption, focusing on providing information to growers and improving communication links with stakeholders, including government.

Australian Wool Services, the holding company of Woolmark, is a public company that specialises in the commercialisation of wool technologies, and owns and licenses the Woolmark brands. Approximately 36 000 wool producers have shares in Australian Wool Services as a result of the restructuring of wool bodies in 2001.



## Industry outlook

Some key factors for the future include:

- improving the competitiveness and attractiveness of wool relative to synthetic fibres
- meeting the challenge of competition from other non-apparel goods for a share of consumer lifestyle expenditures that could reduce demand for wool
- addressing increasing global demand for casual fashions by continuing to develop new and innovative products
- improving market access through multilateral and bilateral negotiations
- making productivity improvements through management, breeding and improved pasture systems
- addressing animal health and welfare issues and environmental concerns
- managing for climate variability and change, salinity and acidity.