

MLA and AWI Wool and Sheepmeat Survey Report - Sheepmeat

October, 2019

Prepared by Kynetec

Contents

Executive Summary	3
Background and Purpose	4
Methodology	5
Survey Respondents	8
MLA Sheep Producing Regions	12
National Results	13
Results by State	17
Results by MLA Reporting Region	21
New question October 2019: Grain fed lambs	31
Regional Snapshots	34

Executive Summary – Lamb Production

Number of breeding ewes on hand

40,513,746 total breeding ewes on hand
30,767,300 Merino breeding ewe flock, 76% of total breeding flock
9,746,446 total non-Merino breeding ewes on hand, 24% of total breeding flock
Within the Merino flock, 98% for Merino lamb production and 2% for other lamb production

Ewe flock intentions for next 12 months

26% increase
56% maintain
16% decrease

Intended method for achieving ewe flock increase

36% Retain more older ewes than normal
55% Retain more replacement ewes than normal
39% Purchase more additional ewes than normal

Number of lambs on hand

26,892,944 total lambs on hand
13,683,414 total Pure bred Merino lambs, 51% of total lamb flock
13,209,530 total non-Merino lambs, 49% of total lamb flock

Expected lamb sales in the next four months (1 Nov – 29 Feb)

11,623,254 total lamb sales in the next four months
3,433,680 total Pure meat sales (30% of total lamb sales)
3,411,820 total First cross sales (29% of total lamb sales)
2,621,022 total Merino sales (23% of total lamb sales)
2,156,731 total other breed sales (19% of total lamb sales)

Number of lambs marked in the past four months (1 Jul – 31 Oct)

22,645,611 total lambs marked in the past four months
11,174,08 total Merino lambs marked (49% of total markings)
11,471,525 total non-Merino lambs marked (51% of total markings)

Number of ewes joined to produce those lambs

24,265,873 total number of ewes joined to produce those lambs
13,669,82 total Merino lambs joined (56%)
10,596,046 total non-Merino lambs joined (44%)

Marking rates

82% National Merino marking rate
108% National non-Merino marking rate

Background and Purpose

Survey Background

The Wool and Sheepmeat survey has been running in various formats for the past 18 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 October 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 1,958 survey responses were achieved in October 2019, down from the 2,256 surveys in June 2019 but at a similar level to the 1,948 surveys achieved in October 2018. October is generally difficult for response rates with lamb marking and harvest but has been further compounded by drought in 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, 2,957 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 October. A total of 49 respondents completed the survey via this method (2.5% 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 31 October 2019) and send reminder emails accordingly. A total of 13,195 emails were sent to MLA and AWI members via the email addresses provided by MLA and AWI databases. Of those 1,302 emails bounced, giving a total emails delivered of 11,893. A total of six 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 1,327 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 582 producers responded by this methodology (30% 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 on the online survey, a total of 39 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 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 again for the February 2020 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 & Oct 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

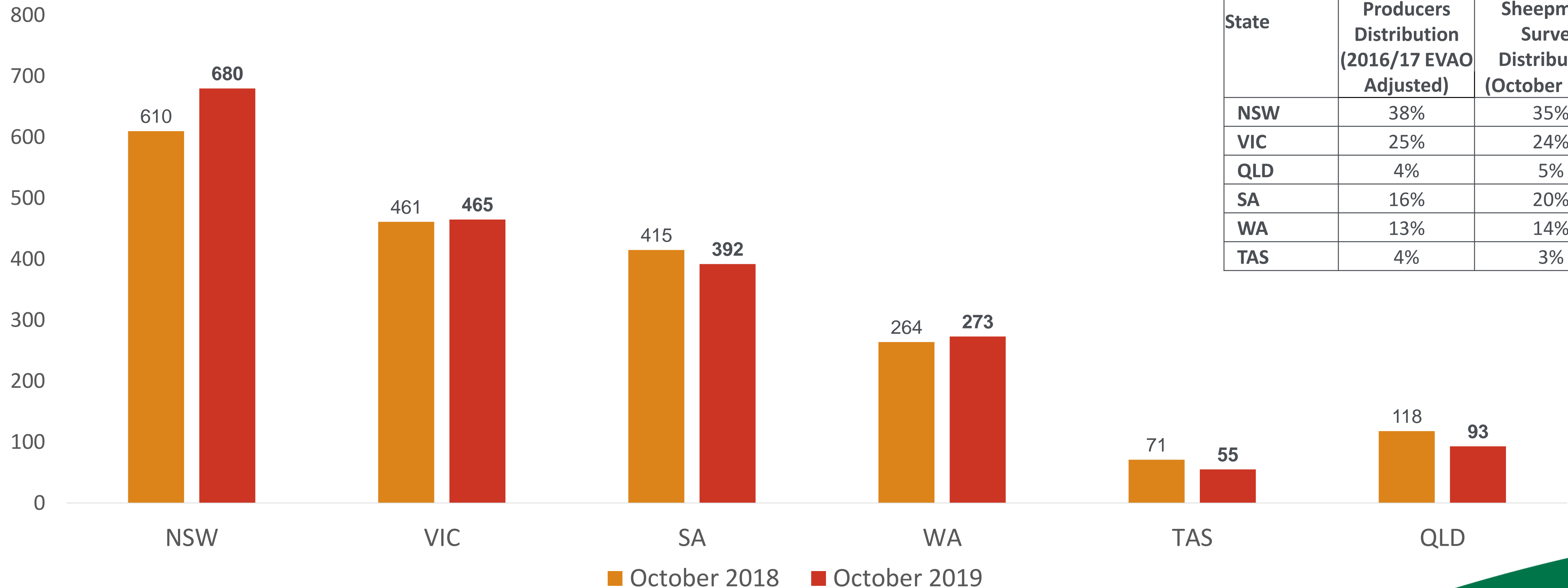
The total research sample of 1,958 will give the results of this study a margin of error of $\pm 2.16\%$ at a 95% confidence level based on 37,238 breeding ewe producers in Australia (ABS 2016-17 Census adjusted for \$40,000 EVOA cutoff). This is basically saying that if you conducted the same survey 100 times, 95 out of the 100 sheep producers should yield results within $\pm 2.16\%$ 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 $\pm 3.67\%$
- Victoria $\pm 4.44\%$
- Queensland $\pm 9.87\%$
- South Australia $\pm 4.79\%$
- Western Australia $\pm 5.78\%$
- Tasmania $\pm 12.95\%$

Survey Respondents [1/4]: By State

The total number of respondents (n=1,958) 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.

Total Respondents (October 2019) = 1,958



State	ABS Census for Breeding Ewe Producers Distribution (2016/17 EVAO Adjusted)	MLA and AWI Wool and Sheepmeat Survey Distribution (October 2019)
NSW	38%	35%
VIC	25%	24%
QLD	4%	5%
SA	16%	20%
WA	13%	14%
TAS	4%	3%

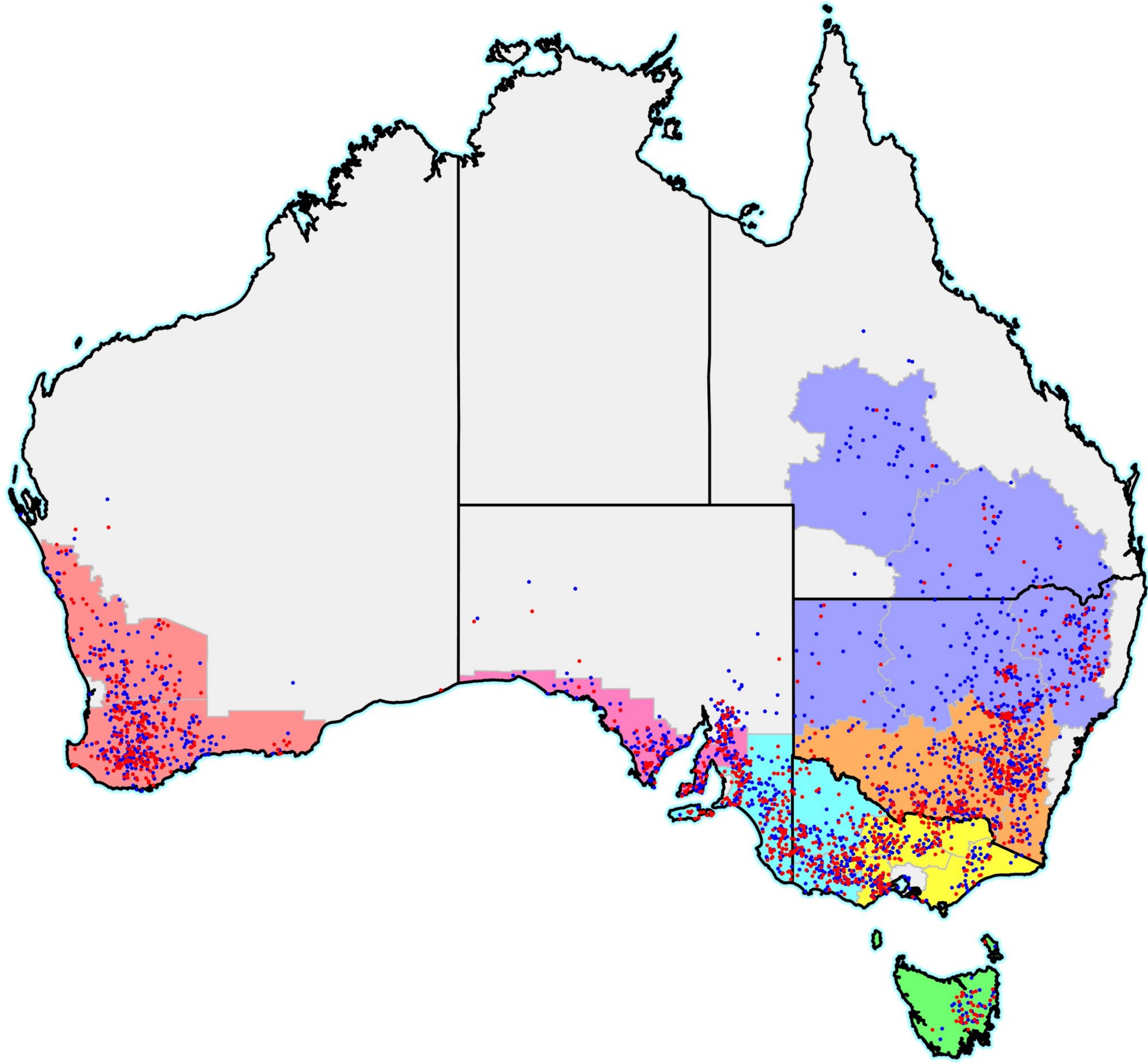
Survey Respondents [2/4]: Total Flock Counts (Merino & Non-Merino)

Merino and non merino flock count by Postcode

- MLA Reporting Regions**
- Central NSW
 - East Vic
 - Northern NSW/Qld
 - SA Peninsula
 - Tasmania
 - Western Australia
 - Wimmera Mallee Murray

Merino flock count by Postcode
1 Dot = 1

Non merino flock count by Postcode
1 Dot = 1



Total properties: n = 2,957
Merino: n = 1,659
All other: n = 1,205

Survey Respondents [3/4]: Merino Flock Counts

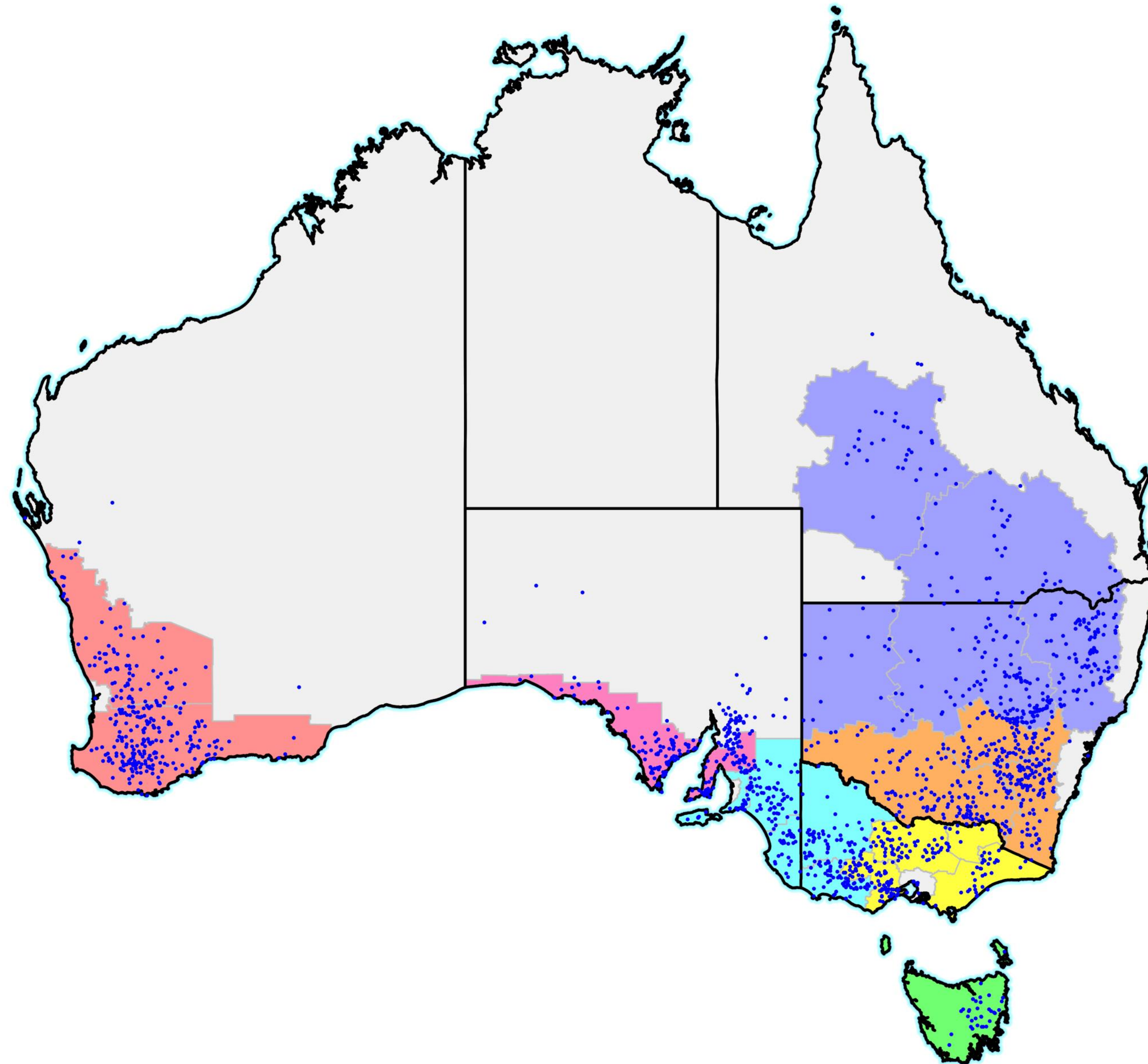
Merino
flock count
by Postcode

MLA Reporting Regions

- Central NSW
- East Vic
- Northern NSW/Qld
- SA Peninsula
- Tasmania
- Western Australia
- Wimmera Mallee Murray

Merino flock count

1 Dot = 1



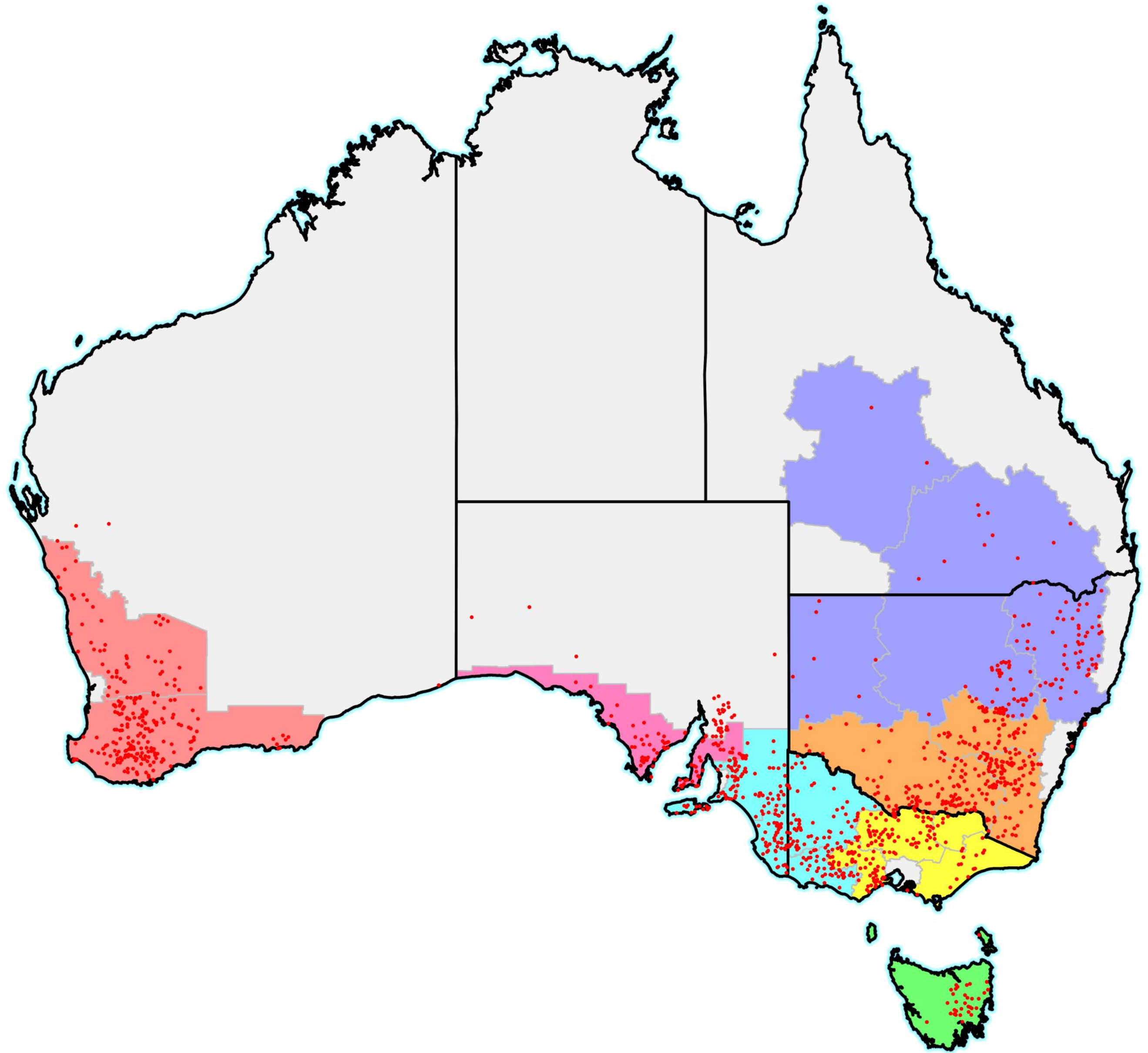
Merino properties: n = 1,659

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

Non merino
flock count
by Postcode

- MLA Reporting Regions**
- Central NSW
 - East Vic
 - Northern NSW/Qld
 - SA Peninsula
 - Tasmania
 - Western Australia
 - Wimmera Mallee Murray

**Non merino flock count
by Postcode**
1 Dot = 1

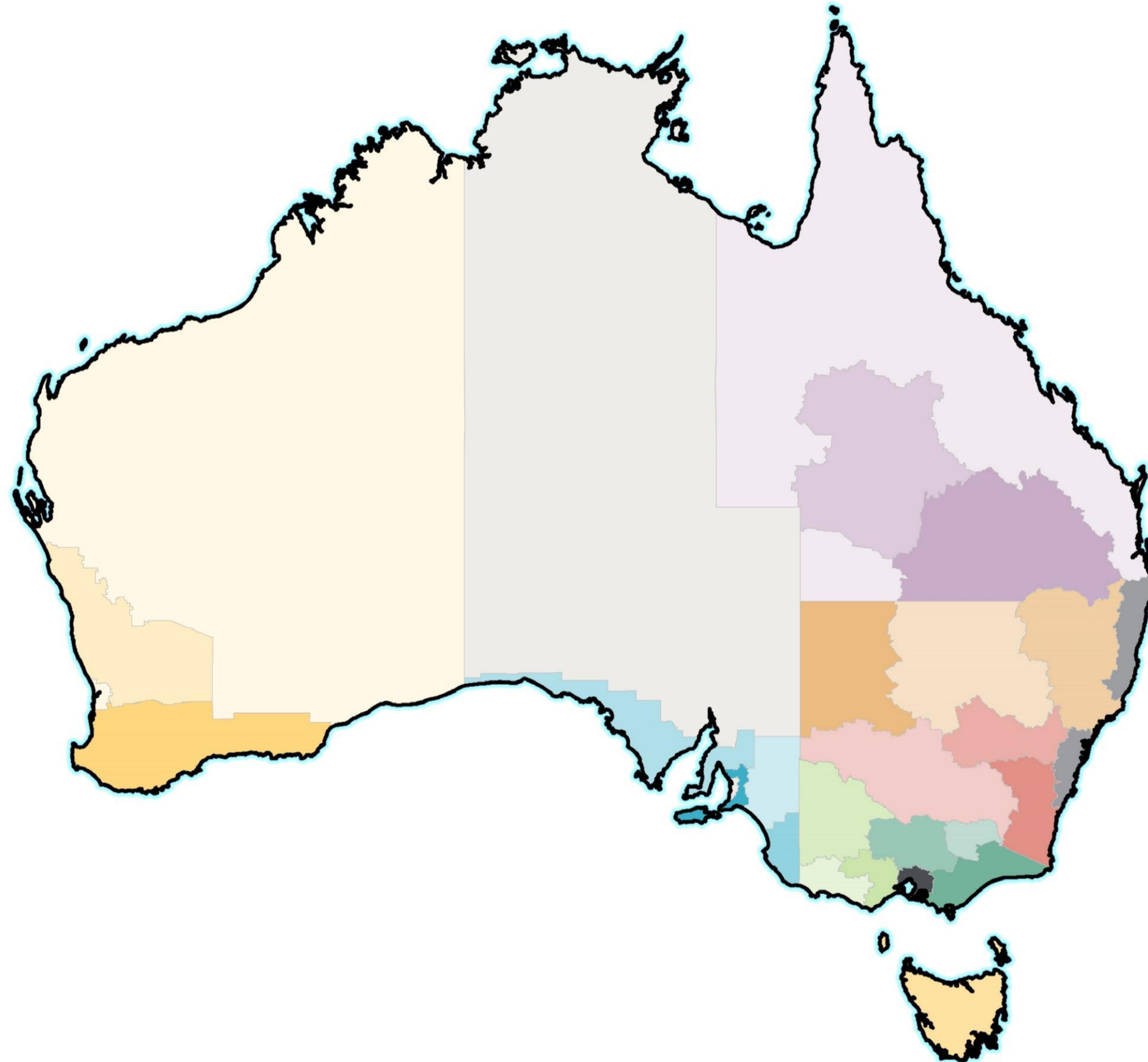


All other properties: n = 1,205

MLA Sheep Producing Regions

MLA Regions

- MLA Regions**
- Barwon & Central Highlands
 - Central Midlands
 - Central Midlands Extra
 - Central Qld
 - Central Qld Extra
 - Central West
 - Eyre Yorke and North
 - Eyre Yorke and North Extra
 - Gippsland
 - Hunter and Northern
 - Hunter and Northern Extra
 - Loddon and Goulburn
 - Murray and Murrumbidgee
 - Murray Lands
 - North Western
 - Outer Adelaide
 - Ovens Murray
 - South East
 - South Eastern
 - South Eastern Extra
 - Southern Qld
 - Tasmania
 - WA South
 - Western District
 - Western Division
 - Wimmera and Mallee



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.

