

## Goat Industry Data Collation and Tracking

## Industry update- 2020/21

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Goat Industry Data Collation and Tracking

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#### **More information**

Trudie Atkinson, Extensive Livestock Unit, Dubbo

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#### Acknowledgments

Project Team: Trudie Atkinson, Steven McLeod, Niall Cummings, Warren Smith, Peter Fleming and Gemma Turnbull

Forecasting Committee: Rick Gates, Floss Howard, Campbell McPhee, Paul Mannion and Rob Newton

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© State of New South Wales through Regional NSW 2021. The information contained in this publication is based on knowledge and understanding at the time of writing (December 2021). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Regional NSW or the user's independent adviser.

#### Contents

Introduction	3
Supply Chain Overview	3
Production Trends	
Supply	6
Processing	9
Exports	11
Forecasting	12
Conclusion	13
References	13

### Introduction

The Australian goatmeat industry is innovative and developing rapidly. An update on the current state of the industry is provided in this publication, which reports processing, supply, production and market trends for the 2020/21 financial year, as well as an outlook for 2021/22. The information and data have been collated as part of the Goat Industry Data Collation and Tracking project, which is co-funded by the NSW Department of Primary Industries and Meat & Livestock Australia.

The project has considerably improved the goatmeat industry's access to reliable data and its capacity to forecast supply changes. Major outputs include accurate reporting of goats supplied for processing from each region in Australia using Integrity Systems Company (ISC) movement data and forming the National Goatmeat Supply Forecasting Committee.

## **Supply Chain Overview**

The Australian goatmeat supply chain is simple and efficient. Goats are either harvested from free-roaming wild populations, or bred in semi-managed<sup>1</sup> or managed production systems. There is trading between properties for herd establishment and expansion, which has become more common as producers establish managed herds in Queensland and NSW.

Goats are marketed and consigned to processors either directly, or via a depot or saleyard. In 2020/21, most goats (58%) were sent off-farm directly to processors. Depots play an important role in aggregating goats for trading and marketing. During the year, 42% of goats were delivered to processors by way of a depot. Depots are mainly used by producers in NSW and South Australia because most depots are in those states. NSW producers sent 56% of goats through a depot. Similarly, 50% of goats coming from South Australia were sent to a depot before processing. Less than 1% of goats processed were sourced from a saleyard (ISC 2021).

Once processed, the majority (95% in 2020) of goatmeat is exported (MLA, 2021). The major operating export abattoirs are located in Victoria, Queensland and South Australia (Aus-meat 2021). A small number of goats are exported live via air freight for breeding or slaughter.

<sup>&</sup>lt;sup>1</sup> Semi managed enterprises contain goats that have originated from the wild population in paddocks with goatproof fencing. However, only minimal husbandry practices such as mustering and drafting are applied in their management.

### **Production Trends**

Production in the southern rangelands of Australia underpins the goatmeat industry. Goats are also farmed in the high-rainfall and sheep-wheat zones of NSW, Queensland, South Australia, Western Australia, Victoria and Tasmania (Figure 1). Industry development is occurring in NSW and Queensland. However, development in the pastoral zones of South Australia and Western Australia has been comparatively restricted by factors including reliance on wild harvesting, state legislation, the lower relative abundance of goats, and a lower level of infrastructure development.

A lag in production following drought conditions in most production regions, and producers retaining does on-farm, restricted supply to processors in 2020/21. NSW and Queensland producers retained does on-farm for herd expansion or traded them to other businesses for herd development or restocking instead of sending them for processing. These enterprises retained mostly Australian Rangeland<sup>2</sup> does as core or 'base' breeding animals. An indicator of this trend was depot operators and processors reporting a male-dominated turnoff, with a much lower proportion of females in consignments than usual. In response to demand, depot operators also on-sold does to restockers rather than slaughter. Additionally, aerial surveys conducted in key production regions in NSW and Queensland indicated a considerable increase in regional goat abundance since 2019 (S. McLeod, personal communication, 23 September 2021; T. Pople, personal communication, 15 November 2021).

Furthermore, observations suggest a rapid and unprecedented increase in the number of NSW and Queensland producers operating managed goat enterprises. The extent to which this has occurred is difficult to quantify, but it represents a shift away from purely harvesting unmanaged goats<sup>3</sup>, which has been the source of most goats processed.

