MLA and AWI Wool and Sheepmeat Survey Report - Sheepmeat

June, 2019

Prepared by Kynetec

Contents

Executive Summary – Lamb Production

Number of breeding ewes on hand

42,479,693 total breeding ewes on hand
31,547,950 Merino breeding ewe flock, 74% of total breeding flock
10,931,743 total non-Merino breeding ewes on hand, 26% of total breeding flock
Within the Merino flock, 74% for Merino lamb production and 19% for other lamb production

Ewe flock intentions for next 12 months

28% increase
61% maintain
10% decrease

Intended method for achieving ewe flock increase

36% Retain more older ewes than normal
58% Retain more replacement ewes than normal
39% Purchase more additional ewes than normal

Number of lambs on hand

17,196,348 total lambs on hand
9,626,810 total Pure bred Merino lambs, 56% of total lamb flock
7,569,538 total non-Merino lambs, 44% of total lamb flock

Expected lamb sales in the next four months (1 Jul – 31 Oct)

6,275,217 total lamb sales in the next four months
1,307,025 total Pure meat sales (21% of total lamb sales)
1,771,909 total First cross sales (28% of total lamb sales)
1,935,618 total Merino sales (31% of total lamb sales)
1,260,665 total other breed sales (20% of total lamb sales)

Number of lambs marked in the past four months (1 Mar – 30 Jun)

5,914,189 total lambs marked in the past four months
2,530,829 total Merino lambs marked (43% of total markings)
3,383,360 total non-Merino lambs marked (57% of total markings)

Number of ewes joined to produce those lambs

6,451,763 total number of ewes joined to produce those lambs
2,908,203 total Merino lambs joined (45%)
3,543,560 total non-Merino lambs joined (55%)

Marking rates

87% National Merino marking rate
95% National non-Merino marking rate

Background and Purpose

Survey Background

The Wool and Sheepmeat survey has been running in various formats for the past 17 years. The survey has been running in its current format since June 2010, following discussions with MLA's Lamb Forecasting Advisory Committee (LFAC), where MLA decided that they needed to use a more vigorous methodology going forward.
Due to the success of the survey, a management agreement between MLA and AWI was negotiated and AWI signed on for the next wave in October 2010.
Since October 2010, MLA, AWI and the LFAC have worked closely to further develop the model, sample and breed code frame for the now combined Wool and Sheepmeat survey.
Kynetec took over from Axiom in October 2016 and have been working closely with MLA and AWI to increase the number of respondents and the amount of data collected by streamlining the online and mail-out surveys.

Purpose of the research

The project provides MLA and AWI with an accurate representation of flock population, demographics, sheep meat and wool supply information and producer production intentions during key production periods throughout the year.
The survey enables MLA and AWI to provide the Lamb Forecasting Advisory Committee (LFAC) and the Australian Wool Production Forecasting Committee (AWPFC), with solid forward looking information to assist industry projections.
Although information gathered has been extremely useful in flock and production forecasts, MLA and AWI are continuing looking to add further value to the study by better aligning the sample collected with industry production structure and making better use of the results in various internal and external publications.

Methodology [1/3]

Sampling

The MLA and AWI Wool and Sheepmeat survey for June 2019 was built around the collection of an industry representative sample of sheep producers across all sheep growing regions of Australia. In order to achieve a representative sample, sheep producers were sampled with strong representation within each MLA defined sheep production region. A total number of 2,256 survey responses were achieved in June 2019, up from the 1,675 surveys in February 2019. Given many large producers have multiple properties in different regions and states and their possible impact on weighting, we reported the results based on number of properties rather than respondents. As a result, 3,381 properties were included in the survey.

Data Collection

Three survey methodologies were adopted in order to collect the target sample:

1. **Online web based survey:** This methodology was presented to potential respondents using two different communication tools (email survey links and website survey links).
   - I. *Website survey links:* Two survey links were given to MLA and AWI to place on their website and to include in selected external communications with producer stakeholders e.g. Friday Feedback and Feedback magazine. Copies of these links were also sent to members of the Lamb Forecasting Advisory Committee (LFAC) to include in their email signatures and place on their websites during June. A total of 20 respondents completed the survey via this method (1% of the total sample).
   - II. *Email survey links:* A link to the survey was created for email purposes so Kynetec could track the number of completes and partial completes throughout the survey period (1 to 30 June 2019) and send reminder emails accordingly. A total of 13,286 emails were sent to MLA and AWI members via the email addresses provided by MLA and AWI databases. Of those 1,310 emails bounced, giving a total emails delivered of 11,967. A total of five reminder emails were sent to non-respondents with a significant number of completes achieved after each reminder. The email survey link returned a total of 1,535 completed responses (68% of the sample).

2. **Mail-out survey:** A hard copy questionnaire and a reply paid envelope was sent to a random sample of 5,000 producers from the FARM database (Fairfax Agricultural Research and Marketing). This methodology was supported by CATI reminder calls to producers in specific regions (Tasmania, Murrumbidgee and western NSW) in order to boost response rates. A total of 701 producers responded by this methodology (31% of total sample).

3. **Telephone surveys:** In an attempt to boost the sample of very large sheepmeat and wool producers for the study, approximately 100 calls were made to MLA's top 50 sheep levy payers in order to do the survey over the phone. As a result of telephone calls an the online survey, a total of 15 very large producers were included in the survey (Ewe flock size >20,000 head).

Methodology [2/3]

Weighting

Breeding ewe and lamb estimates were developed by weighting the number of respondents by both state and flock size to the number of farm businesses with breeding ewes. Wether estimates were developed by weighting the number of respondents by state to the number of total farm businesses with sheep and lambs.

As with all Wool and Sheepmeat surveys since February 2018, the ABS population of producers used for weighting the survey data was is regularly adjusted to account for the significant number of smaller producers (flock sizes of less than 250 head) that were excluded from the ABS census and surveys due to the $40,000 EVAO cutoff. A comparison of the adjusted producer populations used for breeding ewe and lamb estimates for the last five Wool and Sheepmeat surveys is below.

The producer populations will be updated for the October 2019 survey based on the latest release of ABS data.

State	Breeding Ewe Producers used for Feb, June & Oct 2018	Breeding Ewe Producers used for Feb & June 2019
Australia	35,947	37,238
New South Wales/ACT	13,725	14.075
Victoria	9,173	9,473
Queensland	1,410	1,497
South Australia	5,414	5,827
Western Australia	4,906	5,000
Tasmania	1,318	1,387

Methodology [3/3]

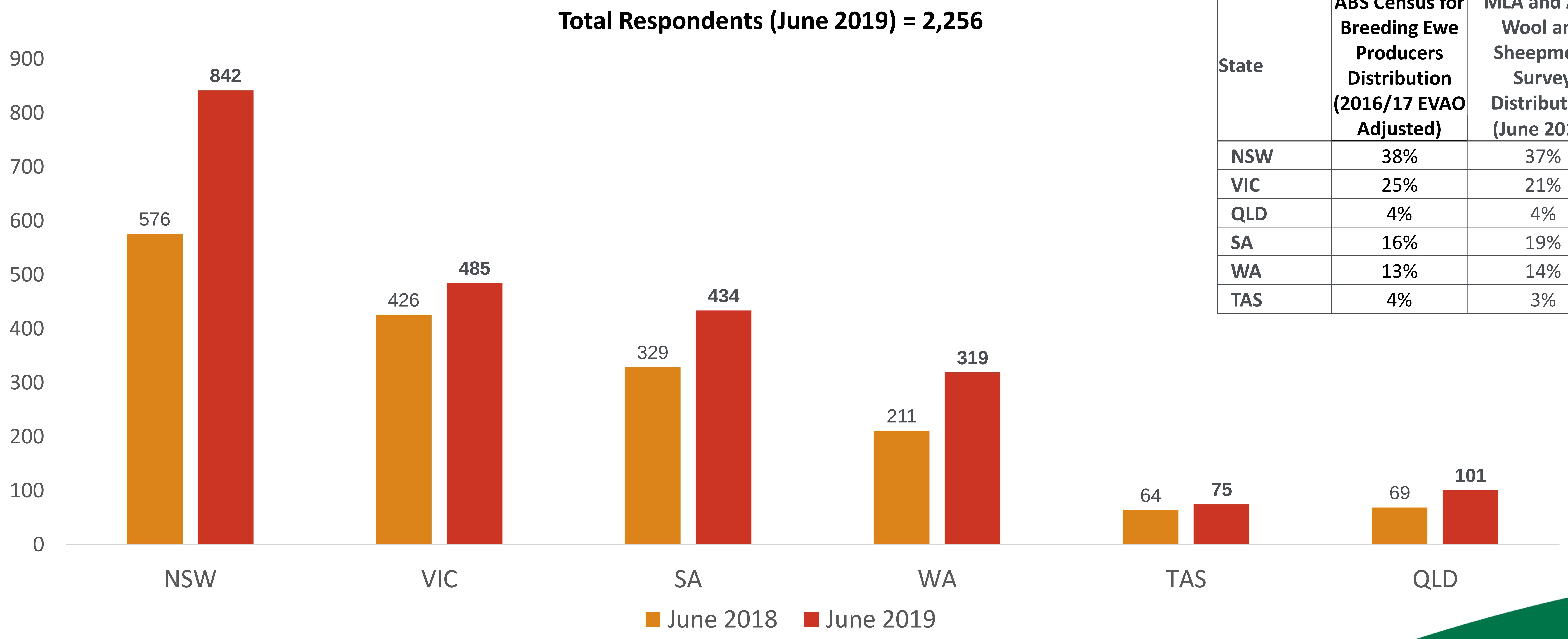
Statistical significance

The total research sample of 2,256 will give the results of this study a margin of error of ± 2.01% at a 95% confidence level based on 37,238 breeding ewe producers in Australia (ABS 2016-17 Census adjusted for $40,000 EVOA cutoff). This is basically saying that if you conducted the same survey 100 times, 95 out of the 100 sheep producers should yield results within ± 2.01% of the published number or percentage. However, the % of error increases as the sample size decreases (e.g. at the state and regional level).

- New South Wales ± 3.28%
- Victoria ± 4.35%
- Queensland ± 9.45%
- South Australia ± 4.54%
- Western Australia ± 5.32%
- Tasmania ± 11.04%

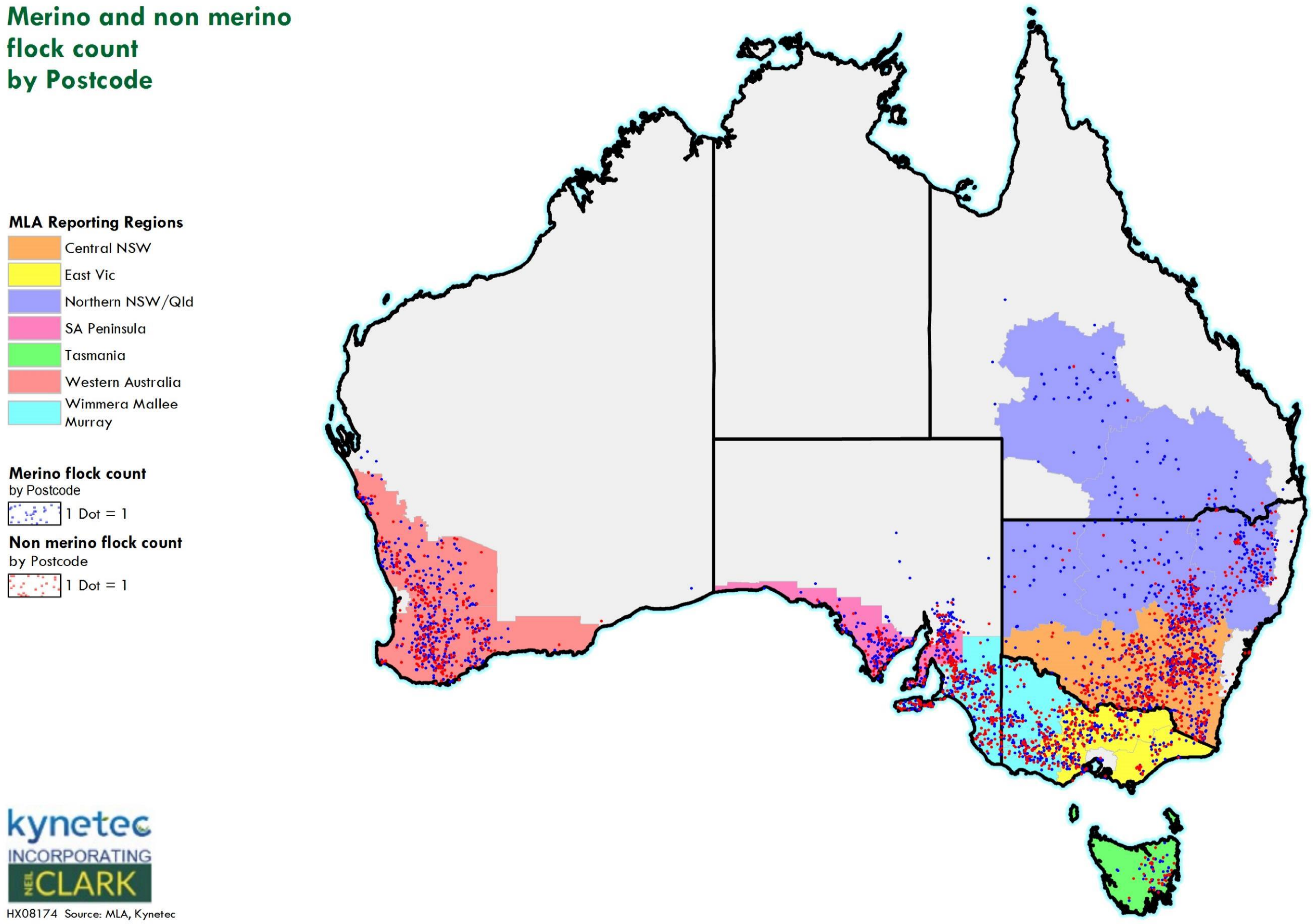
Survey Respondents [1/4]: By State

The total number of respondents (n=2,256) represented national industry distribution of breeding sheep producers producers (29,443 as reported in the ABS Census 2016-17 with an adjustment to 37,238 for the new EVAO cutoff of $40,000), with the proportion of respondents in each state being similar to that of the Census producer distribution. The ABS perform a substantial yearly survey of 35,000 agricultural businesses between Census years in order to continually track agricultural production and producer population. Although it is a survey, it is still indicative of the industry structure and sheep producer distribution and will be used to update state sampling structures in future surveys.



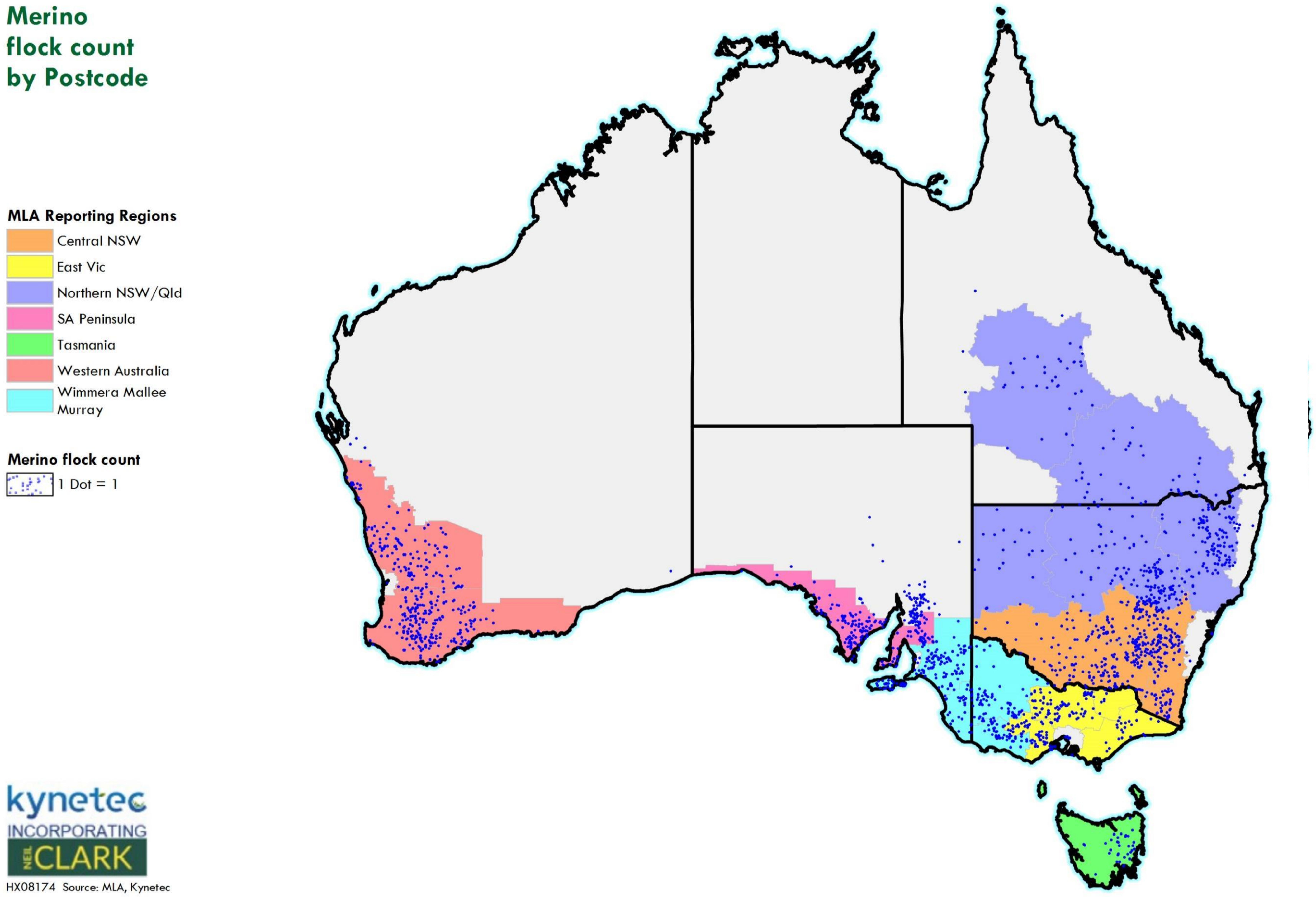
State	ABS Census for Breeding Ewe Producers Distribution (2016/17 EVAO Adjusted)	MLA and AWI Wool and Sheepmeat Survey Distribution (June 2019)
NSW	38%	37%
VIC	25%	21%
QLD	4%	4%
SA	16%	19%
WA	13%	14%
TAS	4%	3%

Survey Respondents [2/4]: Total Flock Counts (Merino & Non-Merino)



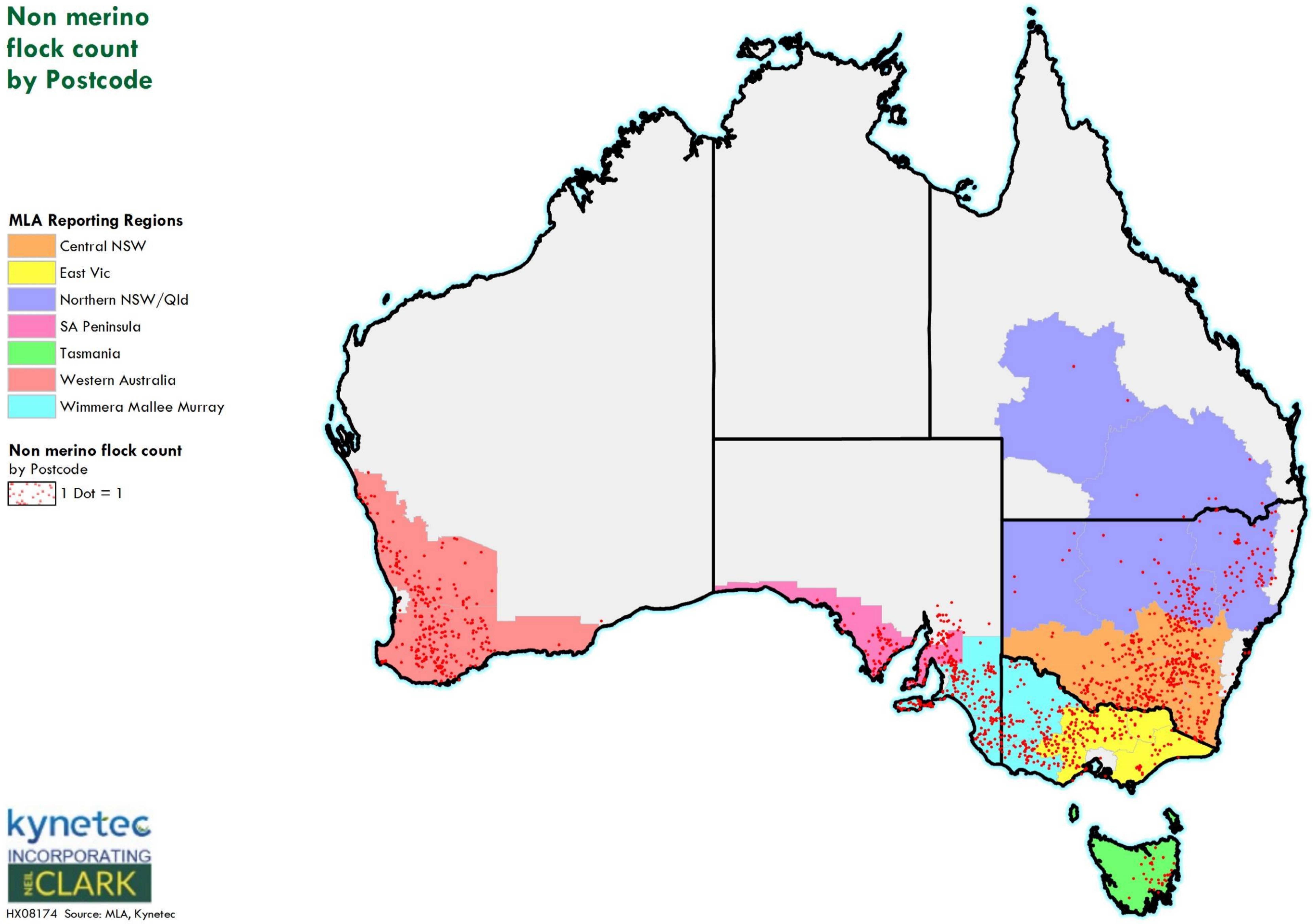
Total properties: n = 3,381
Merino: n = 1,834
All other: n = 1,451

Survey Respondents [3/4]: **Merino** Flock Counts



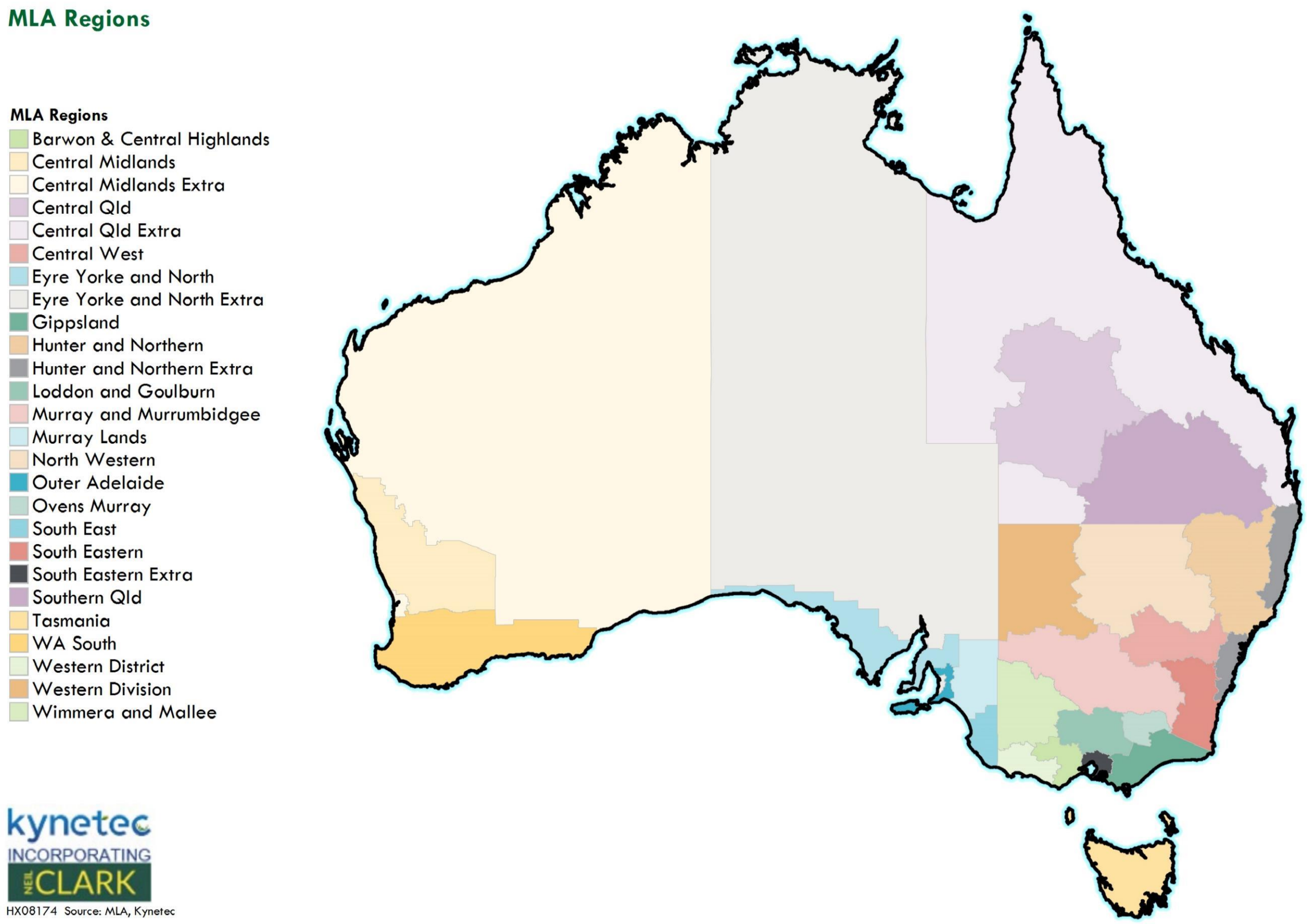
Merino properties: n = 1,834

Survey Respondents [4/4]: **Non-Merino** Flock Counts



All other properties: n = 1,428

MLA Sheep Producing Regions



Due to seasonal and growing condition variability throughout Australia and even within states, Australia was divided into 26 sheep producing regions so that sheep numbers and flock demographics could be reported at a regional level.

Of the 26 sheep producing regions, 7 are located in NSW, 7 in Victoria, 5 in SA, 3 in WA, 3 in Queensland and 1 in Tasmania. These producing regions are likely to change as the flock distribution changes.