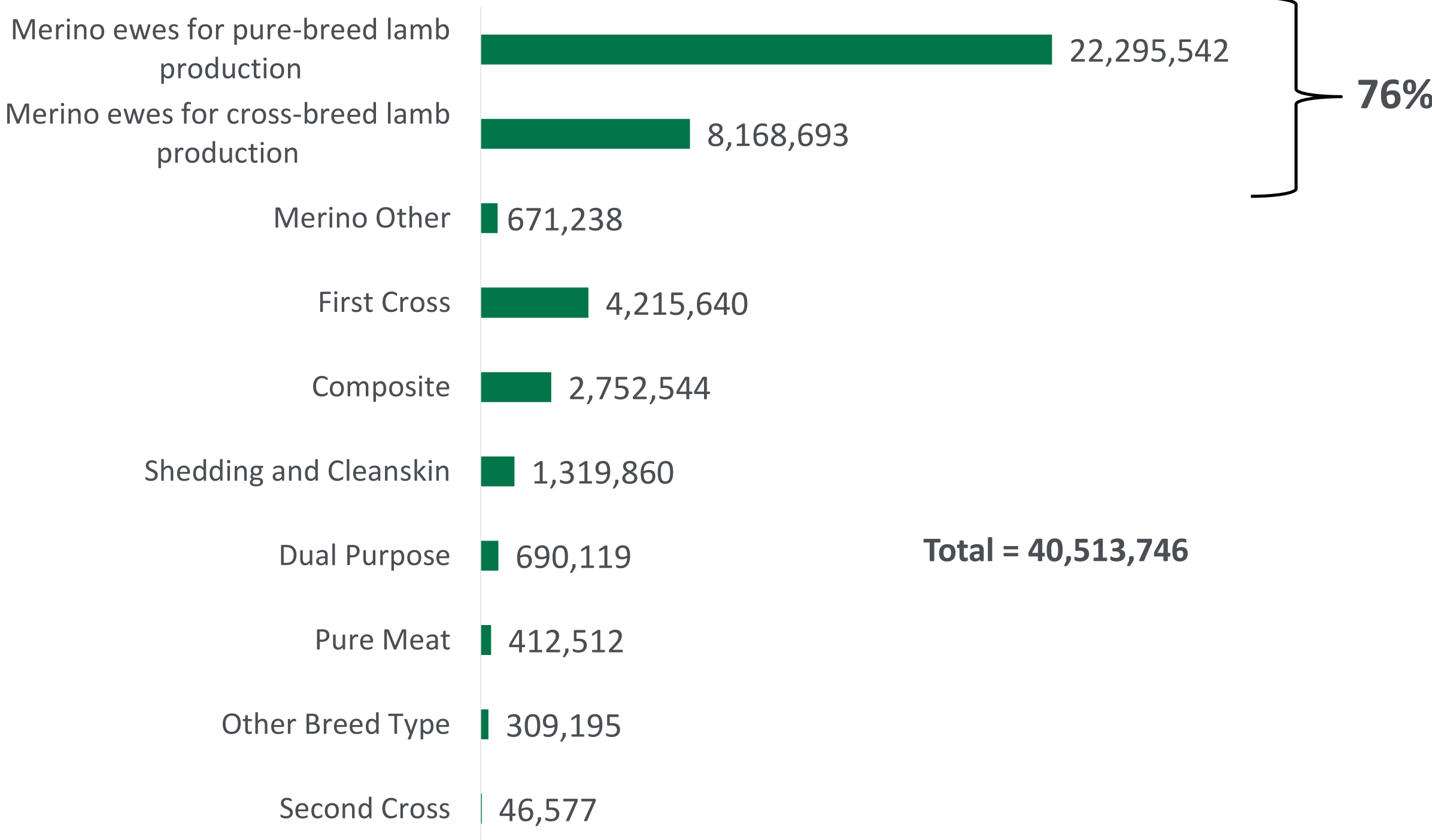
National Results

Ewes on hand and Lambs on hand - Australia

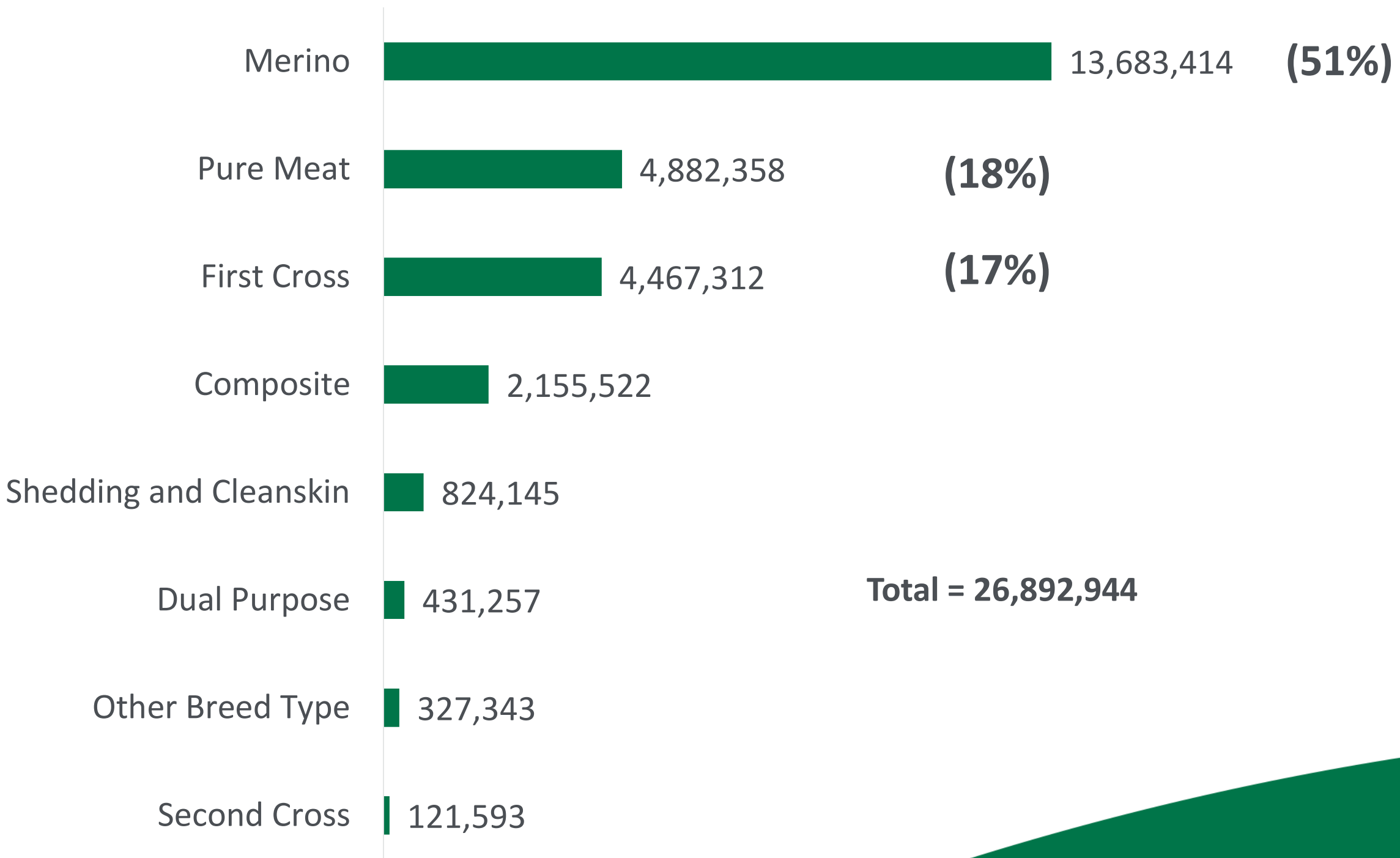
Merinos accounted for 76% of the total breeding ewe flock at 40.5 million head. Merino breeding ewes were further divided into Merino ewes for pure bred Merino production and Merino ewes for crossbred production and 'other' Merinos, accounting for 72%, 25% and 3% of the merino flock, respectively.

There were **26.9 million** lambs on hand at 31st October 2019. Merinos made up 51% of the total lamb flock, at **13.7 million head**, followed by Pure meat and First cross lambs (accounting for 18% and 17% of the national lamb flock respectively).

Number of ewes on hand



Number of lambs on hand

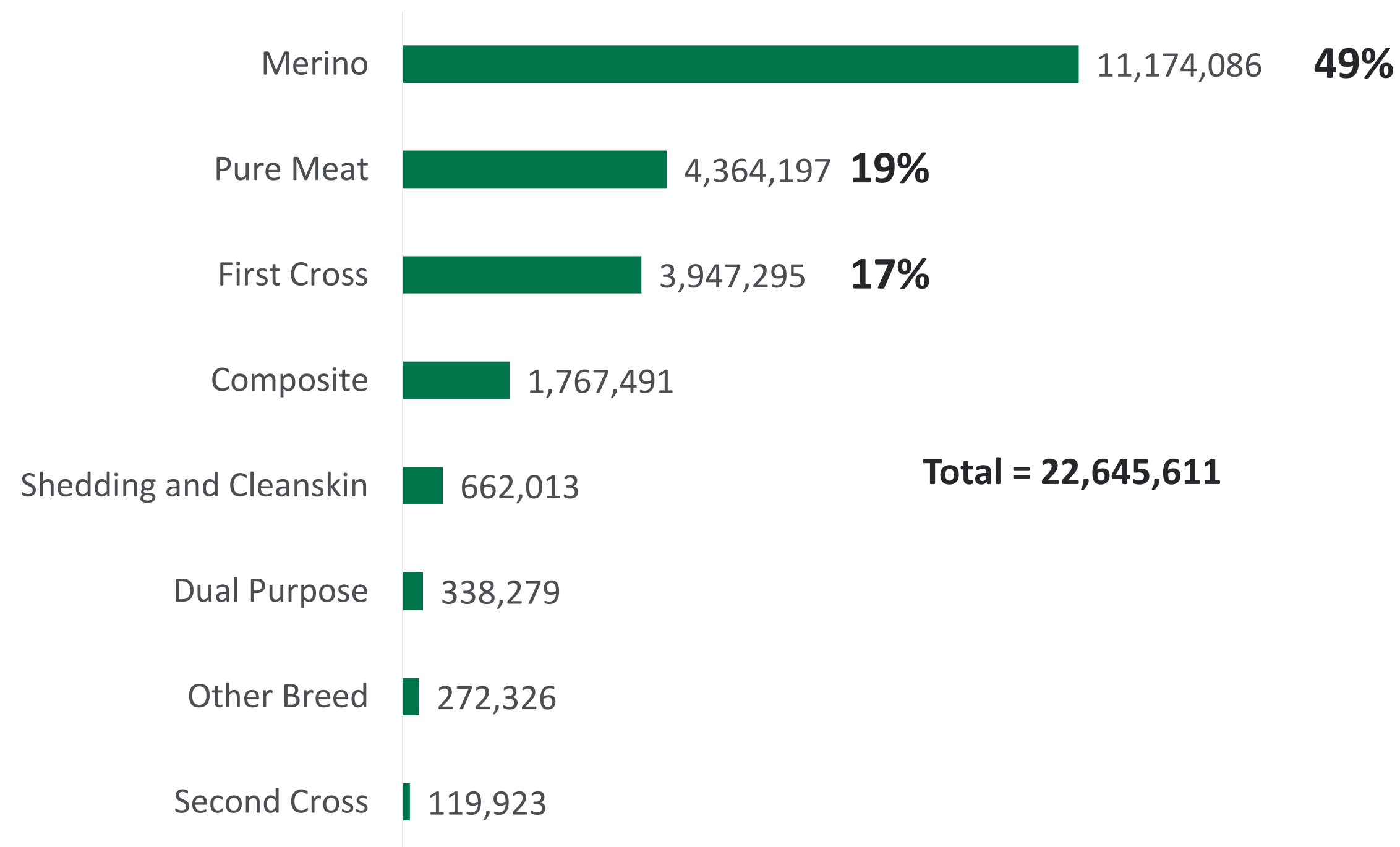


Lambs marked in the past four months (1 Jul – 31 Oct 2019) and Ewes joined to produce those lambs - Australia

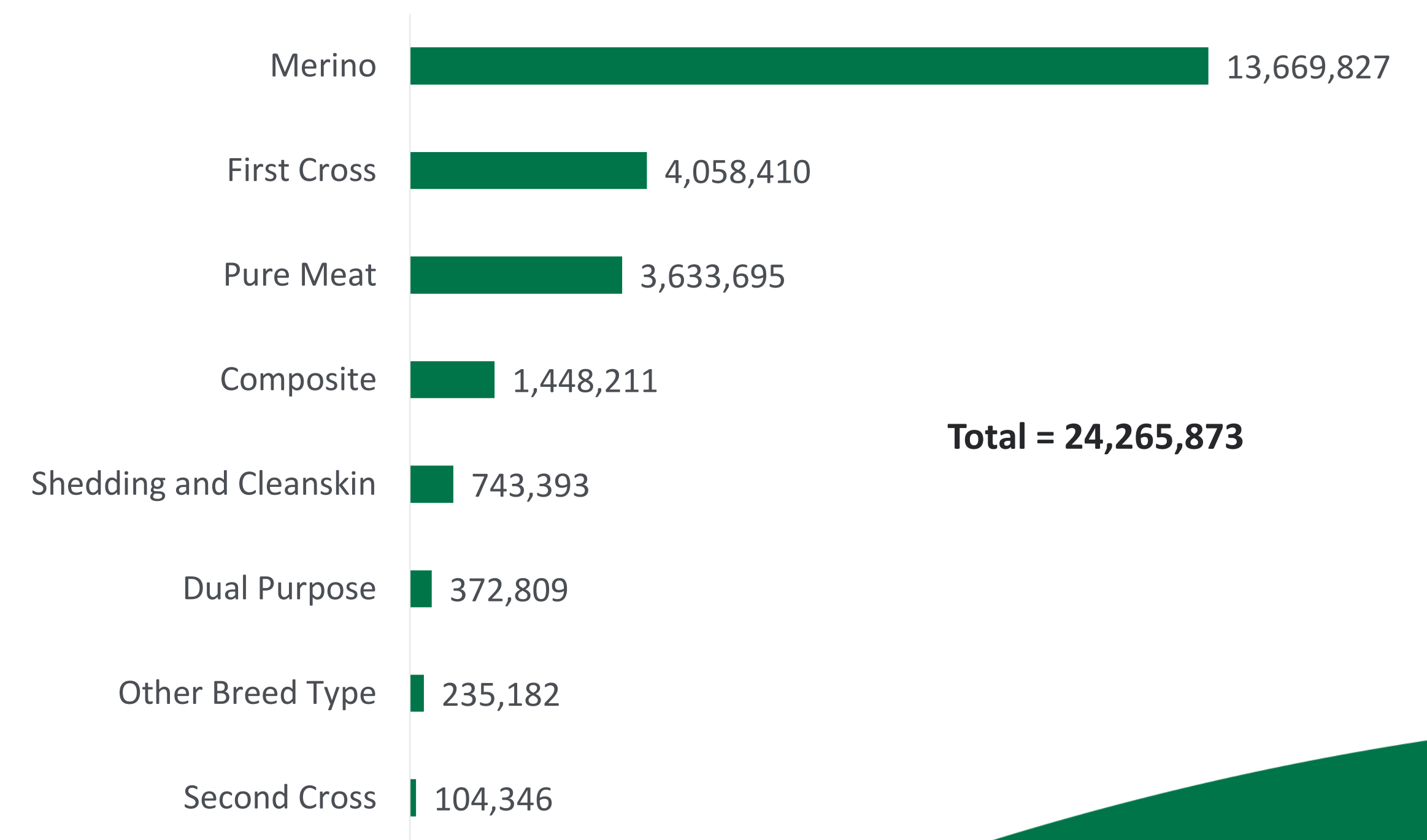
There were a total of 22.6 million lambs marked in the four months (from 1 July to 31 October 2019). Merinos accounted for the largest proportion of lambs marked in the past four months at **49%**, with Pure Meat and First cross breeds accounting for **19%** and **17%**, respectively.

A total number of 24.3 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 82% and 108% respectively.

Lambs marked in the past 4 months (1 Jul to 31 Oct)



Ewes joined to produce marked lambs (1 Jul to 31 Oct)