Several factors are influencing producers' decisions to retain does and manage goats. Firstly, producers are responding to the industry's outlook, which includes a positive growth trajectory underpinned by global demand and favourable prices. For instance, the average eastern over-the-hook price in 2020/21 was 818 c/kg cwt (12.1-16 kg) (MLA 2021b), and benchmarking showed that returns from goatmeat enterprises were competitive with lamb, beef and wool (Francis 2020). The availability of goats also made them an attractive option for producers, amid better seasonal conditions, rebuilding livestock numbers after extended

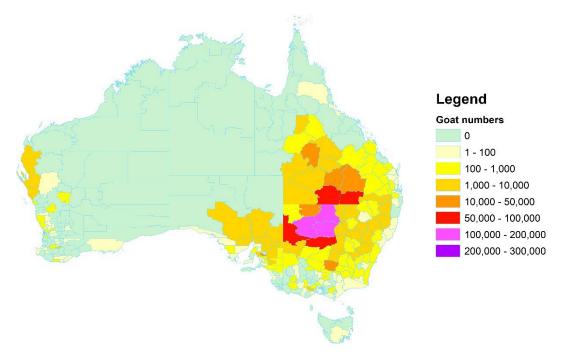
<sup>&</sup>lt;sup>2</sup> Australian Rangeland goats are a composite incorporating dairy, fibre and meat goat breeds, which has become naturalised throughout Australia's rangelands (MLA 2021b). These goats have effectively adjusted to the environment to the extent that they no longer bear any strong resemblance to the original breeds of domesticated goats introduced with European settlement (GICA 2021).

<sup>&</sup>lt;sup>3</sup> Unmanaged goats exist in free-roaming wild populations, are not been born as a result of a managed breeding program, and are not subjected to any animal husbandry procedure or treatment (NSW DPI 2018).

periods of below-average rainfall in most production regions. In addition, public and private investment in fencing has broadened enterprise options. For example, cluster fencing has enhanced wild dog control across large areas (Clark et al. 2018), improving the viability of small ruminant enterprises.

Businesses with managed enterprises are increasingly interested in boosting herd productivity and profitability, with a strong focus on crossbreeding and improving reproduction and growth rates. Rangeland goats will continue to be the basis of the goatmeat industry owing to their numbers relative to meat breeds, such as Boer and Kalahari. However, there is a strong interest in breeding rangeland does with meat breed sires. Demand and willingness to pay for Kalahari and Boer bucks and does were strong during the year. For example, at a goat sale in November 2020, the average sale price paid for Kalahari bucks was \$4,502 for 49 bucks, and an average of \$5,180 for ten does sold (The Land 2020). Goats have the potential for high weaning percentages, and some commercial herds are weaning in excess of 160%/doe joined. However, there is large variation in the number of kids weaned/doe joined among properties, indicating potential for gains. (Robertson *et al.* 2020).

Enterprise development will reduce supply volatility, providing further confidence for market development and expansion. Shifting to a managed goat enterprise also reduces unmanaged grazing pressure, enhancing producer's capacity to manage stocking rates, resource condition thresholds (e.g. ground cover and perennial grass utilisation rates) and strategic rest. As the industry rapidly matures and grows, it urgently requires research and development programs to expedite development and enhance genetic and productivity improvements.





# Supply

Table 1 The number of goats supplied for processing from each state during 2020/21 and the percentage change from the 2019/20 (Data source: ISC)

	Goats supplied 2020-21 (head)	% Change from previous year
NSW	686,569	-34%
QLD	219,563	-11%
SA	70,406	-33%
VIC	15,130	-3%
WA	28,073	-41%
TOTAL	1,019,741	-30%

During the 2020/21 financial year, all major goat producing states recorded a reduction in supply compared to the previous year (Table 1). Production from NSW and Queensland showed signs of stabilisation and recovery potential in 2021/22. Supply from South Australia and Western Australia was considerably reduced. Supply information is collated using unpublished National Livestock Identification System (NLIS) movement data supplied by the ISC.

NSW producers supplied 67% of the goats processed nationally in the 2020/21 financial year. Although NSW continues to be the largest supplier, supply from the state fell by 34% from 2019/20 to 686,569 head. Monthly supply was reasonably consistent, varying between 38,877 and 73,179 head (Figure 2) compared to the previous year when supply per month ranged from 27,156 to 162,284 (ISC 2021). This consistency suggests that supply from NSW may have descended to its lowest point, after which stable or increased supply is expected.