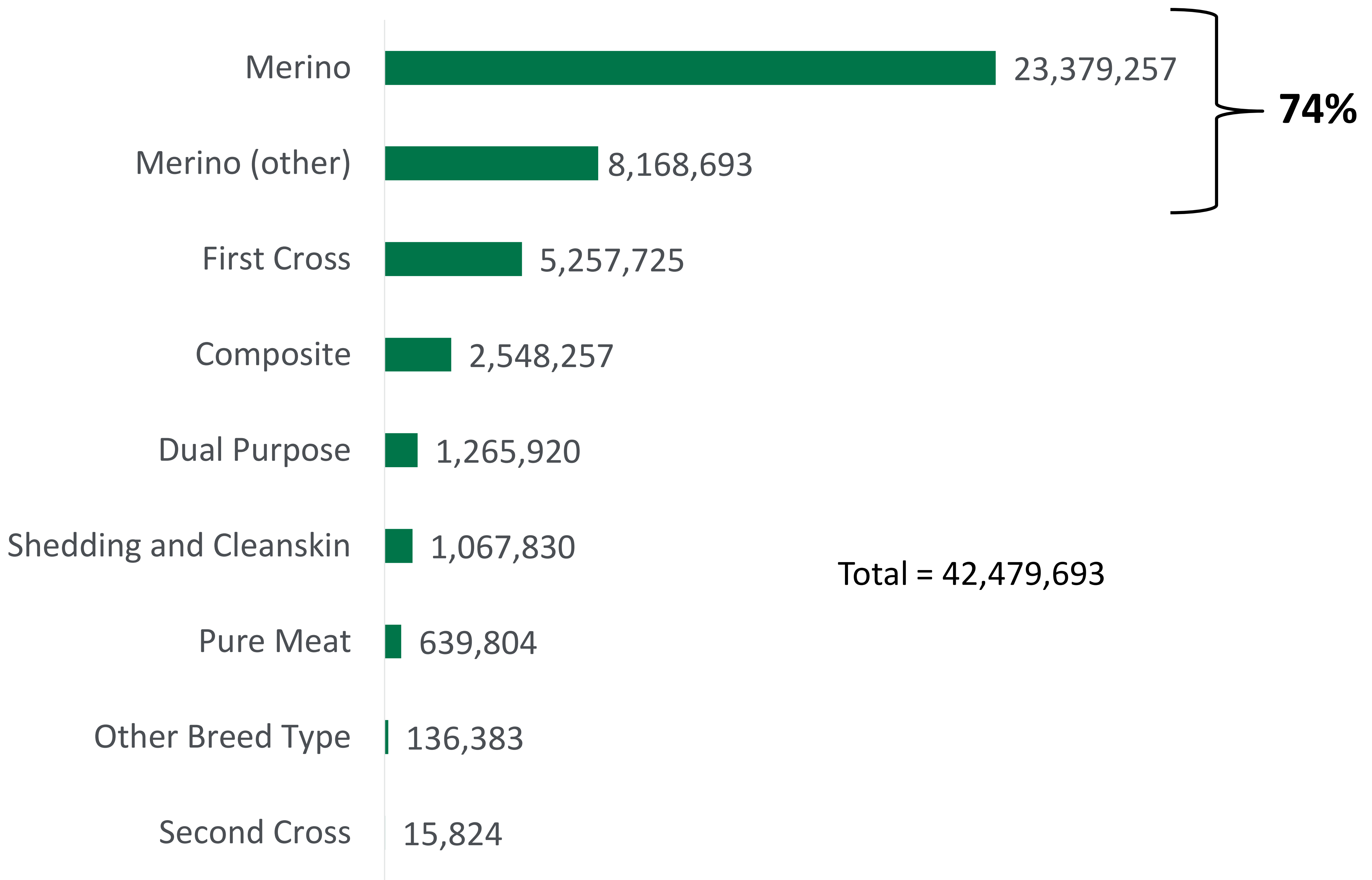
National Results

Ewes on hand and Lambs on hand - Australia

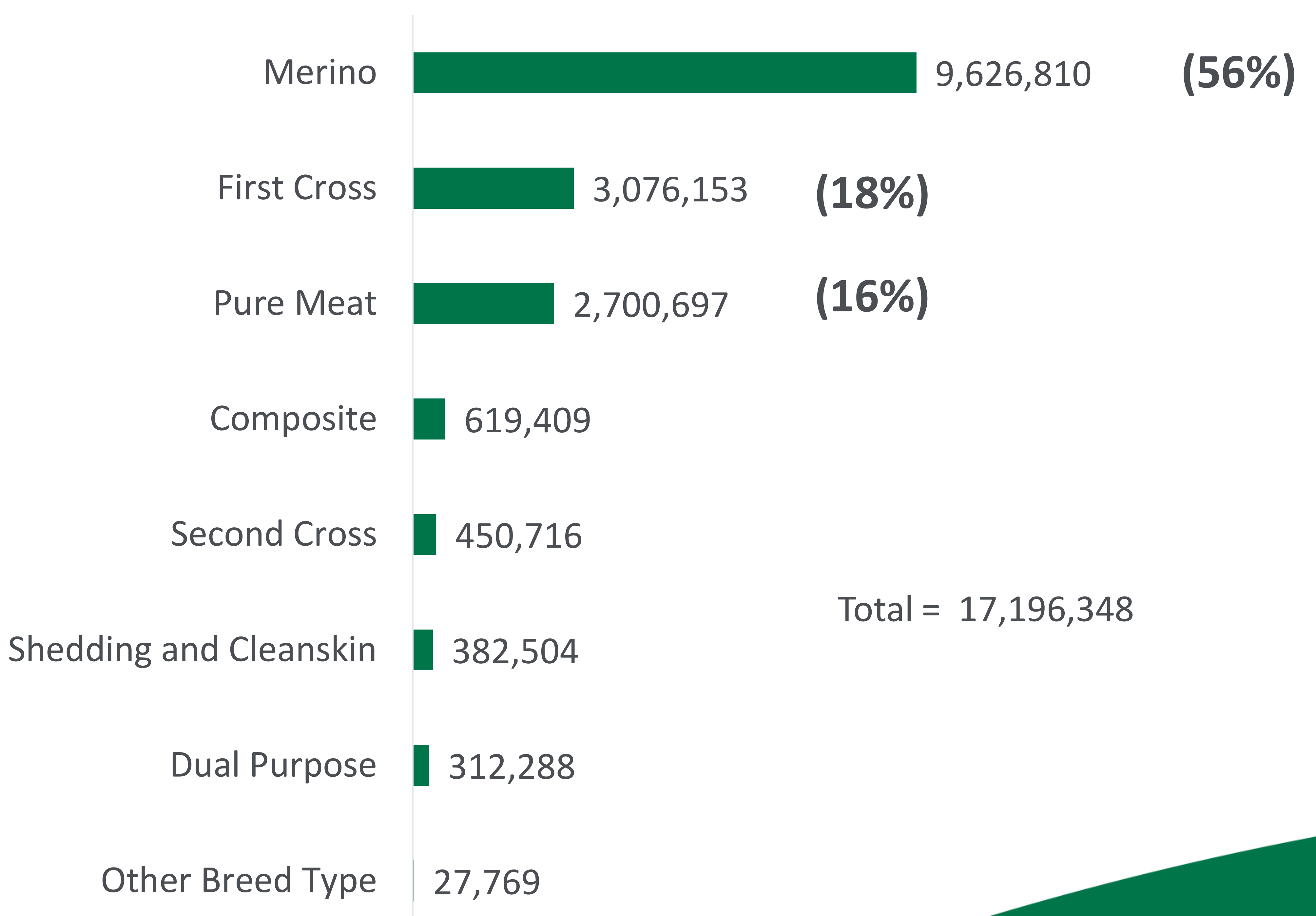
Merinos accounted for 74% of the total breeding ewe flock at 42 million head. Merino breeding ewes were further divided into Merino ewes for pure bred Merino production and Merino ewes for crossbred production and ‘other’ Merinos, accounting for 74% and 26% of the merino flock, respectively.

There were **17 million** lambs on hand at 30 June 2019. Merinos made up 56% of the total lamb flock, at **9.6 million head**, followed by First cross and Pure meat lambs (accounting for 18% and 16% of the national lamb flock respectively).

Number of ewes on hand



Number of lambs on hand



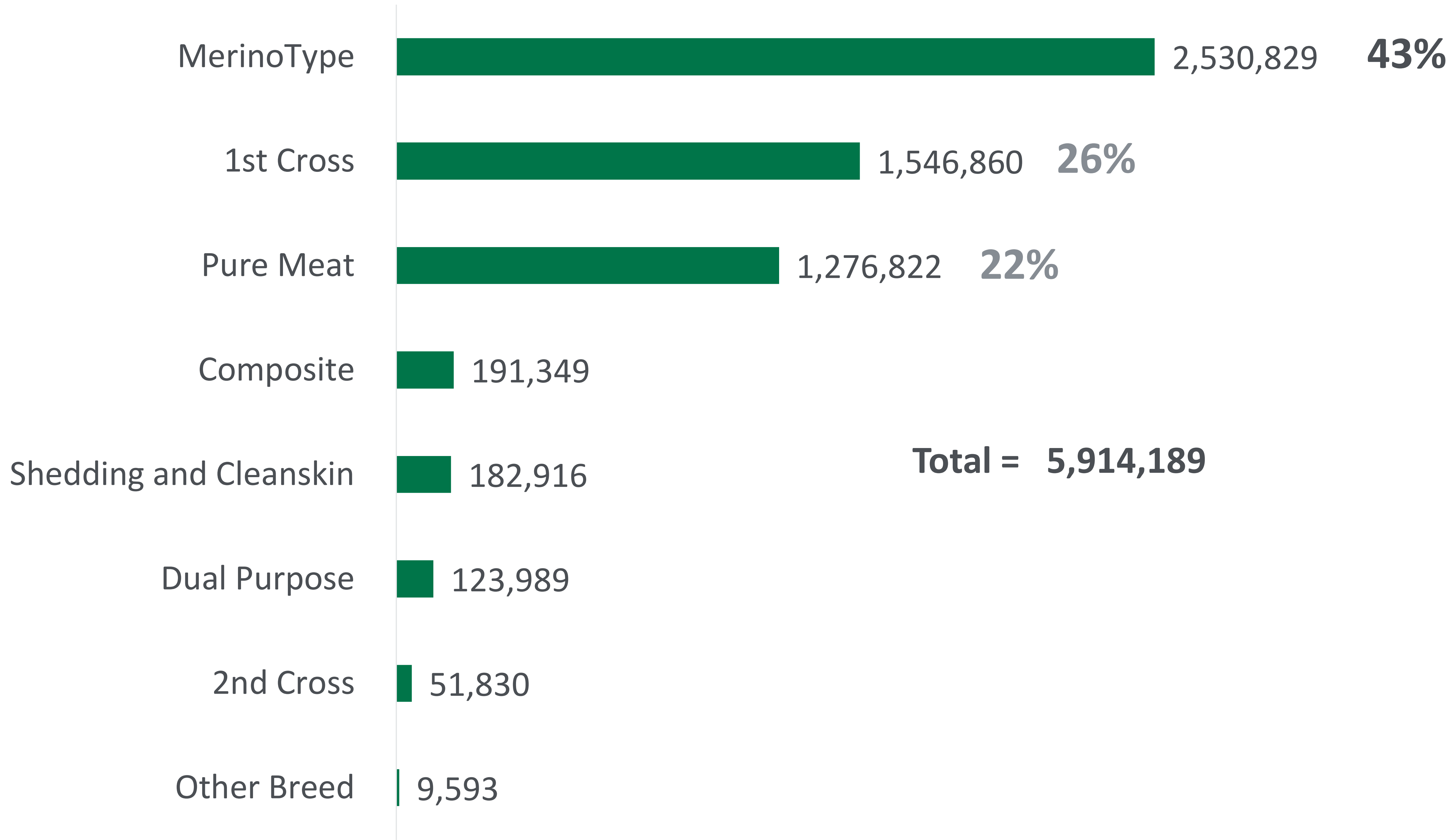
Sample base (properties) n=3,381

Lambs marked in the past four months (1 Mar – 30 Jun 2019) and Ewes joined to produce those lambs - Australia

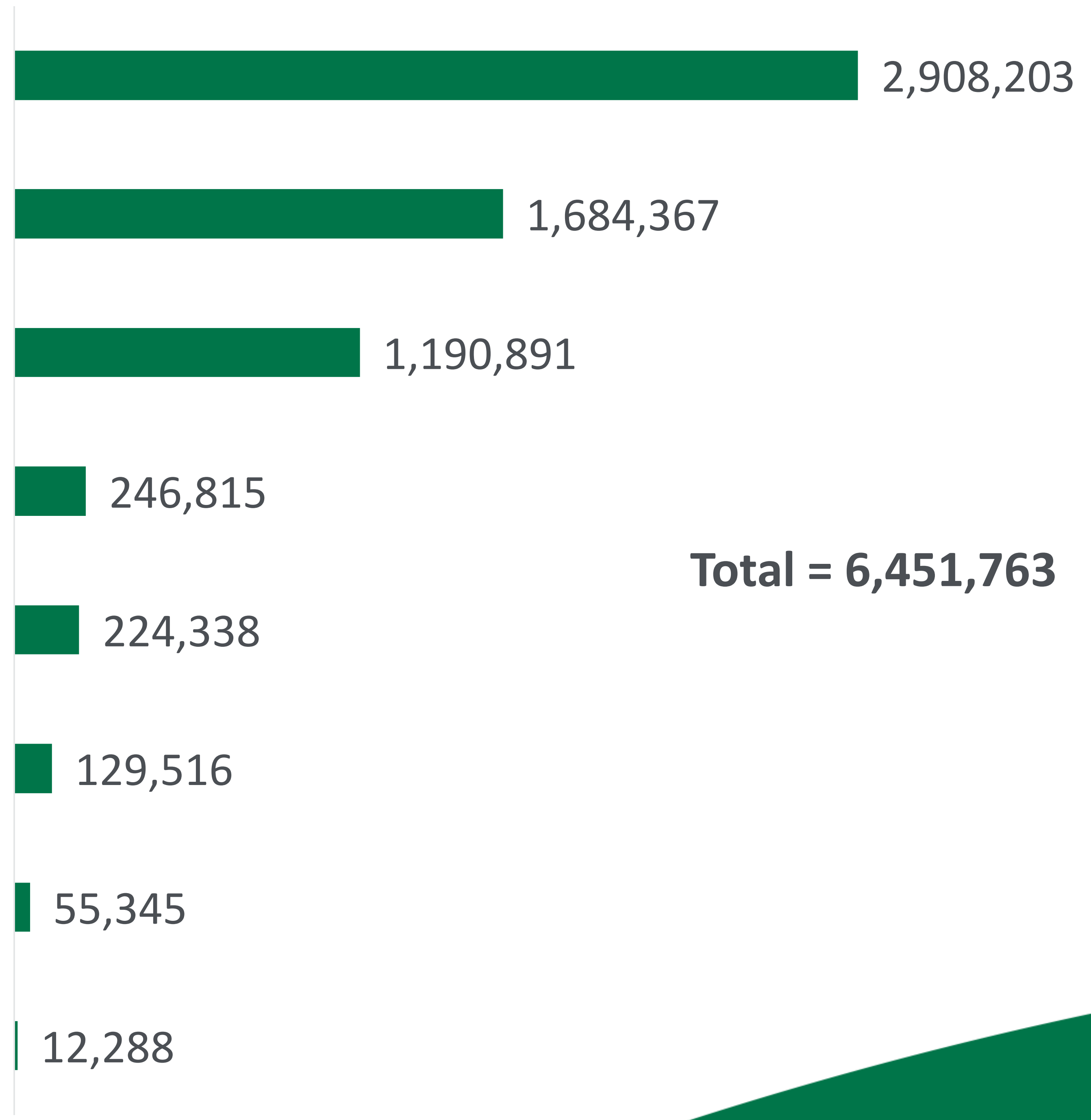
There were a total of 5.9 million lambs marked in the four months (from 1 March to 30 June 2019). Merinos accounted for the largest proportion of lambs marked in the past four months at **43%**, with First cross and Pure meat breeds accounting for **26%** and **22%**, respectively.

A total number of 6.4 million ewes were joined to produce the lambs that were marked in the past four months. National Merino marking rates were well below that of non-merino breeds at 87% and 95% respectively.

Lambs marked in the past 4 months (1 Mar to 30 Jun)



Ewes joined to produce marked lambs (1 Mar to 30 Jun)



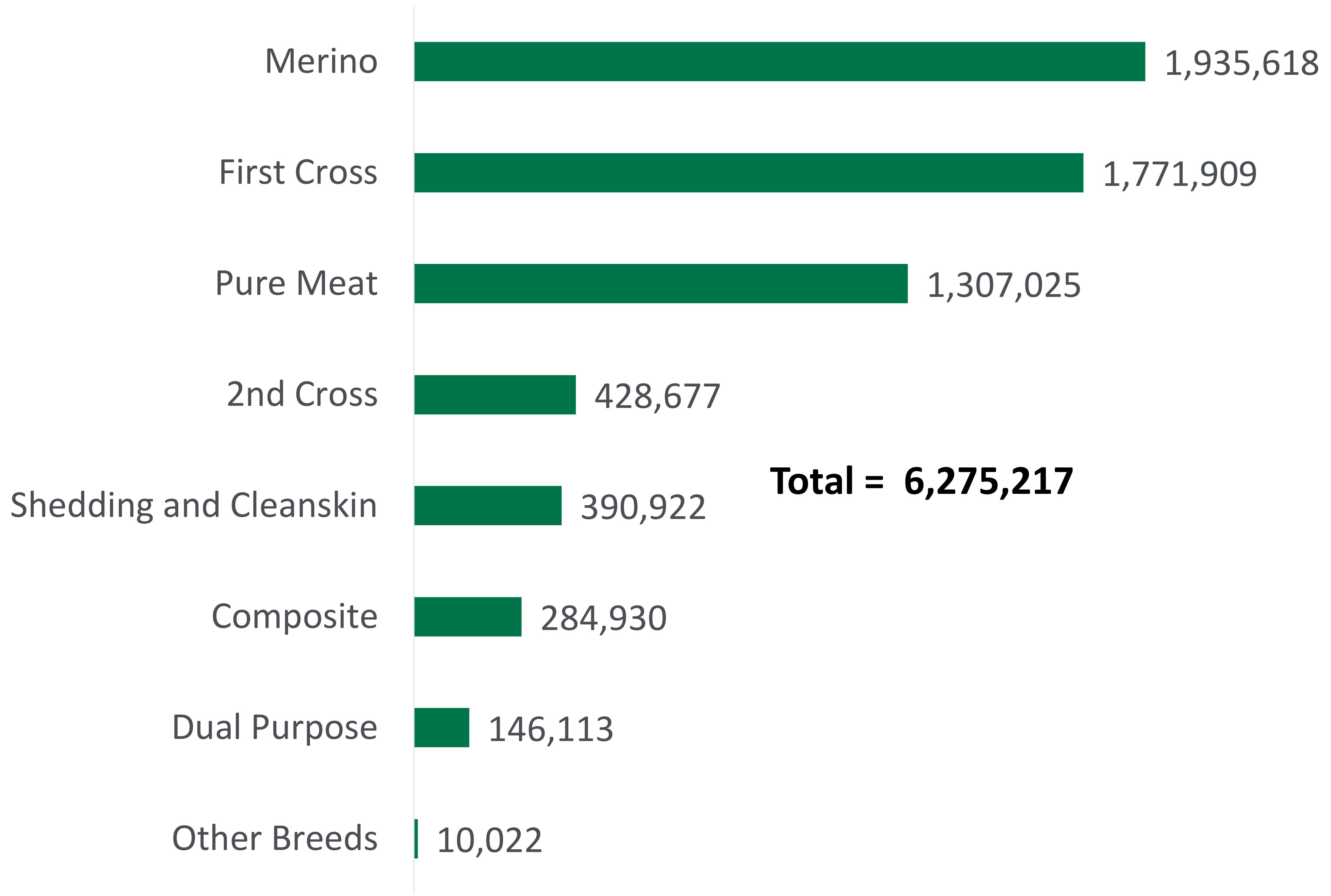
Sample base (properties) n=3,381

Expected lamb sales in the next 4 months - Australia

A total number of **6.3 million lambs** are expected to be sold in the next four months (1 July 2019 to 31 October 2019), approximately 36% of the total number of lambs on hand (17.2 million). Of these: Merino, First Cross and Pure Meat breeds are expected to account for 31%, 28% and 21% of lamb sales respectively.

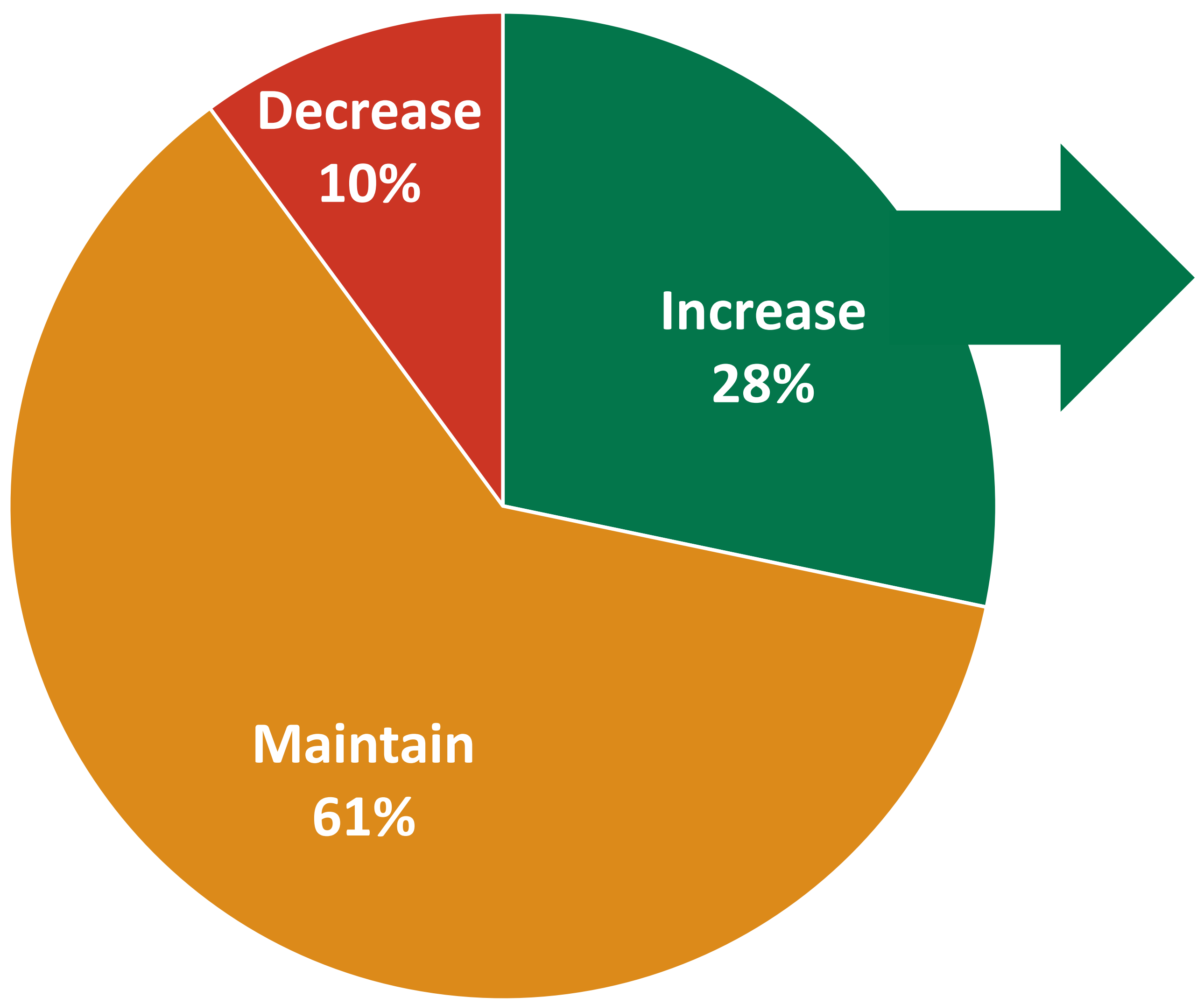
These results are consistent with producer ewe flock intentions for the next 12 months and method of achievement, with **28%** looking to increase their ewe flocks and of these 58% are expected to retain more replacement ewes than normal.