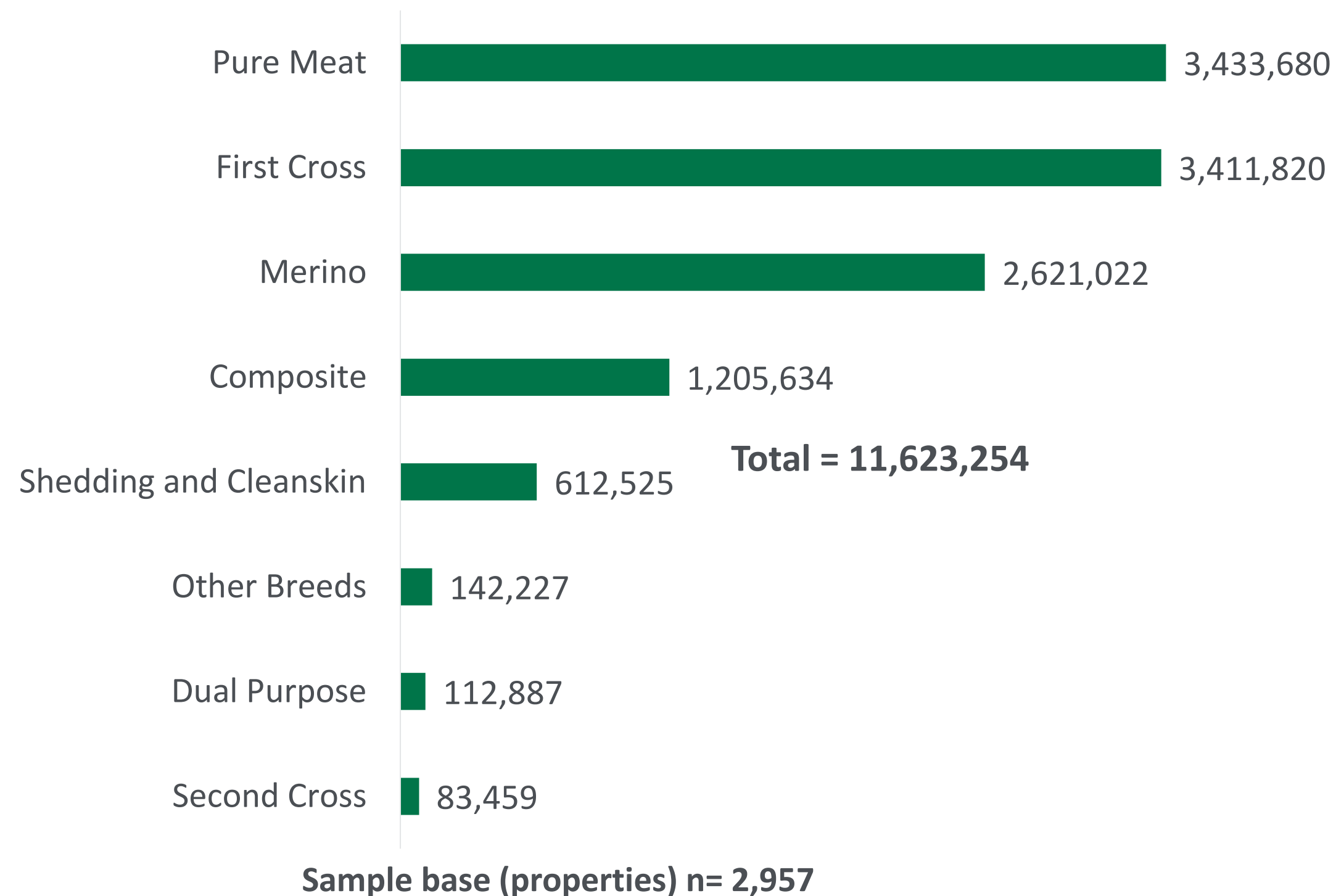


Expected lamb sales in the next 4 months - Australia

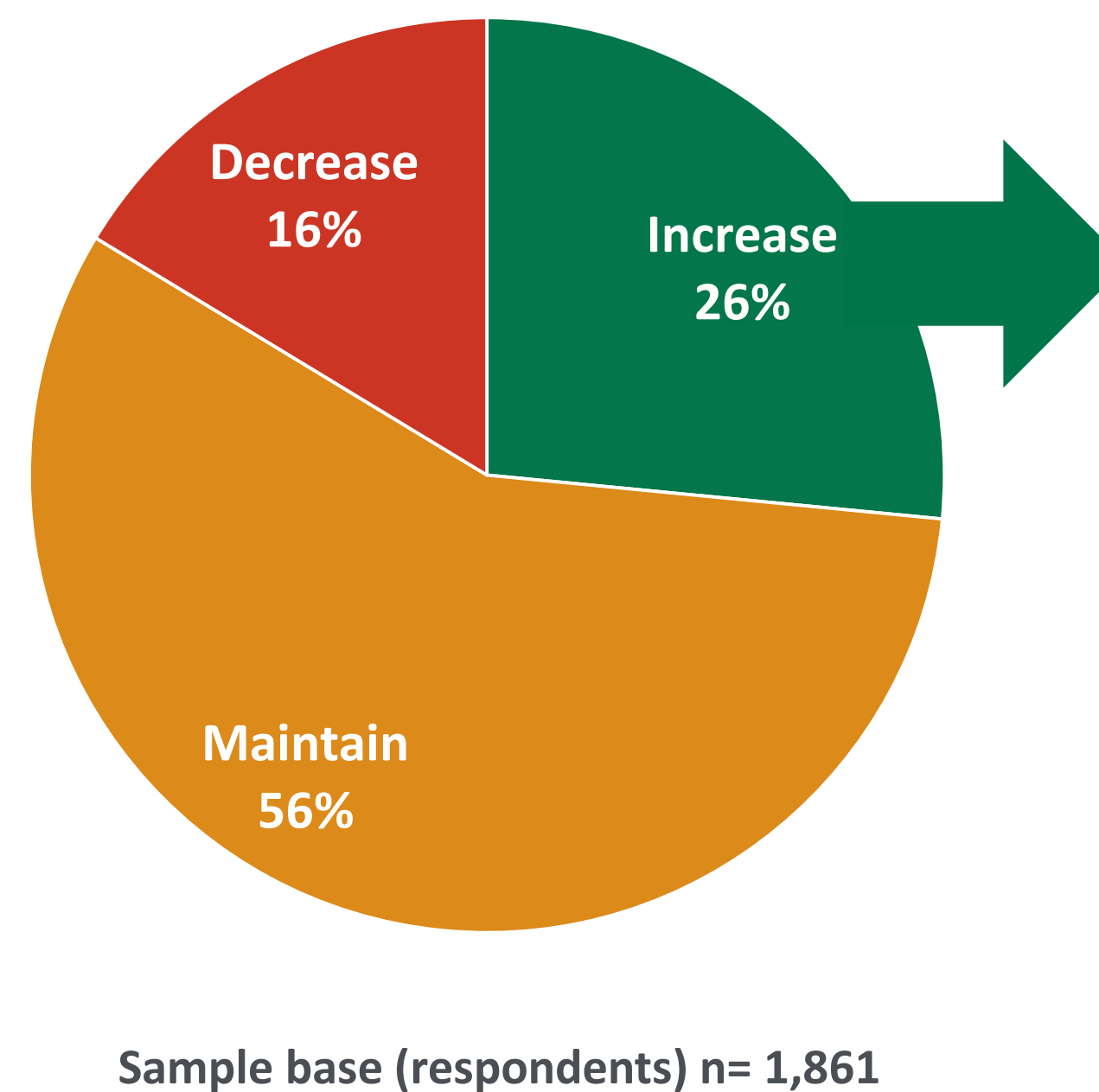
A total number of **11.6 million lambs** are expected to be sold in the next four months (1 Nov 2019 to 29 Feb 2020), approximately 43% of the total number of lambs on hand (26.9 million). Of these: Pure Meat, First Cross and Merino breeds are expected to account for 30%, 29% and 23% of lamb sales respectively.

These results are consistent with producer ewe flock intentions for the next 12 months and method of achievement, with **26%** looking to increase their ewe flocks and of these 58% are expected to retain more replacement ewes than normal.

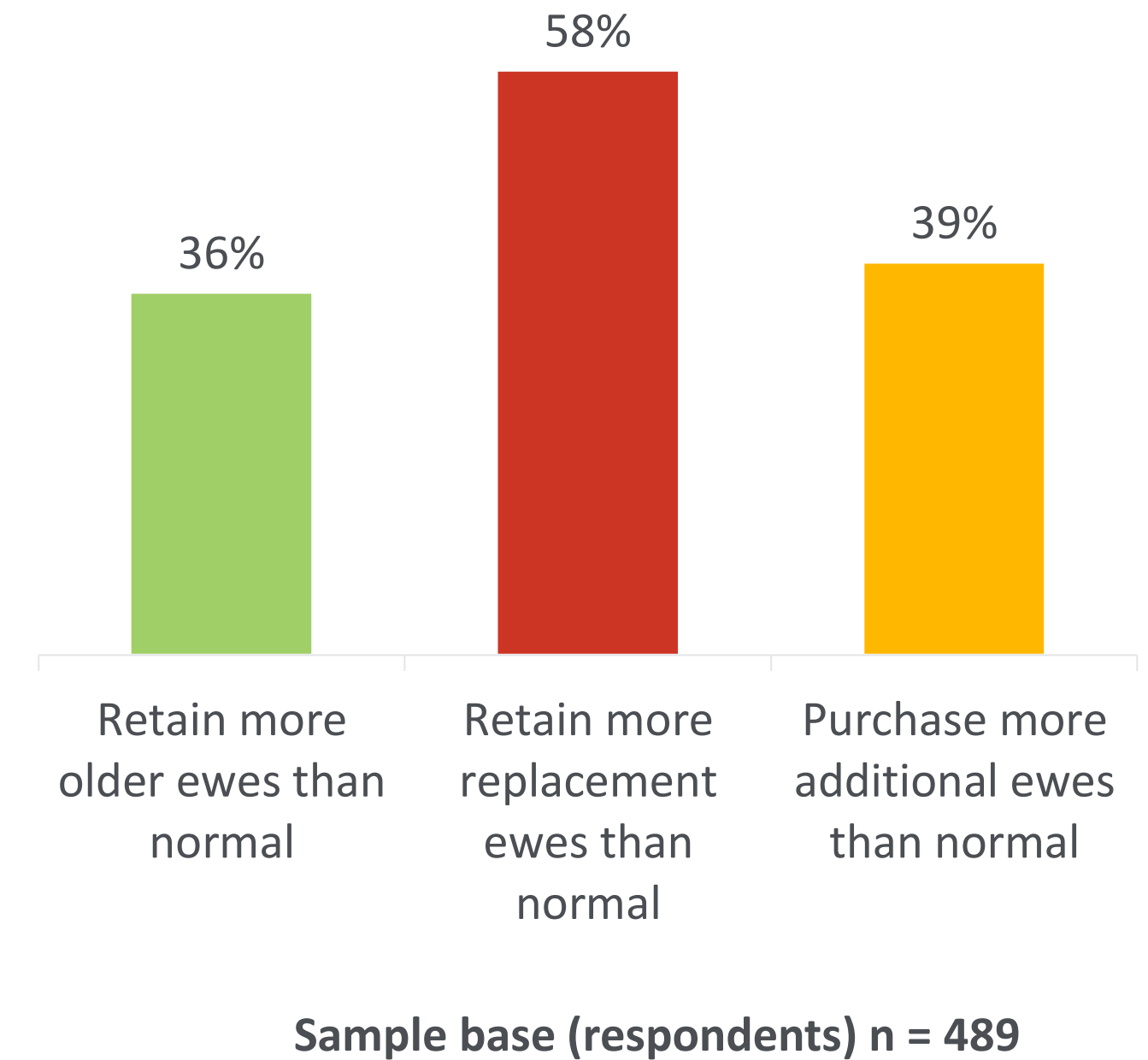
Expected lamb sales in the next 4 months



Ewe flock intentions



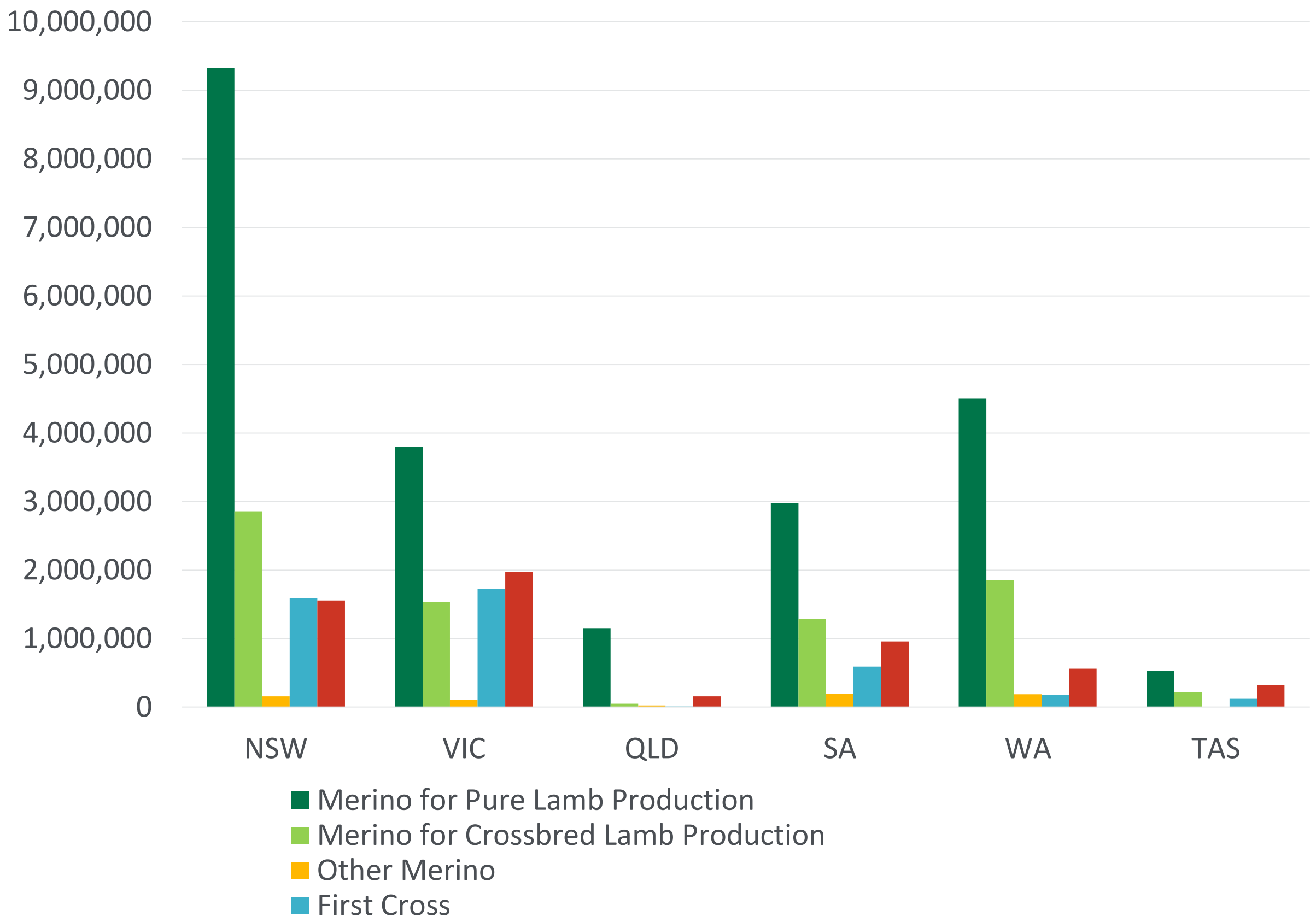
How to achieve increase



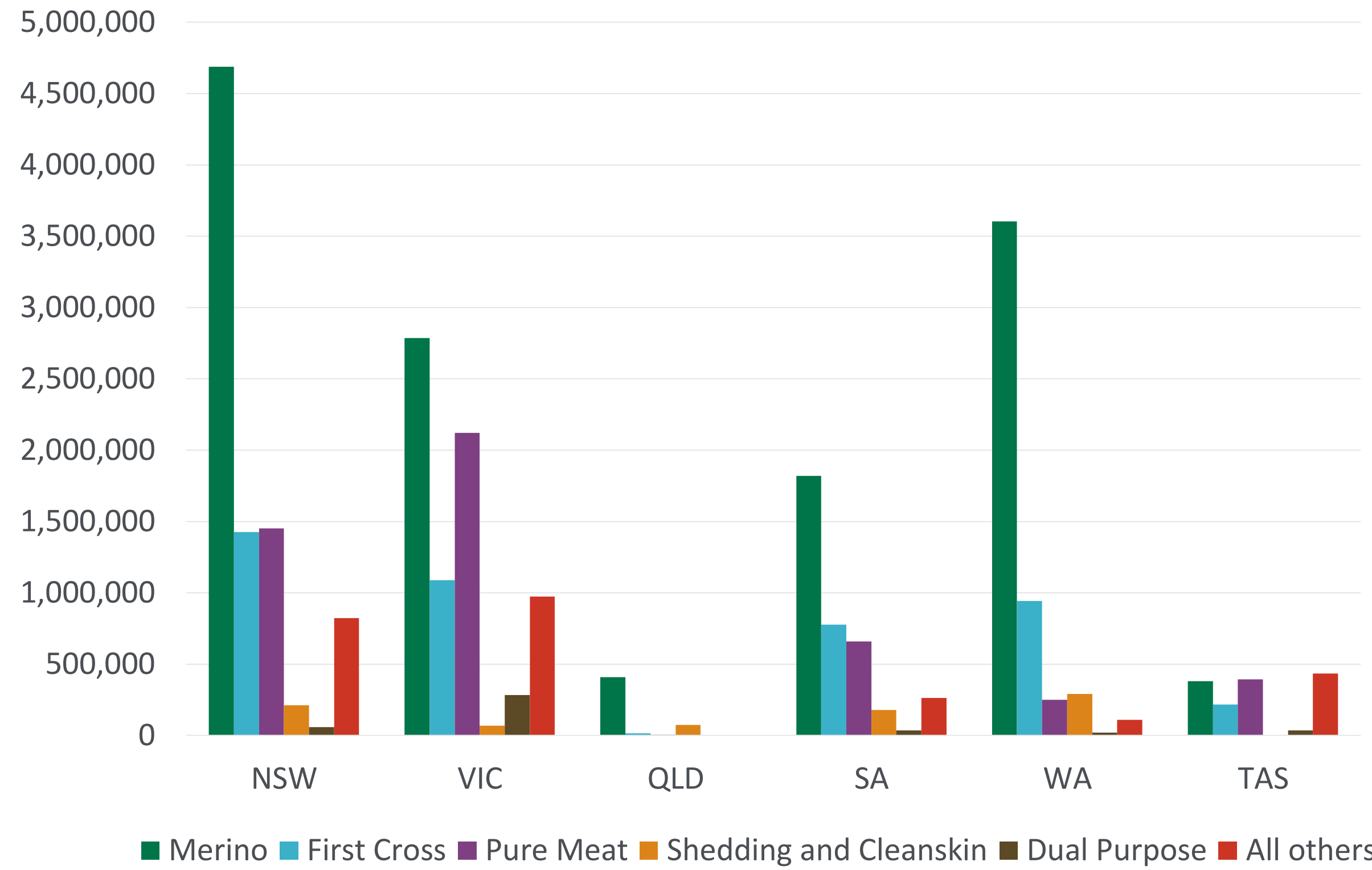
Results by State

Ewes on hand and Lambs on hand - State

Ewes on hand

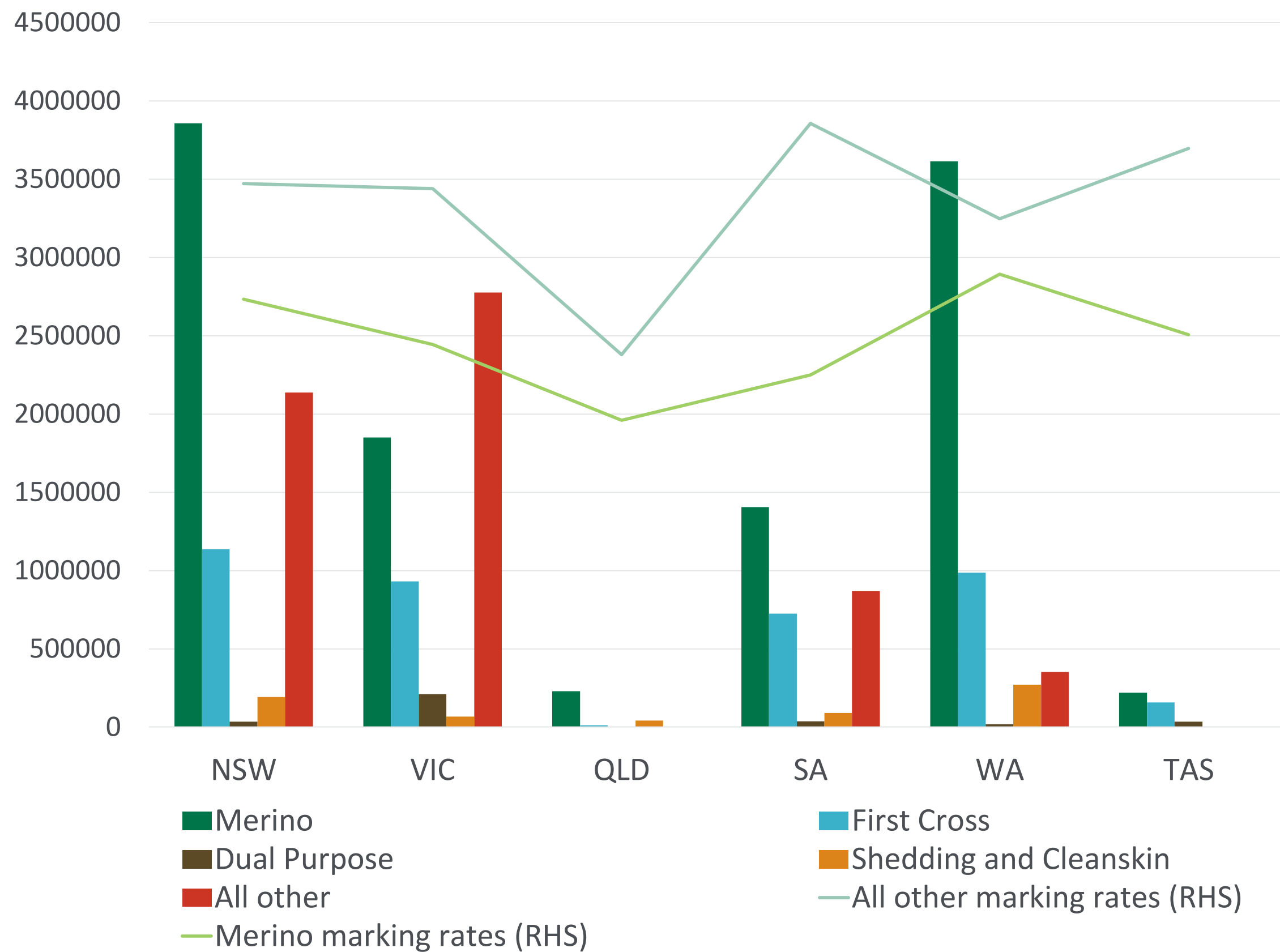


Lambs on hand



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

Lambs marked in the past 4 months
(1 July 2019 – 31 October 2019)

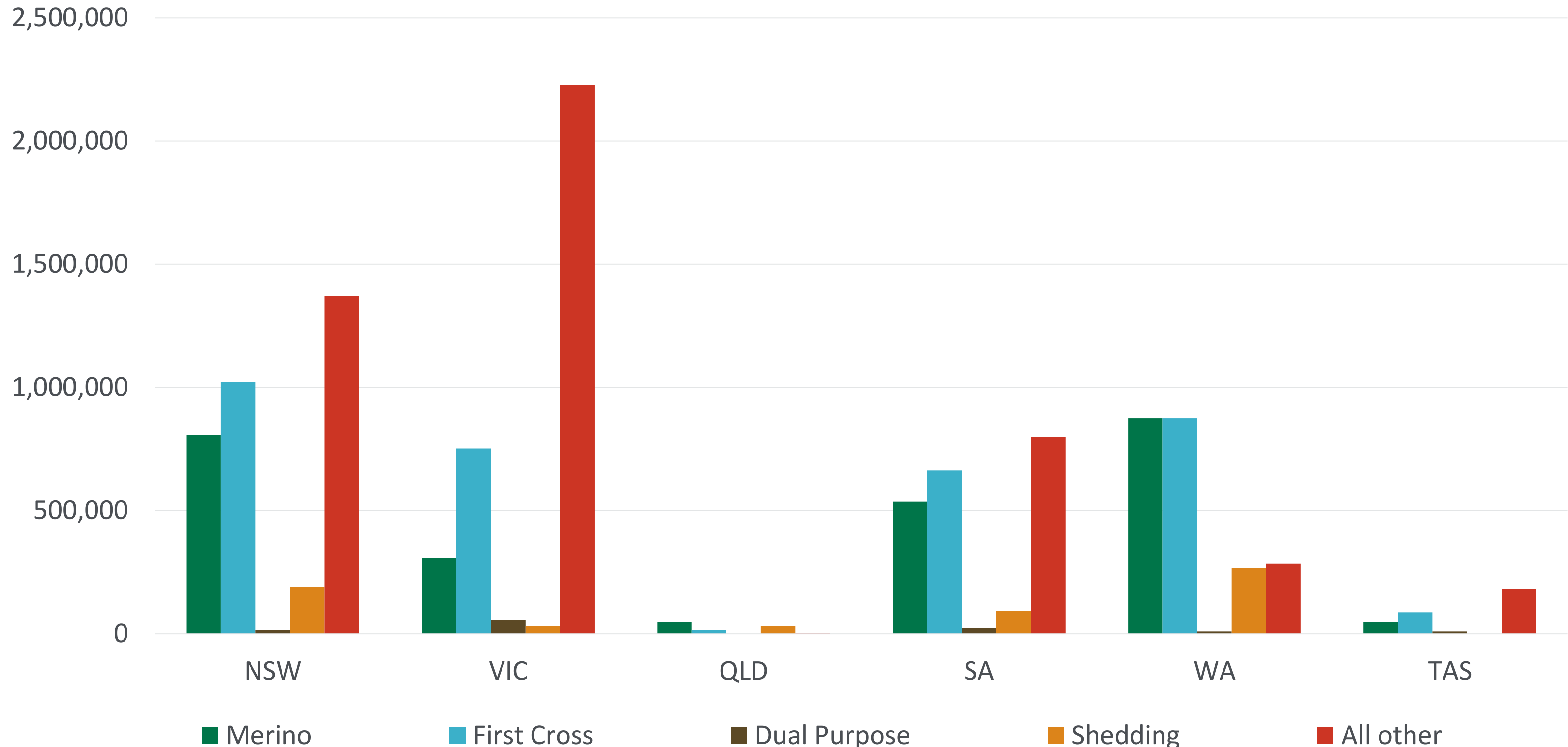


Ewes joined to produce those lambs in the past 4 months
(1 July 2019 – 31 October 2019)