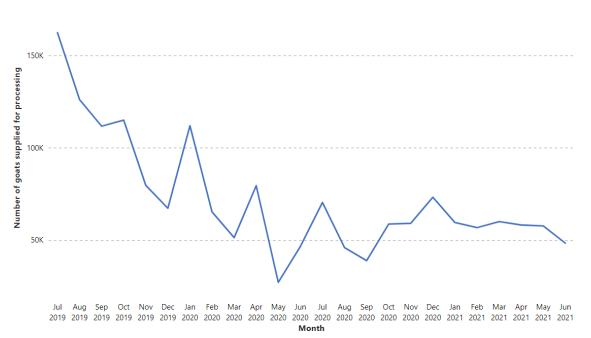
Supply from NSW is vital for processing in all other states except Western Australia. In 2020/21, 96% of the goats processed in Victoria originated from NSW. NSW also supplied 30% of the goats processed in Queensland and 27% of goats slaughtered in South Australia (ISC 2021).

Supply from Queensland production systems was down 11% year on year to 219,563 head. This was the lowest percentage reduction in supply among all the states. Queensland secured its place as the second largest goat producing state, supplying 22% of all goats killed in Australia during the financial year (ISC 2021). It will be interesting to see if the increase in supply during the last quarter of 2020/21(Figure 3) can be maintained or improved in 2021/22. Turnoff is expected to increase following the sustained period of enterprise development and herd building. Supply from South Australian properties was low compared to historical turnoff rates, and monthly totals were volatile. South Australian production levels were the lowest since at least 2010/11, and supply was down 33% compared to 2019/20. Areas of South Australia did experience more prolonged dry seasonal conditions than other states. In October and November 2020, producers supplied less than 2,000 head per month (Figure 4), which was the lowest monthly totals processed in the state since at least 2010. Monthly supply peaked at 12,879 head during February 2020 (ISC 2021), potentially reflecting improved conditions for harvesting during the warmer months.

Western Australia supplied less than 3% of the goats slaughtered nationally. Producers in the state supplied 28,073 goats, a decrease of 41% year on year and the lowest number since 2012/13. Seasonal variation in supply continues to drive considerable variation in monthly slaughter totals. For example, turnoff in July 2020 was less than 100 goats, while turnoff in January 2021 reached 10,000 head (Figure 4) (ISC 2021).

In 2020/21, Victoria continued to contribute only a small proportion (<1.5%) of the goats processed nationally. During the financial year, 15,130 goats were supplied from Victorian properties, which was a similar total to the year before (ISC 2021).

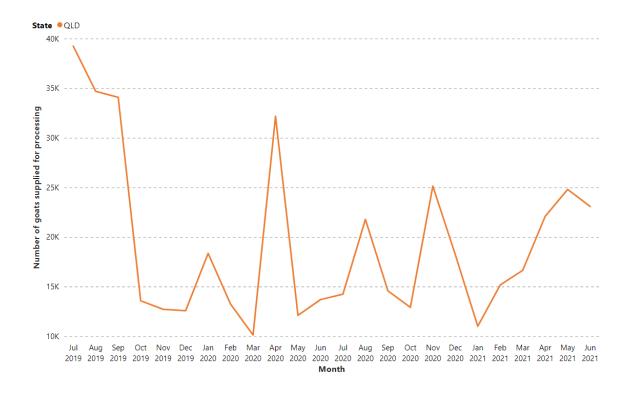
The National Livestock Identification System (NLIS) regions of Cobar, Bourke and Wilcannia were the leading production areas in NSW (Figure 1). These three regions produced more than 60% of the goats supplied from NSW. In Queensland, the Paroo, Balonne and Murweh regions were the three largest suppliers of goats. The Barossa/Lower North region was the largest supplier of goats to processing in South Australia, while the North Pastoral region was also a significant supplier of goats. In Western Australia, Shark Bay and Carnarvon were the top two supply regions. Golden Plains was the leading supply region in Victoria (ISC 2021).