Expected lamb sales in the next 4 months



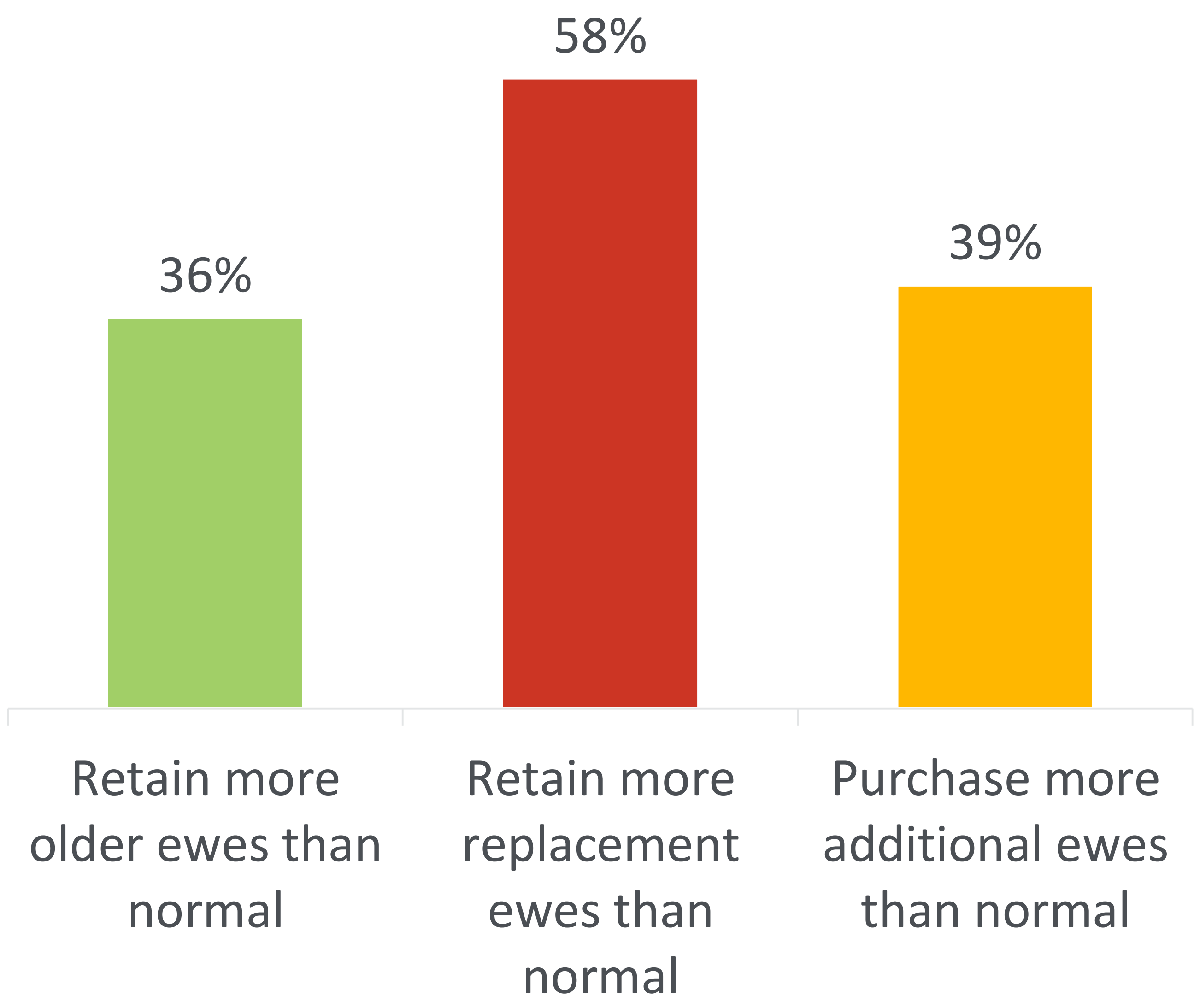
Sample base (properties) n=3,381

Ewe flock intentions



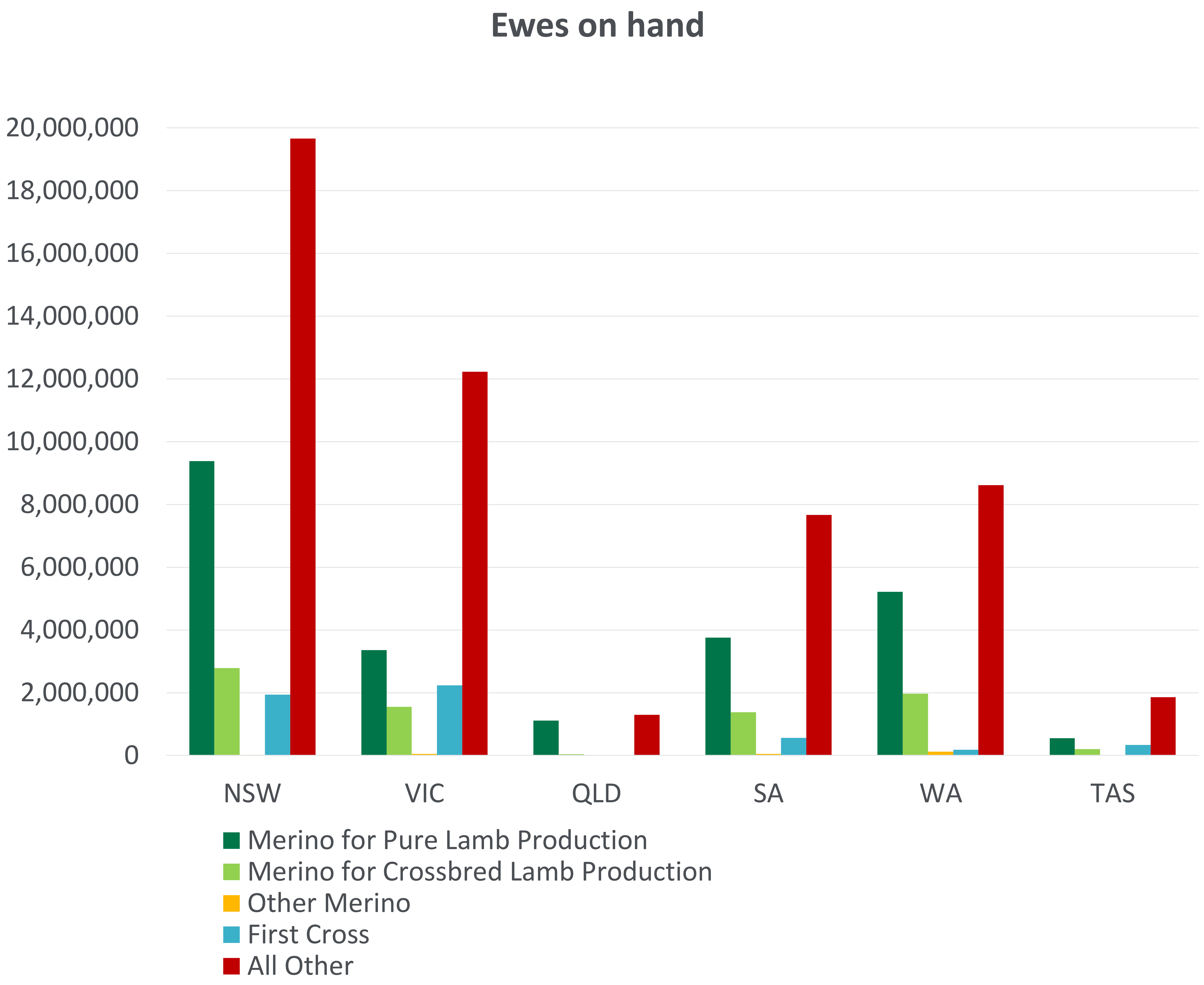
Sample base (respondents) n=2,109

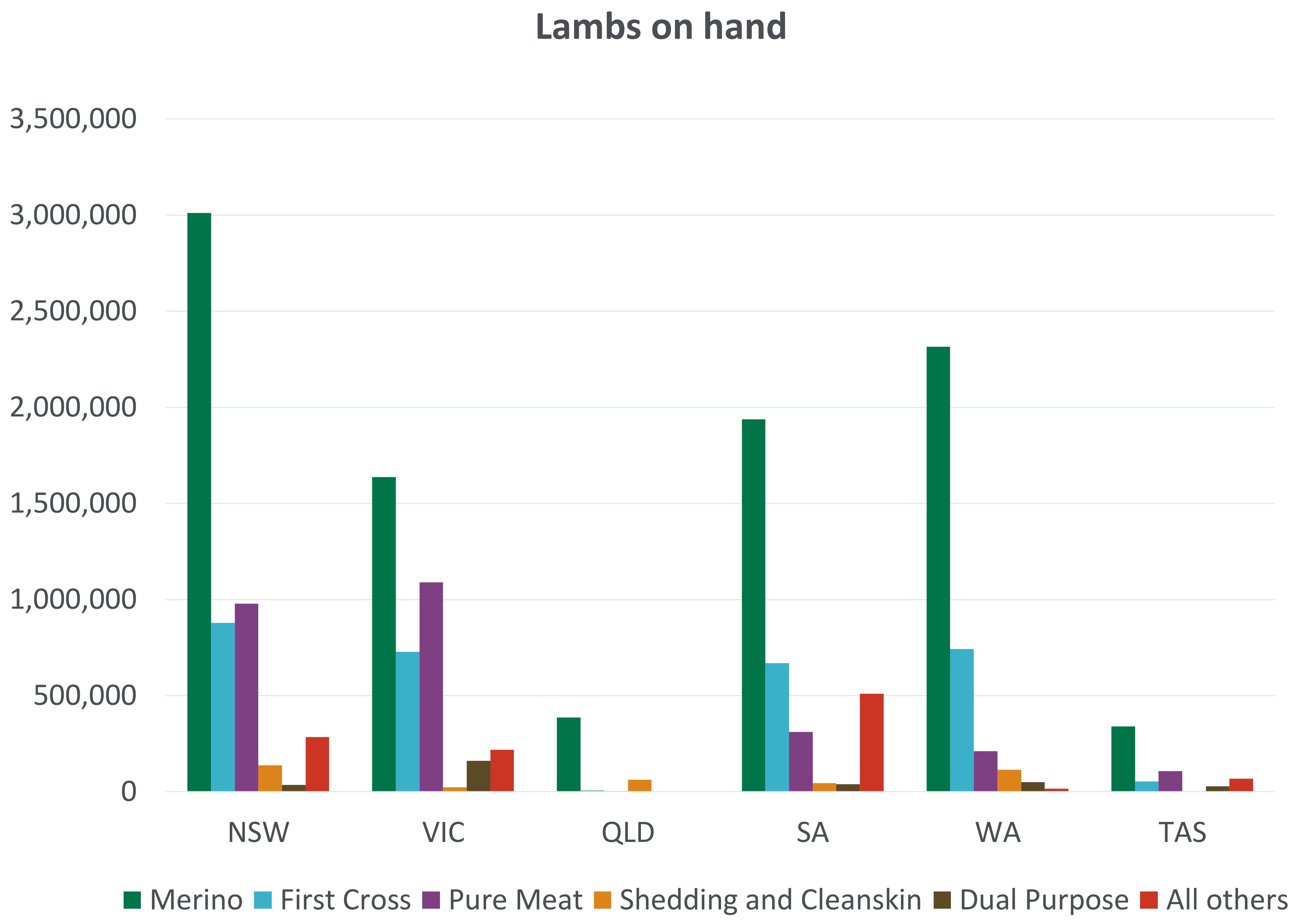
How to achieve increase



Results by State

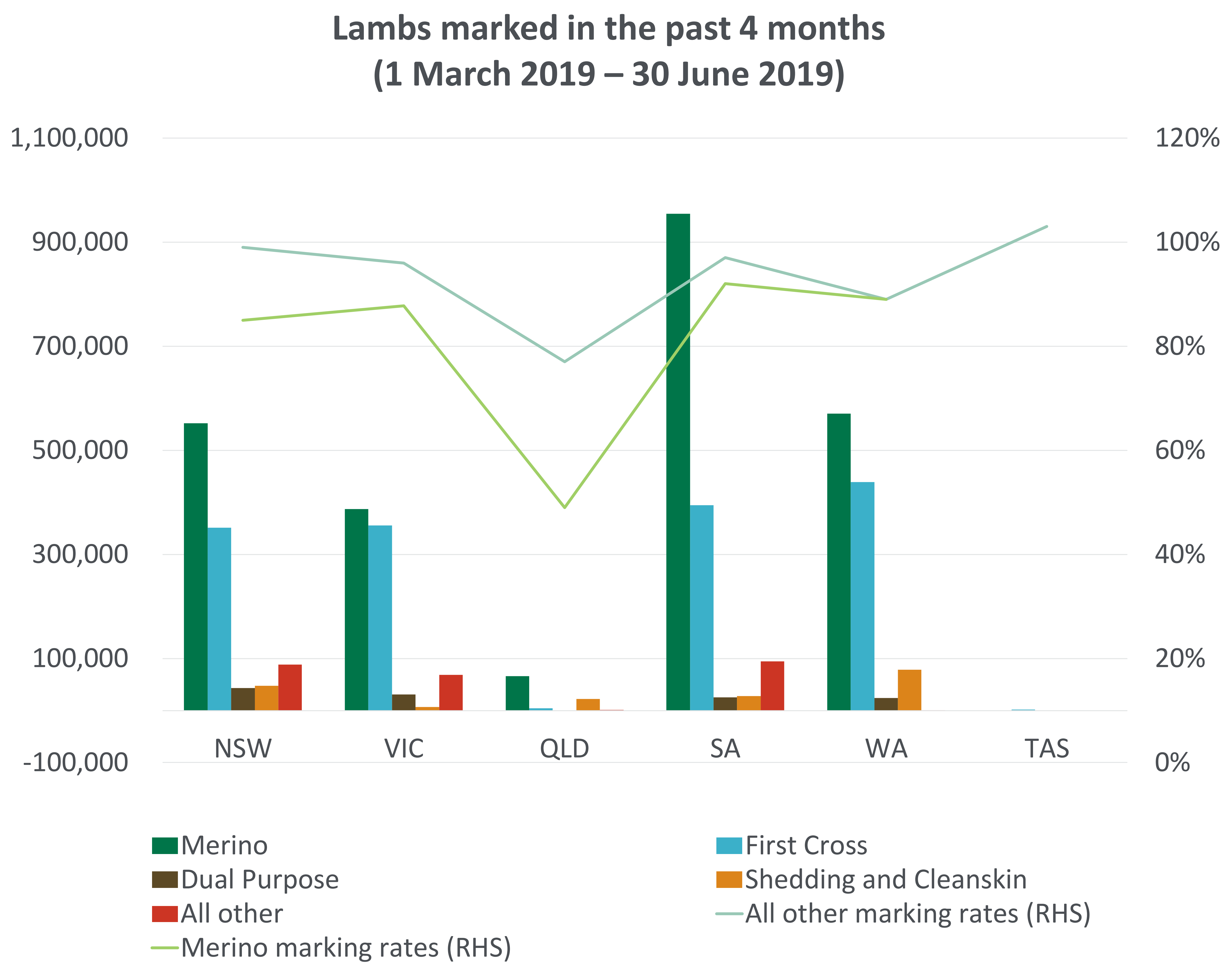
Ewes on hand and Lambs on hand - State

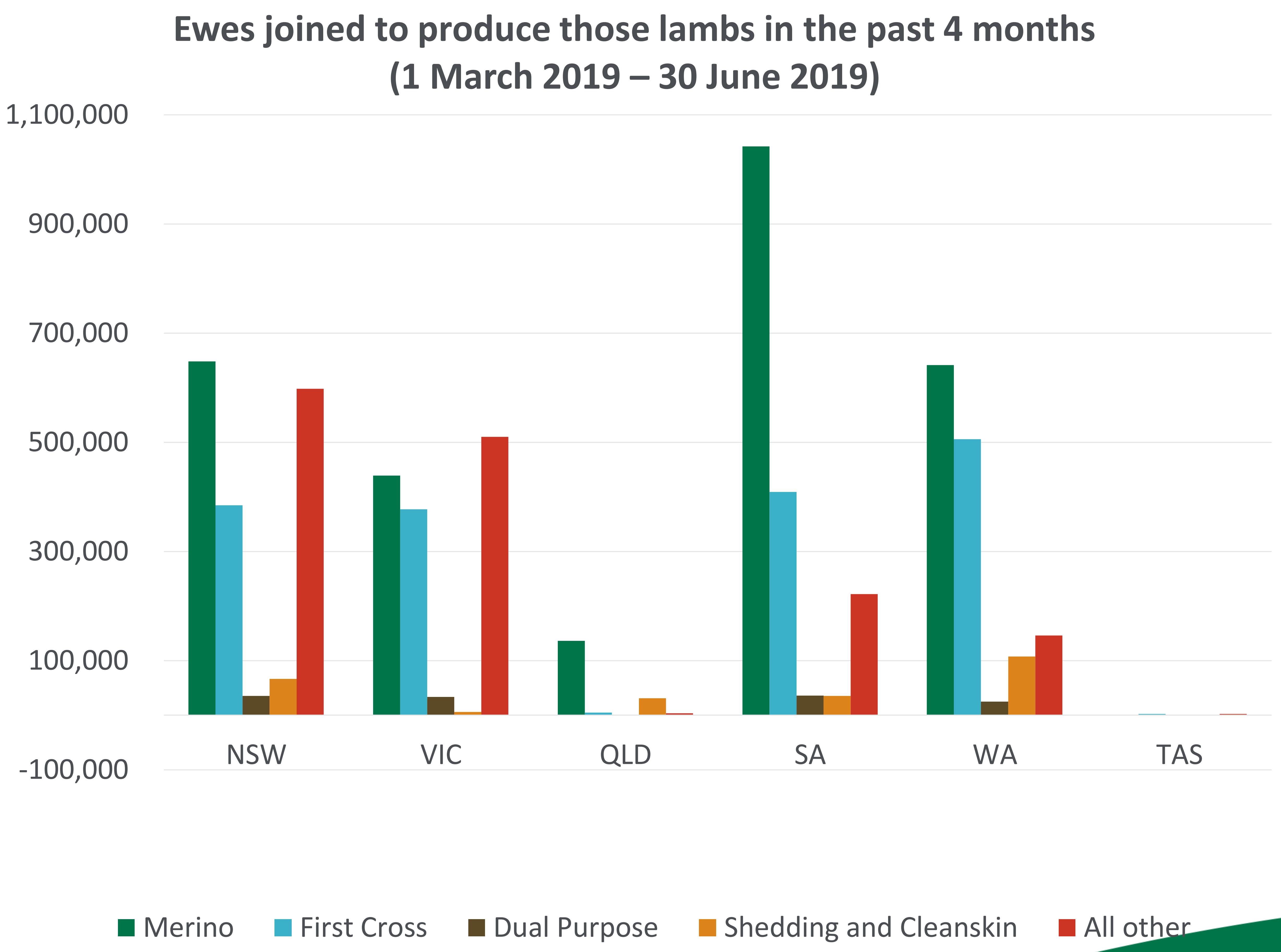




Sample base (properties) n=3,381

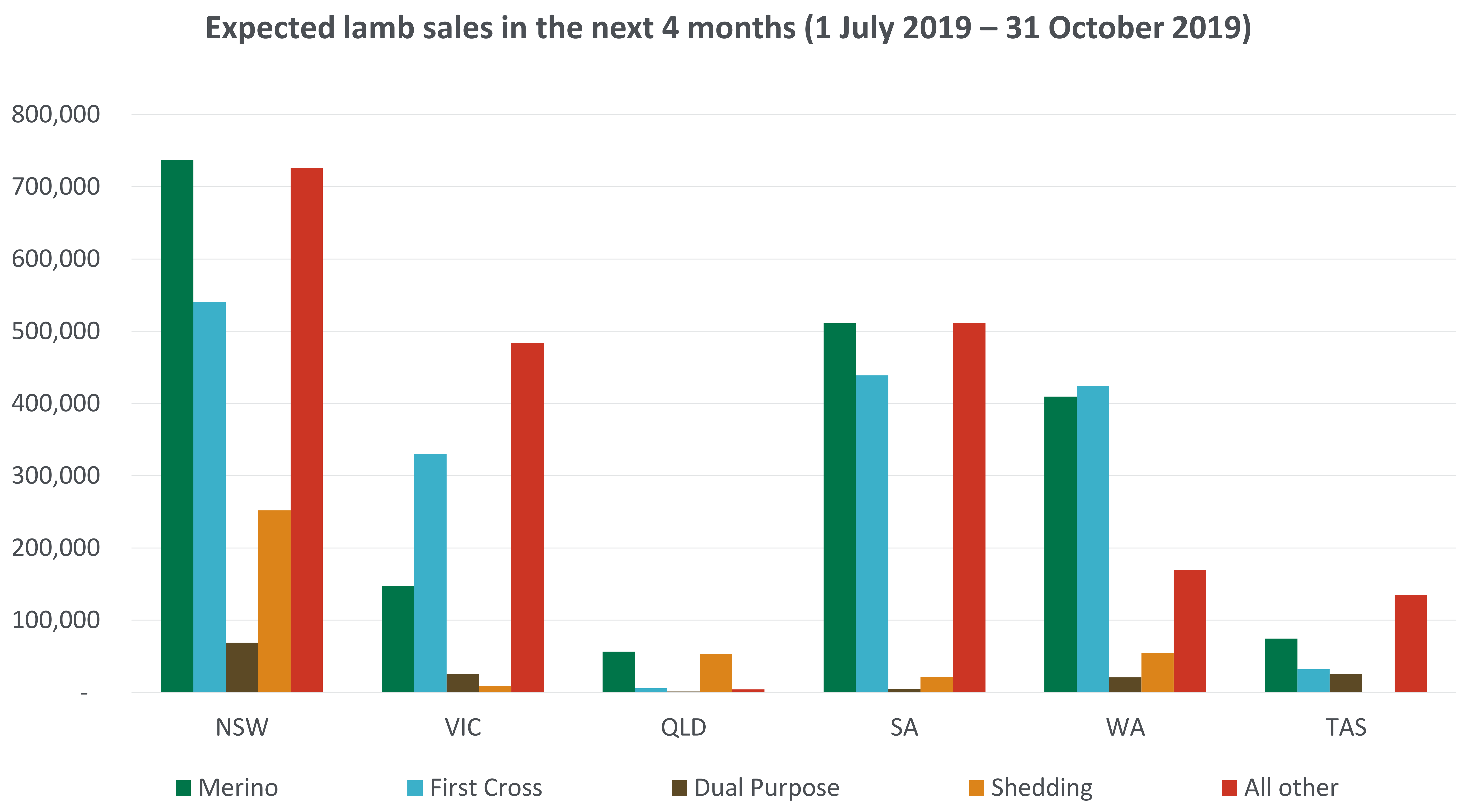
Lambs marked in the past four months and Ewes joined to produce those lambs - State





Sample base (properties) n=3,381

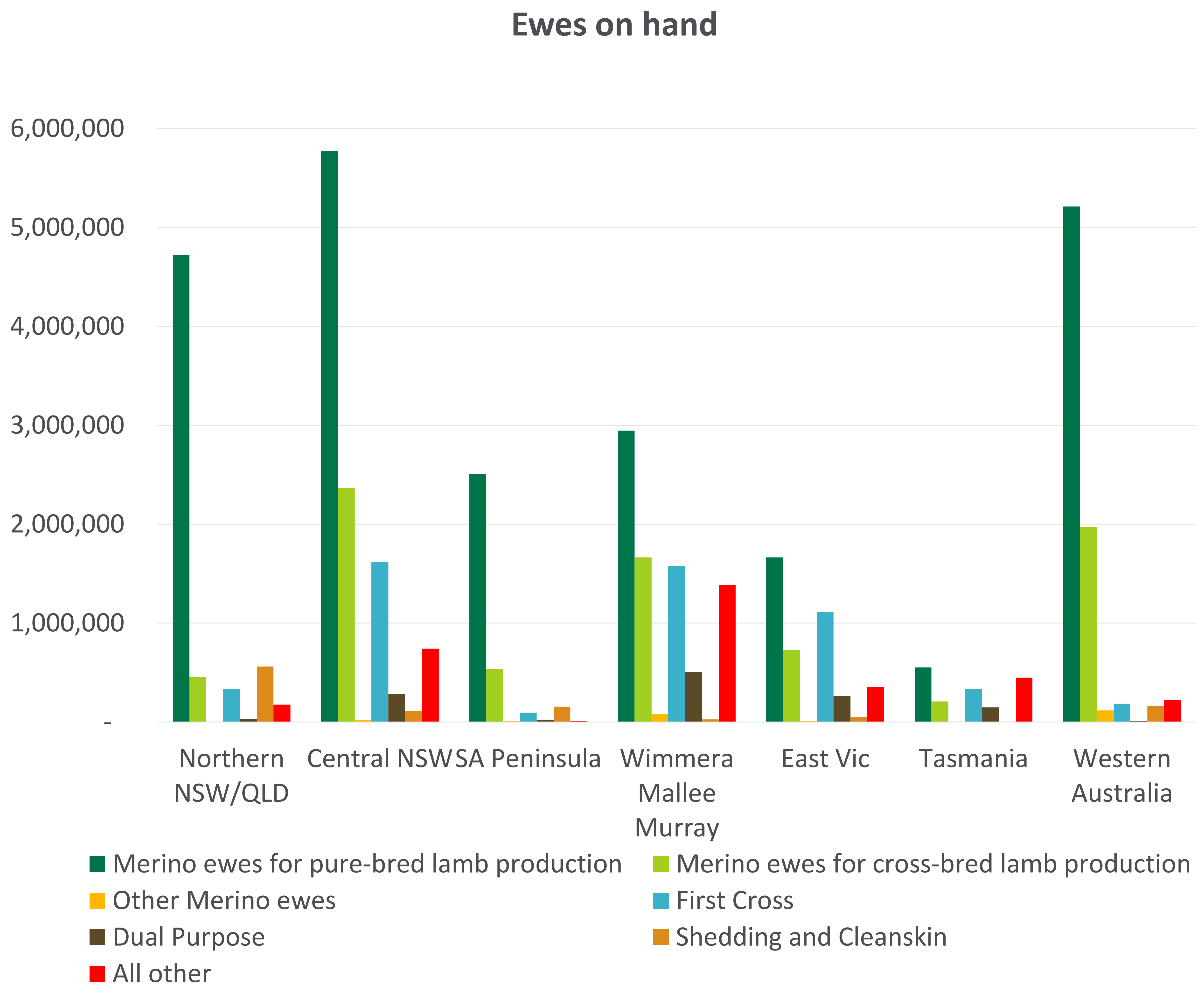
Expected lamb sales in the next four months – by State

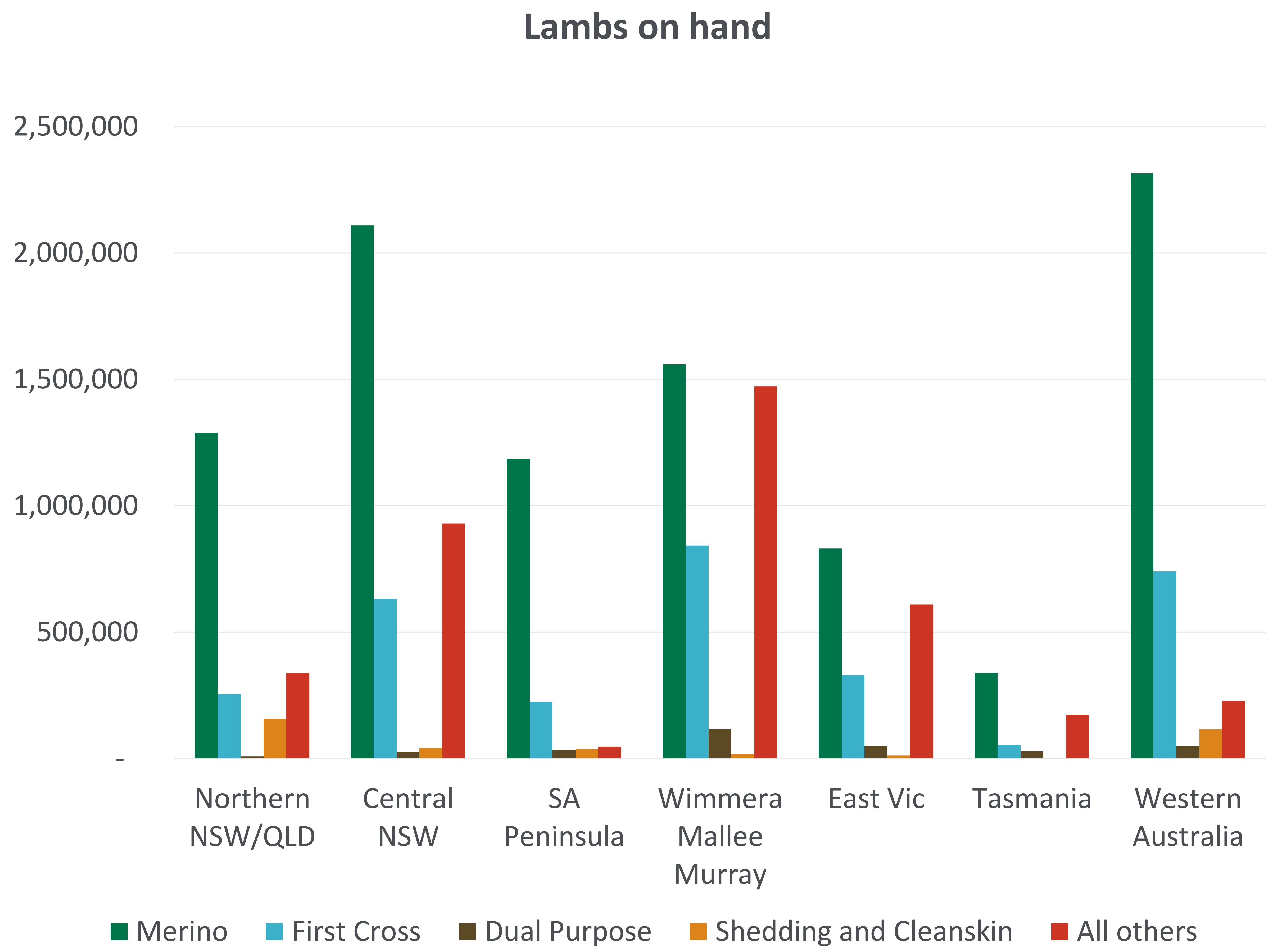


Sample base (properties) n=3,381

Results by MLA Reporting Region

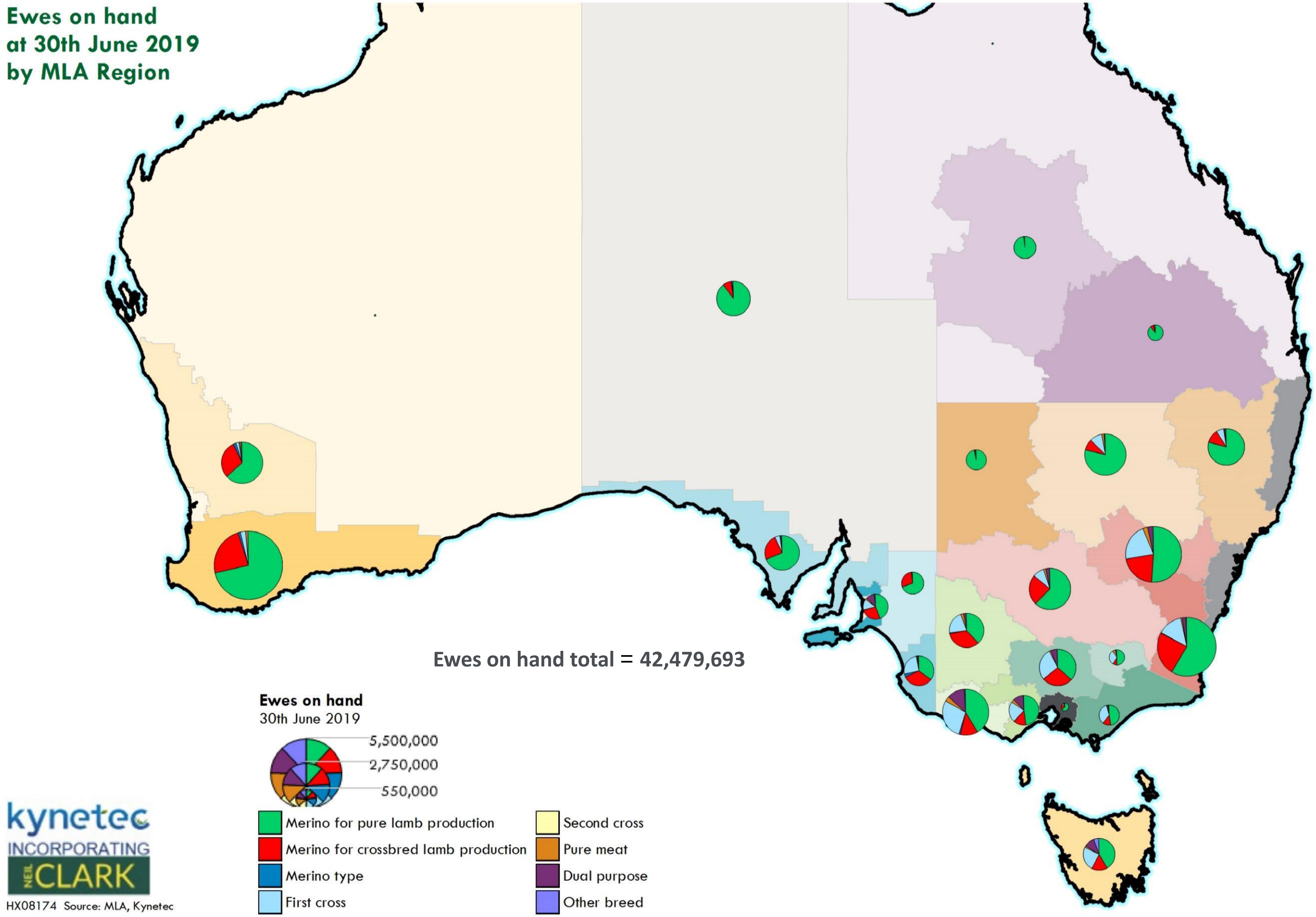
Ewes on hand and lambs on hand 30 June 2019 - by MLA reporting regions





Sample base (properties) n=3,381

Ewes on hand – MLA reporting regions



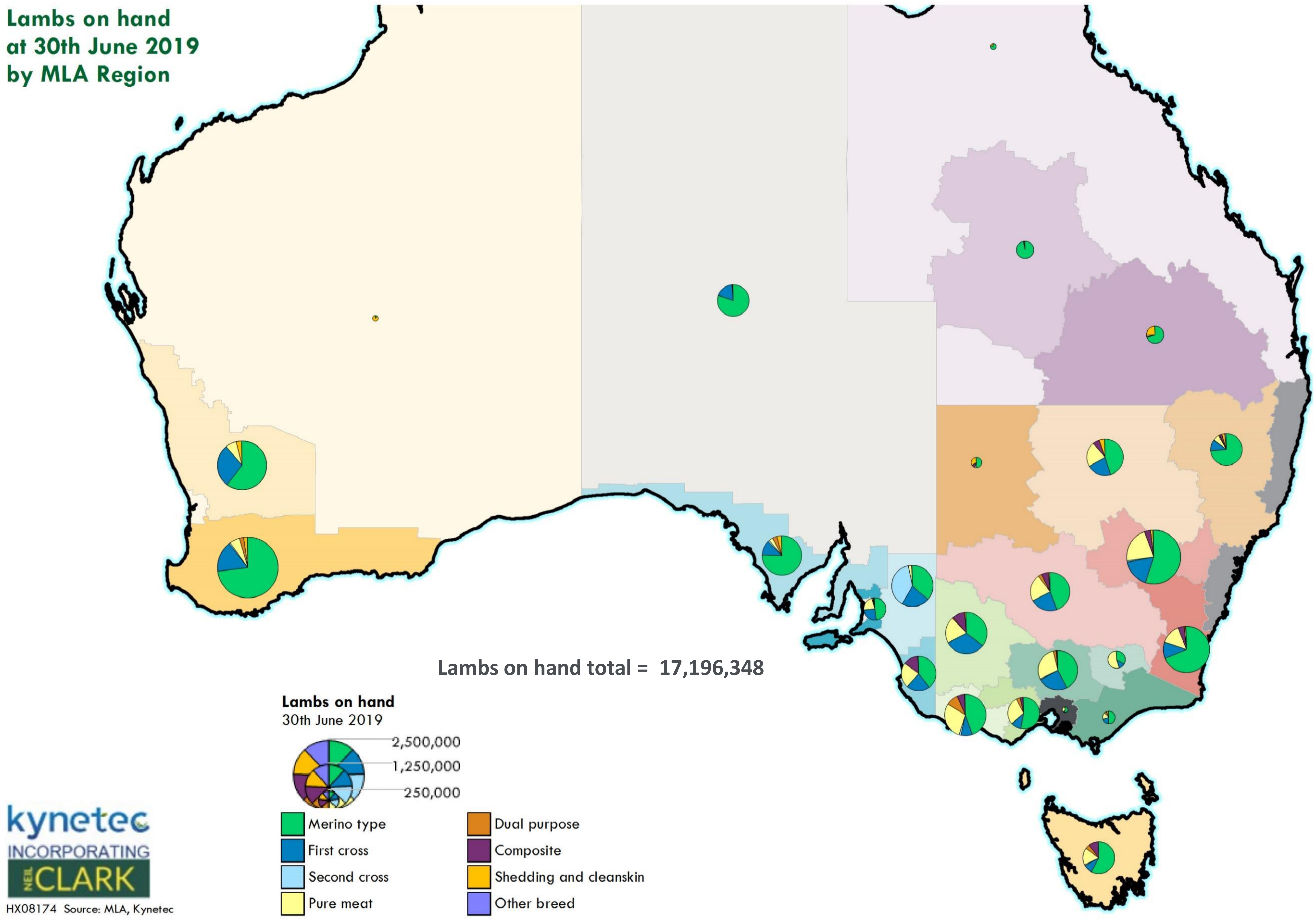
The breeding ewe population was largest in WA South (5.4 m), South Eastern NSW (4.2 m) and Central West region NSW (4.1 m).

Central Queensland (100%), Murray Land (99%) and WA South (94%) had the highest percentage of merinos in their flock followed by Eyre Yorke and North Extra (93%) and Eyre Yorke and North (90%) (Merino for Pure lamb, Merino for cross lamb production and Merino other).

Conversely, when considering regions with over 40,000 non merinos, the largest percentage of non-merino ewes was in Tasmania and Western District VIC (both 55%), Barwon and Central Highlands (47%) and South East SA (46%).