Expected lamb sales in the next four months – by State

Expected lamb sales in the next 4 months (1 November 2019 – 29 February 2020)

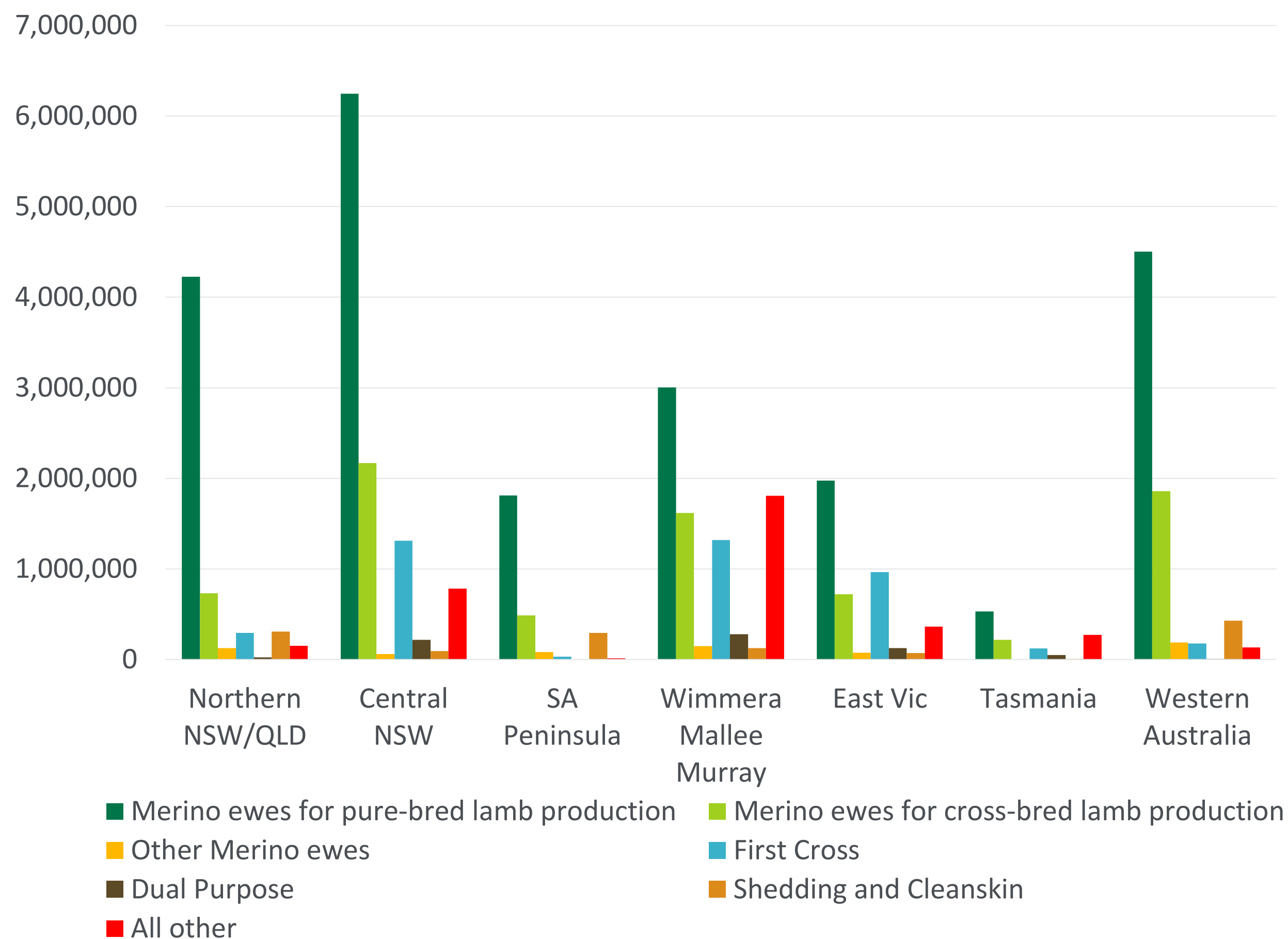


Results by MLA Reporting Region

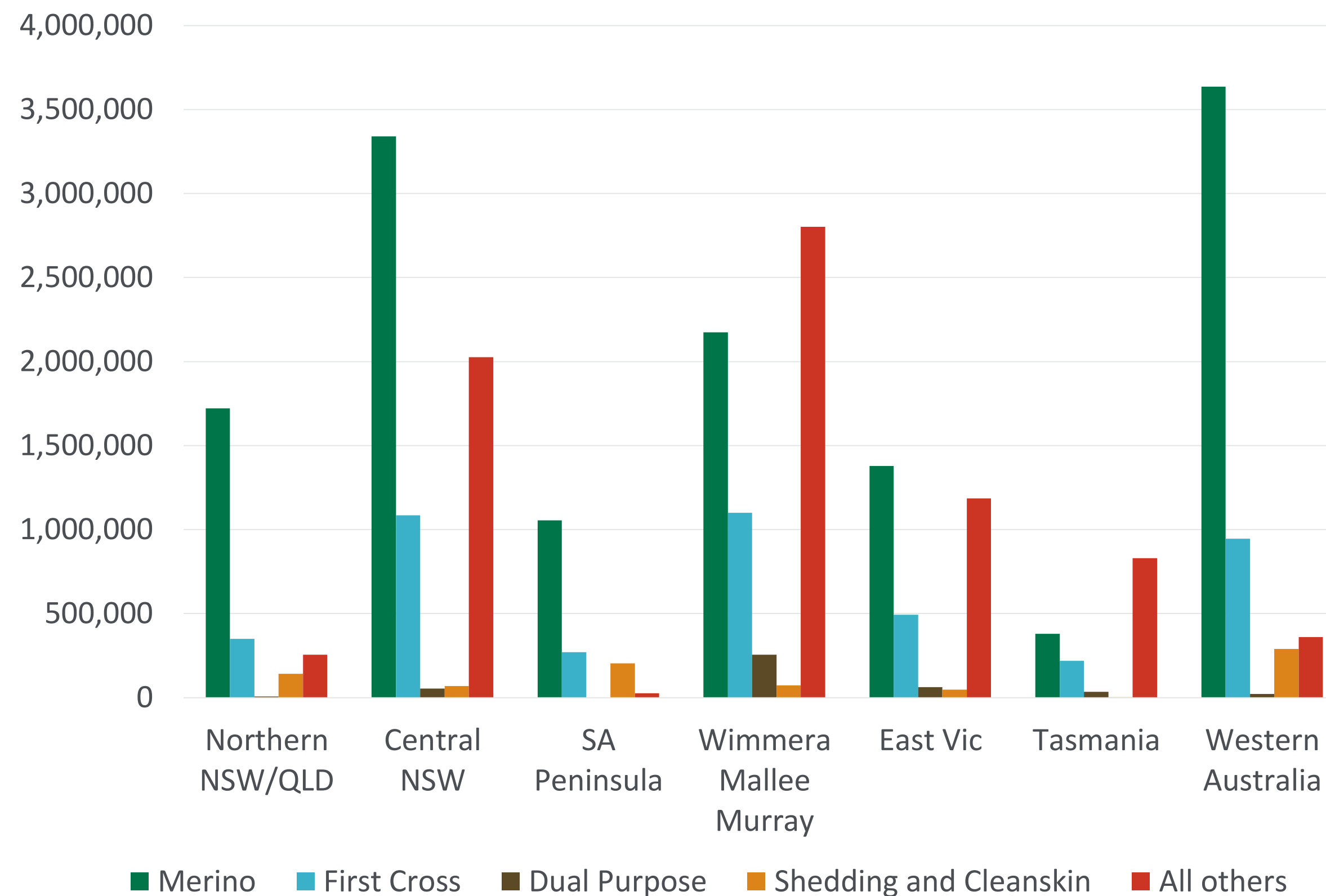
Ewes on hand and lambs on hand 31 October 2019

- by MLA reporting regions

Ewes on hand

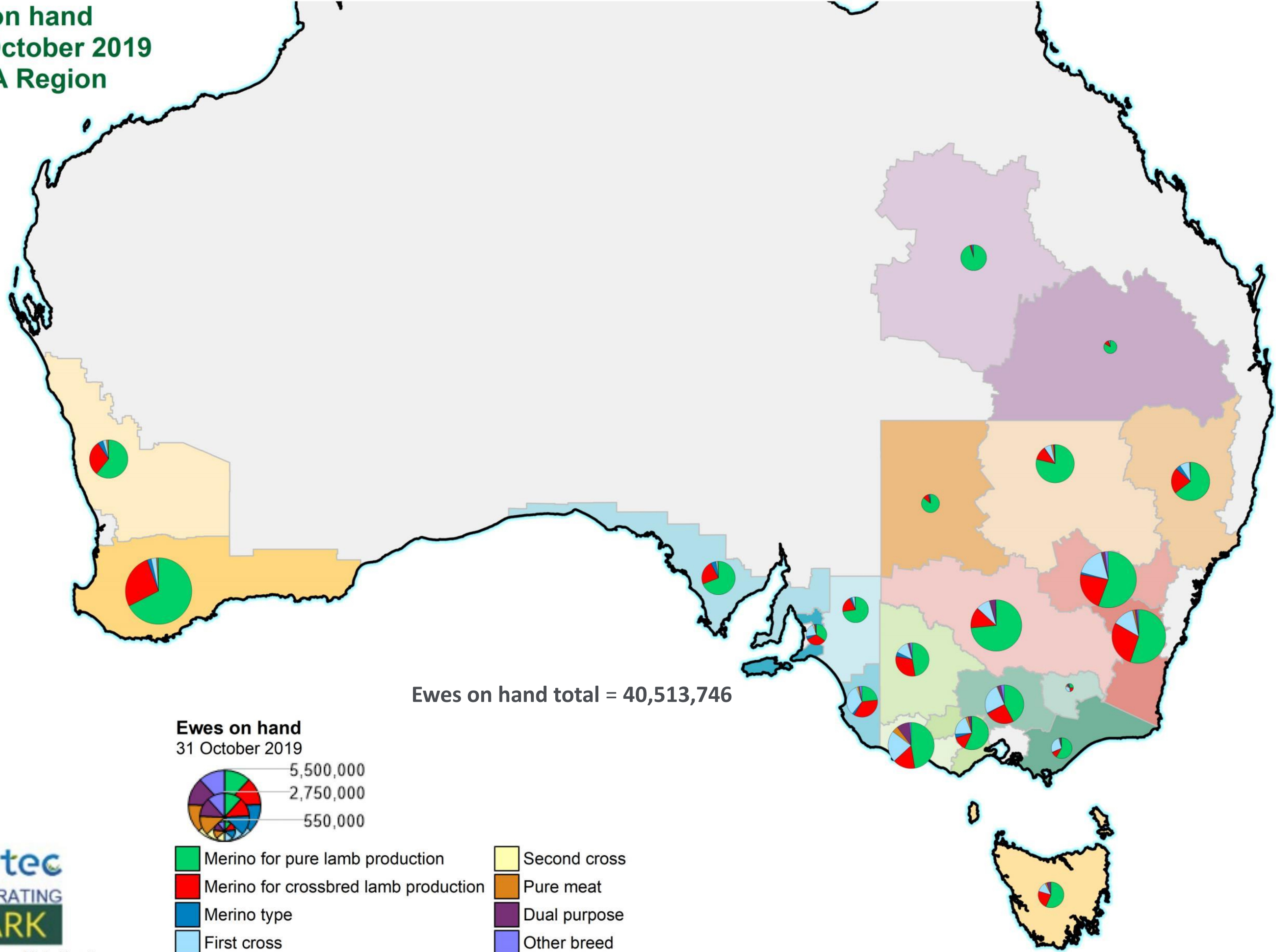


Lambs on hand



Ewes on hand – MLA reporting regions

Ewes on hand
at 31 October 2019
by MLA Region



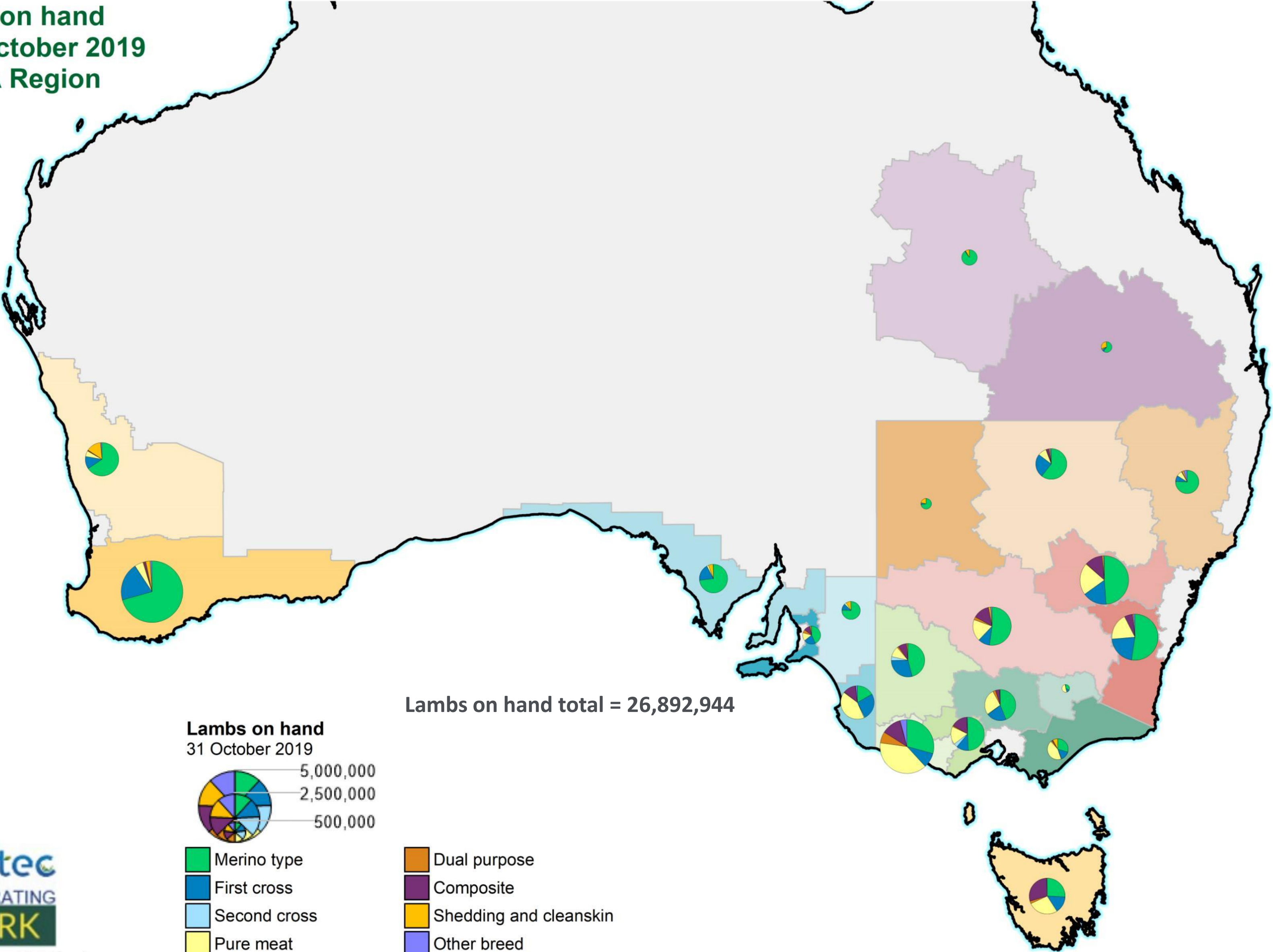
The breeding ewe population was largest in WA South (5.1 m), Central West region NSW (3.8 m) and South Eastern NSW (3.4 m).

Central Queensland (93%), WA South (92%) and Eyre Yorke and North (92%) had the highest percentage of merinos in their flock followed by Murray Lands (89%) and North Western (88%) (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 South East, Ovens Murray (both 56%) and Western District (51%).

Lambs on hand – by MLA reporting regions

Lambs on hand
at 31 October 2019
by MLA Region



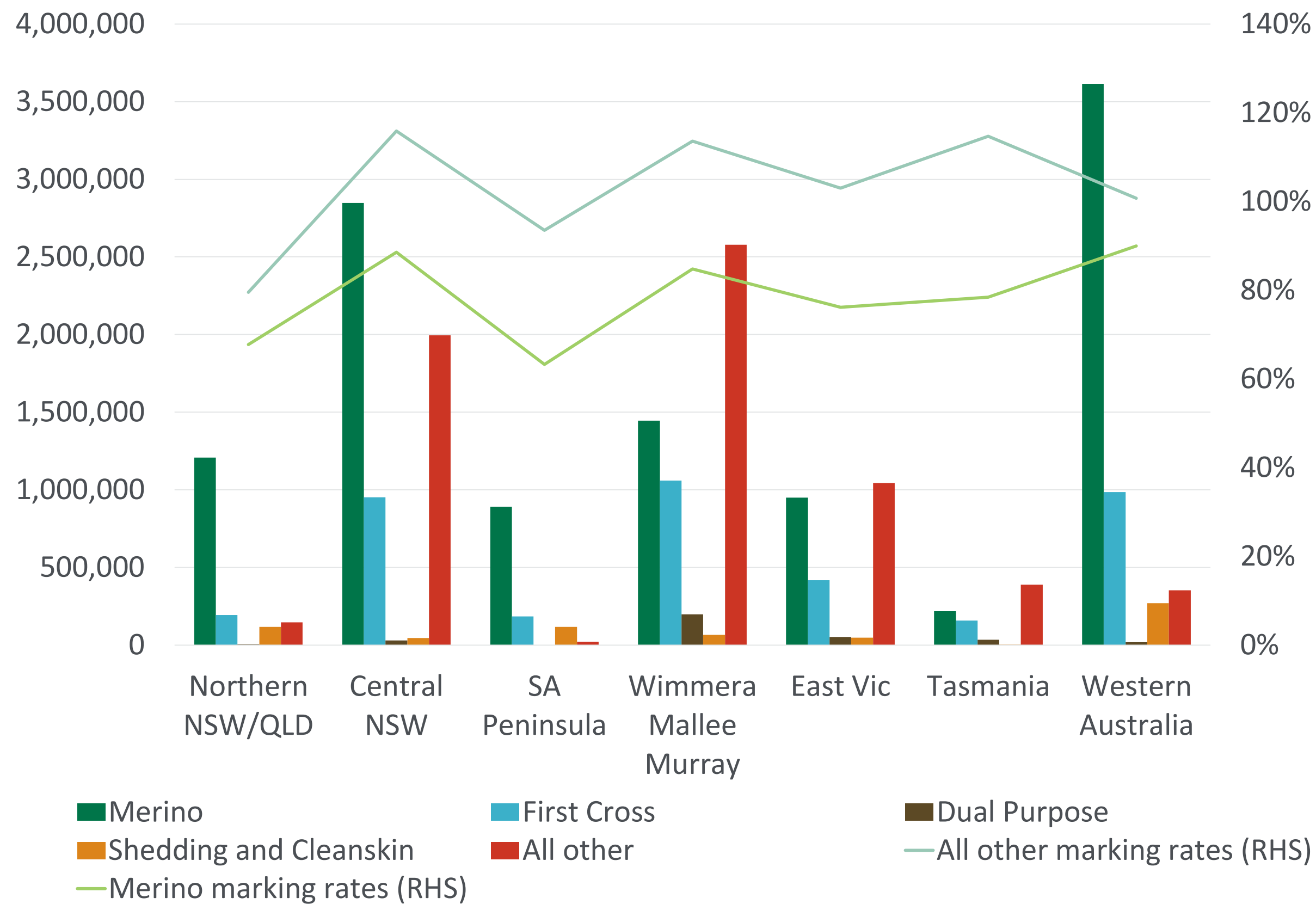
In line with a larger ewe flock population, the number of lambs on hand at 31 October was greatest in WA South at 3.9 million head. This was followed by the Central West region, recording around 2.5 million head.

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. First cross lambs comprised of 29% in the Wimmera and Mallee while in North Western 25% of the flock is First cross lambs. Pure meat in Ovens Murray and Gippsland comprised of 53% and 44% of the total lamb flocks, respectively.