State 

NSW





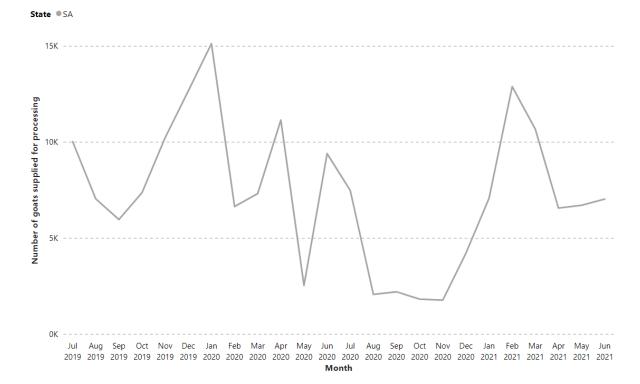


Figure 4 The number of goats supplied from South Australia for processing – July 2019 to June 2021 (Data source: ISC)



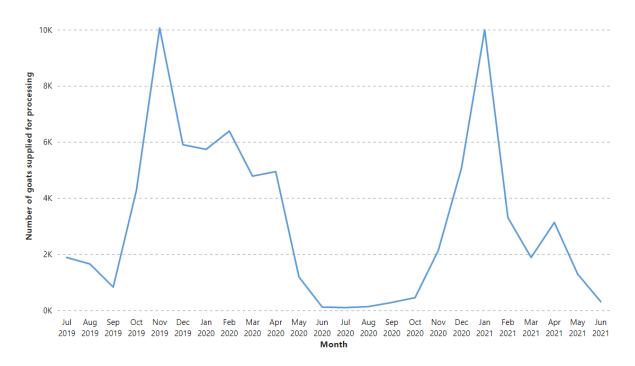


Figure 5 The number of goats supplied from Western Australia for processing – July 2019 to September 2021 (Data source: ISC)

#### Processing

Table 2 The number of goats processed in 2020/21 and the percentage change compared with 2019/20 (Data source: DAWE)

	Goats processed 2020/21 (head)	% Change from previous year
NSW	77,545	5%
QLD	301,949	-4%
SA	121,471	-48%
TAS	20	-75%
VIC	548,028	-23%
WA	16,895	-42%
TOTAL	1,065,908	-22%

Australian abattoirs processed 1.07 million goats during the 2020/21 financial year, the lowest total in over a decade. Supply limited processing with 23% (302,236) fewer goats slaughtered than the previous year. In all states except NSW, fewer goats were processed than last year (Table 2) (DAWE 2021).

Although only 7% of the national kill is slaughtered in NSW, the number of goats processed in NSW increased by 5% year on year. There were 77,545 goats processed in the state (DAWE 2021).

Victoria remained the largest processor of goatmeat, slaughtering more than half the national total. However, abattoirs in the state processed 23% fewer goats than the year earlier, and the lowest number of goats (548,028) since 2008/09. Goat processing in Victoria has declined substantially since 2014/15, when throughput peaked at over 1.2 million head (Figure 6) (DAWE 2021).

The tight supply conditions had less impact on processing totals in Queensland (-4% year on year). This is potentially an early indication of reduced supply volatility in this region associated with enterprise development. Nevertheless, the number of goats processed in the state remained low compared to historical levels. In 2013/14, the number of goats processed in Queensland peaked at more than 800,000 (DAWE 2021).

Processing totals in South Australia and Western Australia were reduced by more than 40% year on year. South Australia had the greatest percentage reduction in slaughter numbers during 2020/21 (-48%) (DAWE 2021).

This information is collated using levy data sourced from the Department of Agriculture, Water and the Environment (DAWE). Hence, different datasets are used to report supply and processing trends. While the totals from each data set closely align, they do not exactly match because the methods used to collect and collate the data are different.

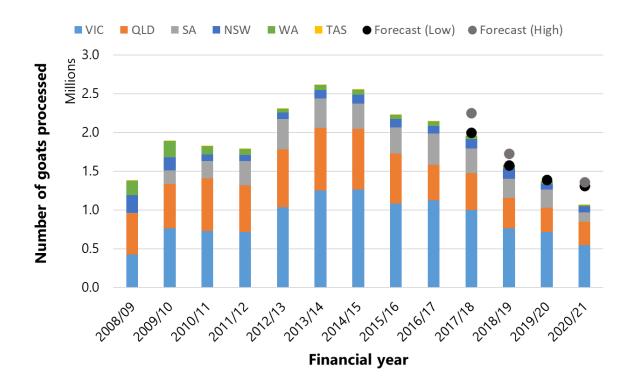


Figure 6 Number of goats processed per financial year (2008/09 – 2020/21) compared with forecast estimates (Data source: DAWE; National Forecasting Committee)

### **Exports**

The tight supply conditions impacted export market volume and value during the financial year. Australian exporters shipped 15,713 tonnes of goatmeat (MLA 2021b) (Figure 7) to 16 countries (GTA 2021). The trade was valued at AU\$158 million (GTA 2021). Compared with the previous year, volume declined by 13%, and value was down 32%.