Sample base (properties) n=3,381

Lambs on hand – by MLA reporting regions



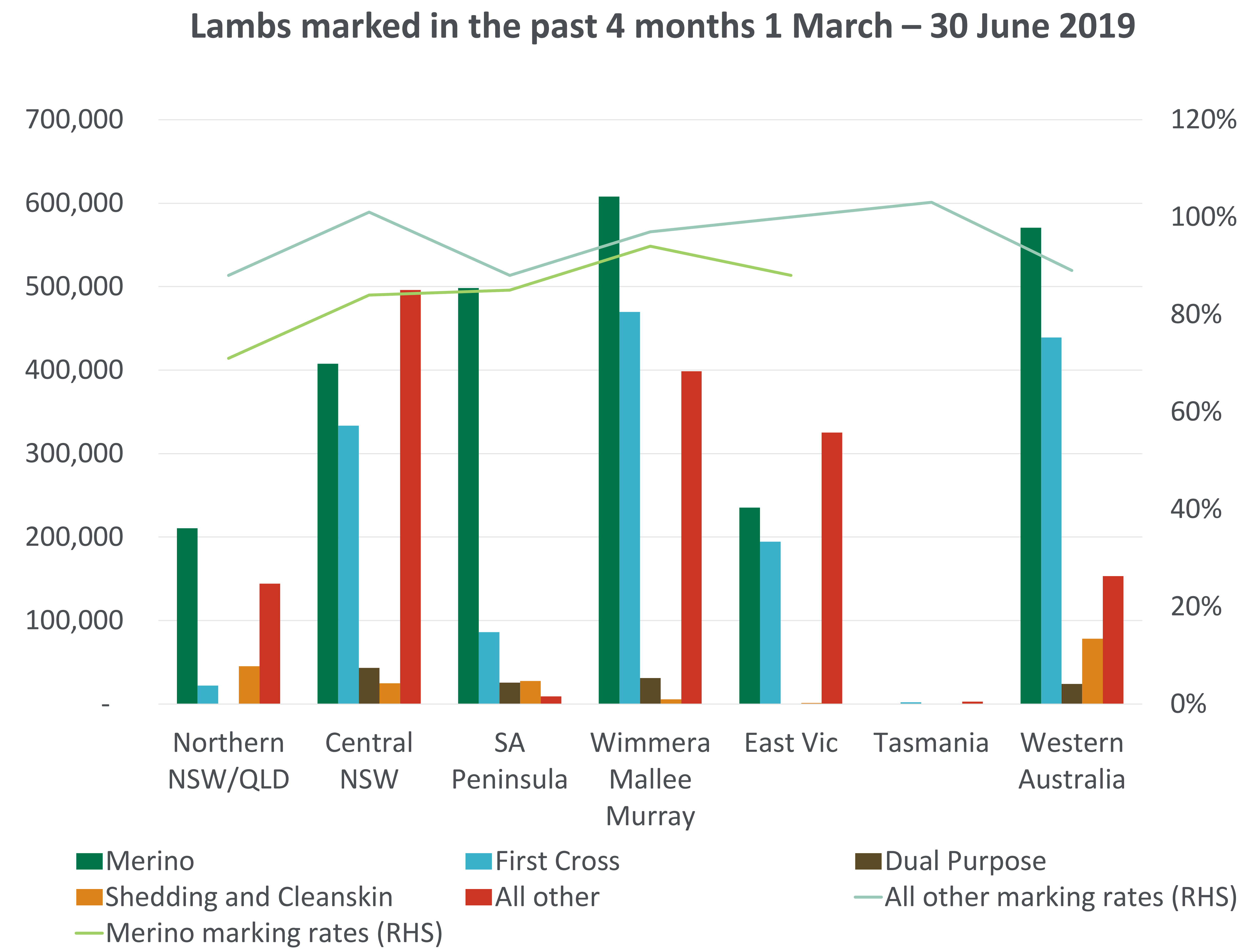
In line with a larger ewe flock population, the number of lambs on hand at 30 June was greatest in WA South at 2 million head. This was followed by the Central West NSW region, recording around 1.6 million head.

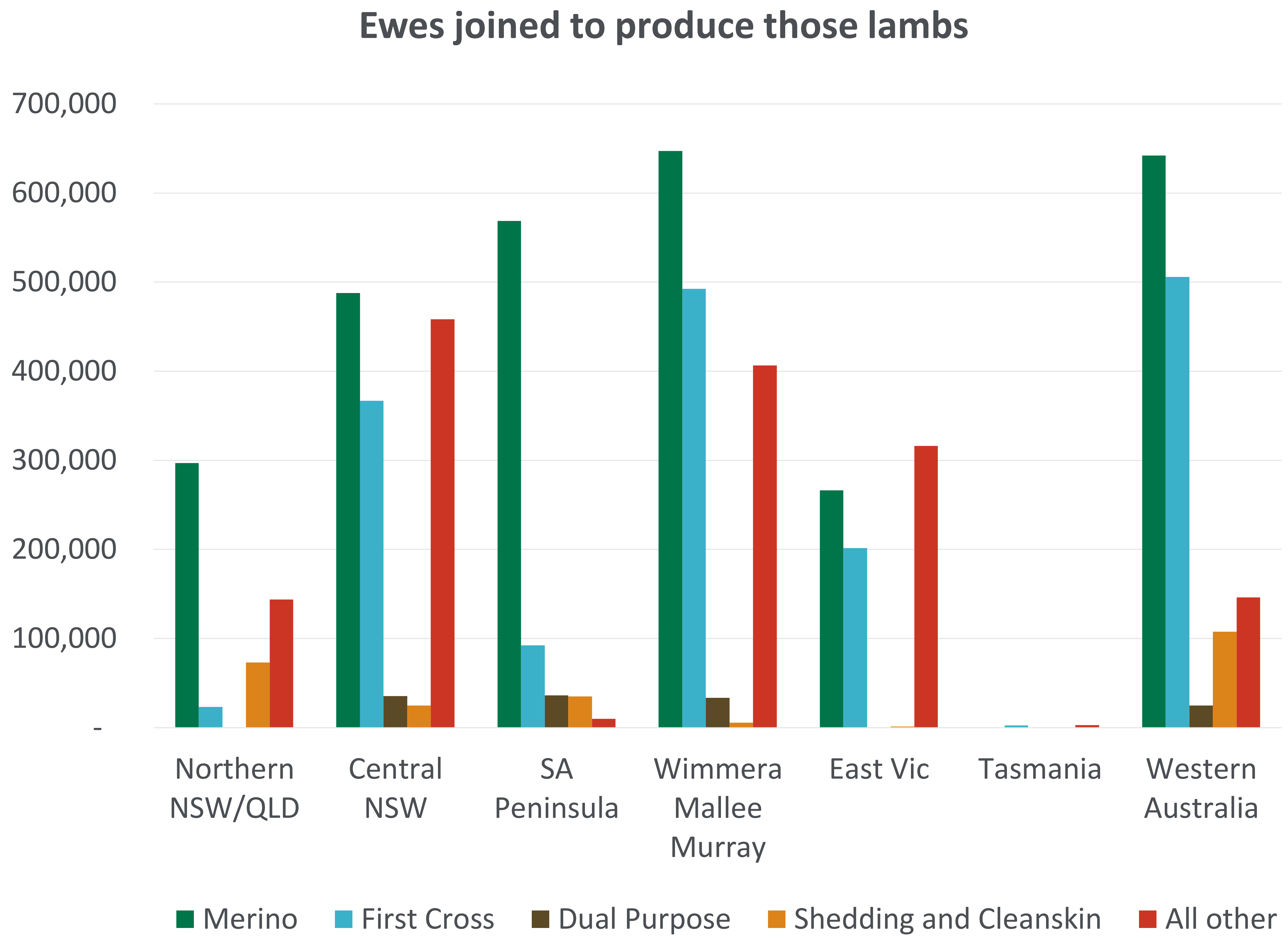
Although Merinos tended to be the most dominant breed of lamb across almost all regions, a large proportion of flocks in some regions were made up of first cross and pure meat breeds. In the Wimmera and Mallee, First cross lambs comprised of 31% of the lamb flock while Pure meat in Loddon and Goulburn and South East comprised of 29% and 24% of the total lamb flocks, respectively.

NSW had the largest Merino lamb flock at around 3 million head, accounting for 57% of the 5.3 m total NSW lamb flock. In WA however, Merinos accounted for 67% of the total lamb flock (2.3 m of 3.4 m head).

Sample base (properties) n=3,381

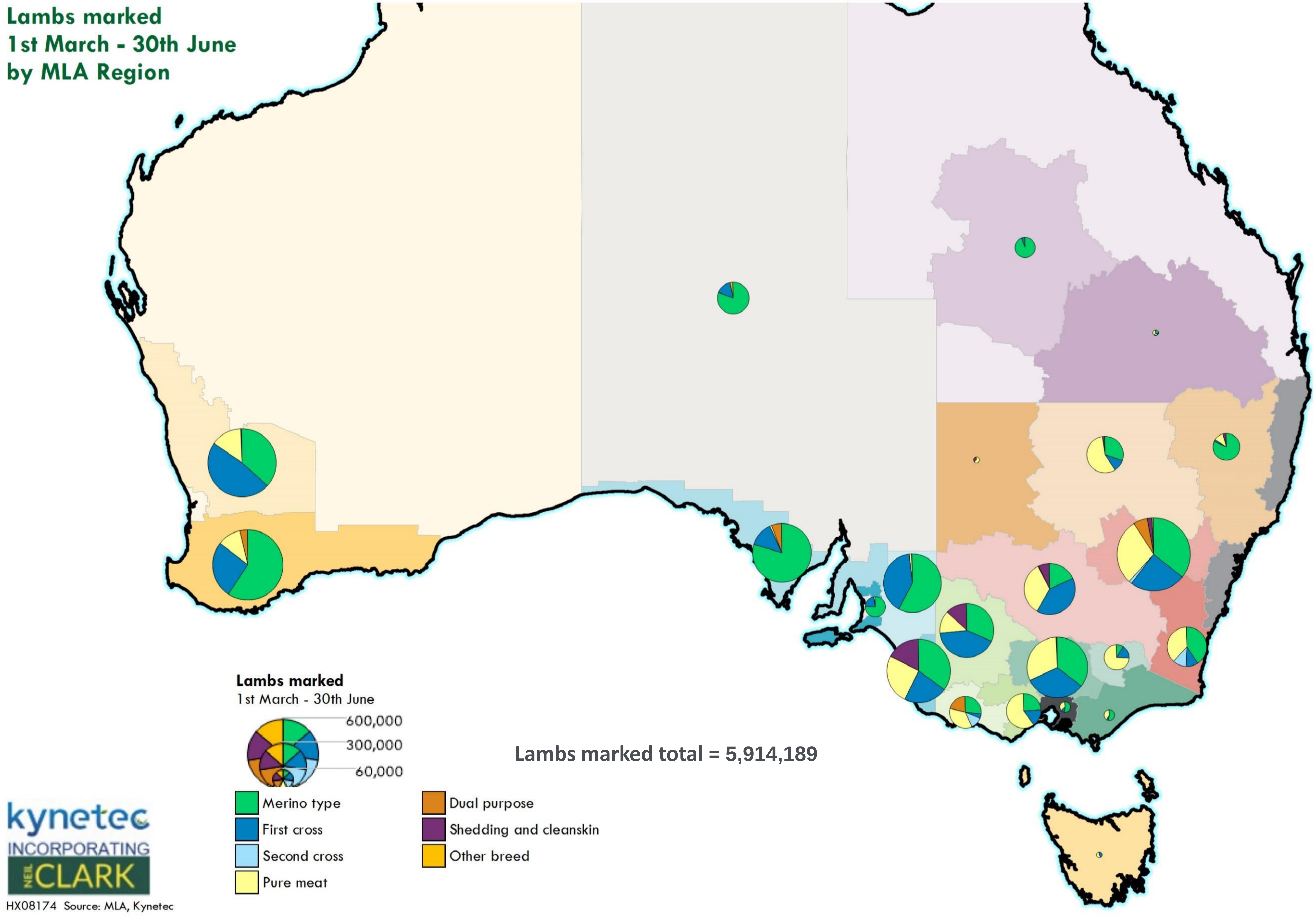
Lambs marked in the past 4 months and Ewes joined to produce those lambs – by MLA reporting regions





Sample base (properties) n=3,381

Lambs marked in the past four months

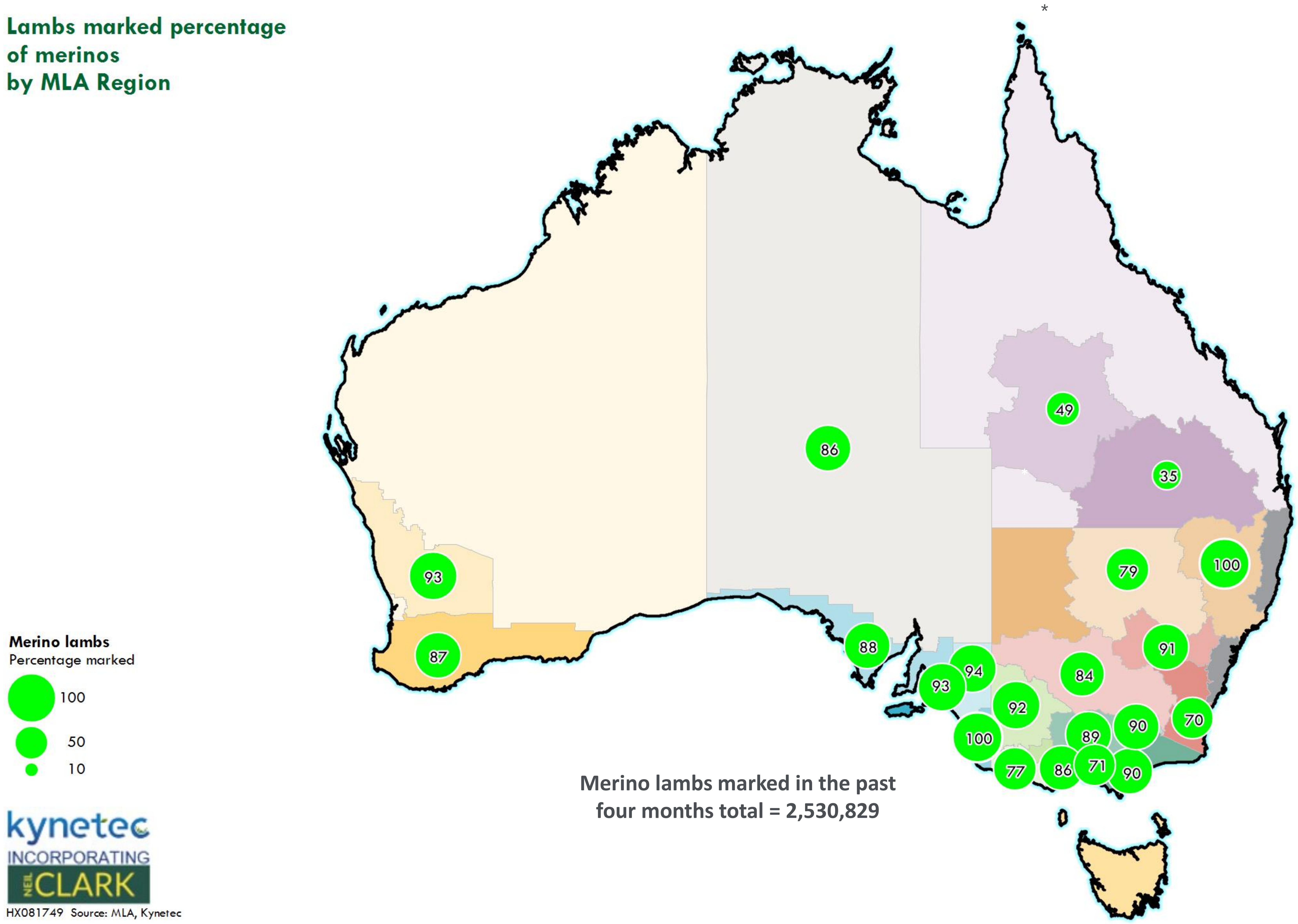


Around 5.9 million lambs were marked over the past four months.

Central West, Central Midlands and WA South accounted for a large number of new lambs, with markings of 0.7m, 0.6m and 0.6m head respectively.

Sample base (properties) n=3,381

Merino lamb marking rates – by MLA reporting regions



Merino lambs marked in the past four months total = 2,530,829

The highest Merino marking rates were recorded in Hunter and Northern NSW (100%) and South East SA (100%). Conversely, the lowest marking rates were recorded in Southern QLD at 35% and Central Queensland at 49%.

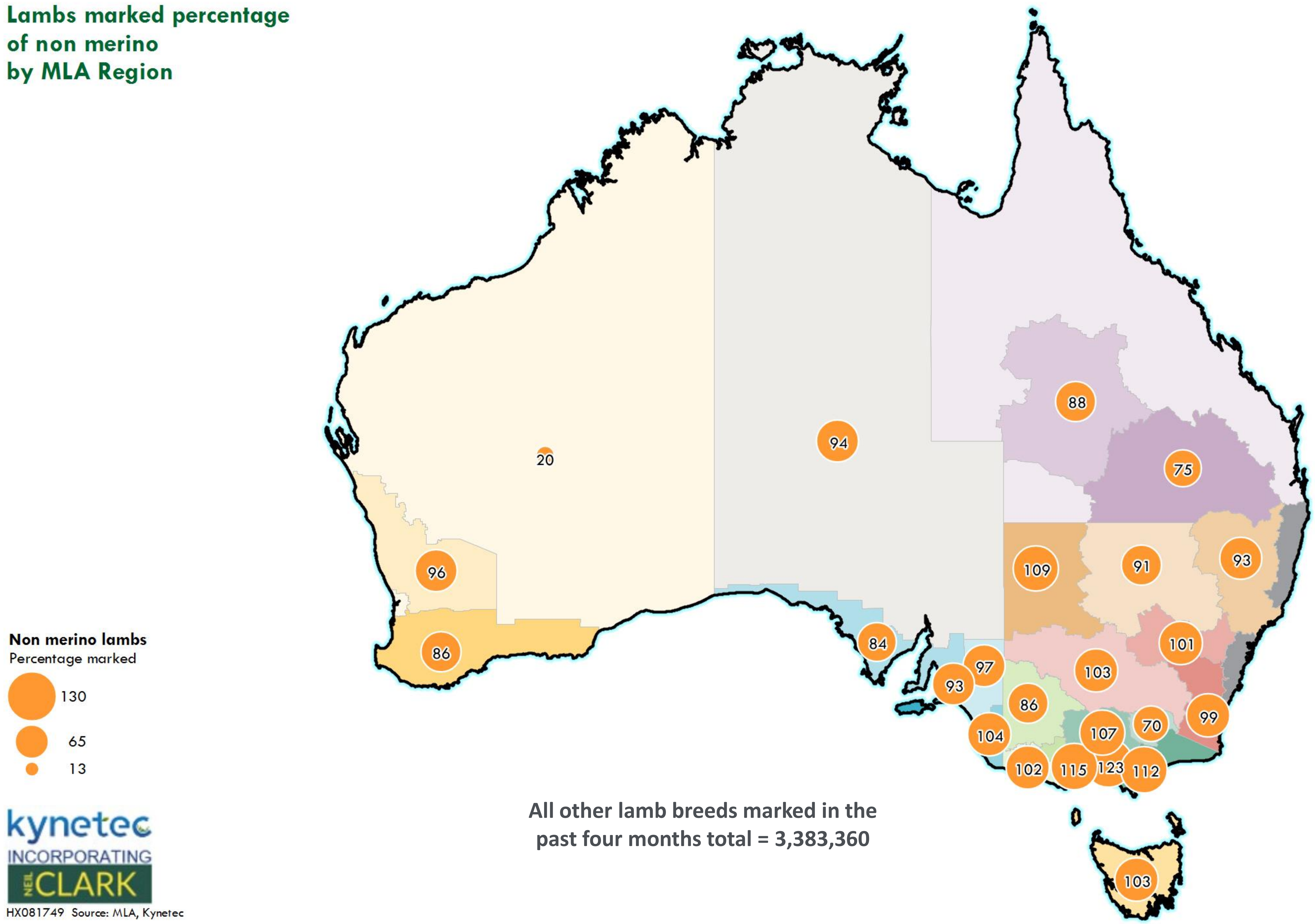
Nationally the Merino marking rate was 77% and on a state basis, Queensland and NSW had the lowest marking rate at 49% and 85% respectively, while SA and WA recorded the highest Merino marking rates of 92% and 89% respectively.

Note: These marking rates are for the period between 1 March to 30 June 2019 and are not an accurate representation of annual marking rates.

Sample base (properties) n = 1,834

All other breed lamb marking rates–by MLA reporting regions

kynetec INCORPORATING NEIL CLARK



All other lamb breeds marked in the past four months total = 3,383,360

South Eastern Extra, Barwon and Central Highlands and Gippsland recorded the highest marking rates for non-Merino lambs at 123%, 115% and 112% respectively.

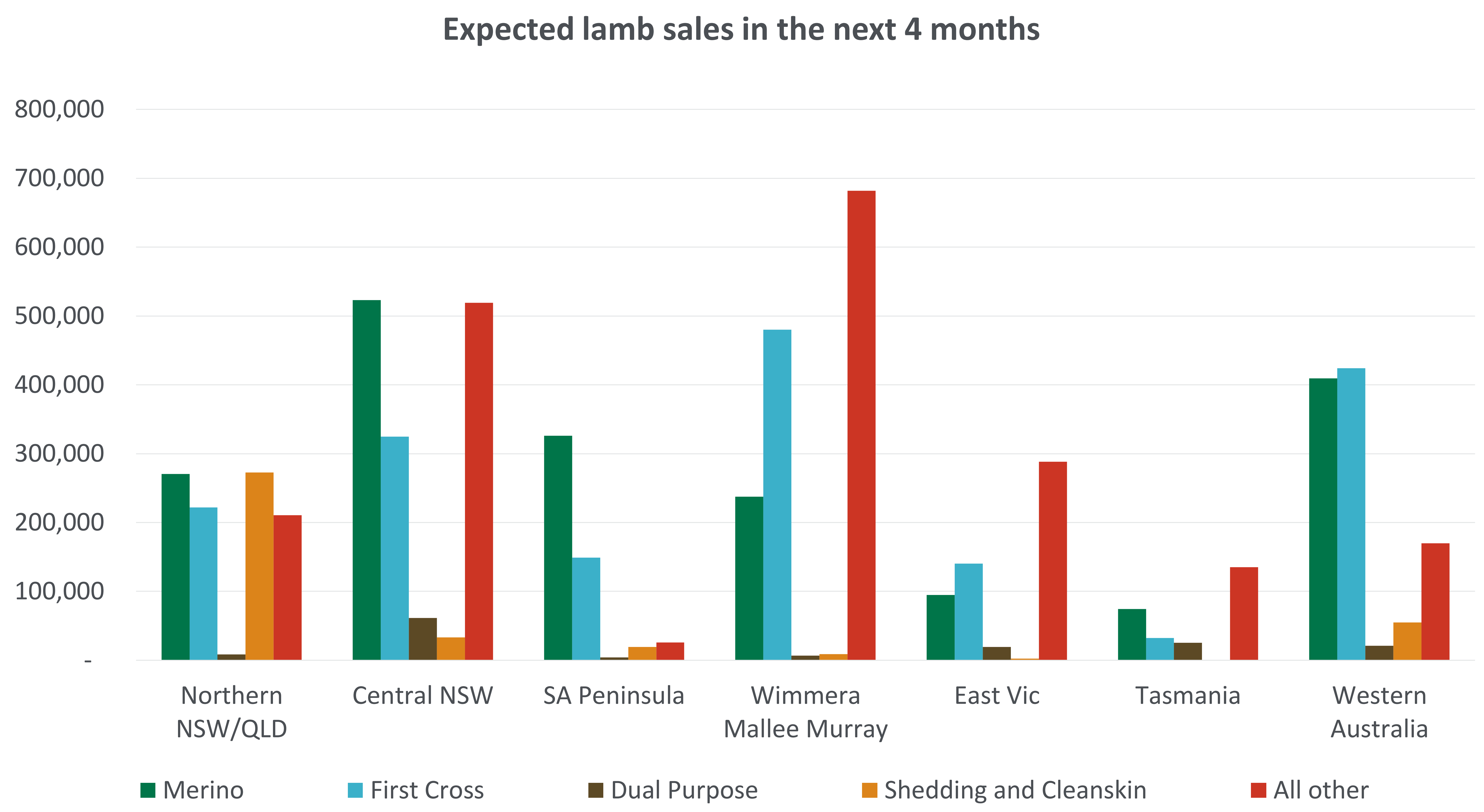
On a state basis, Tasmania and NSW recorded the highest non-merino marking rates at 103% and 99% respectively, above QLD at 77% and WA at 89%.

Note: These marking rates are for the period between 1 March and 30 June 2019. As this is outside of the peak lambing period in some regions this year, these are not representative of the average annual marking rates.

Sample base (properties) n = 1,451

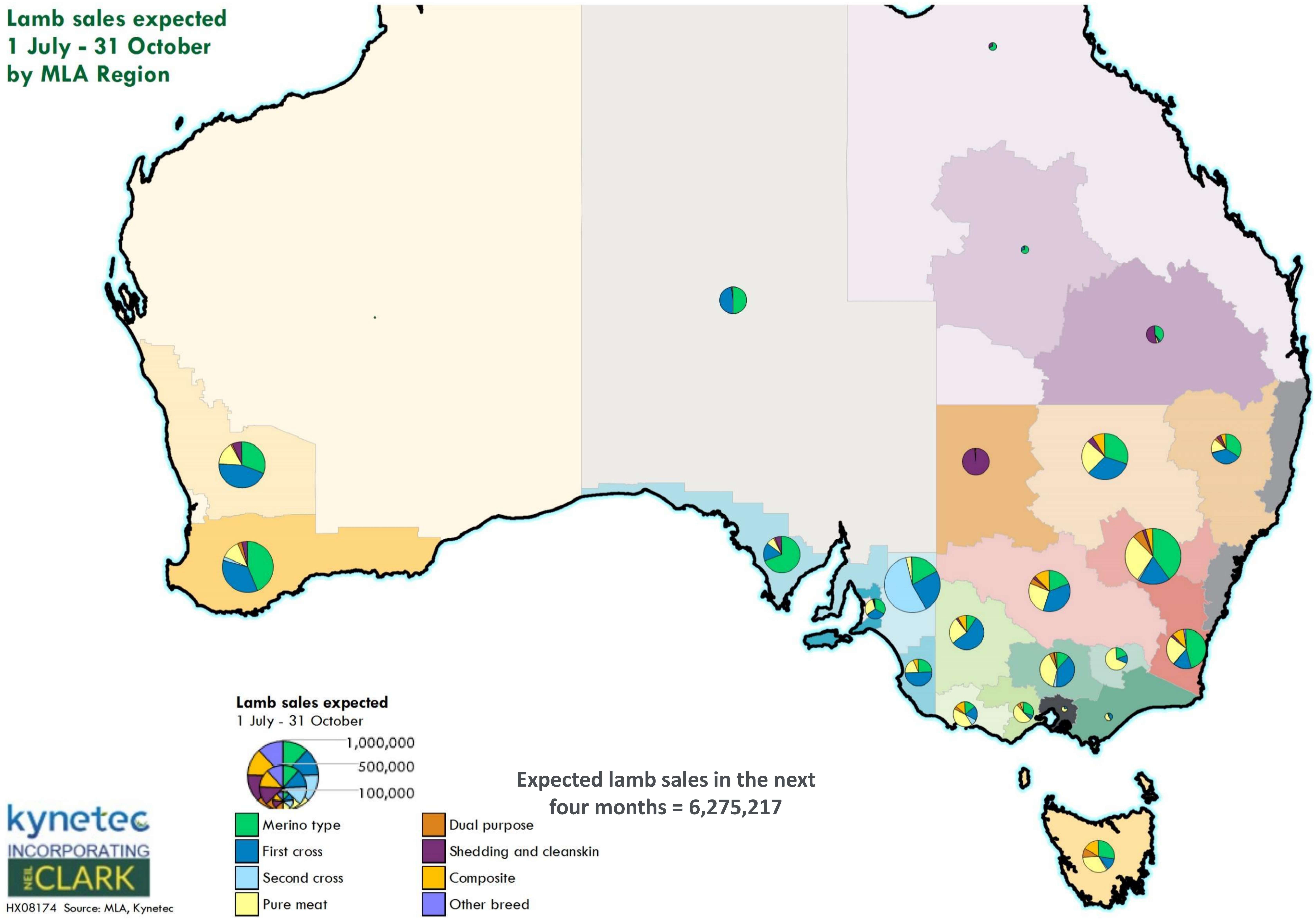
mla MEAT & LIVESTOCK AUSTRALIA

Expected lamb sales in next four months (1 July - 31 October 2019) – by MLA reporting regions



Sample base (properties) n=3,381

Expected lamb sales in next four months



Expected lamb sales in the next four months = 6,275,217

Over the next four months (1 July 2019 to 31st October 2019), most lamb sales are expected to occur in Murray Lands (0.69m), Central West (0.67m) and WA South (0.58m).

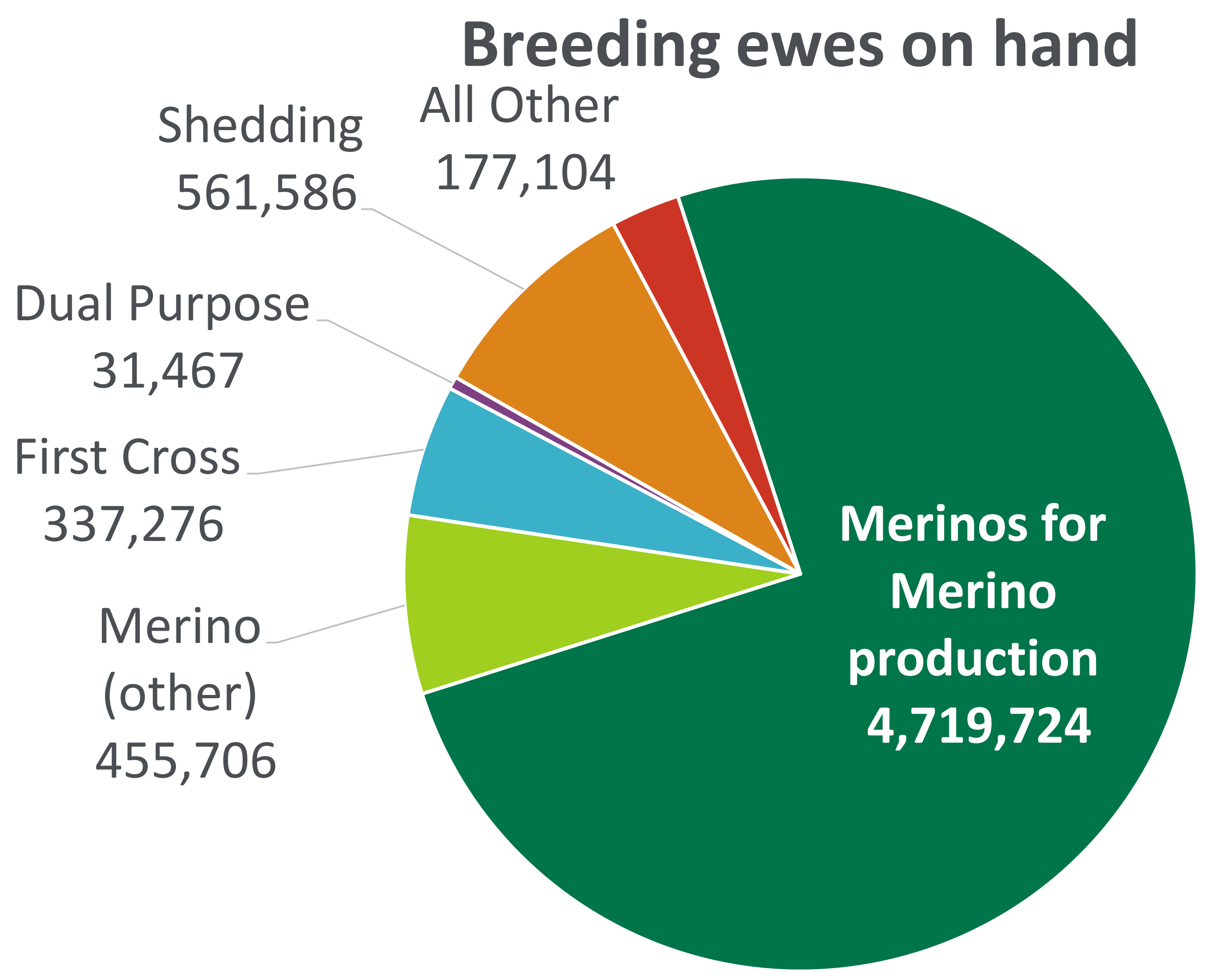
Merino's are expected to account for 31% of national lamb sales, with the proportion higher in QLD and WA (46% and 38% respectively). First cross, pure meat and other breeds will account for 69% of lamb sales, being highest in Victoria (85%) and Tasmania (72%).