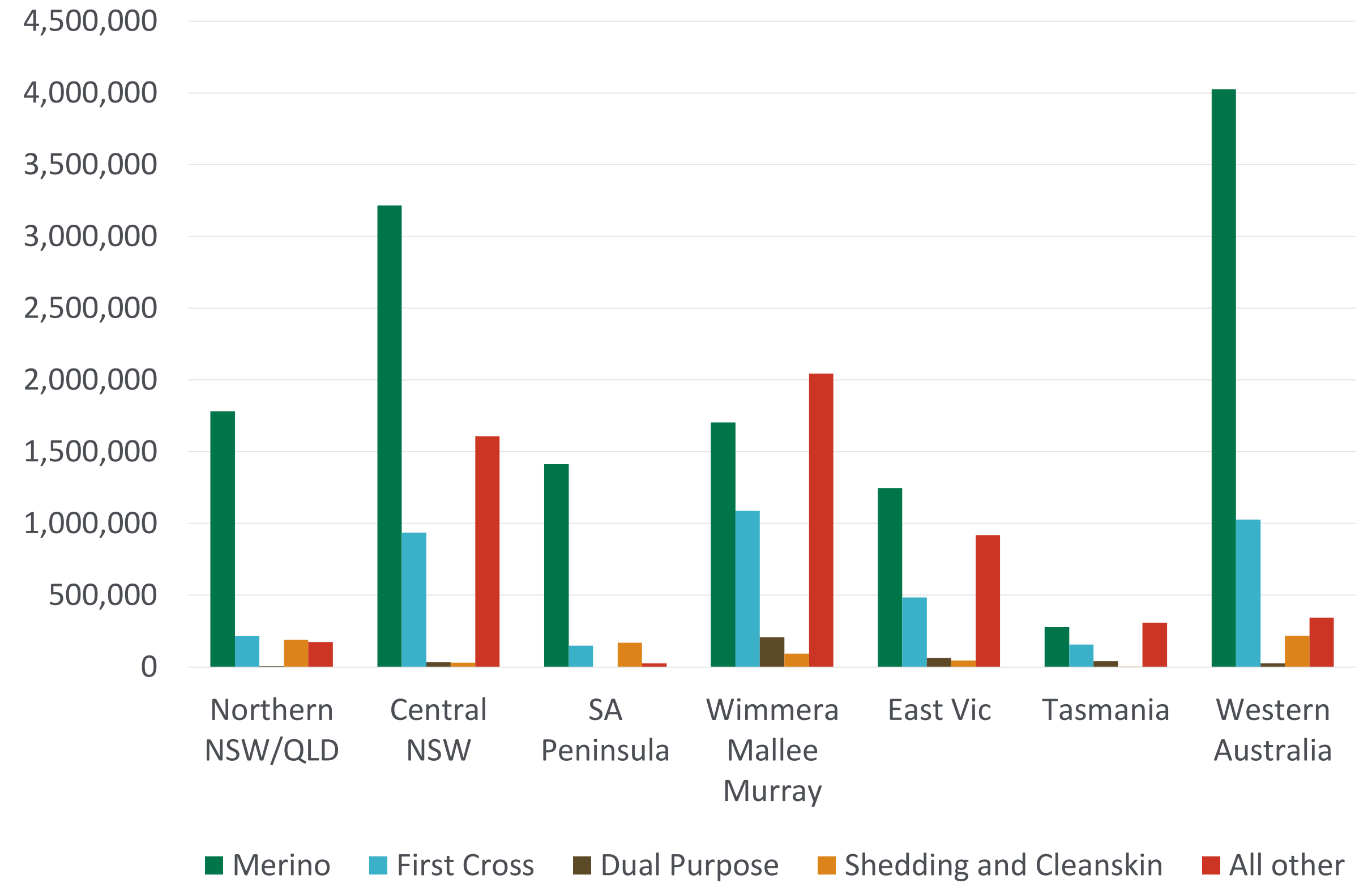
NSW had the largest Merino lamb flock at around 4.7 million head, accounting for 54% of the 8.7 m total NSW lamb flock. In WA however, Merinos accounted for 69% of the total lamb flock (3.6 m of 5.2 m head).

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

Lambs marked in the past 4 months 1 July – 31 October 2019

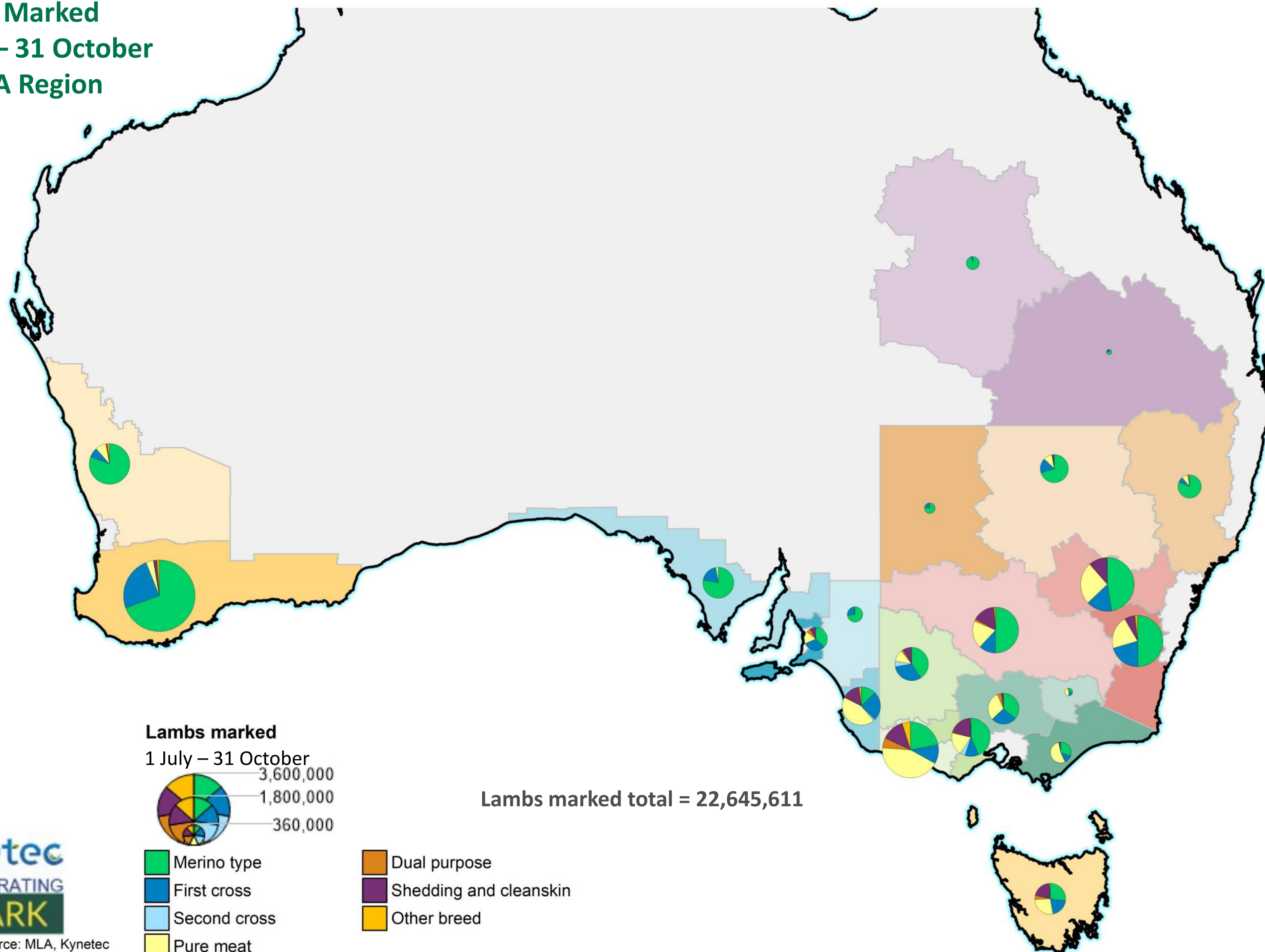


Ewes joined to produce those lambs



Lambs marked in the past four months

Lambs Marked
1 July – 31 October
By MLA Region



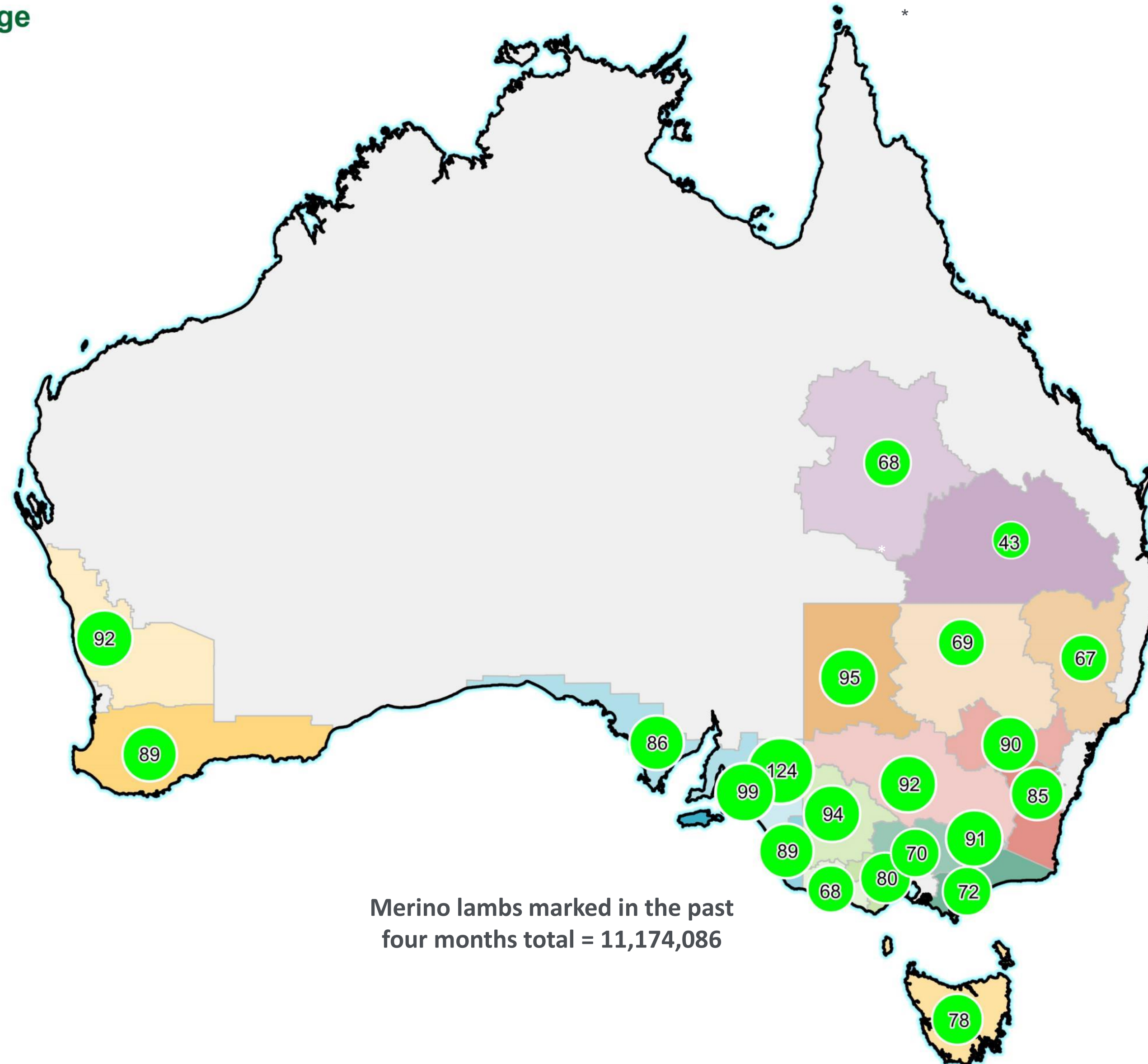
Lambs marked total = 22,645,611

Around 22.6 million lambs were marked over the past four months.

WA South, Western District and Central West accounted for a large number of new lambs, with markings of 3.6m, 2.4m and 2.1m head respectively.

Merino lamb marking rates – by MLA reporting regions

Lambs marked percentage of merinos by MLA Region



Merino lambs marked in the past four months total = 11,174,086

The highest Merino marking rates were recorded in Murray Lands (124%) and Outer Adelaide (100%). Conversely, the lowest marking rates were recorded in Southern QLD at 43% and Hunter and Northern at 67%.

Nationally the Merino marking rate was 82% and on a state basis, Queensland and SA had the lowest marking rate at 61% and 70% respectively, while WA and NSW recorded the highest Merino marking rates of 90% and 85% respectively.

Note: These marking rates are for the period between 1 July to 31 October 2019.

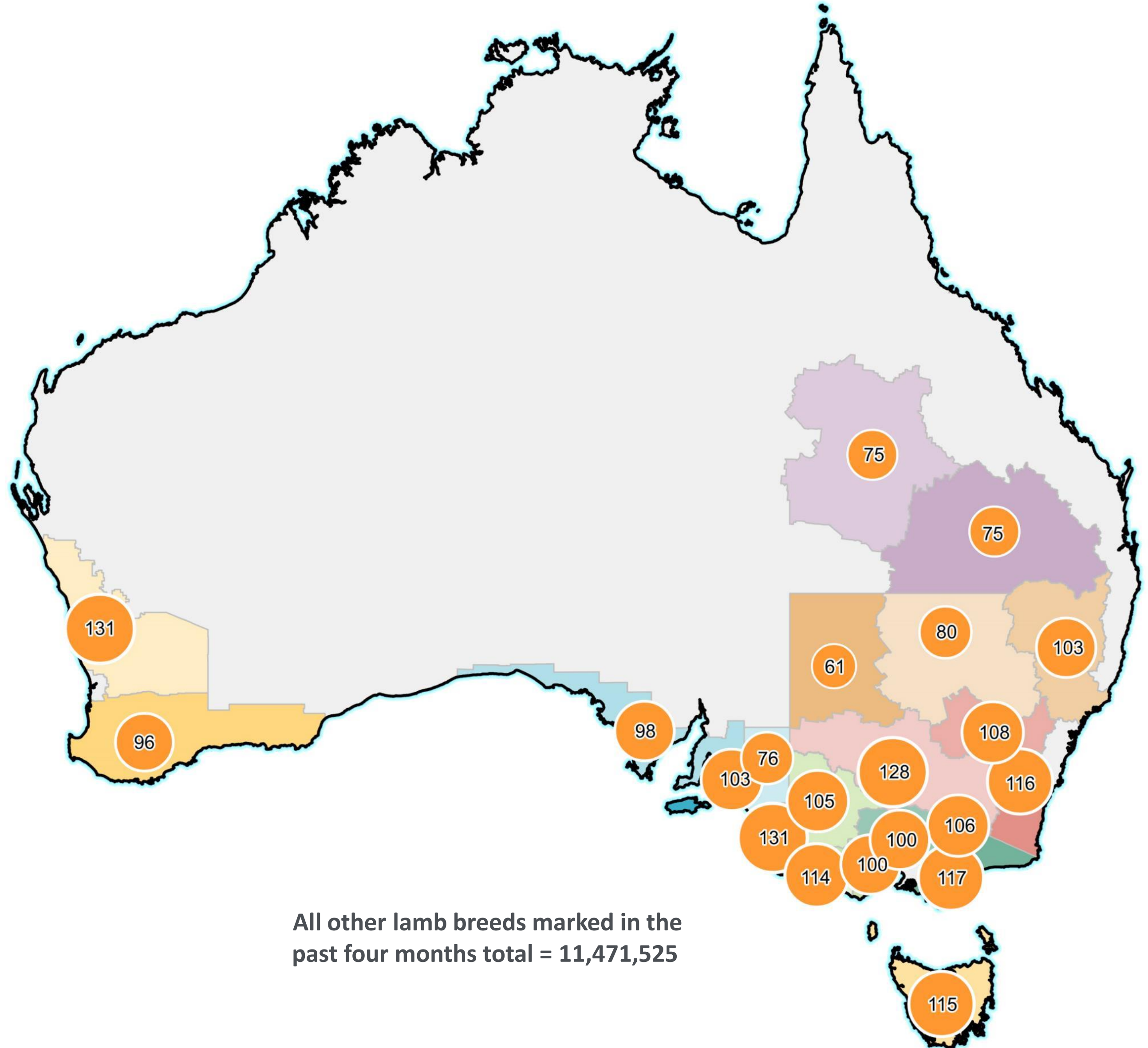
Sample base (properties) n= 2,957

Merino lambs
Percentage marked

- 100
- 50
- 10

All other breed lamb marking rates—by MLA reporting regions

Lambs marked percentage of non merinos by MLA Region



South East, Central Midlands and Murray and Murrumbidgee recorded the highest marking rates for non-Merino lambs at 131%, 131% and 128% respectively.

On a state basis, South Australia and Tasmania recorded the highest non-merino marking rates at 120% and 115% respectively, above QLD at 74% and WA at 101%.

Note: These marking rates are for the period between 1 July and 31 October 2019.

Non merino lambs
Percentage marked

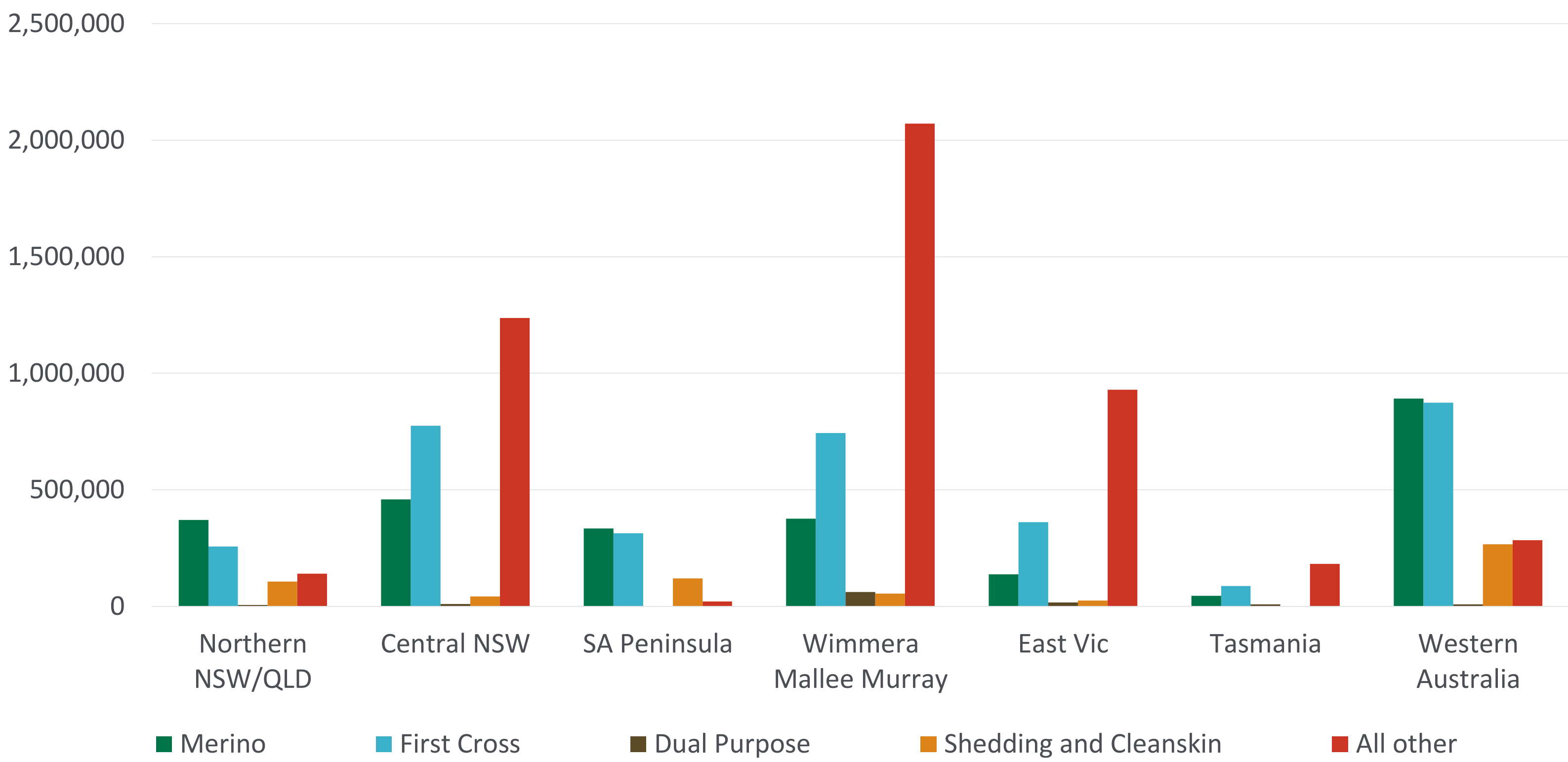
- 130
- 65
- 13

All other lamb breeds marked in the past four months total = 11,471,525

Sample base (properties) n= 2,957

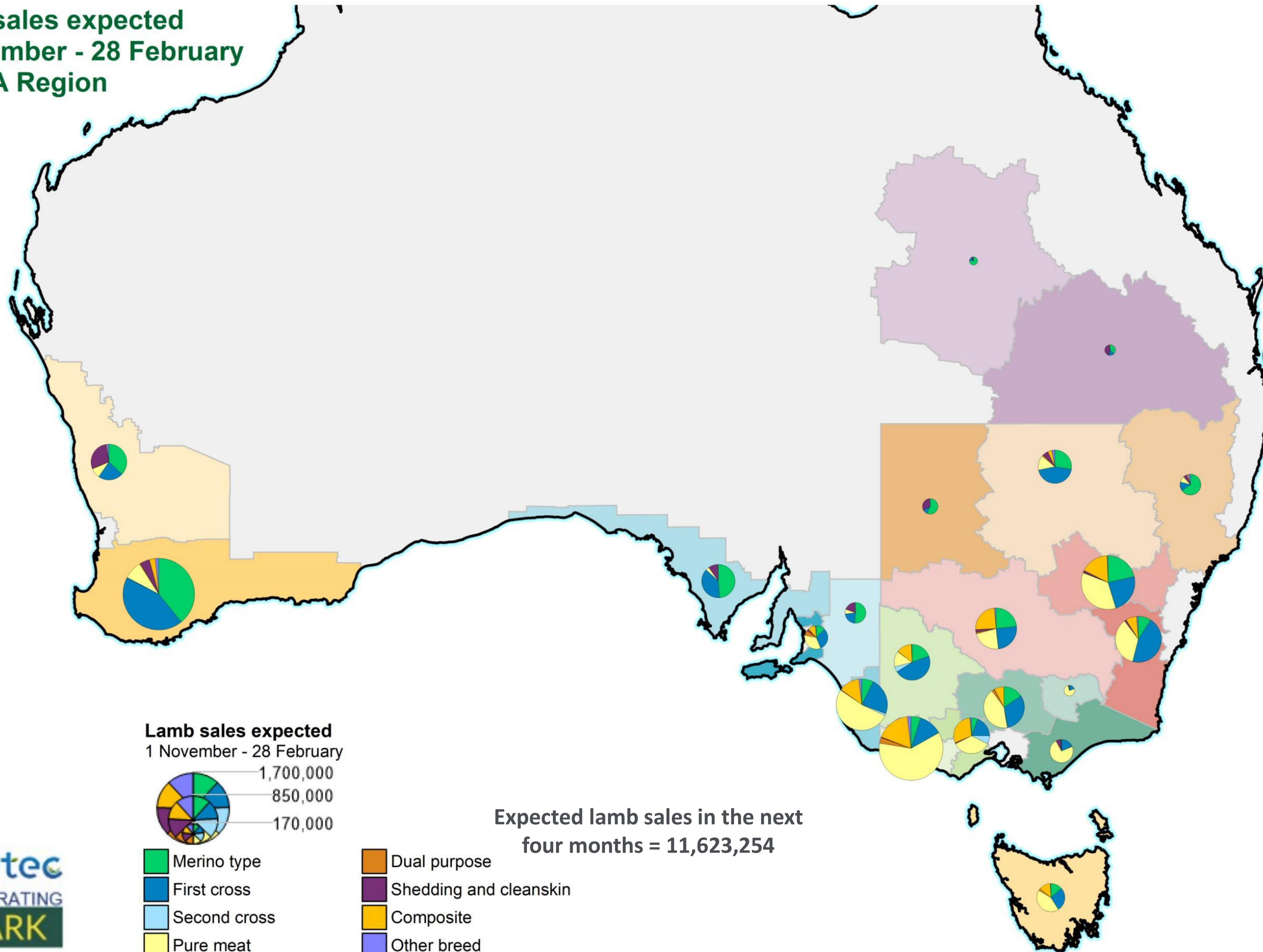
Expected lamb sales in next four months (1 November 2019 - 28 February 2020) – by MLA reporting regions