The US remained the largest and most important market for Australian goatmeat, accounting for 64% of export volume. However, the volume exported to the US was 16% lower than 2019/20 (MLA 2021b).

Taiwan, South Korea, Canada, Japan and Trinidad & Tobago are consistent importers, each receiving more than 385 tonnes during the financial year. While volume was down overall, export volumes increased to South Korea (55%) and Japan (35%) (MLA 2021b).

While the Covid-19 crisis impacted domestic processing capacity, the foodservice industry in key markets and supply chain logistics, these impacts coincided with low goat supply. Hence, overall, low supply from Australian farms was the main factor that limited goatmeat export volume.

Live exports increased by 19% from the previous year, with 15,002 head transported by air to seven countries. Malaysia, Philippines and China were the main destinations (MLA 2021b). High prices and tight supply conditions have limited live exports compared to historical levels (MLA 2021c).

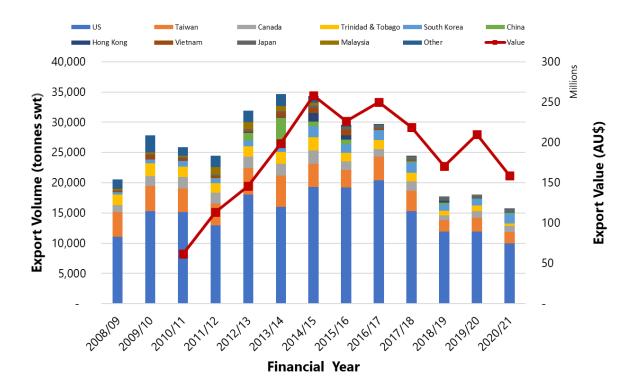


Figure 7 Australian goatmeat exports by volume and value, 2008/09 – 2020/21 (Data source: MLA, 2021; GTA, 2021)

### Forecasting

The National Goatmeat Supply Forecasting Committee meets annually to estimate the number of goats that will be supplied for processing in the coming year. The Committee consists of five representatives from various sectors of the supply chain. NSW DPI and other stakeholders provide supply and population modelling, data and market analysis to inform the forecasting process. This information is integrated with the Committee's industry intelligence and knowledge to formulate the forecasts. Since its inception in 2017, the Committee has significantly increased the industry's capacity to predict and understand supply and population trends, enhancing the goatmeat sector's strategic planning.

The Committee forecasted that 1.32 million goats would be supplied for processing in 2020/21 (Figure 6) but a review of the forecast against processing figures showed that realised supply was overestimated by 24%. Although the Committee and NSW DPI's modelling overestimated supply in 2020-21, the forecasting committee successfully anticipated and explained the factors that constrained supply during the year. The Committee had foreseen that herd-building would occur but underestimated the extent to which does were retained in NSW and Queensland.

Early in 2021/22, the Committee projected that the industry will supply between 1.12 and 1.14 million goats for processing in the 2021/22 financial year, a 5 to 7% increase from the previous year. However, when this report was published, the Committee was considering revising this forecast following reasonably strong supply recovery from July to September 2021.

While there is some uncertainty about the extent of supply recovery, the Committee members are confident that supply during 2020/21 reached its lowest point, and an increase in 2021/22 is expected. Based on the population modelling, the goat population in NSW is also predicted to increase in 2022 (S. McLeod, personal communication, 23 September).

## Conclusion

Supply constrained processing and export volume during 2020/21 as Australian producers undertook a herd building phase after drought conditions impacted upon population and herd size in preceding years and in response to market signals and a positive industry outlook. Although supply and export value have been affected, herd expansion will benefit the industry and supply in the future. Supply is projected to increase in 2021/22.

The goat industry is providing a viable alternative livestock enterprise to Australian livestock producers. Goatmeat production has regional economic significance in the southern-rangeland of Australia, particularly western NSW, and south and central-west Queensland.

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