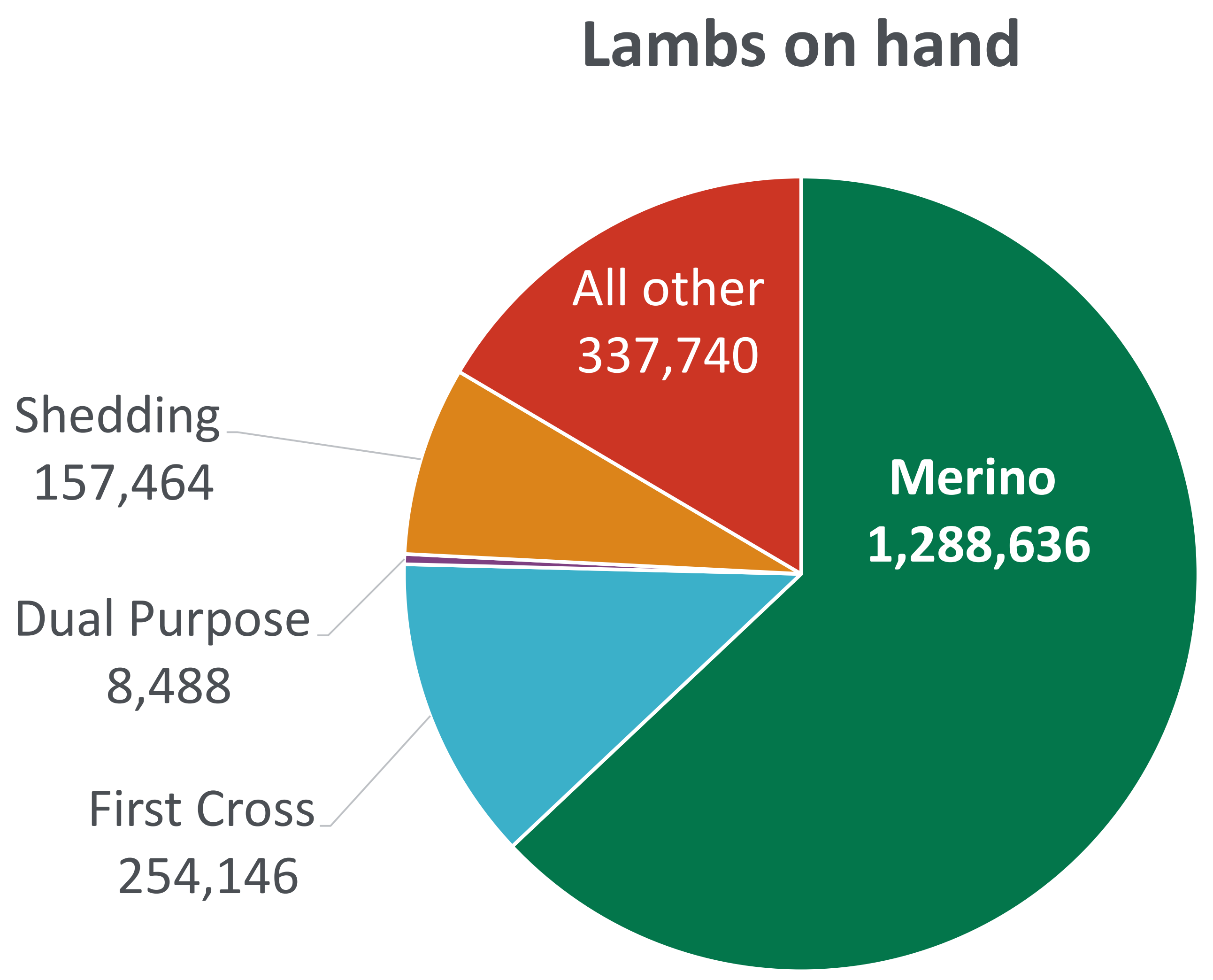
NSW is expected to account for 37% of total lamb sales over the next four months, with around 2.3 million lambs expected to be on offer. This is followed by South Australia and WA at 24% and 17% of total lamb sales, respectively.

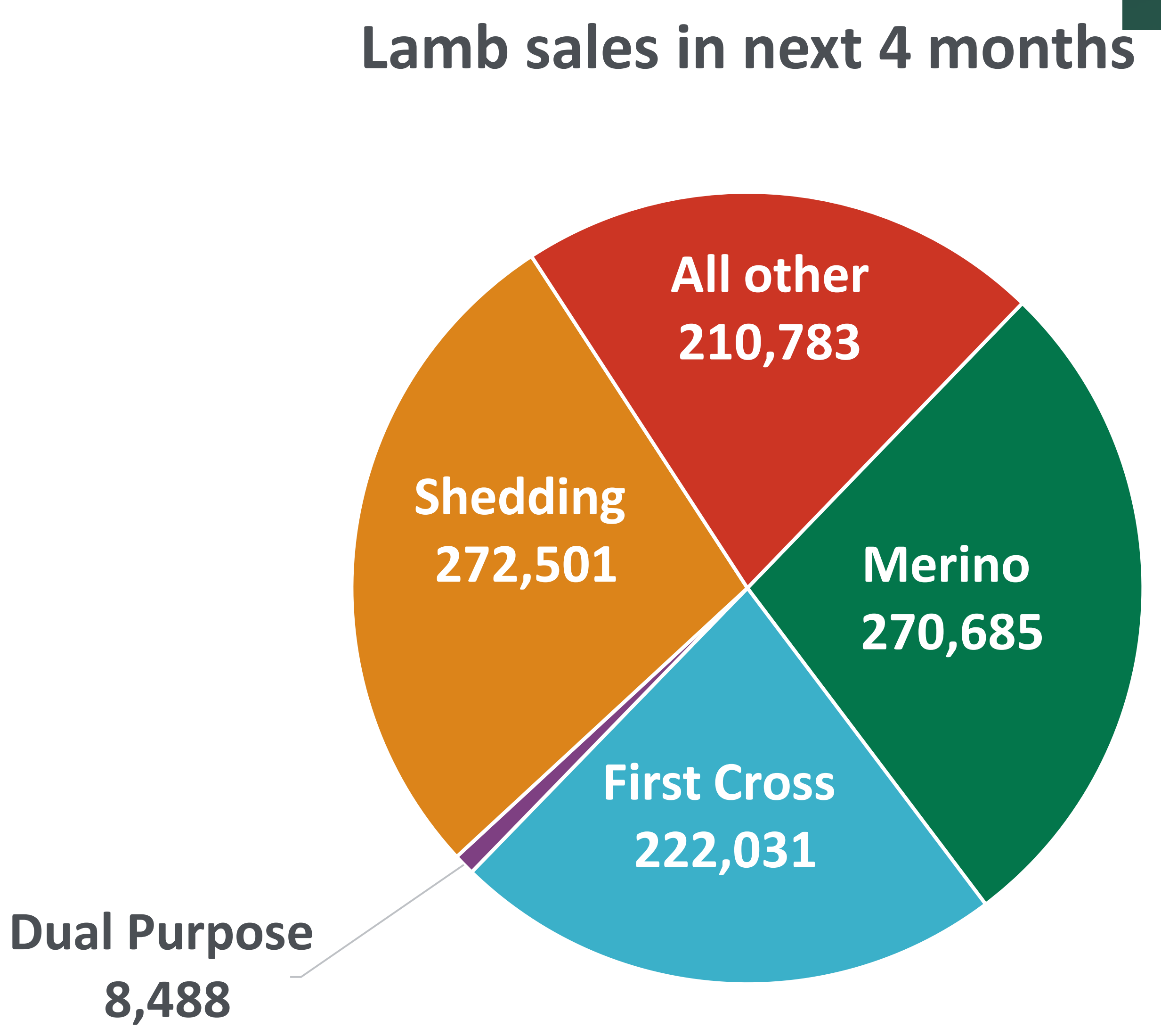
Sample base (properties) n=3,381

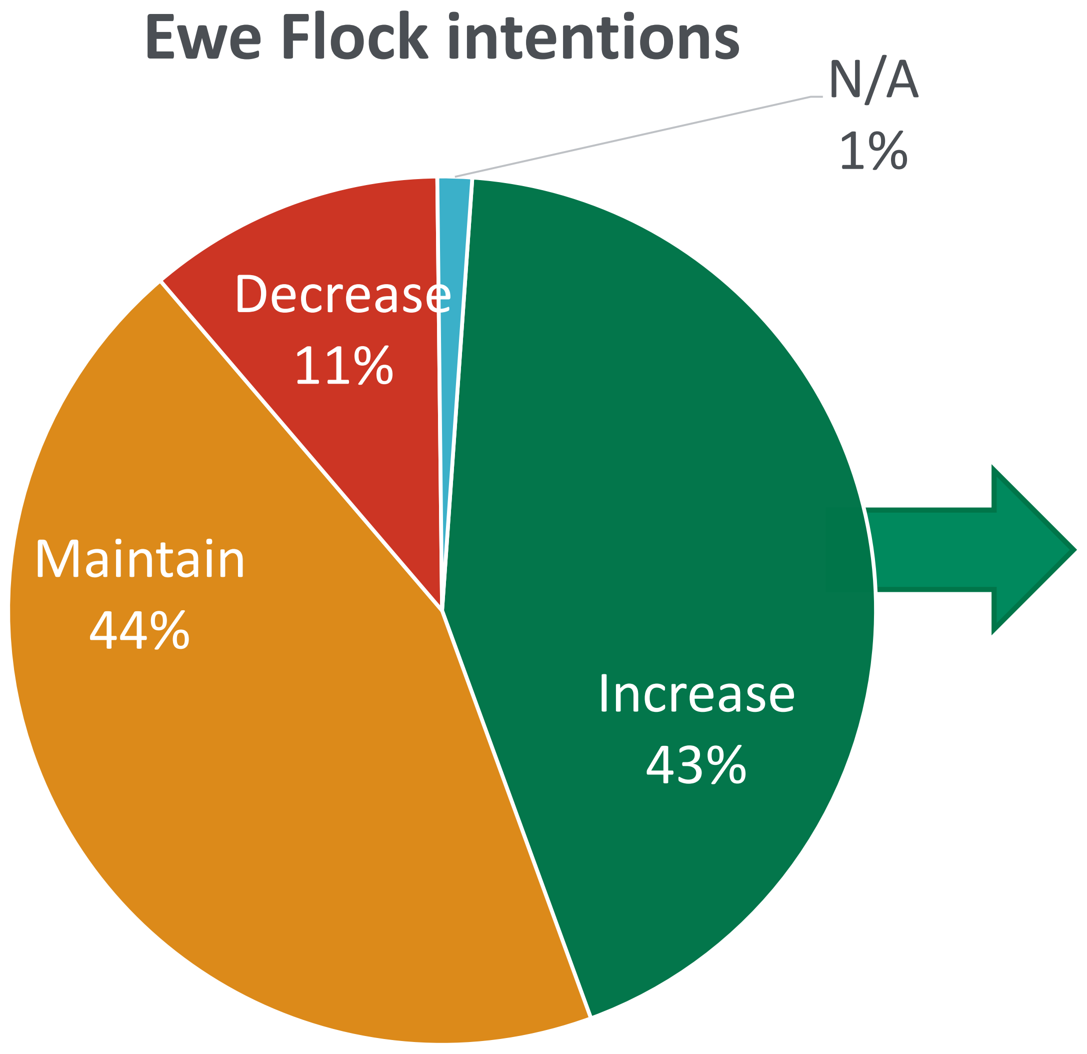
Regional Snapshots

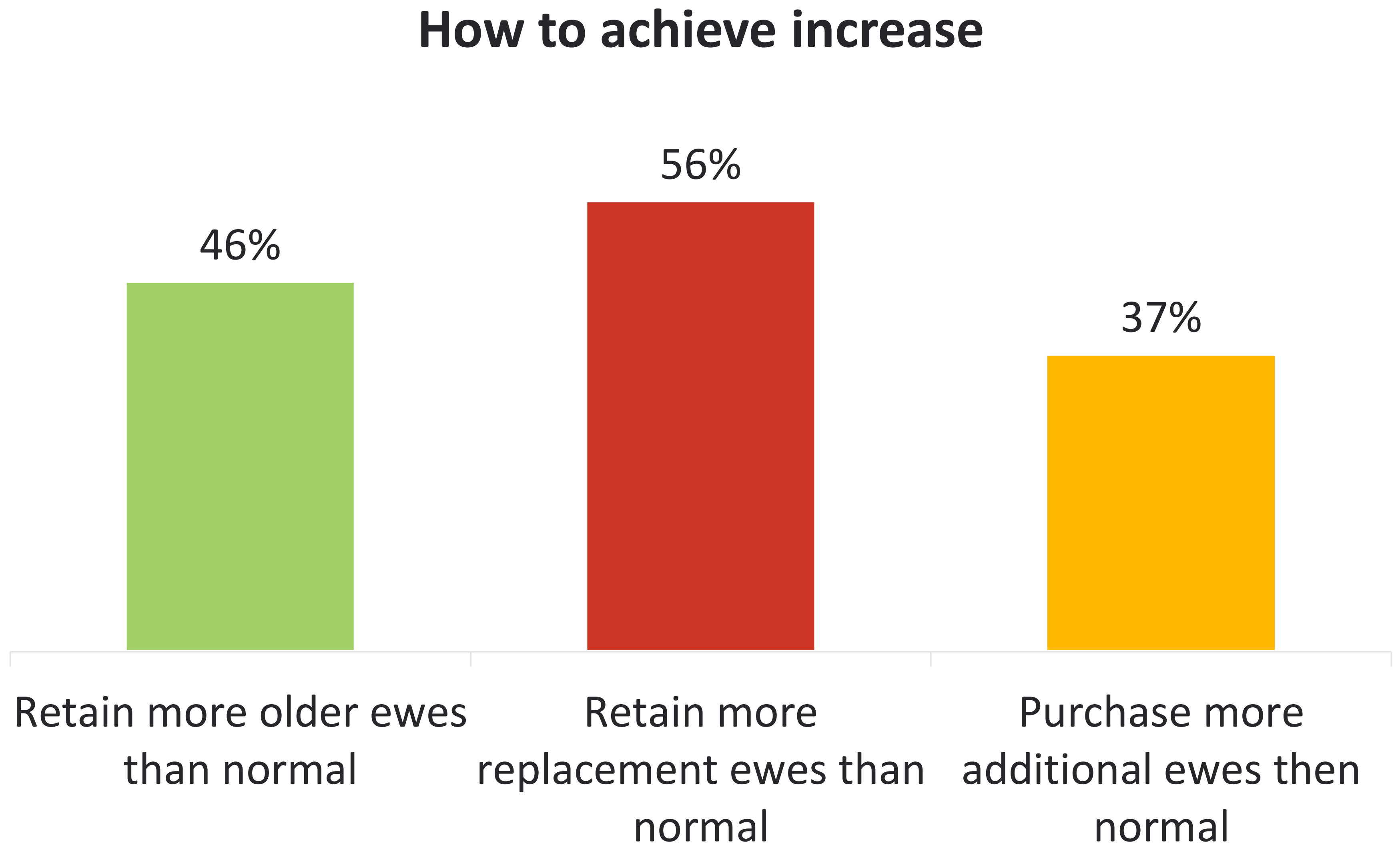
Northern NSW/QLD









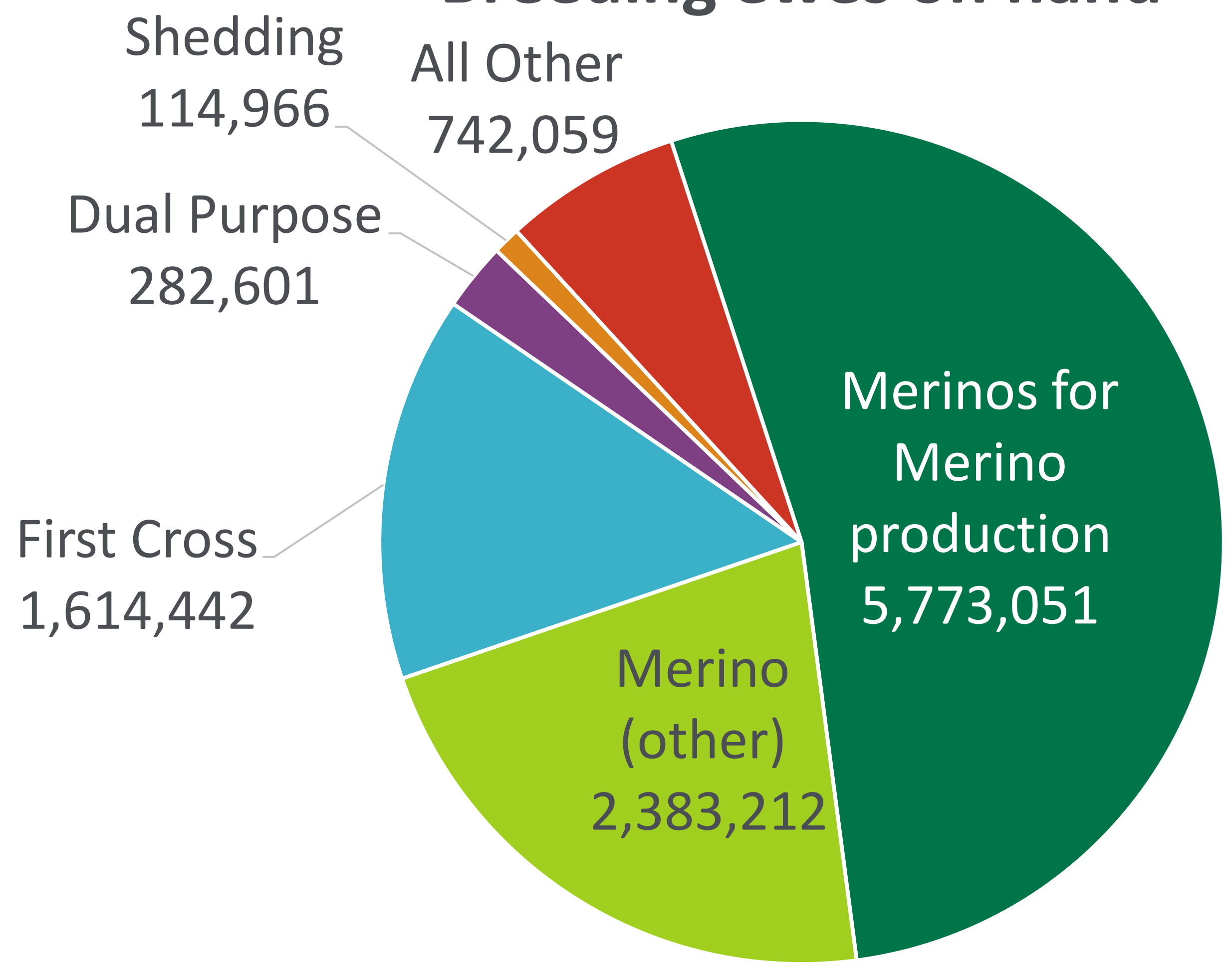


Totals

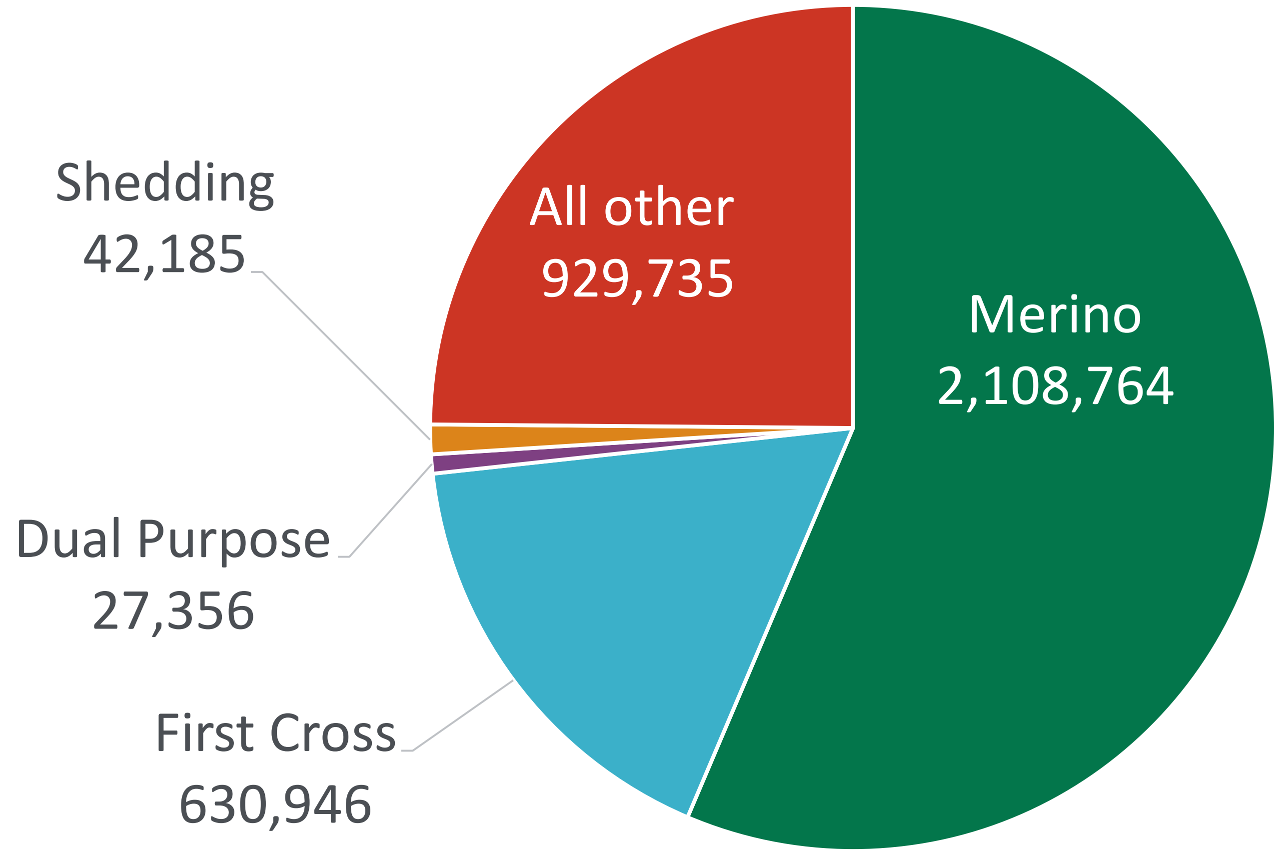
Breeding ewes on hand	6,282,862
Lambs on hand	2,046,475
Expected lamb sales in the next 4 months	984,488
Lambs marked in the past 4 months (1 Mar – 30 Jun)	422,304
Number of ewes joined to produce marked lambs	536,621