Expected lamb sales in the next 4 months



Expected lamb sales in next four months

Lamb sales expected
1 November - 28 February
by MLA Region



Lamb sales expected
1 November - 28 February

1,700,000
850,000
170,000

Expected lamb sales in the next
four months = 11,623,254

- Merino type
- First cross
- Second cross
- Pure meat
- Dual purpose
- Shedding and cleanskin
- Composite
- Other breed

Over the next four months (1 November 2019 to 28 February 2020), most lamb sales are expected to occur in WA South (1.7m), Western District (1.4m) and Central West(1.1m).

Merino's are expected to account for 23% of national lamb sales, with the proportion higher in QLD and WA (51% and 38% respectively). First cross, pure meat and other breeds will account for 77% of lamb sales, being highest in Victoria (91%) and Tasmania (86%).

NSW is expected to account for 29% of total lamb sales over the next four months, with around 3.4 million lambs expected to be on offer. This is followed by Victoria and WA at 29% and 20% of total lamb sales, respectively.

New Question in October 2019: Grain Fed Lambs

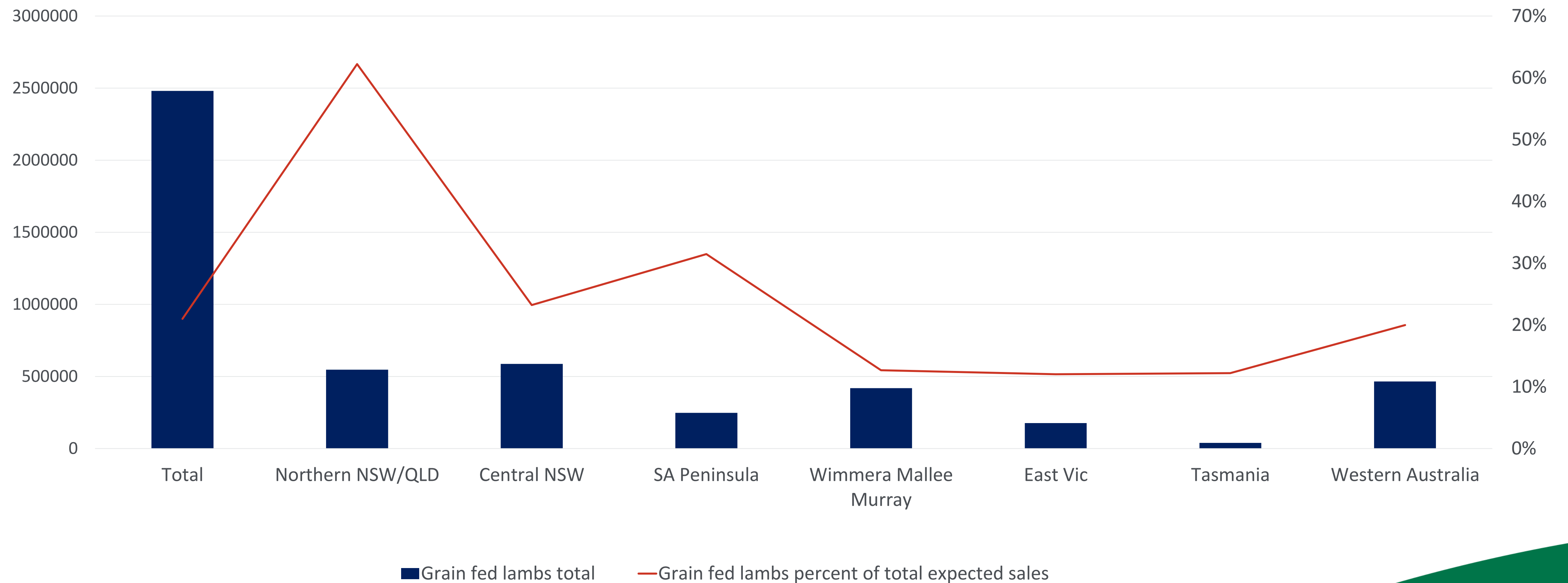
Number of lambs expected to be sold that spent 35 days with grain as their primary food source

Of expected lamb sales, how many will have spent 35 days with grain as their primary food source



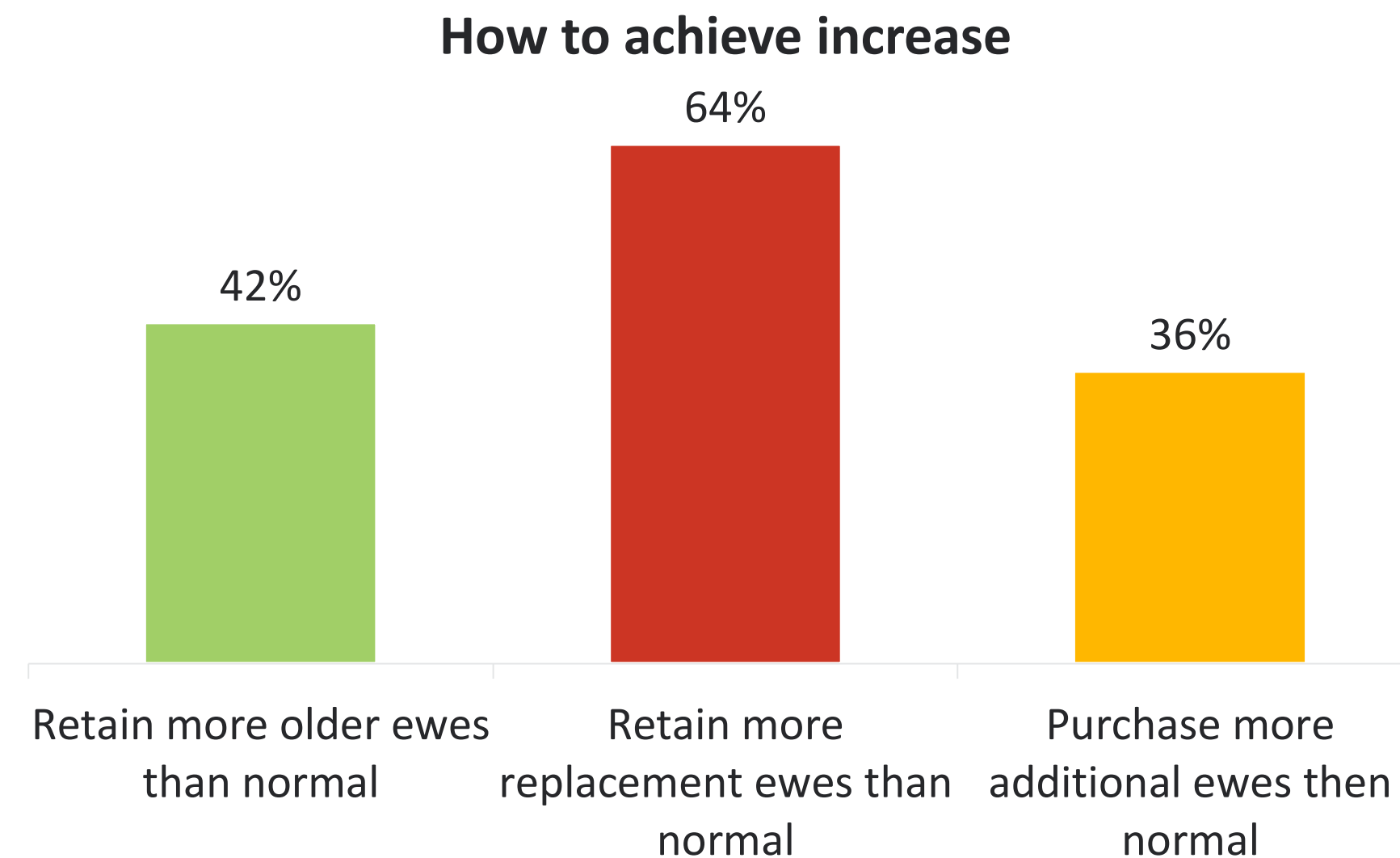
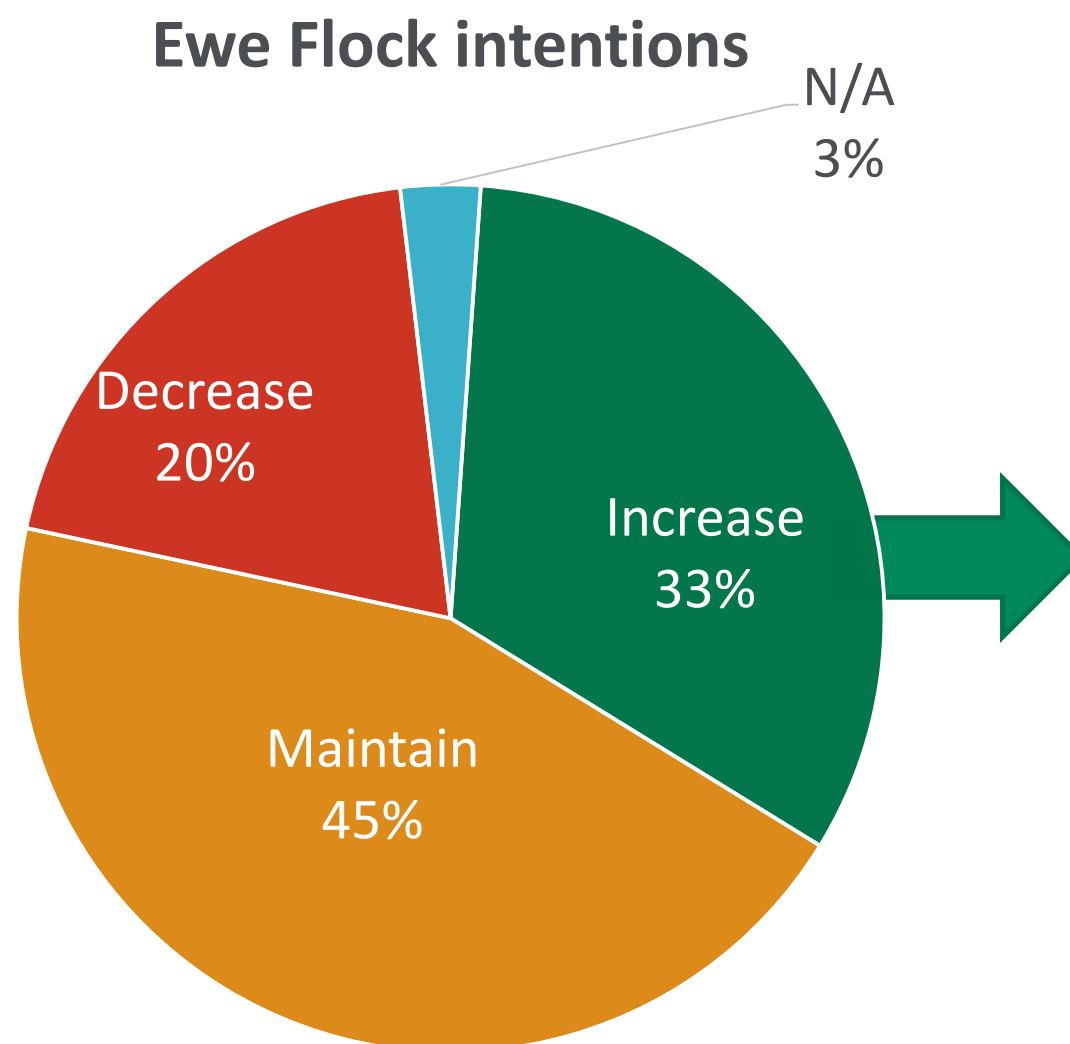
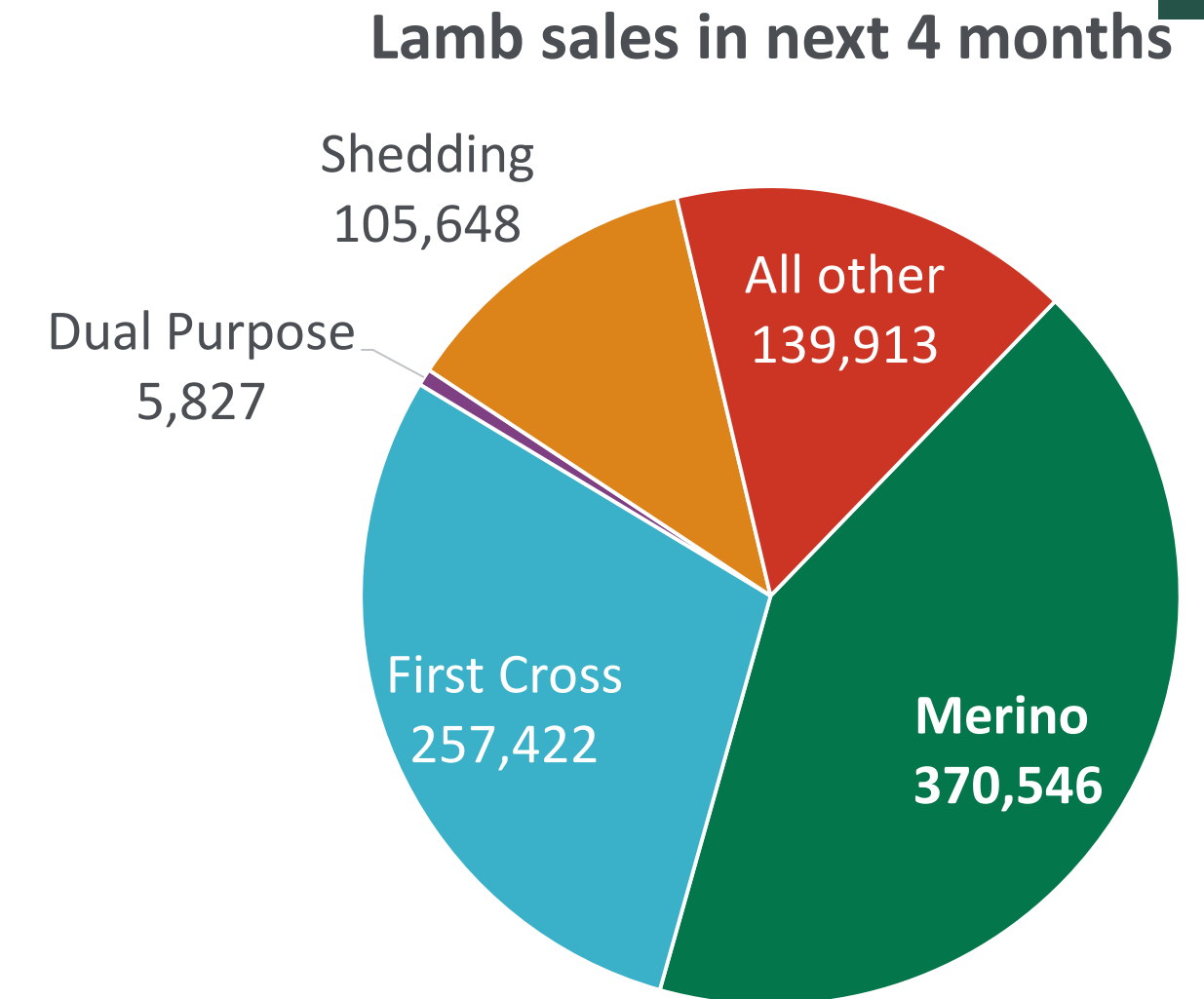
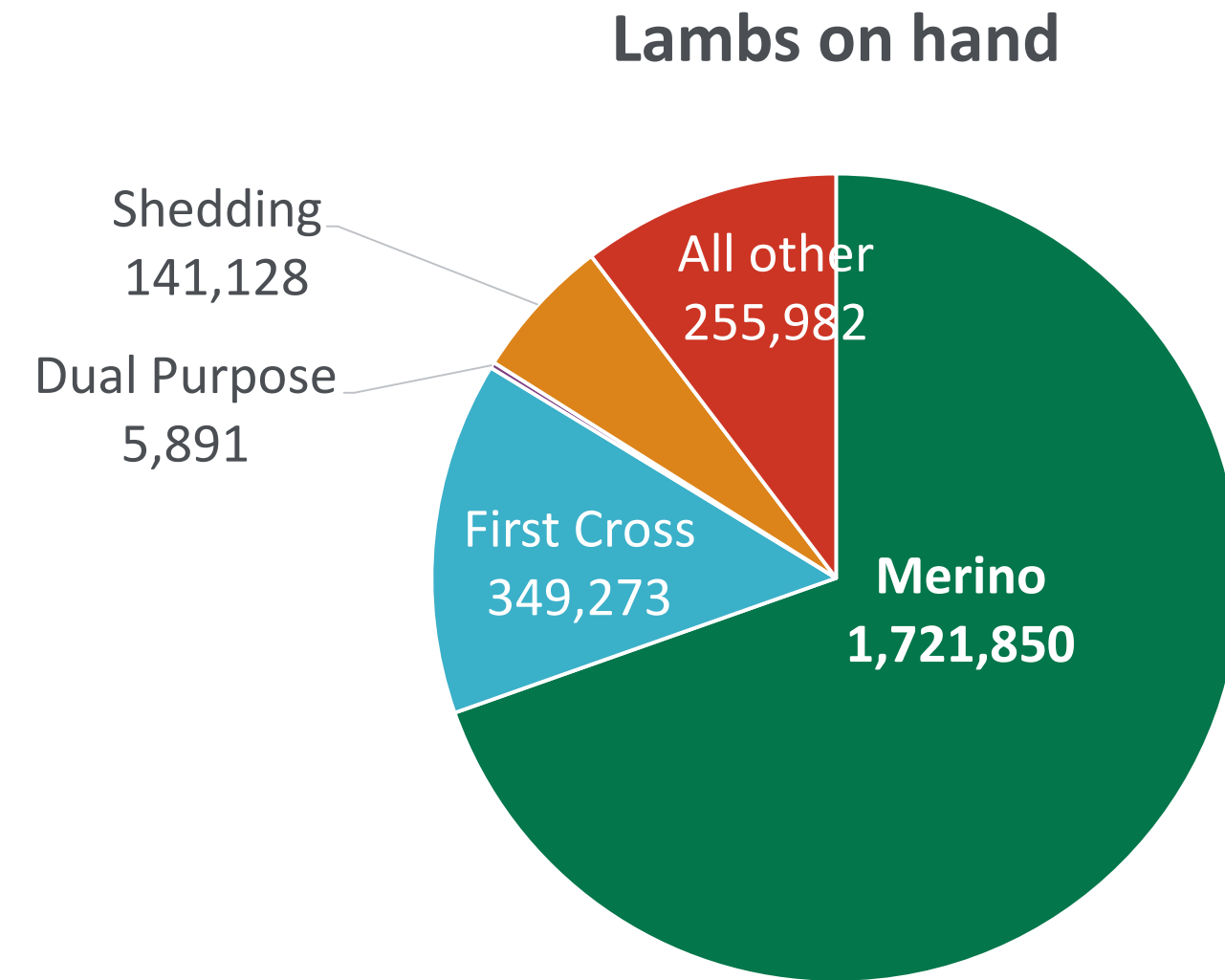
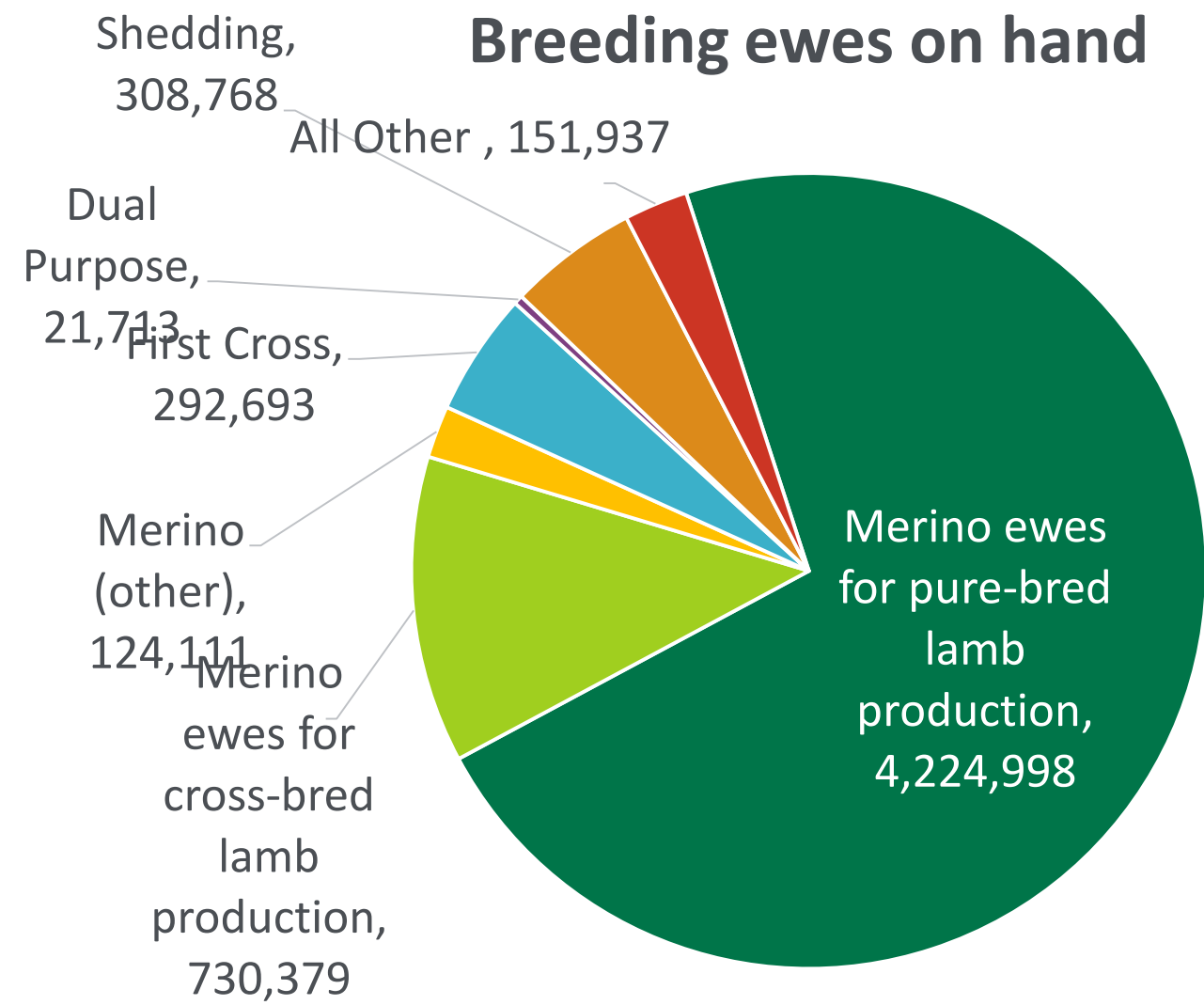
Number of lambs expected to be sold that spent 35 days with grain as their primary food source