Central NSW

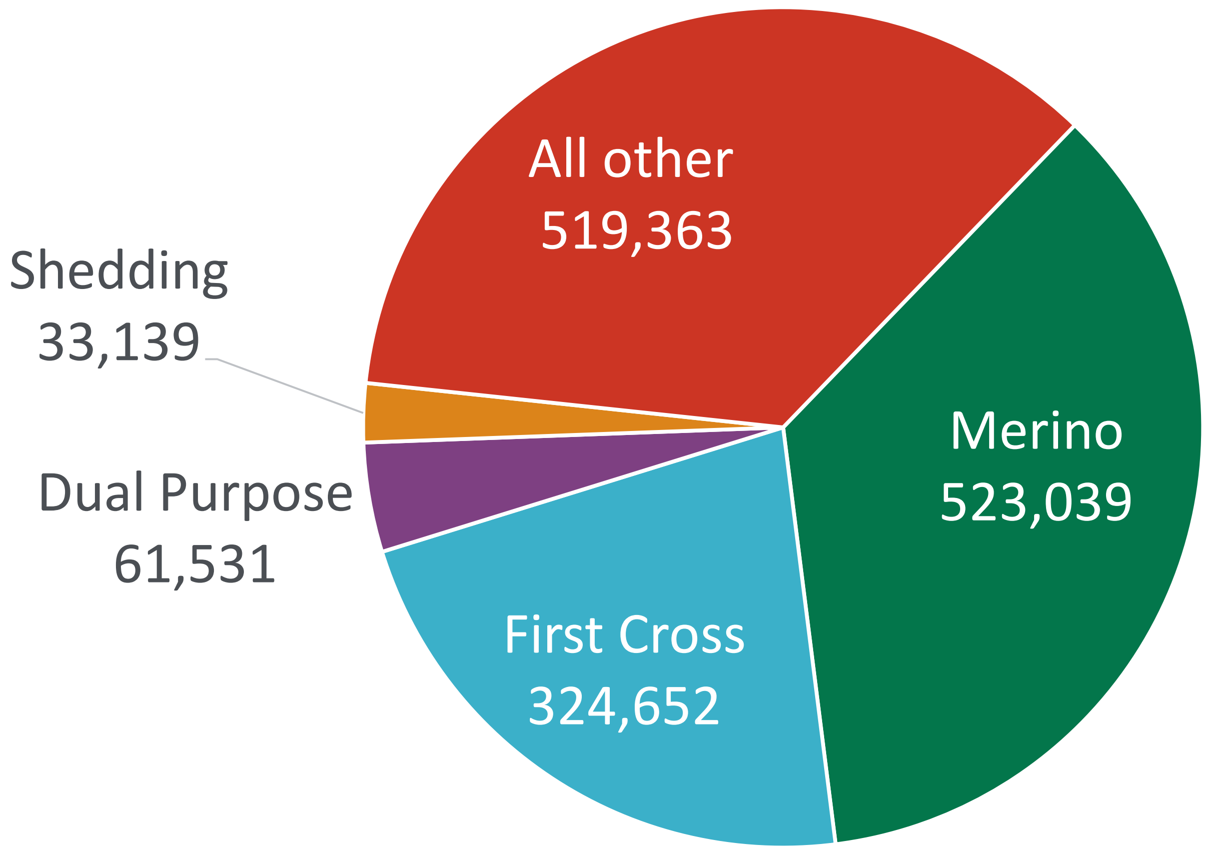
Breeding ewes on hand



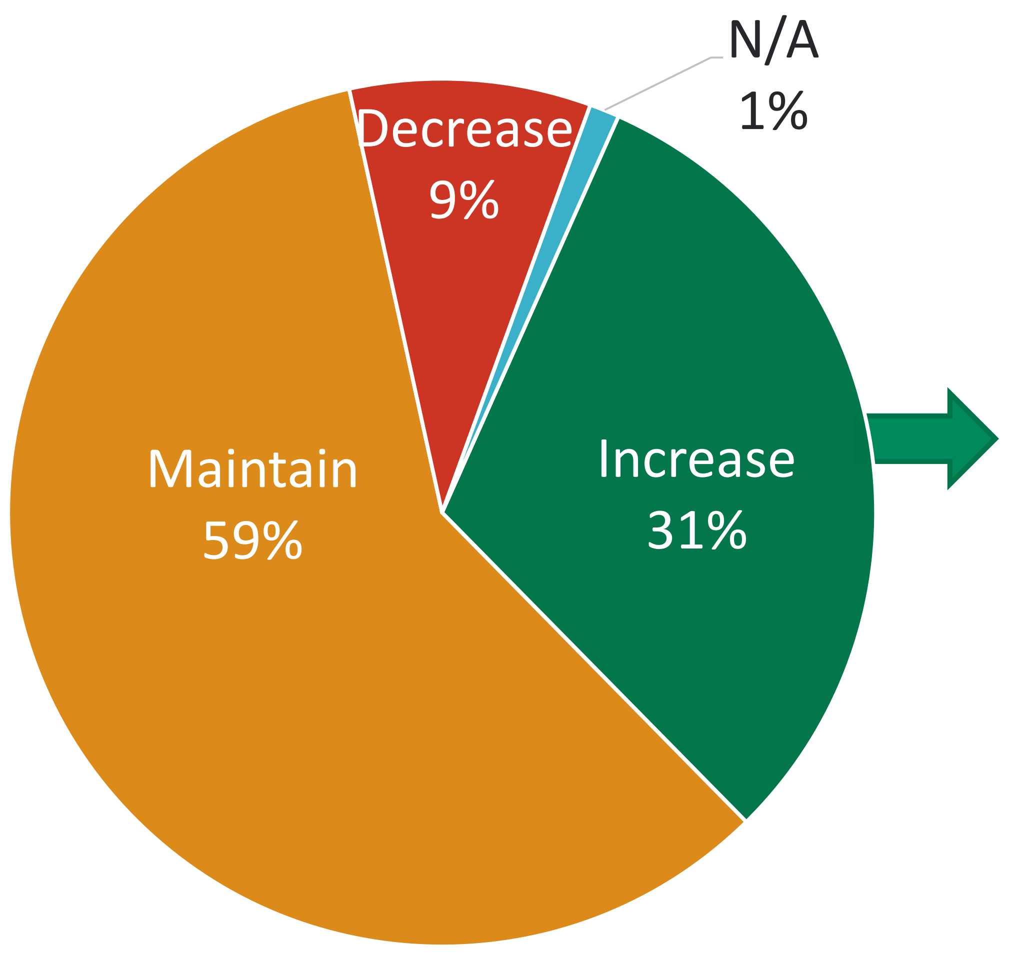
Lambs on hand



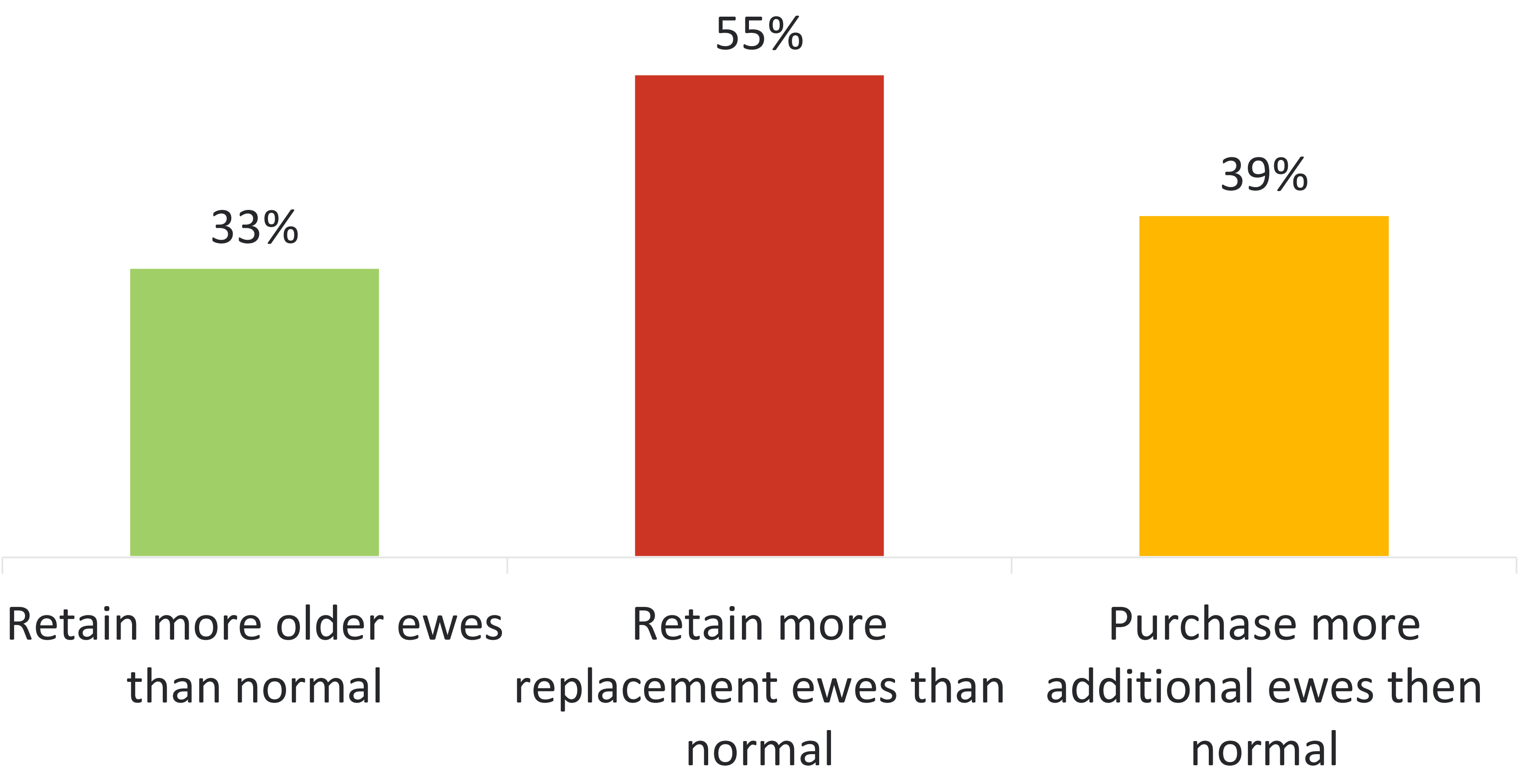
Lamb sales in next 4 months



Ewe Flock intentions



How to achieve increase

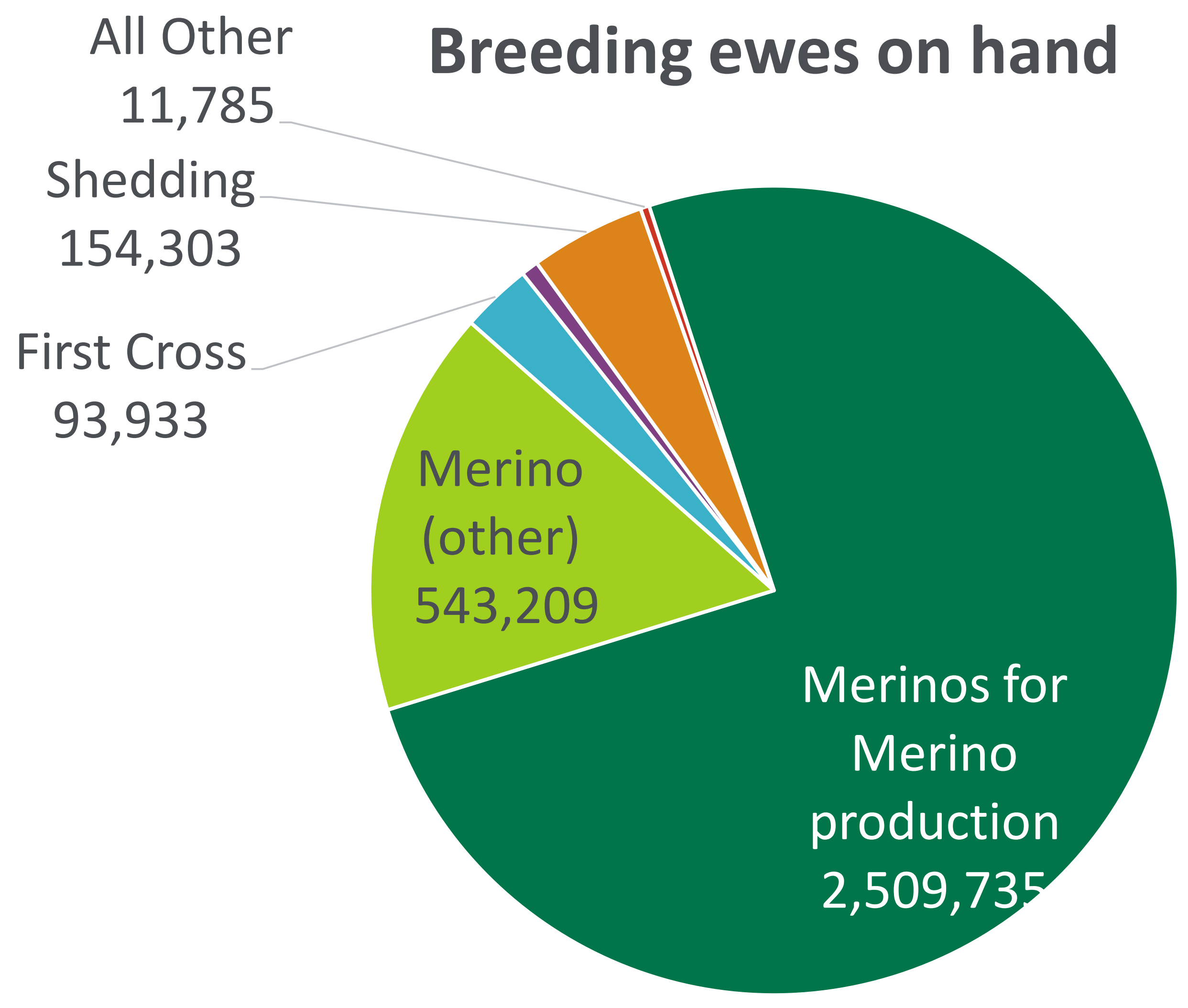


Totals

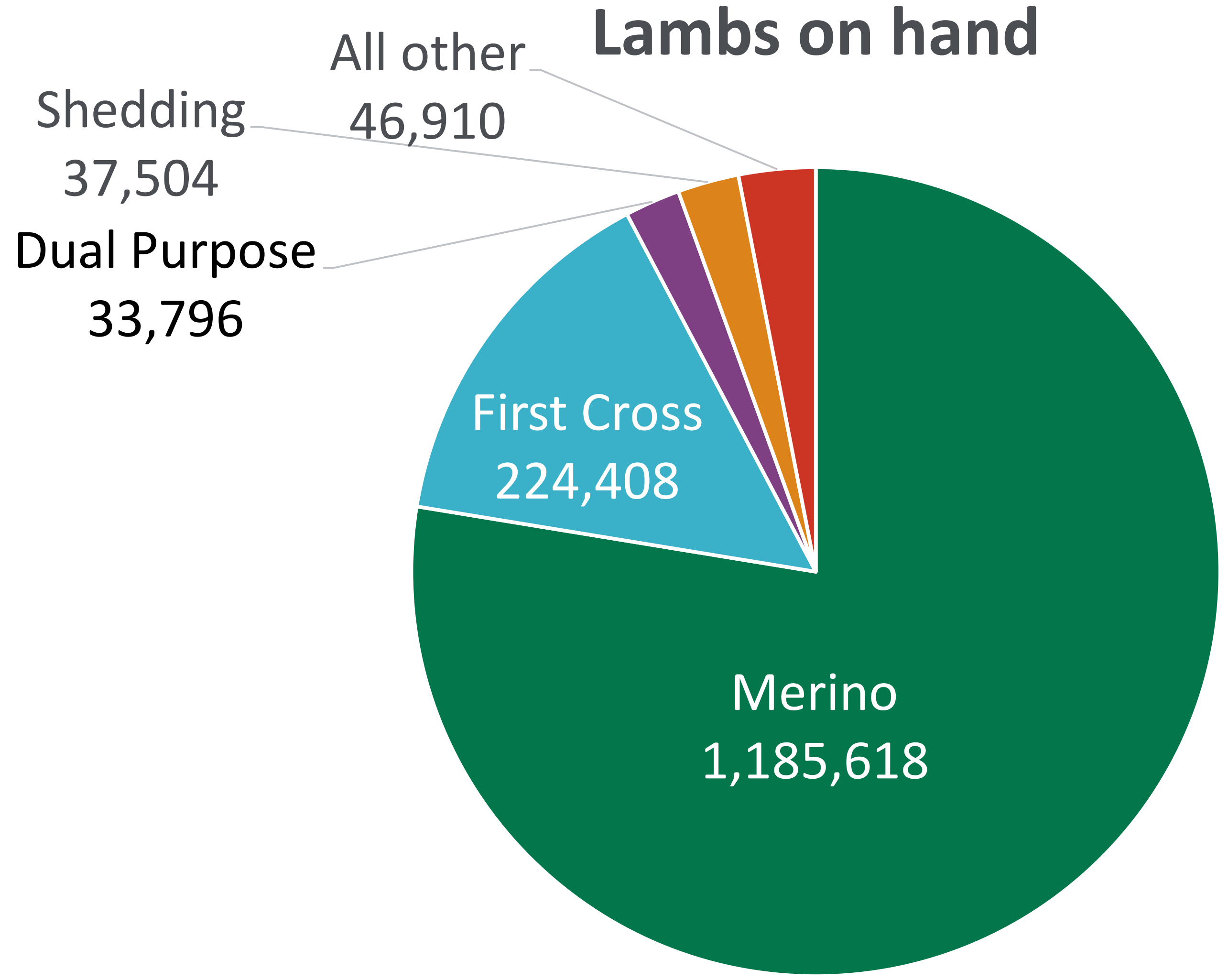
Breeding ewes on hand	10,910,331
Lambs on hand	3,738,986
Expected lamb sales in the next 4 months	1,461,724
Lambs marked in the past 4 months (1 Mar – 30 Jun)	1,305,237
Number of ewes joined to produce marked lambs	1,372,369

SA Peninsula

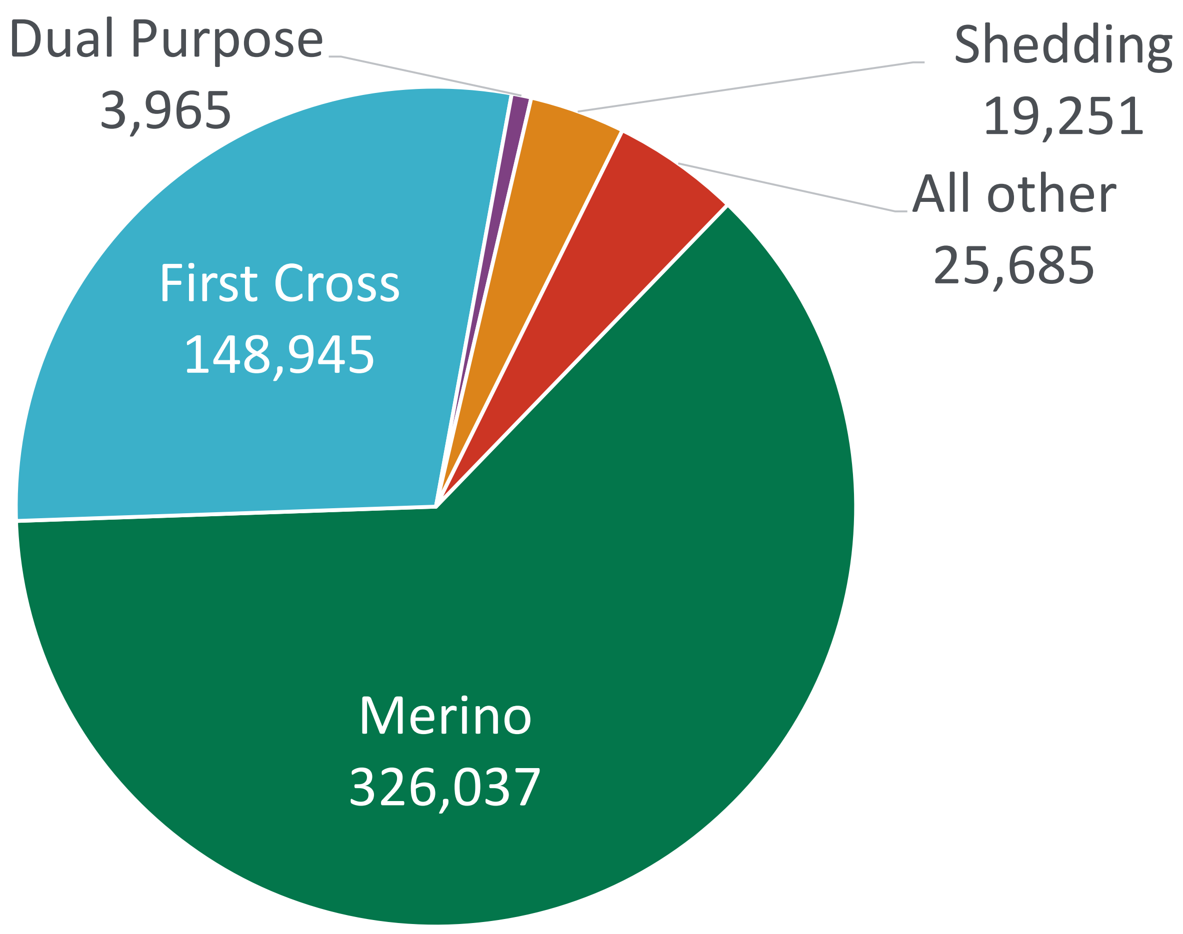
Breeding ewes on hand



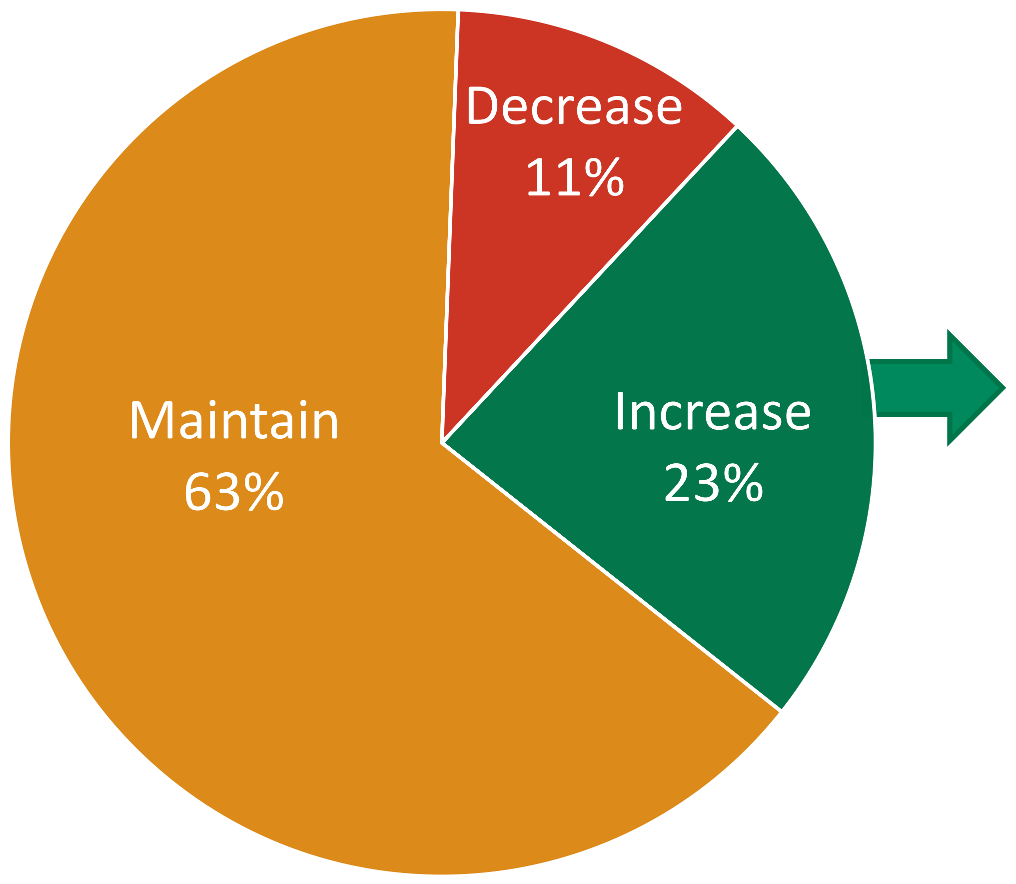
Lambs on hand



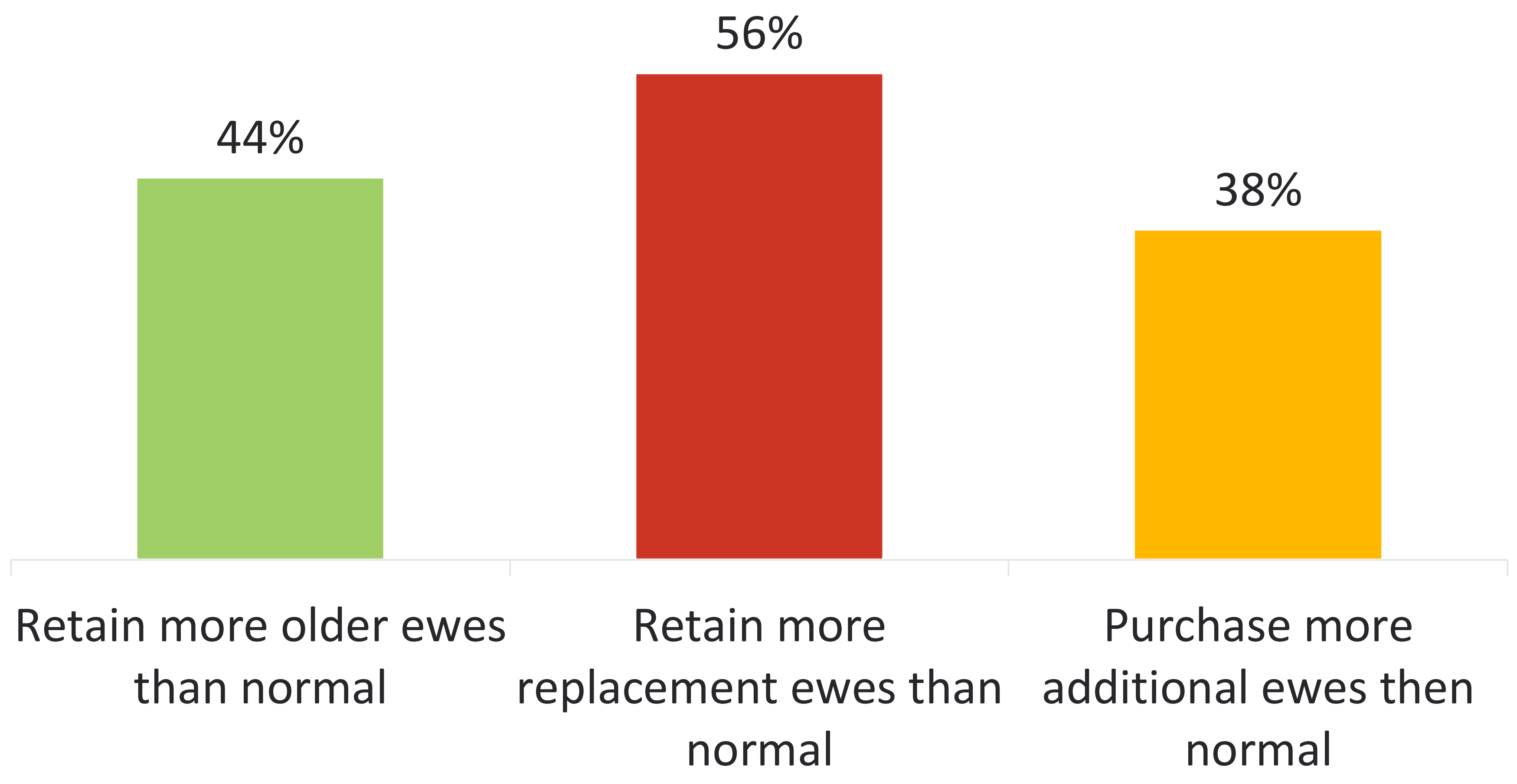
Lamb sales in next 4 months



Ewe Flock intentions



How to achieve increase

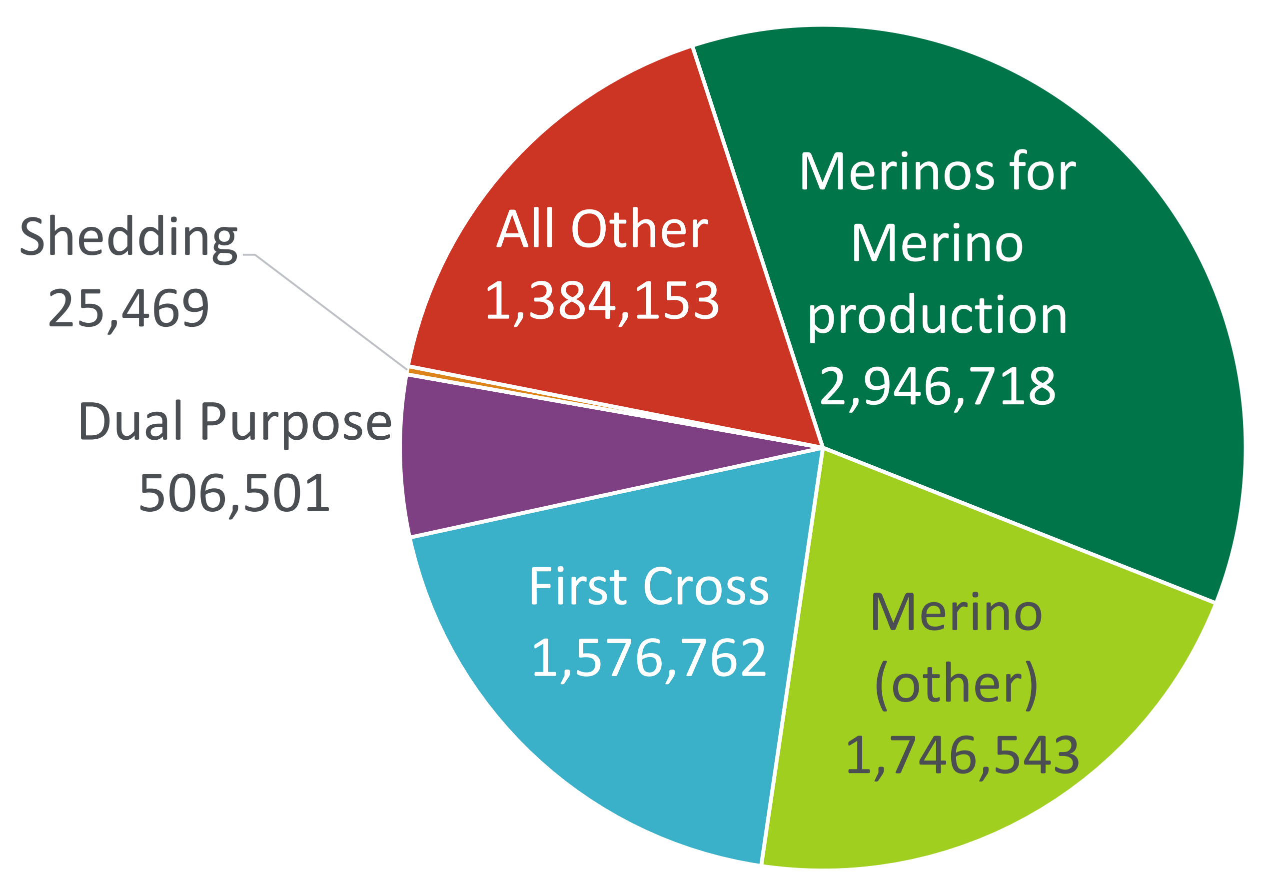


Totals

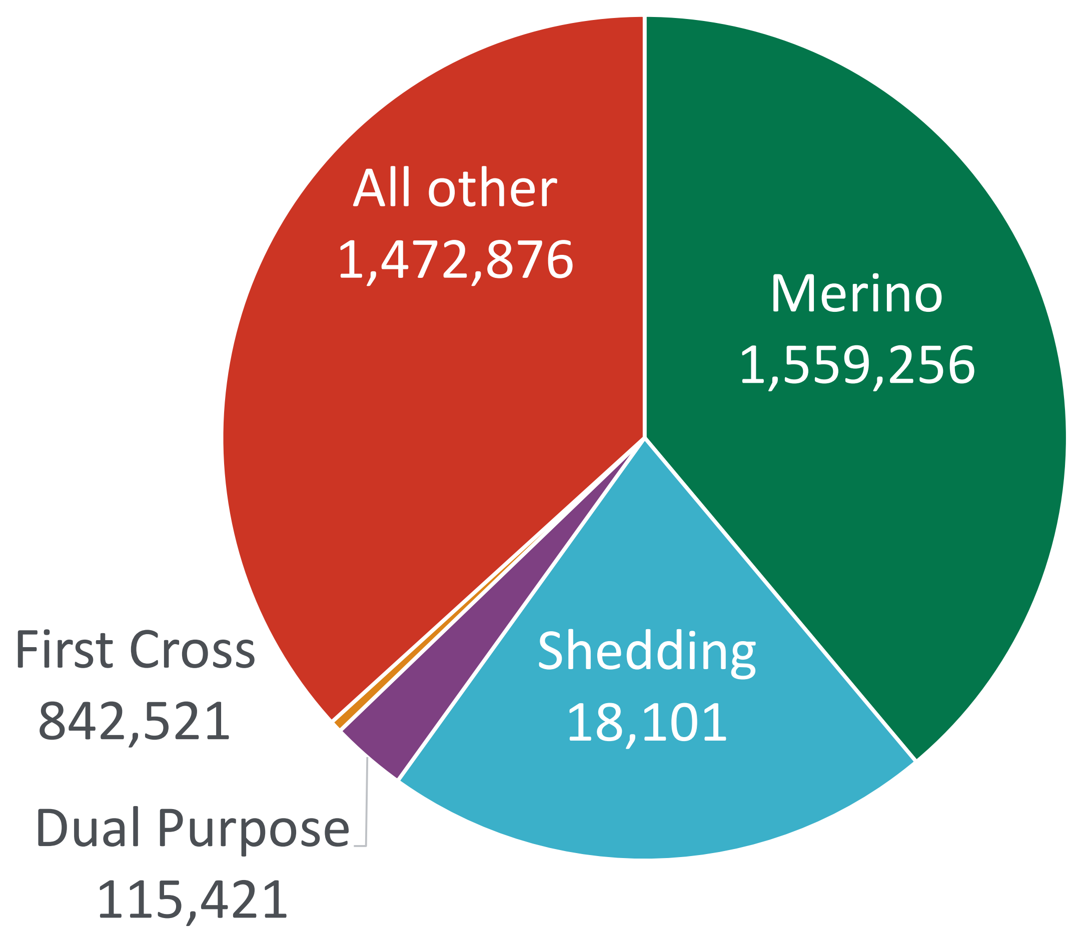
Breeding ewes on hand	3,336,062
Lambs on hand	1,528,236
Expected lamb sales in the next 4 months	523,883
Lambs marked in the past 4 months (1 Mar – 30 Jun)	646,546
Number of ewes joined to produce marked lambs	741,930

Wimmera Mallee Murray

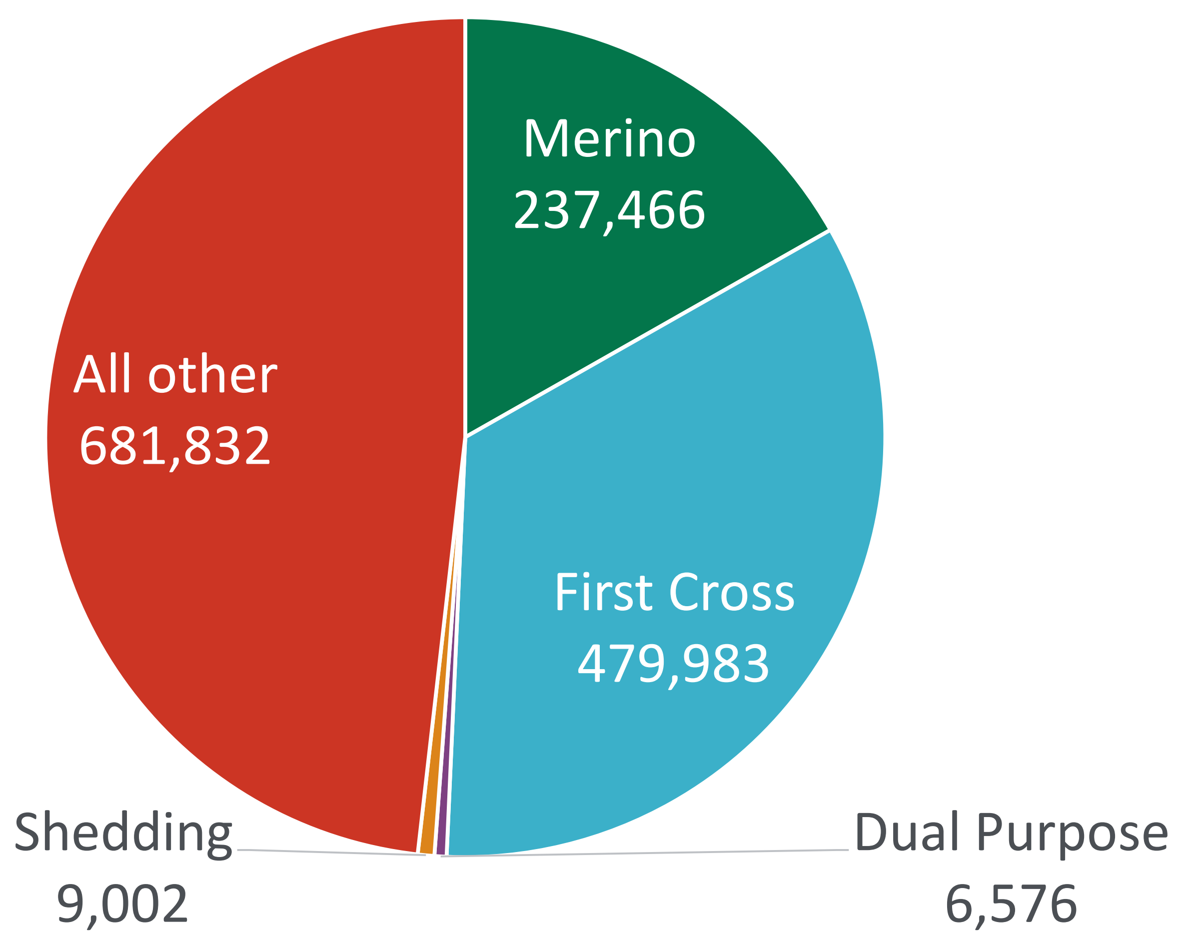
Breeding ewes on hand



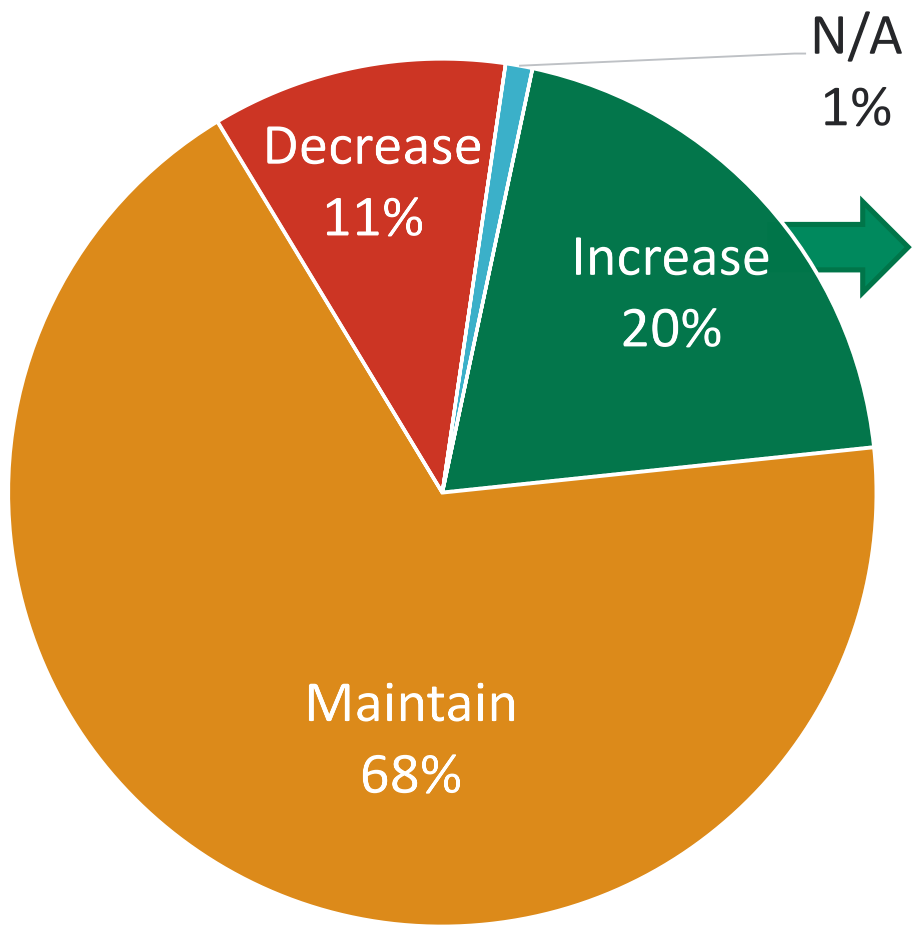
Lambs on hand



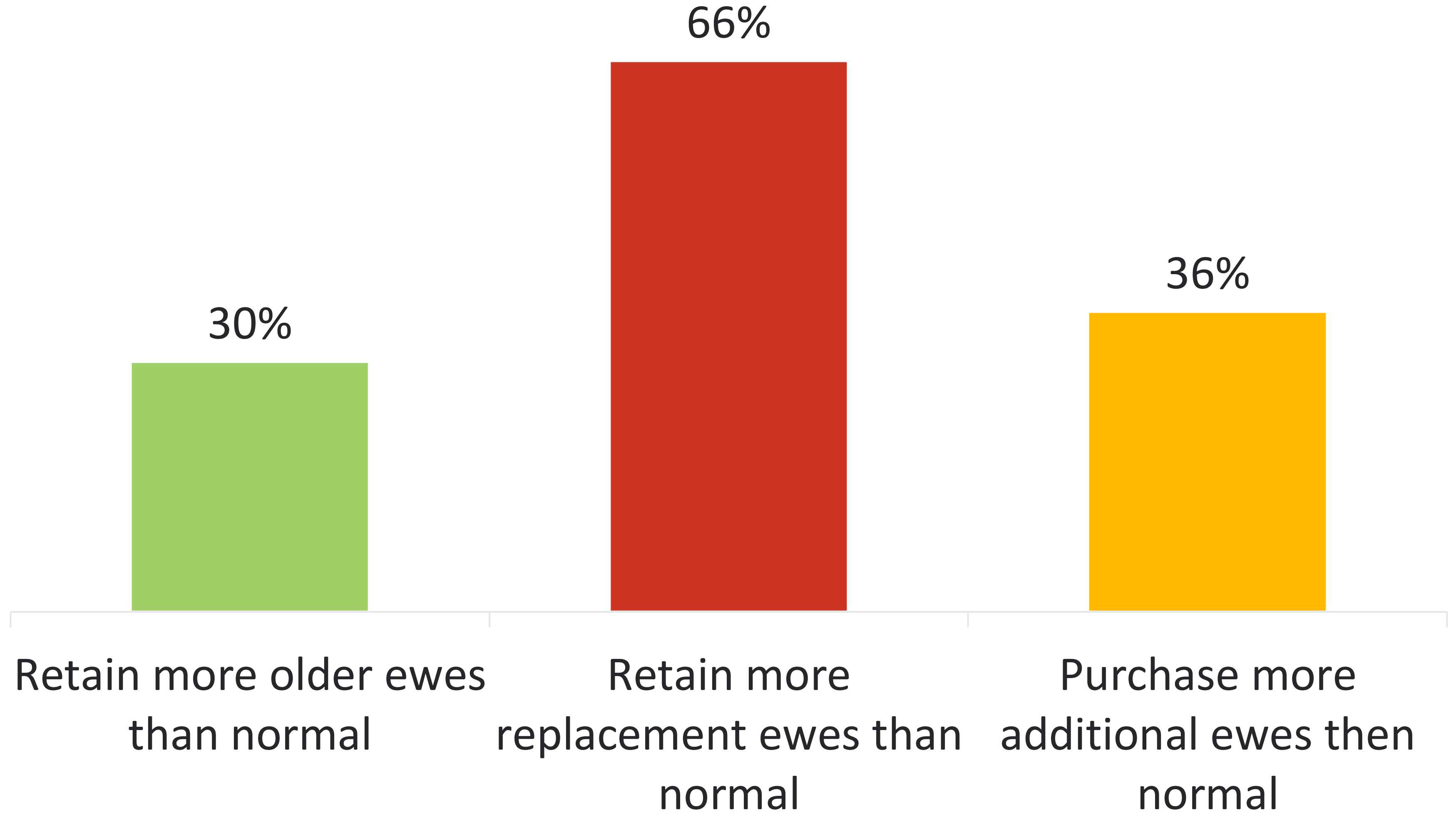
Lamb sales in next 4 months



Ewe Flock intentions



How to achieve increase

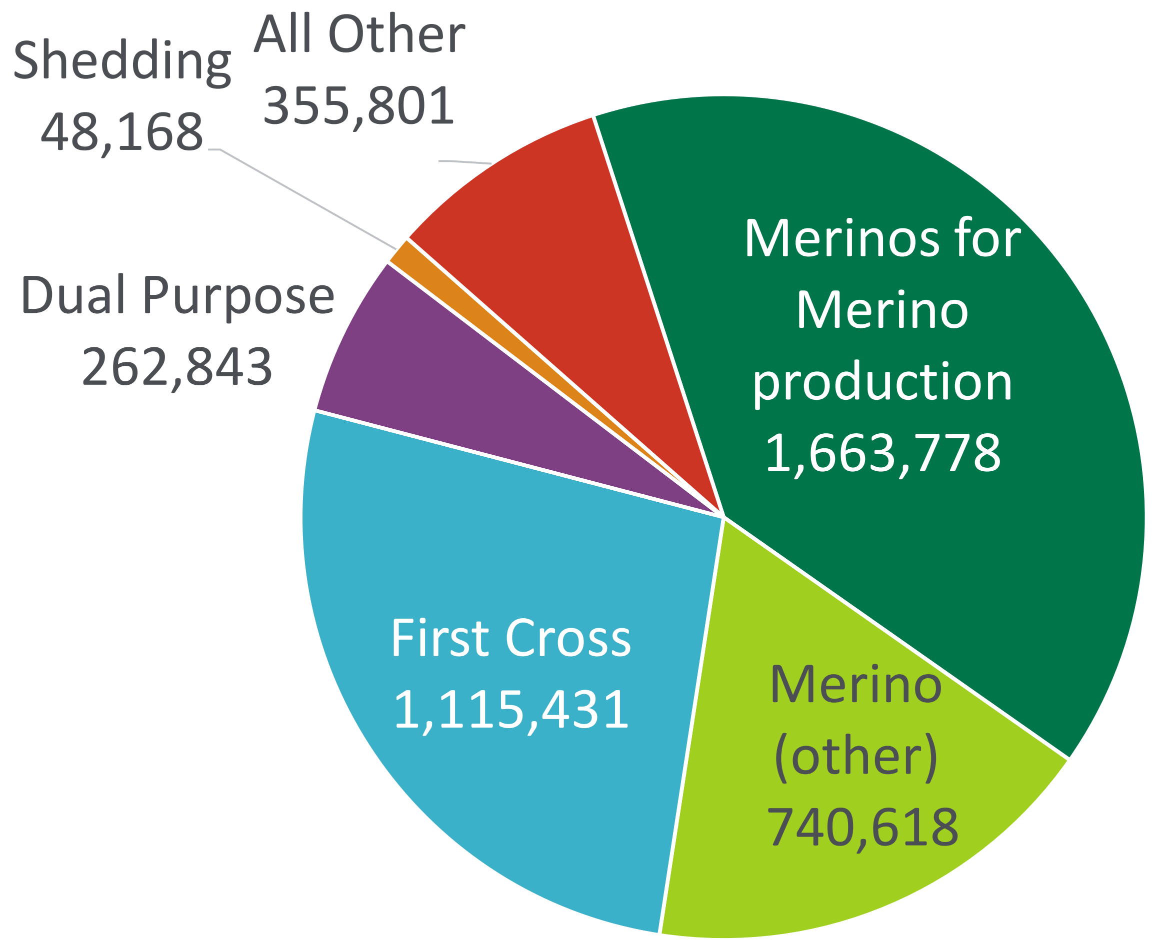


Totals

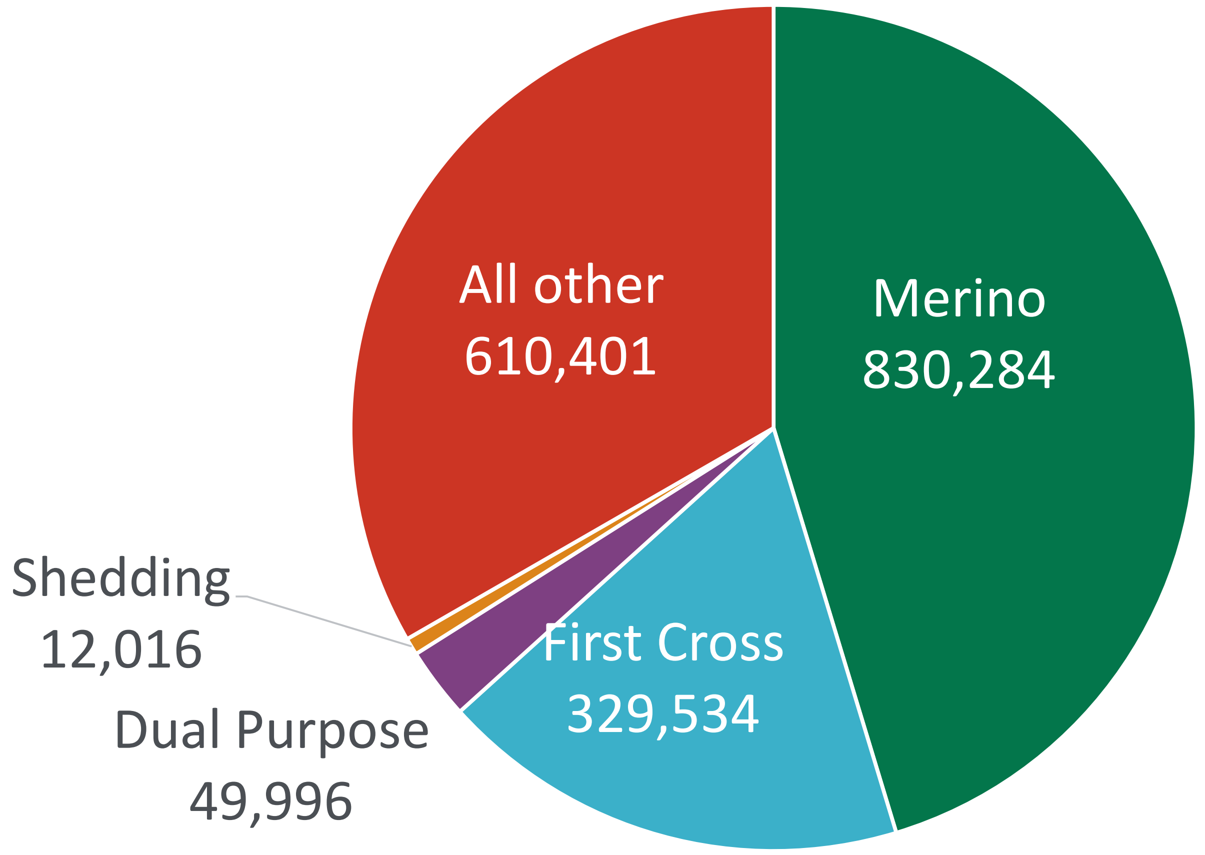
Breeding ewes on hand	8,186,146
Lambs on hand	4,008,175
Expected lamb sales in the next 4 months	1,414,859
Lambs marked in the past 4 months (1 Mar – 30 Jun)	1,513,012
Number of ewes joined to produce marked lambs	1,584,850

East Victoria

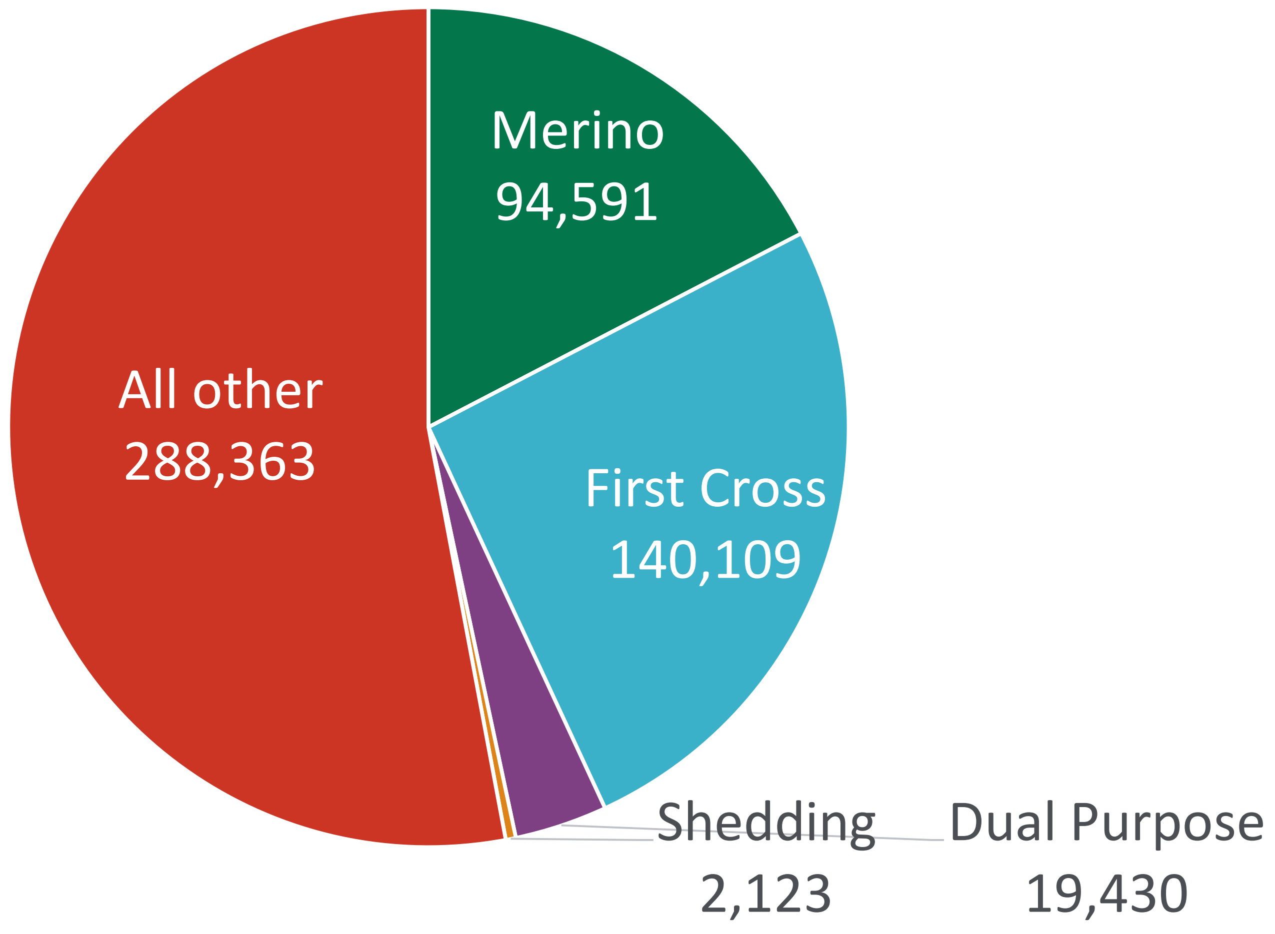
Breeding ewes on hand



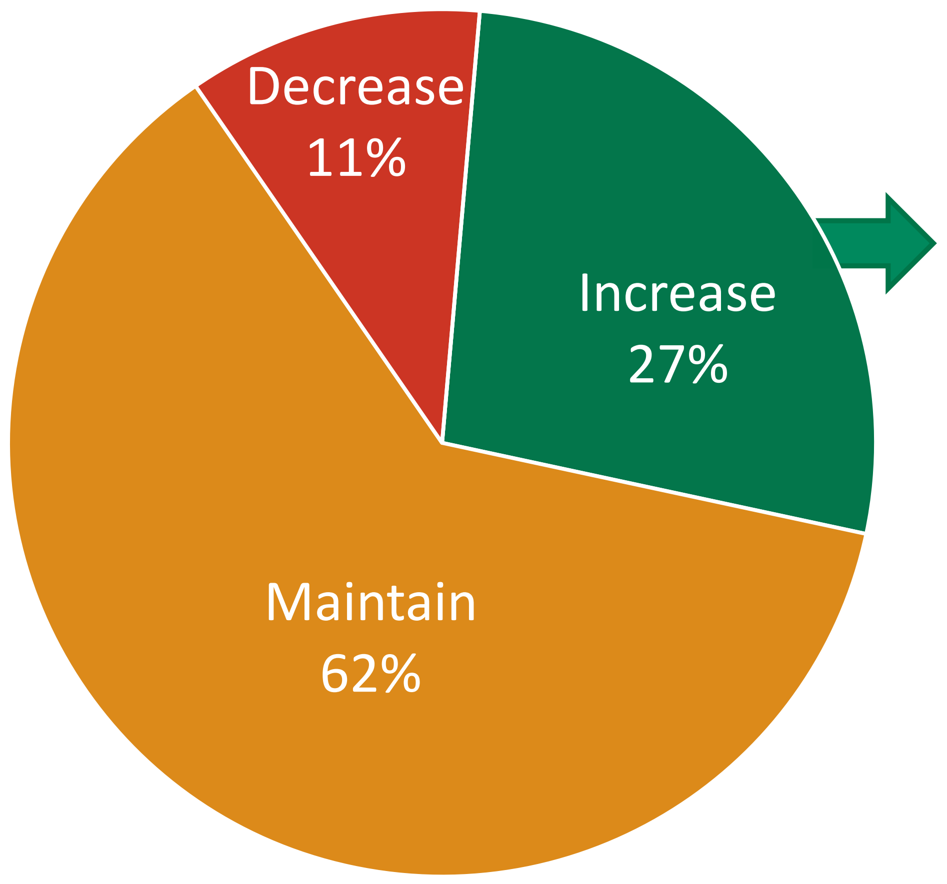
Lambs on hand



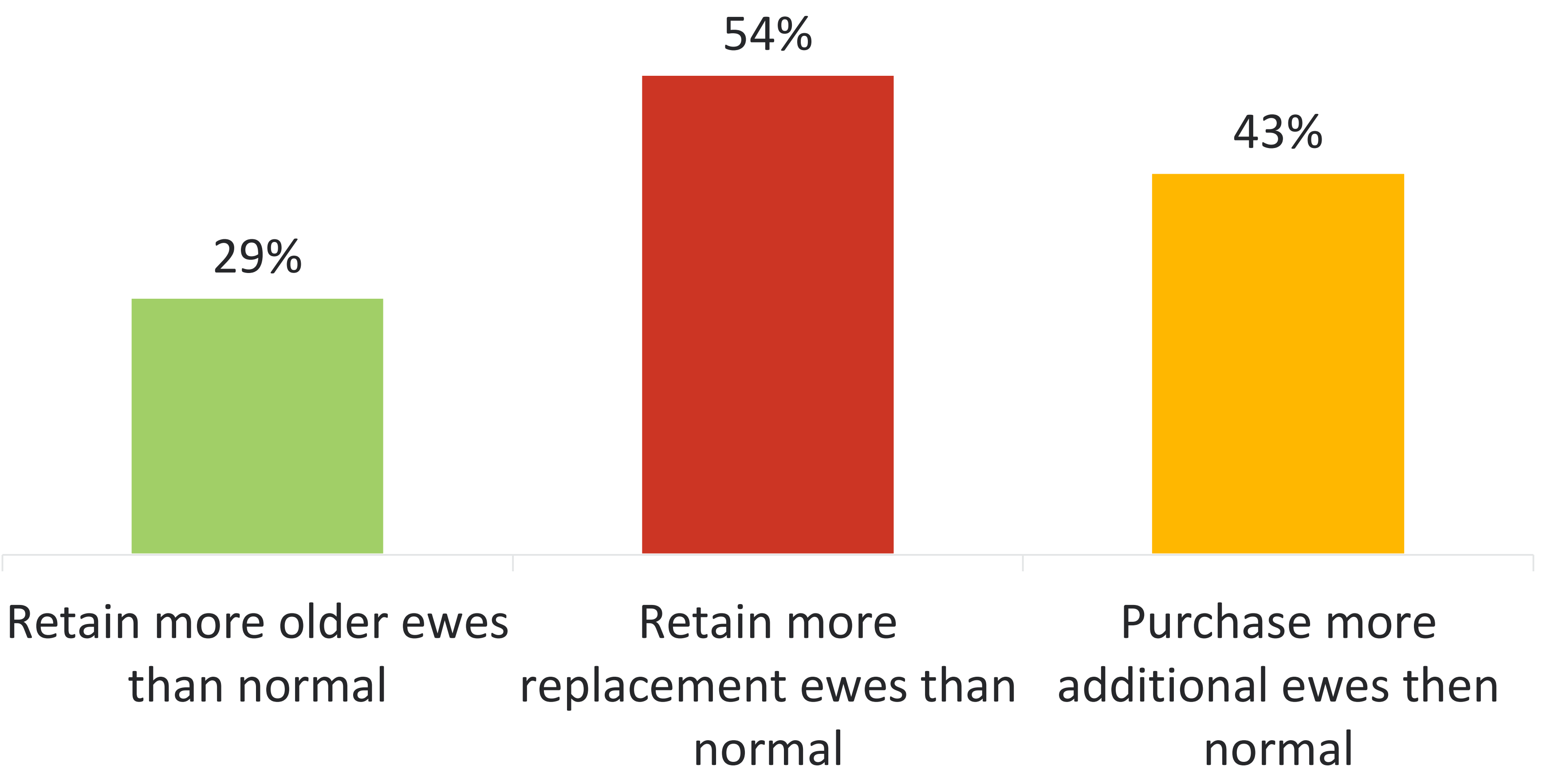
Lamb sales in next 4 months



Ewe Flock intentions



How to achieve increase

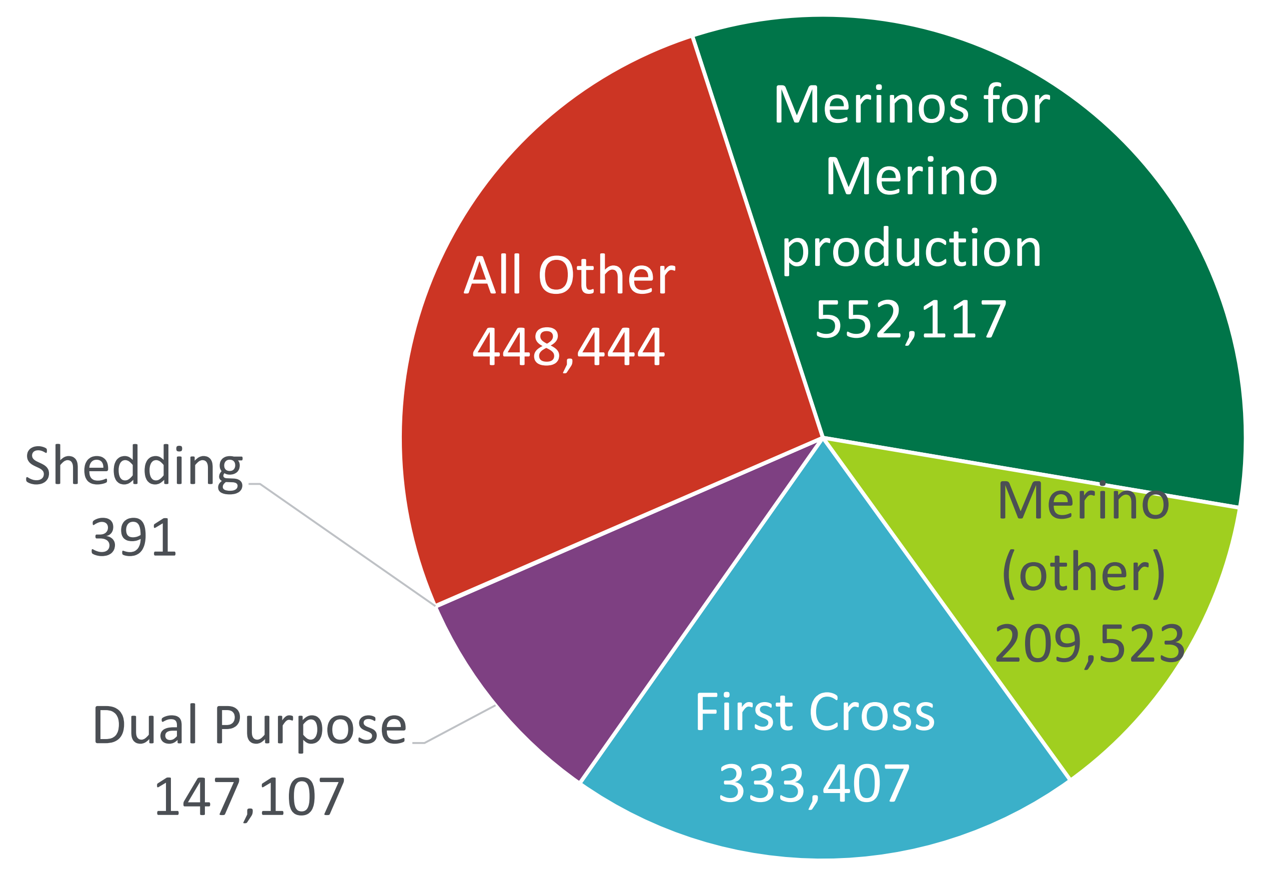


Totals

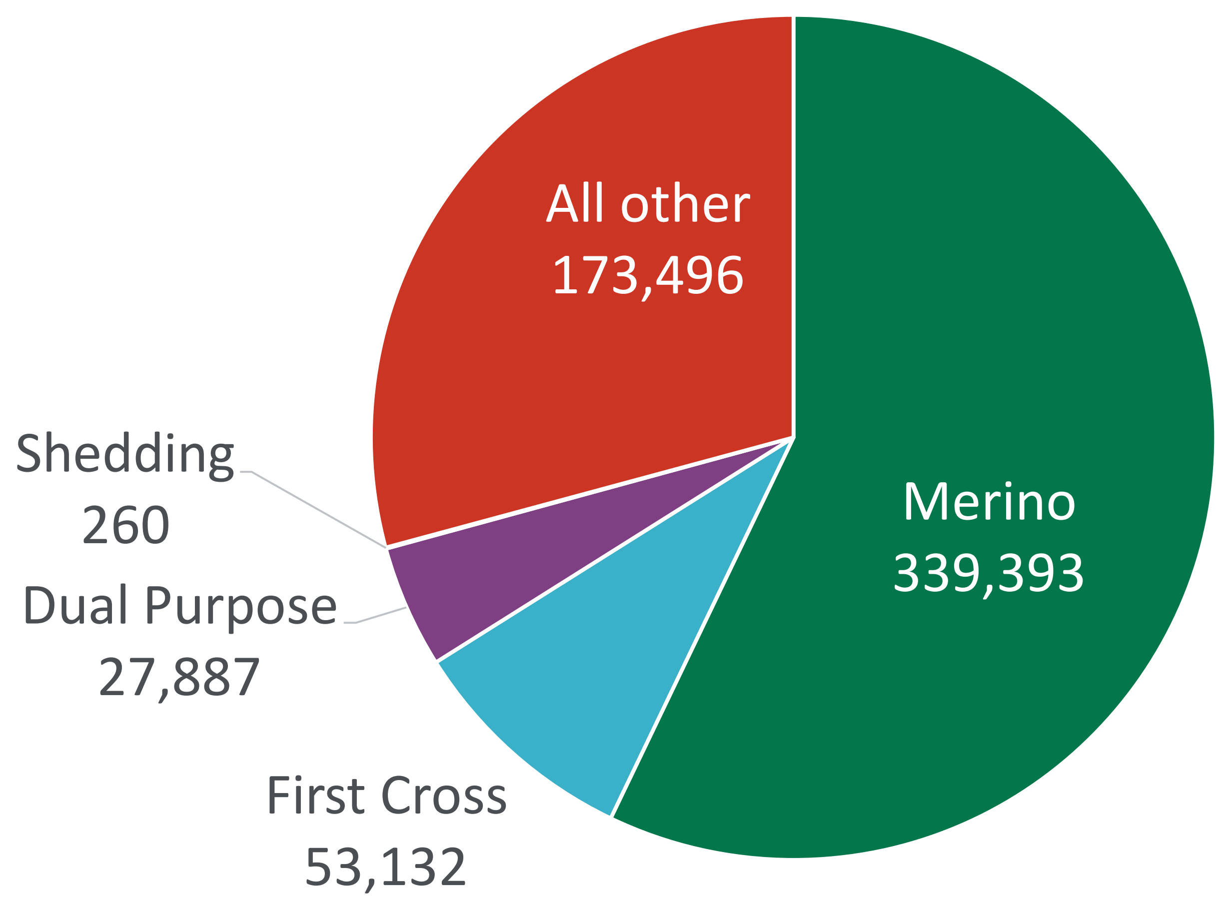
Breeding ewes on hand	4,186,639
Lambs on hand	1,832,231
Expected lamb sales in the next 4 months	544,616
Lambs marked in the past 4 months (1 Mar – 30 Jun)	756,498
Number of ewes joined to produce marked lambs	784,797