Of expected lamb sales, how many will have spent 35 days with grain as their primary food source



Regional Snapshots

Northern NSW/QLD

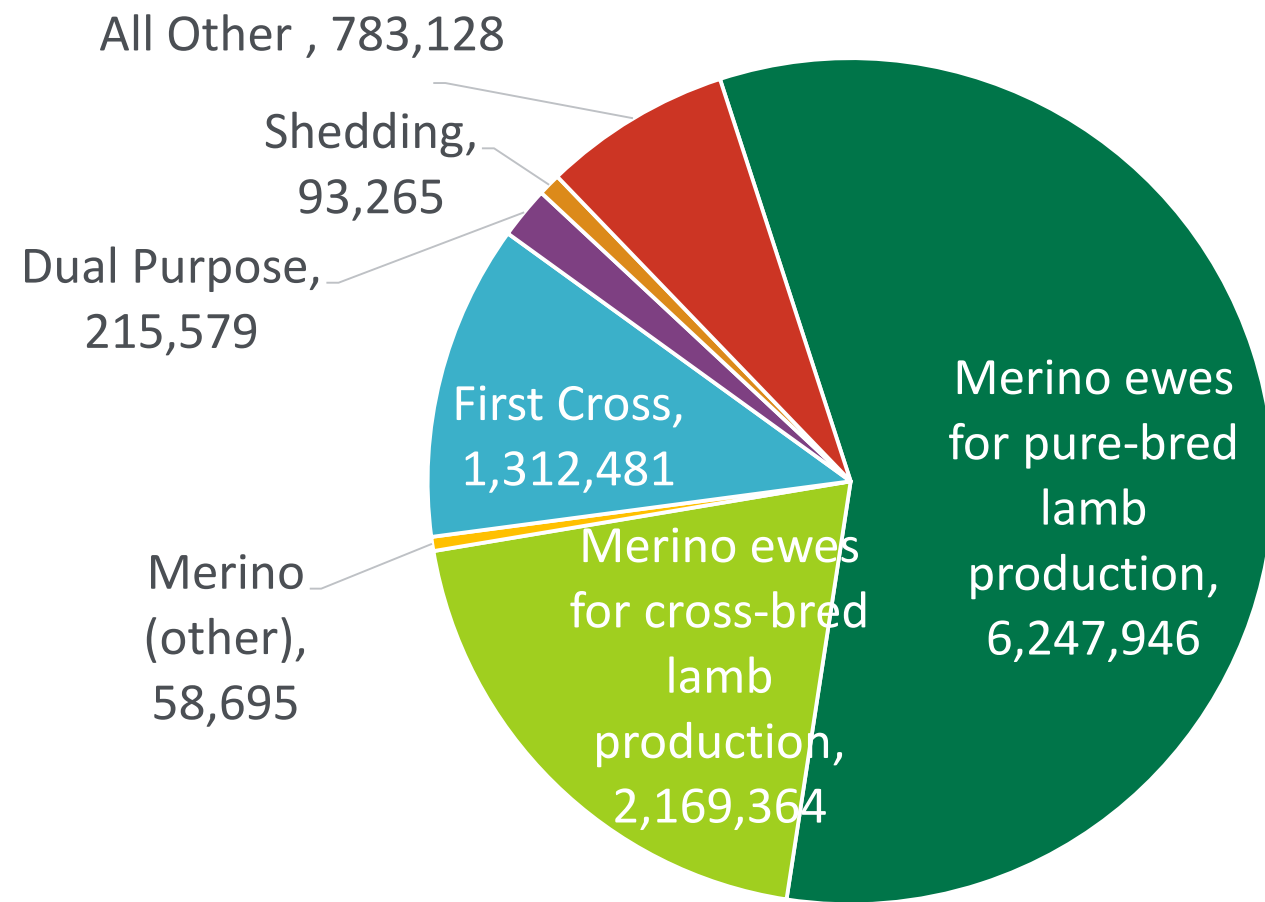


Totals

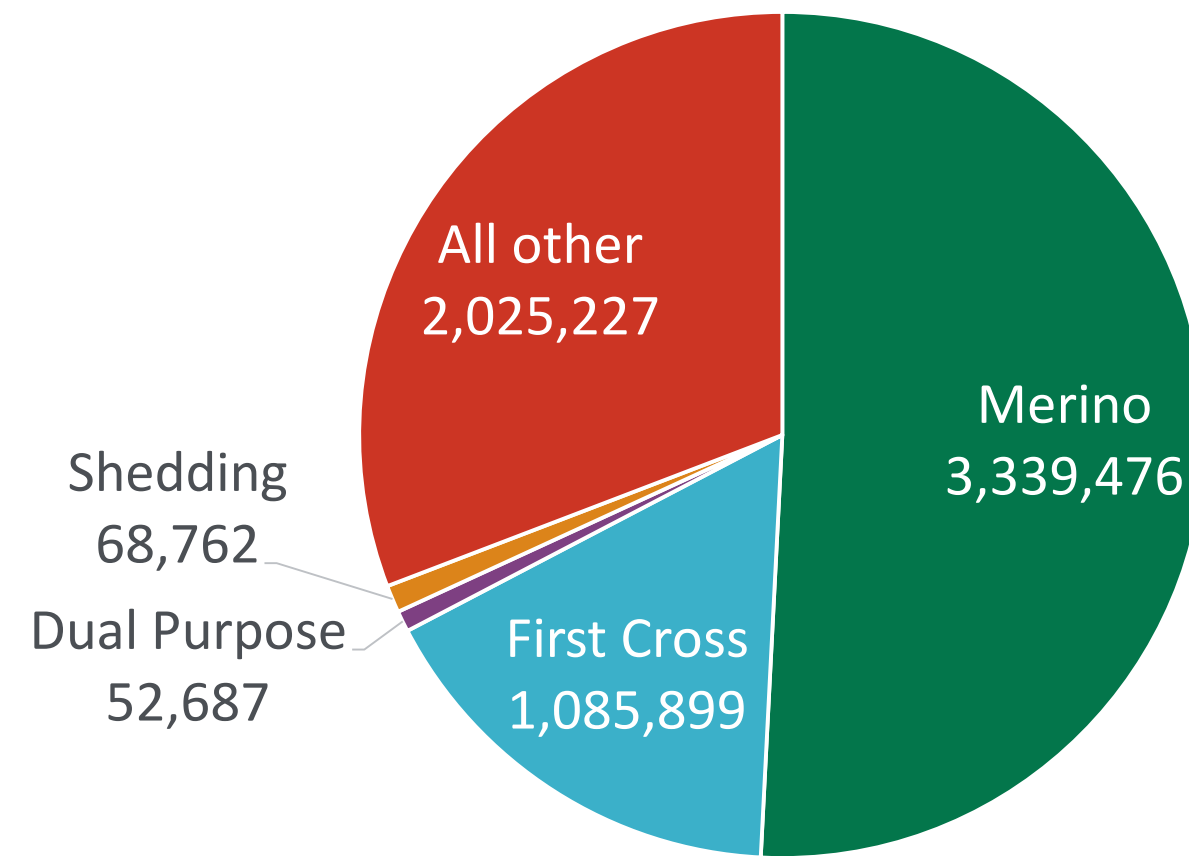
Breeding ewes on hand	5,854,599
Lambs on hand	2,474,125
Expected lamb sales in the next 4 months	879,356
Lambs marked in the past 4 months (1 Mar – 30 Jun)	1,670,053
Number of ewes joined to produce marked lambs	2,364,344