Tasmania

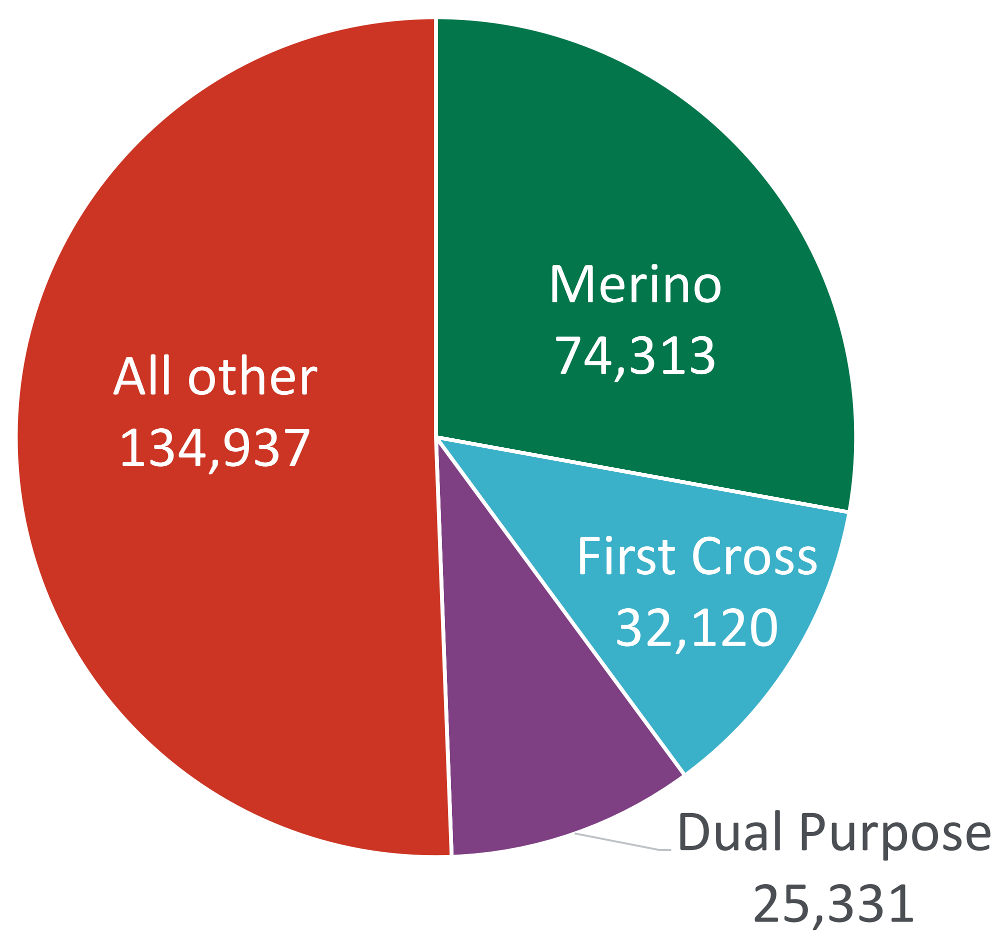
Breeding ewes on hand



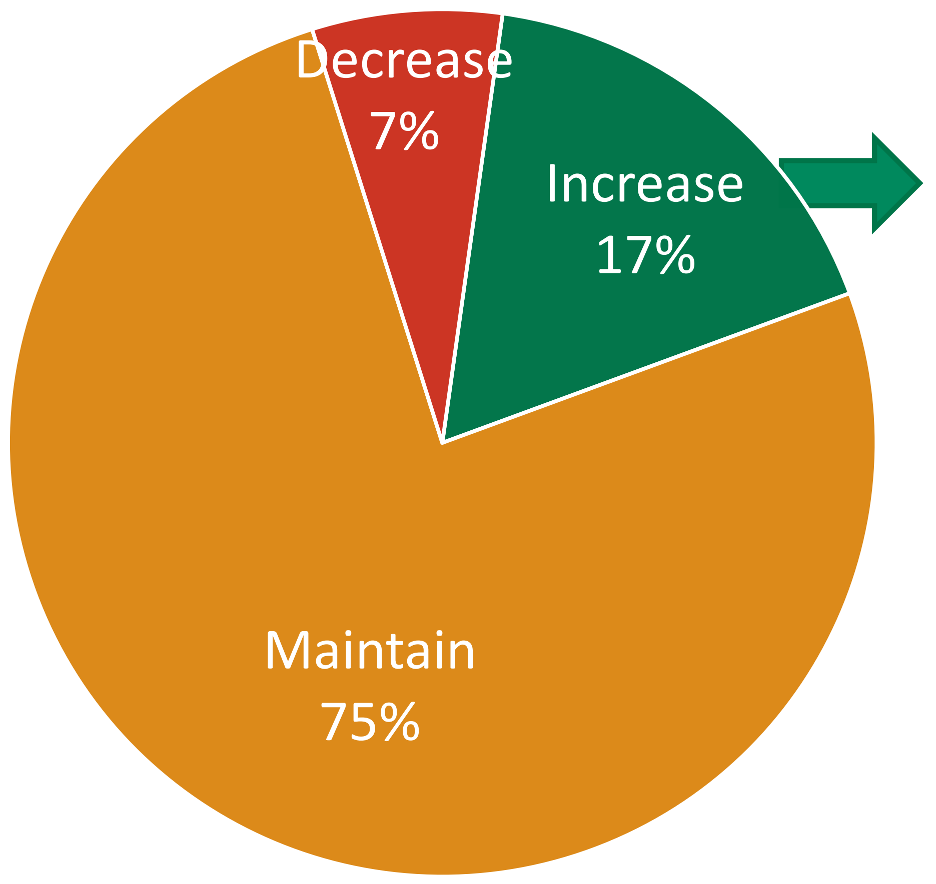
Lambs on hand



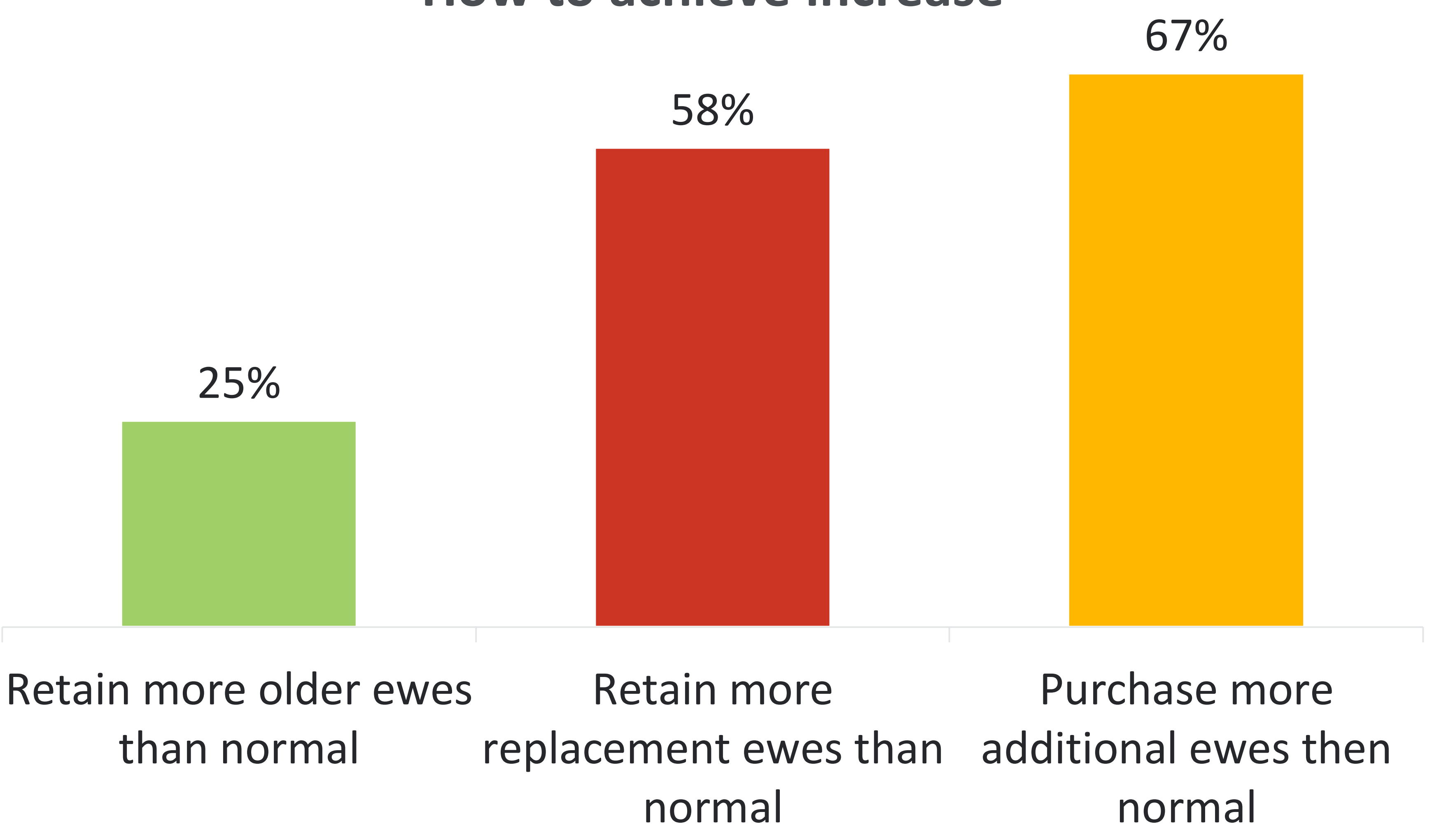
Lamb sales in next 4 months



Ewe Flock intentions



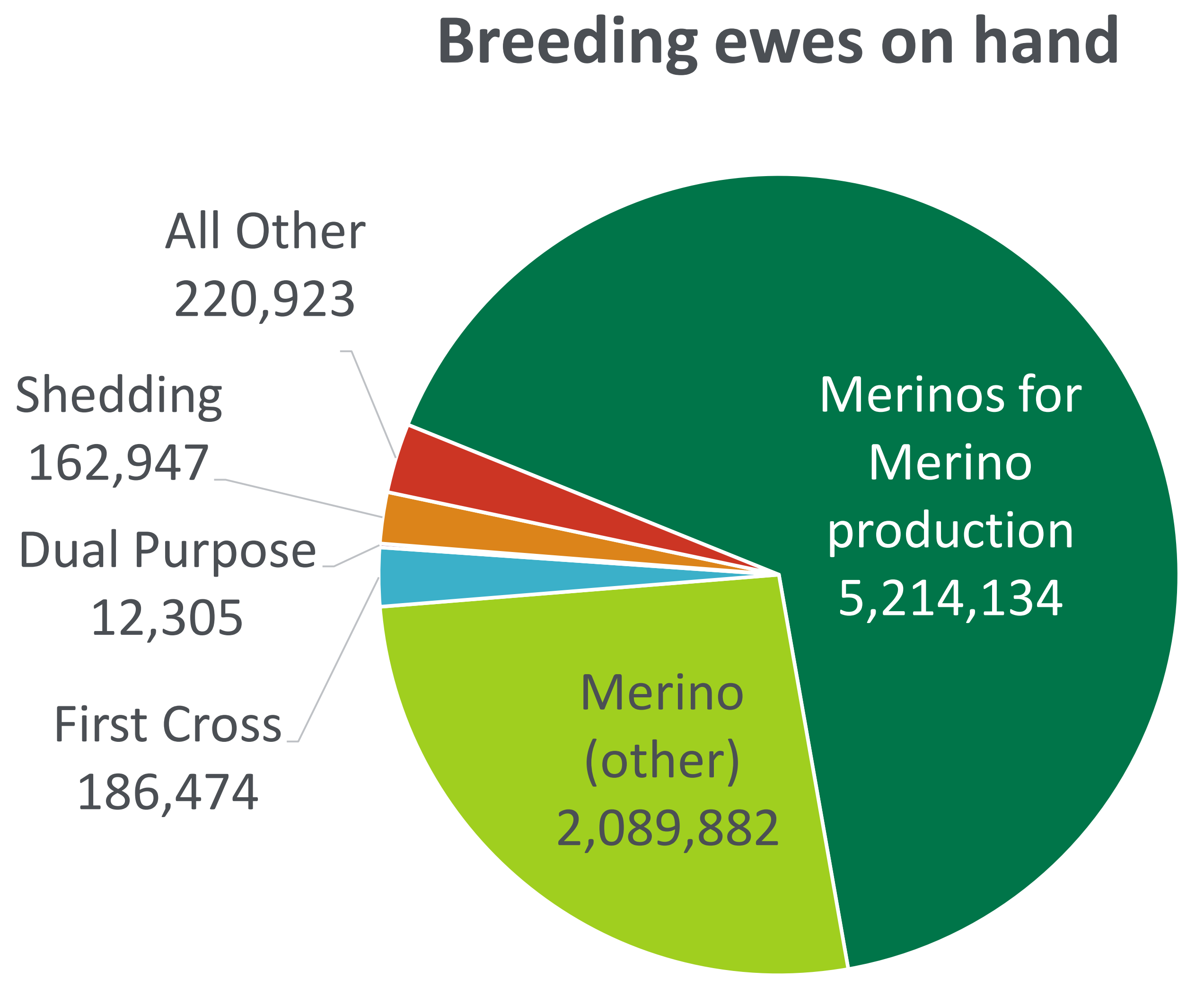
How to achieve increase

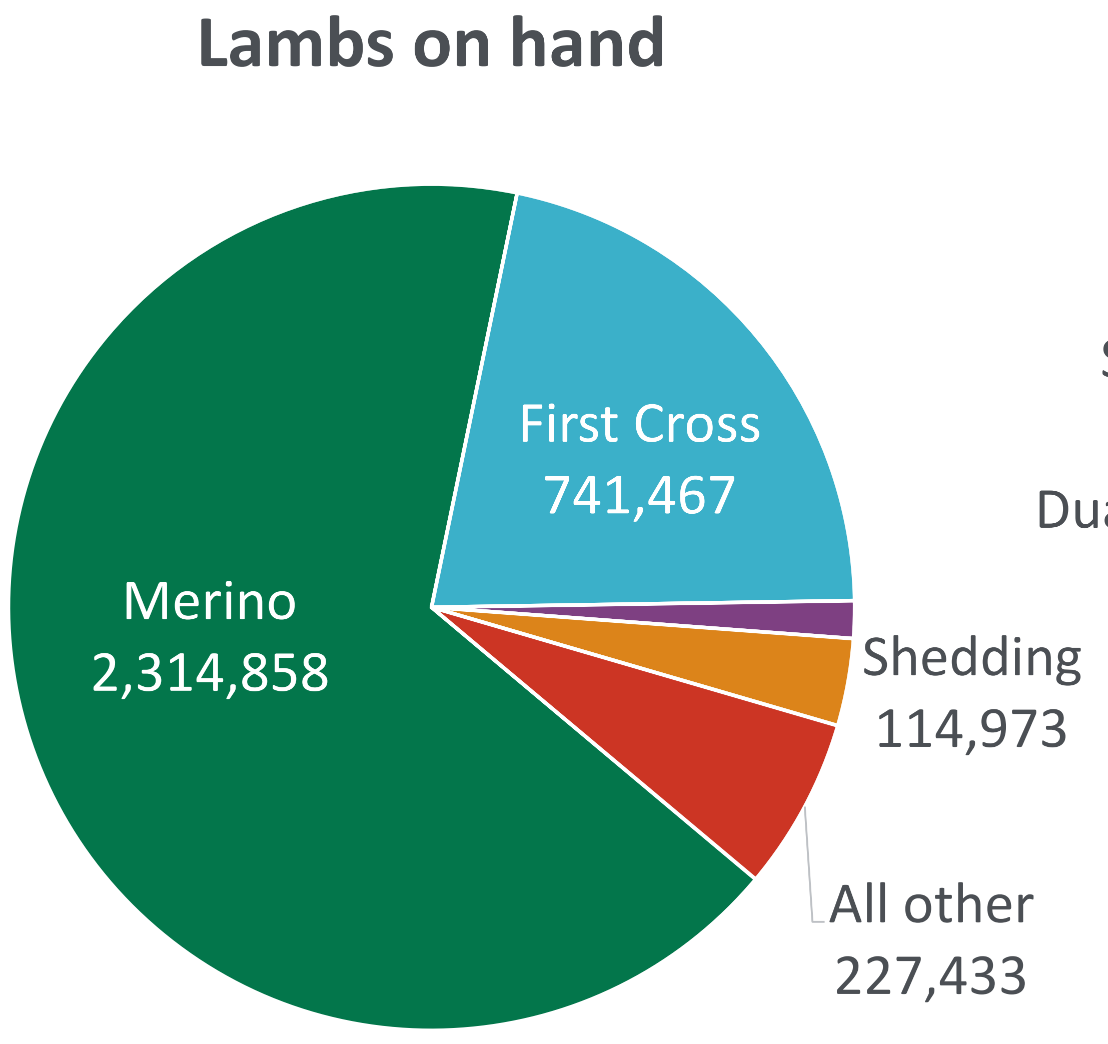


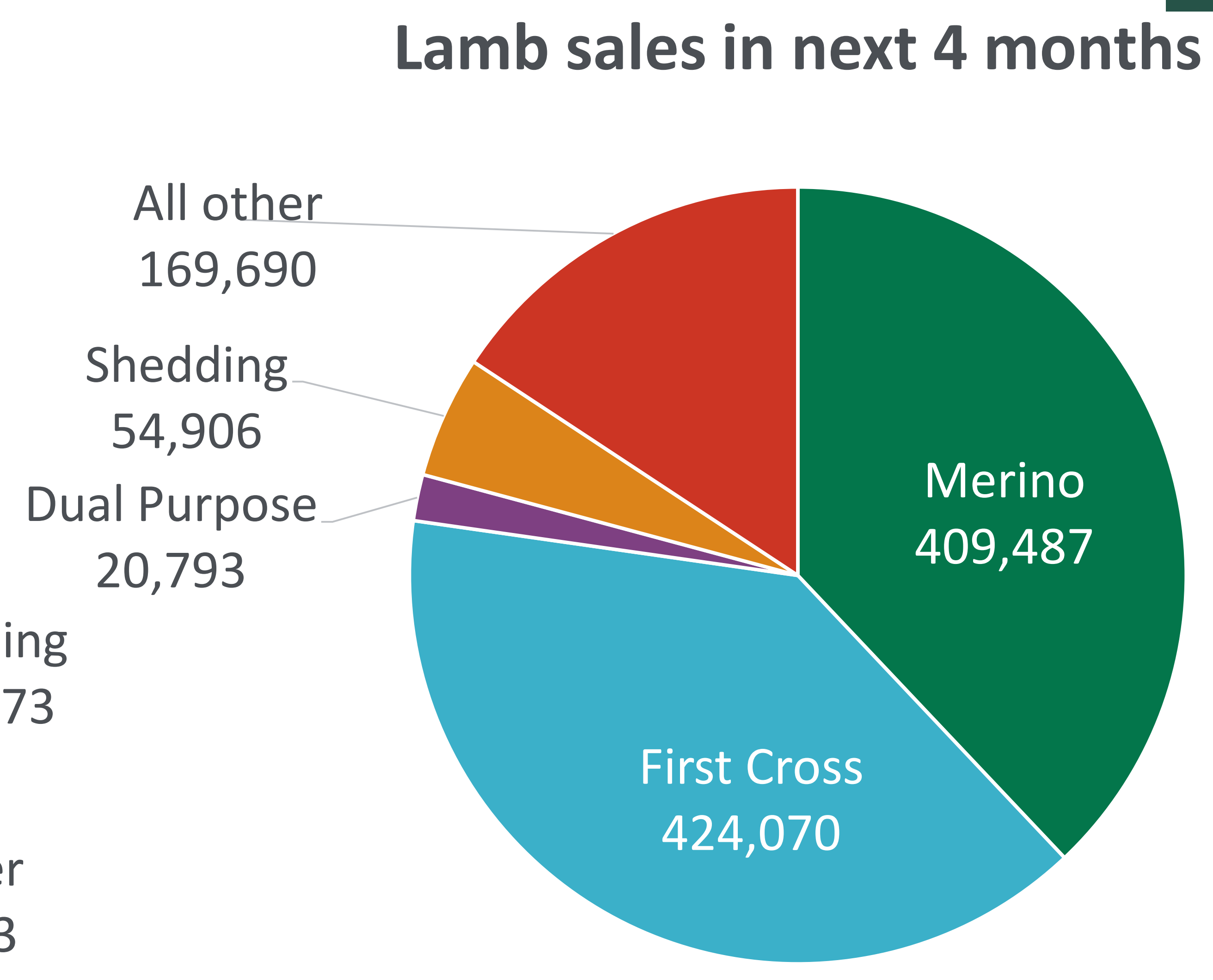
Totals

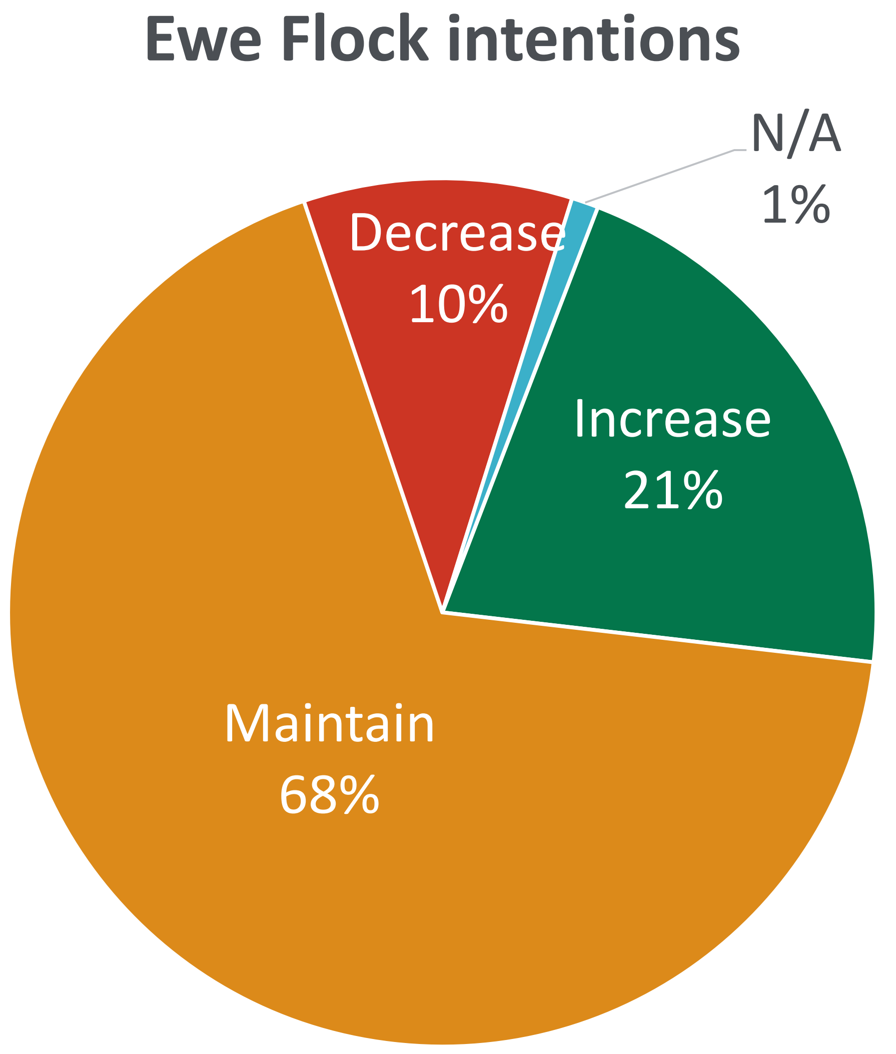
Breeding ewes on hand	1,690,989
Lambs on hand	594,168
Expected lamb sales in the next 4 months	266,701
Lambs marked in the past 4 months (1 Mar – 30 Jun)	5,031
Number of ewes joined to produce marked lambs	4,865

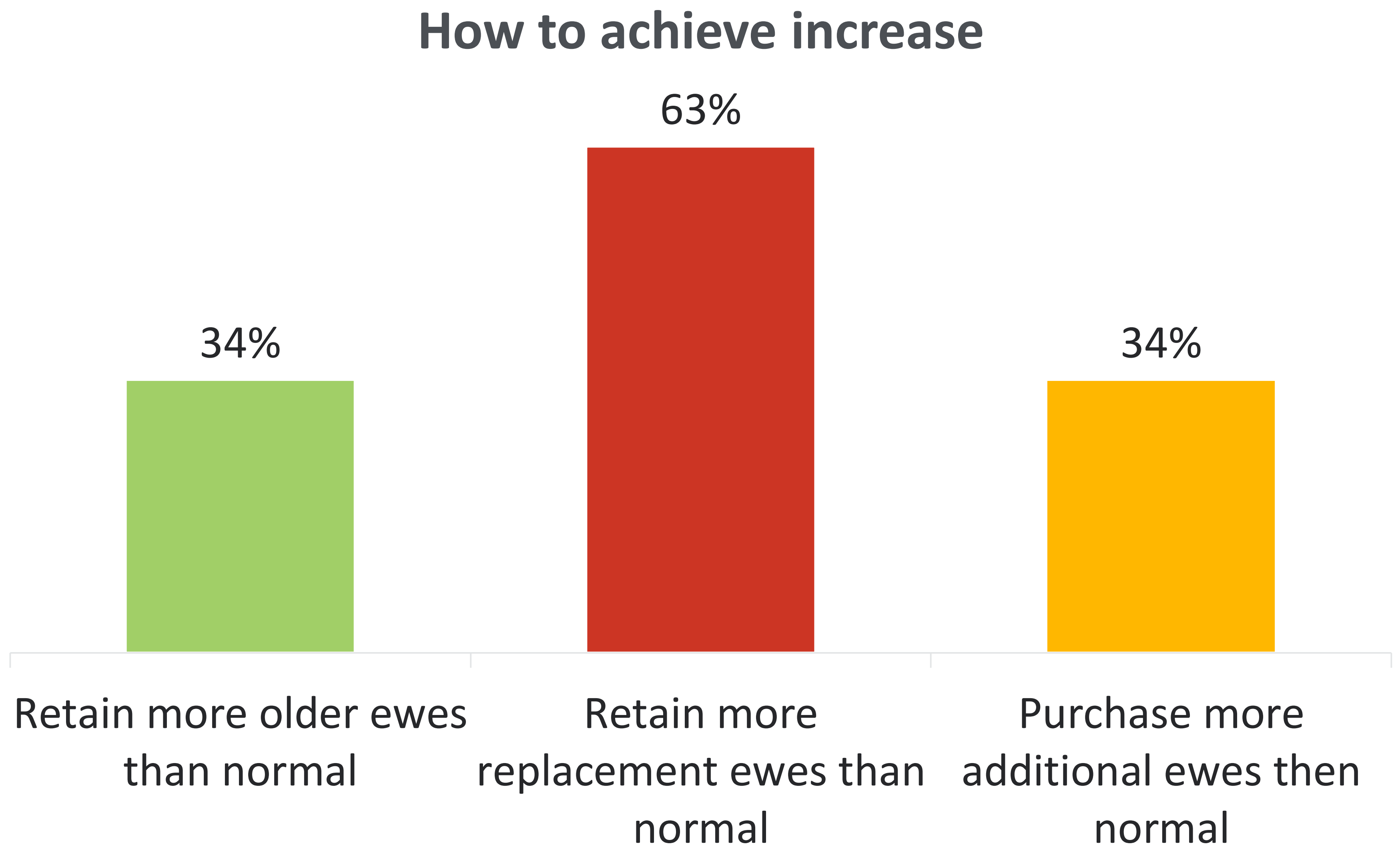
Western Australia











Totals

Breeding ewes on hand	7,886,665
Lambs on hand	3,448,076
Expected lamb sales in the next 4 months	1,078,946
Lambs marked in the past 4 months (1 Mar – 30 Jun)	1,265,560
Number of ewes joined to produce marked lambs	1,426,330

Disclaimer

Information contained in this publication is obtained from a variety of third party sources. To the best of MLA's knowledge the information accurately depicts existing and likely future market demand. However, MLA has not verified all third party information, and forecasts and projections are imprecise and subject to a high degree of uncertainty.

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