Central NSW

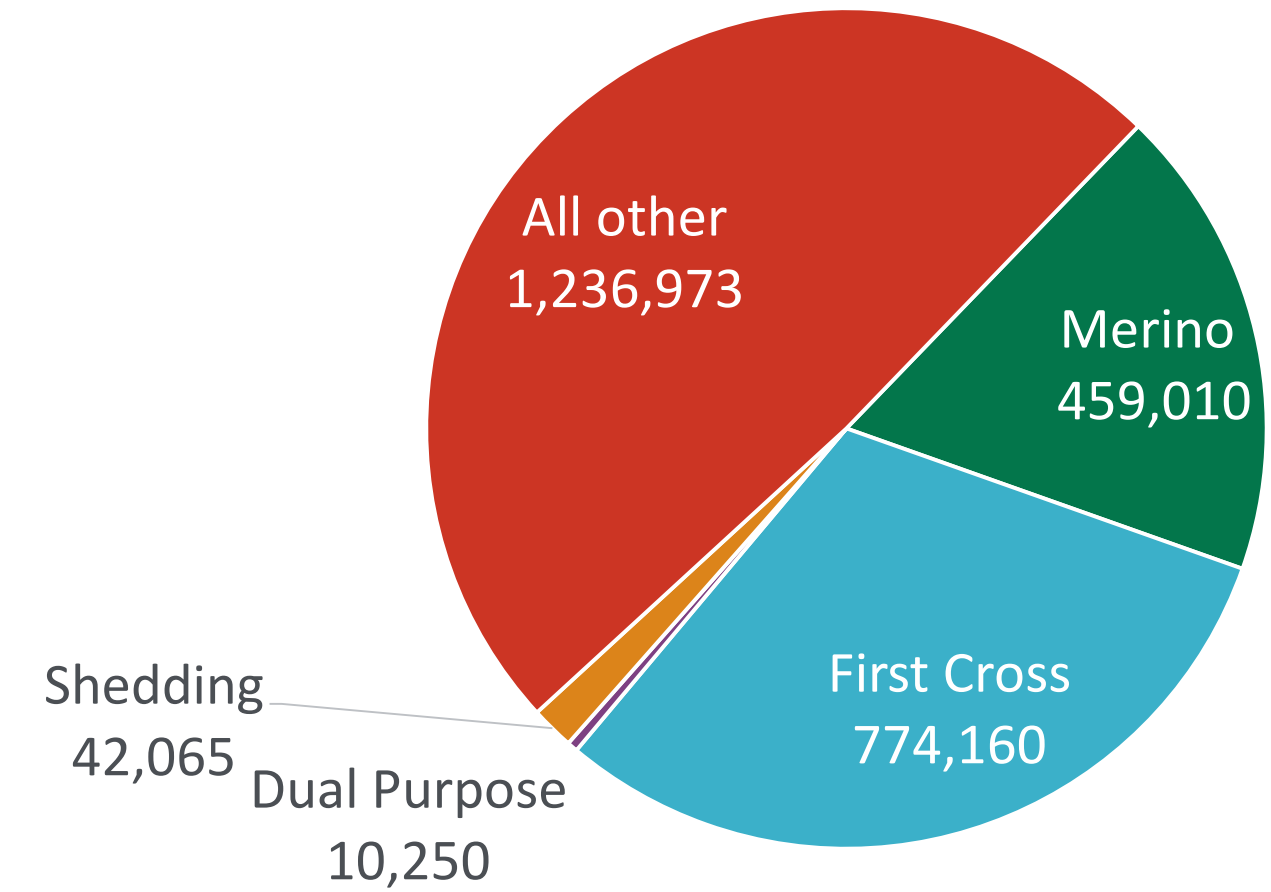
Breeding ewes on hand



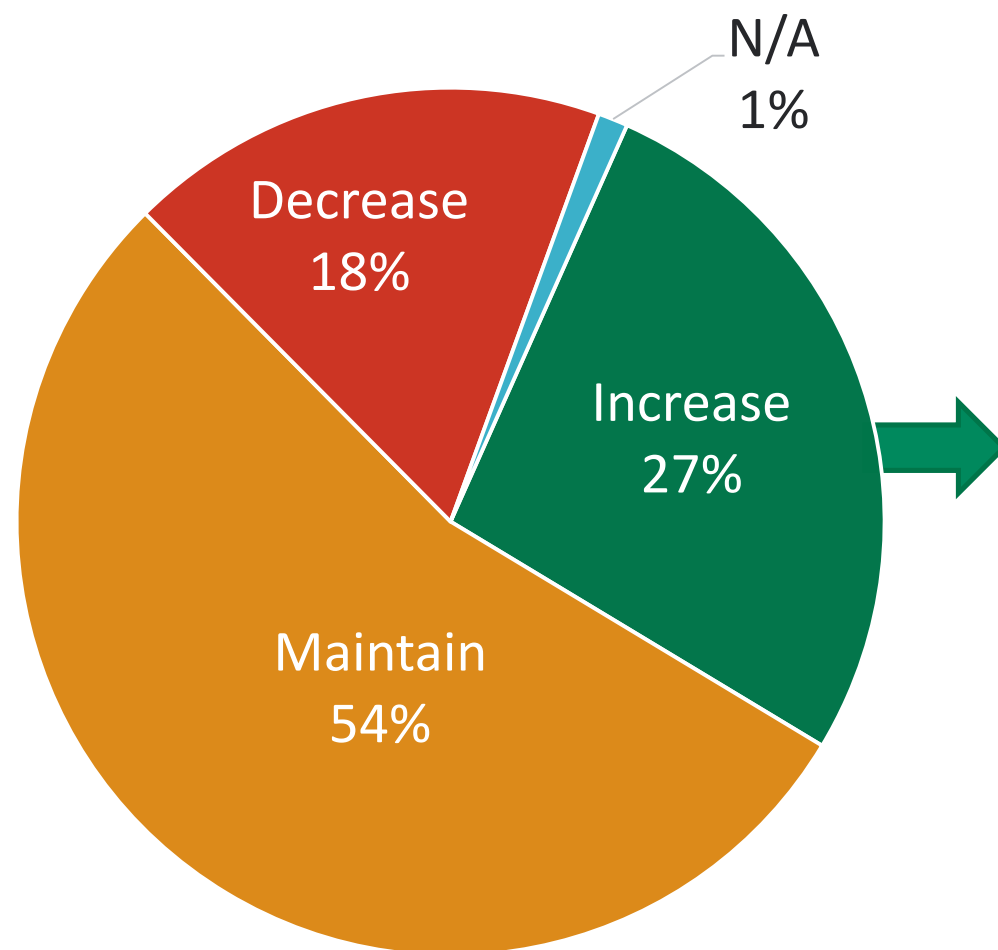
Lambs on hand



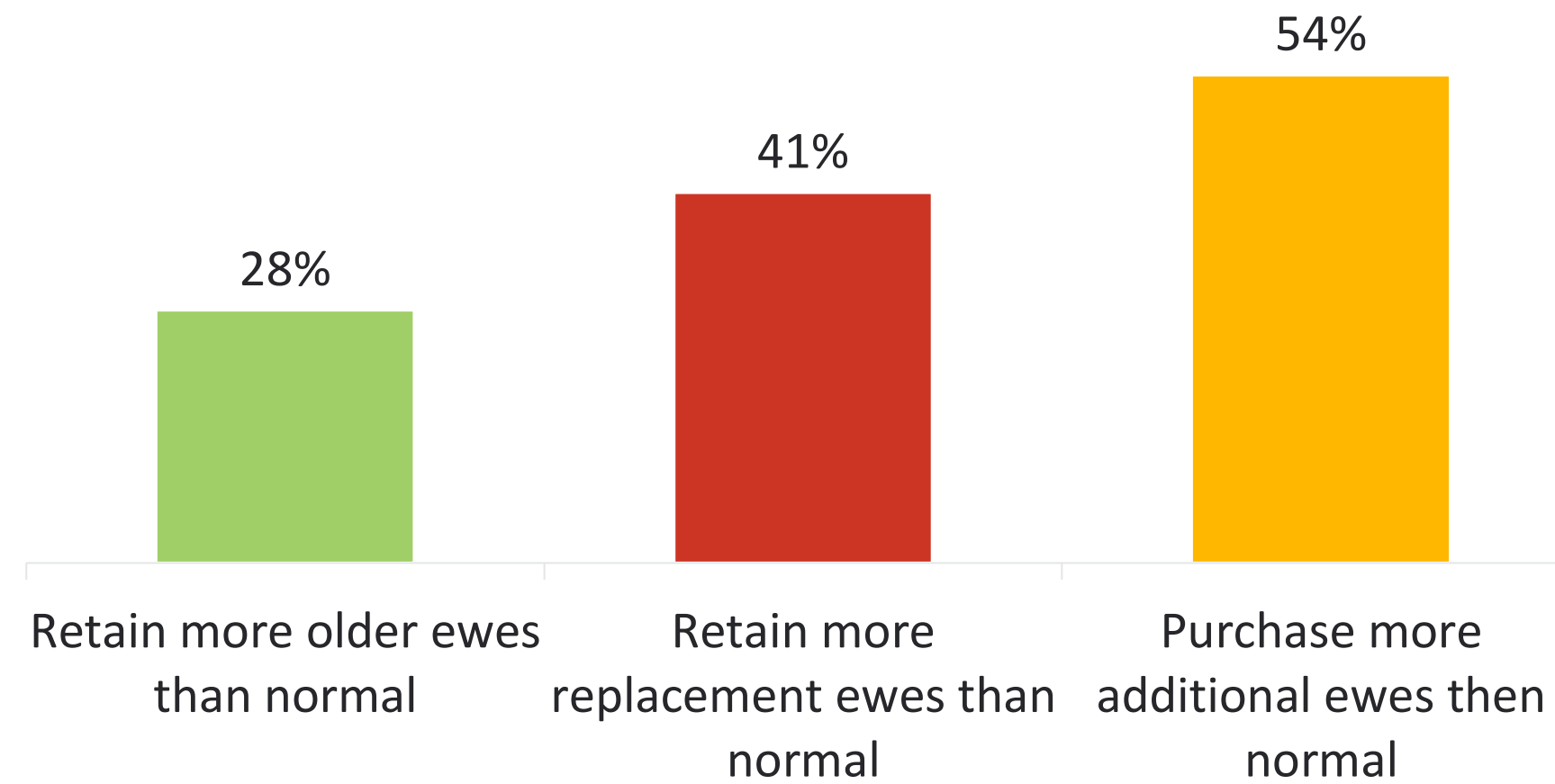
Lamb sales in next 4 months



Ewe Flock intentions



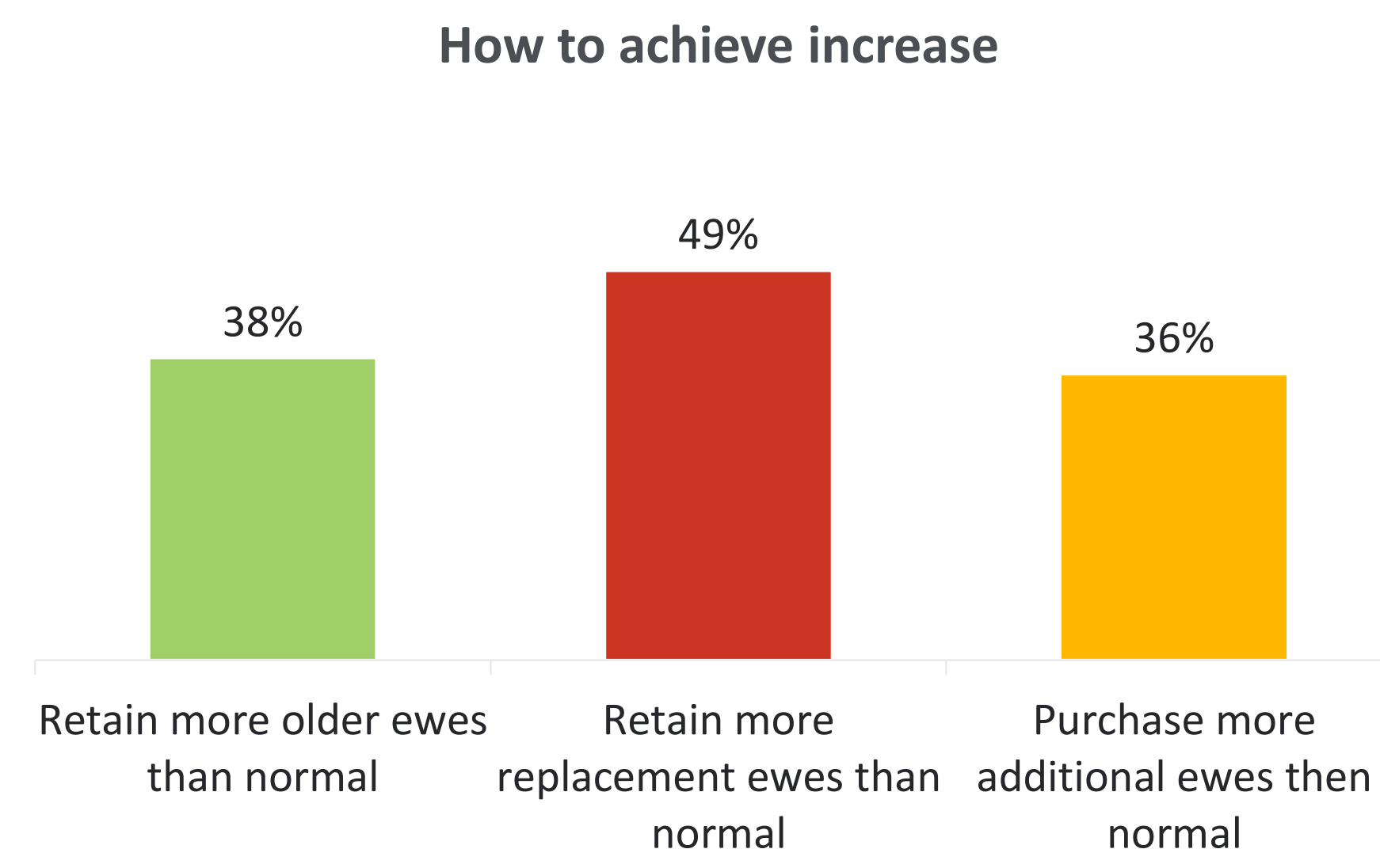
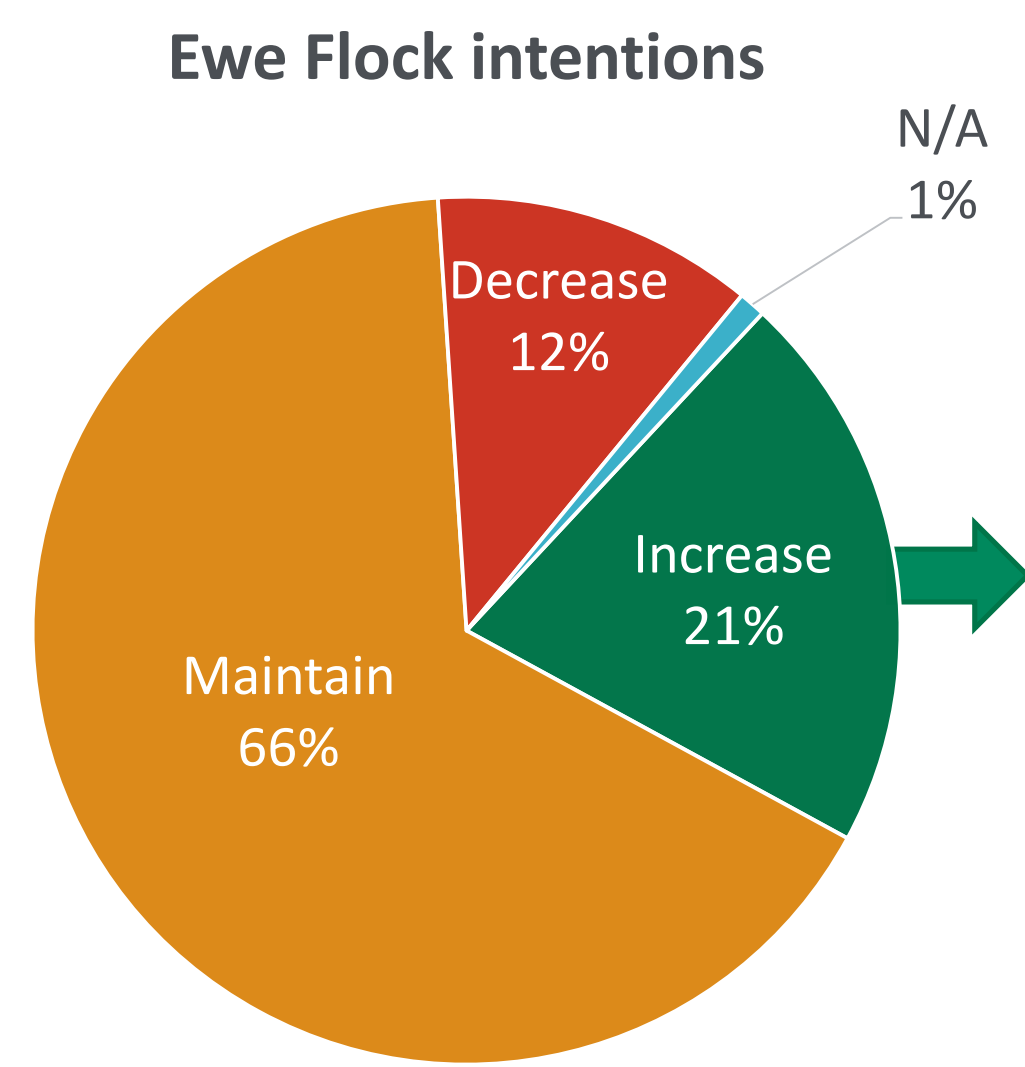
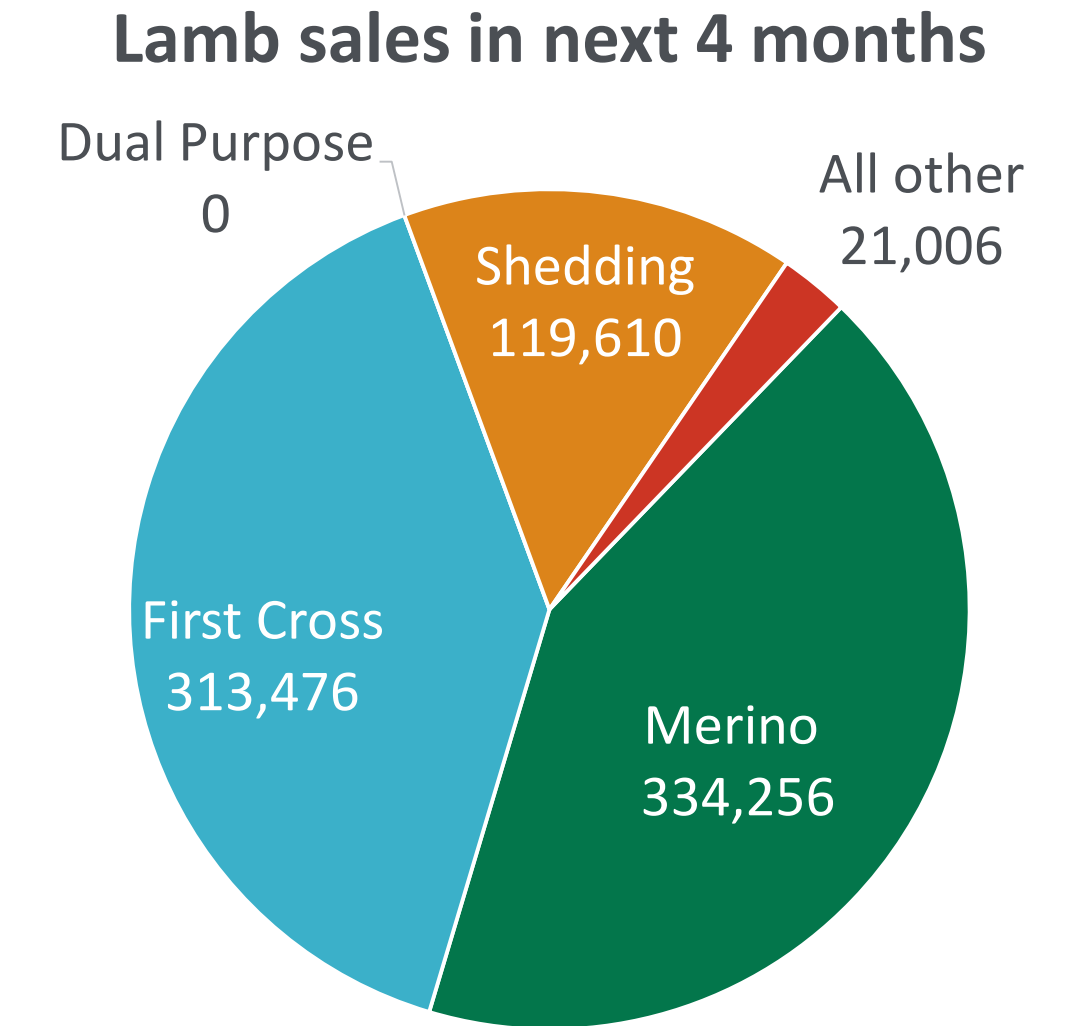
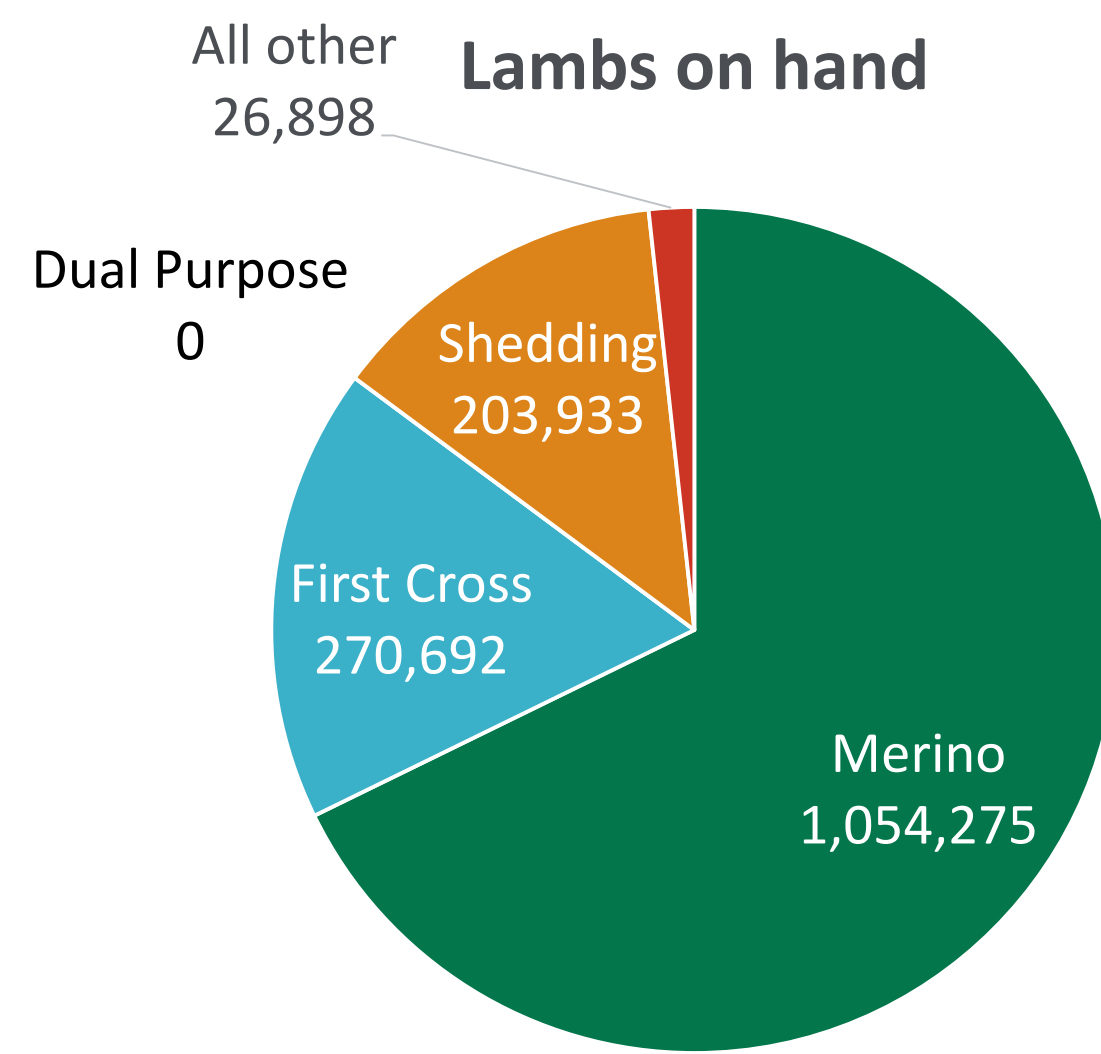
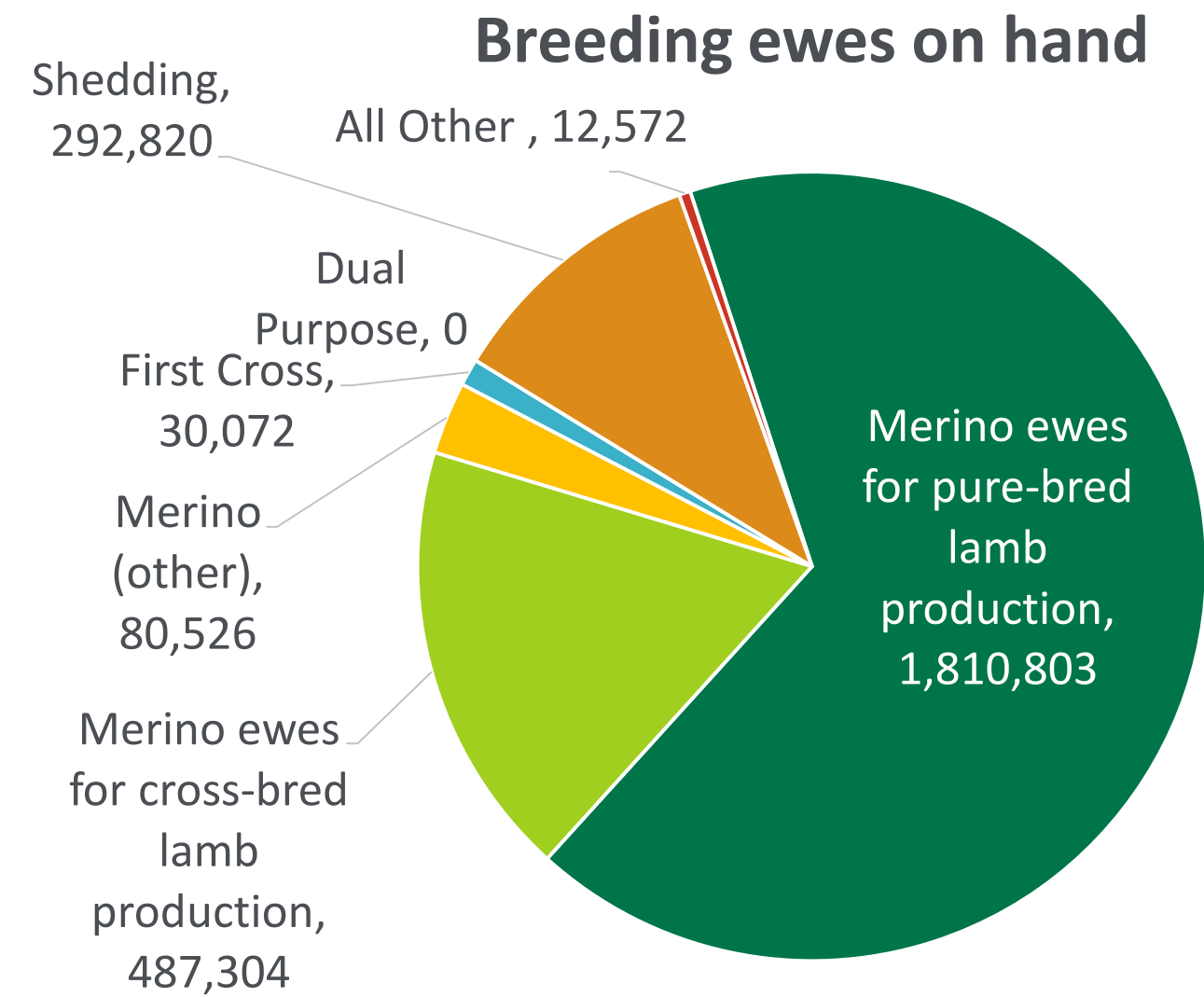
How to achieve increase



Totals

Breeding ewes on hand	10,880,457
Lambs on hand	6,572,051
Expected lamb sales in the next 4 months	2,522,457
Lambs marked in the past 4 months (1 Mar – 30 Jun)	5,867,278
Number of ewes joined to produce marked lambs	5,821,918

SA Peninsula

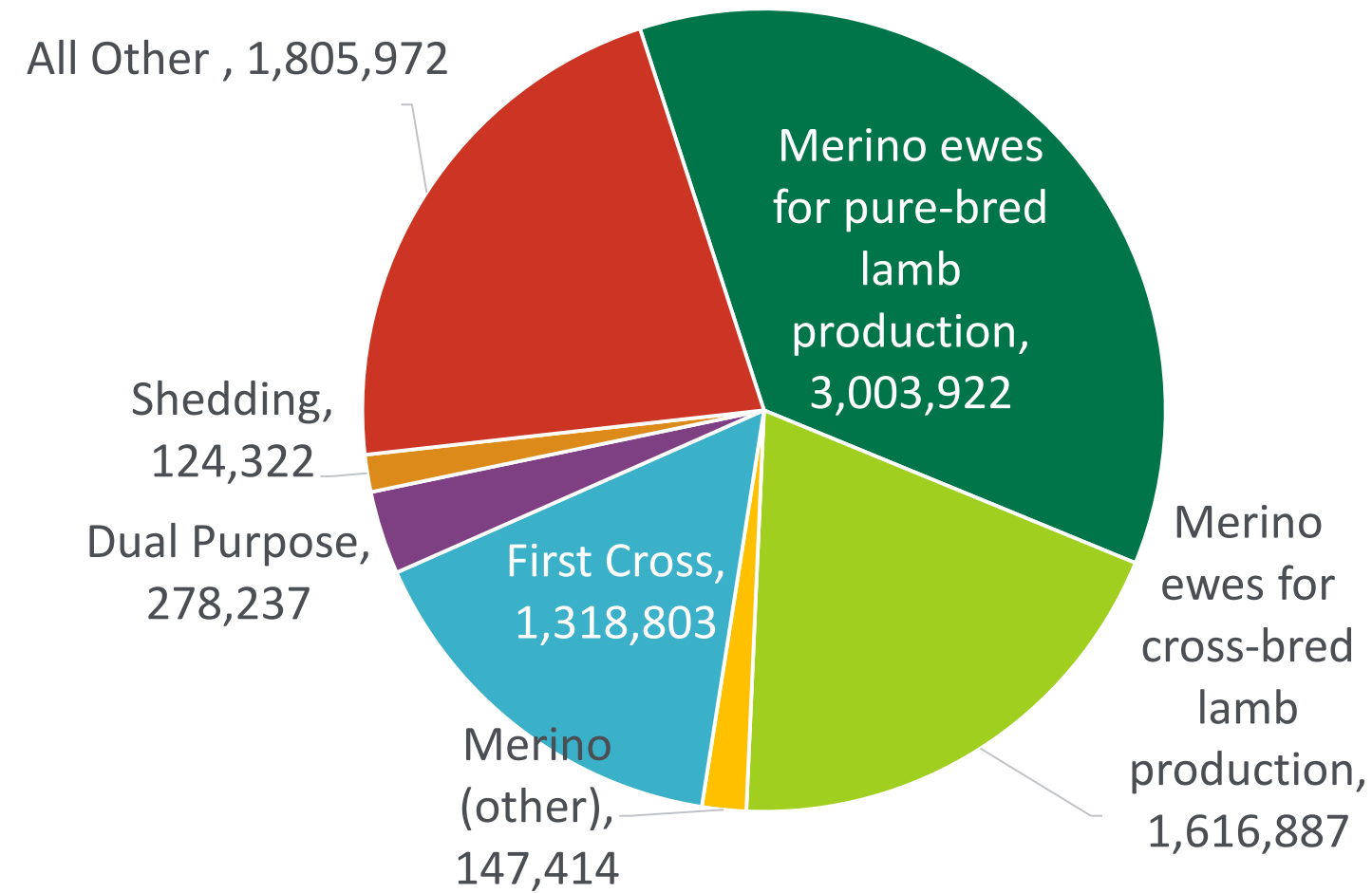


Totals

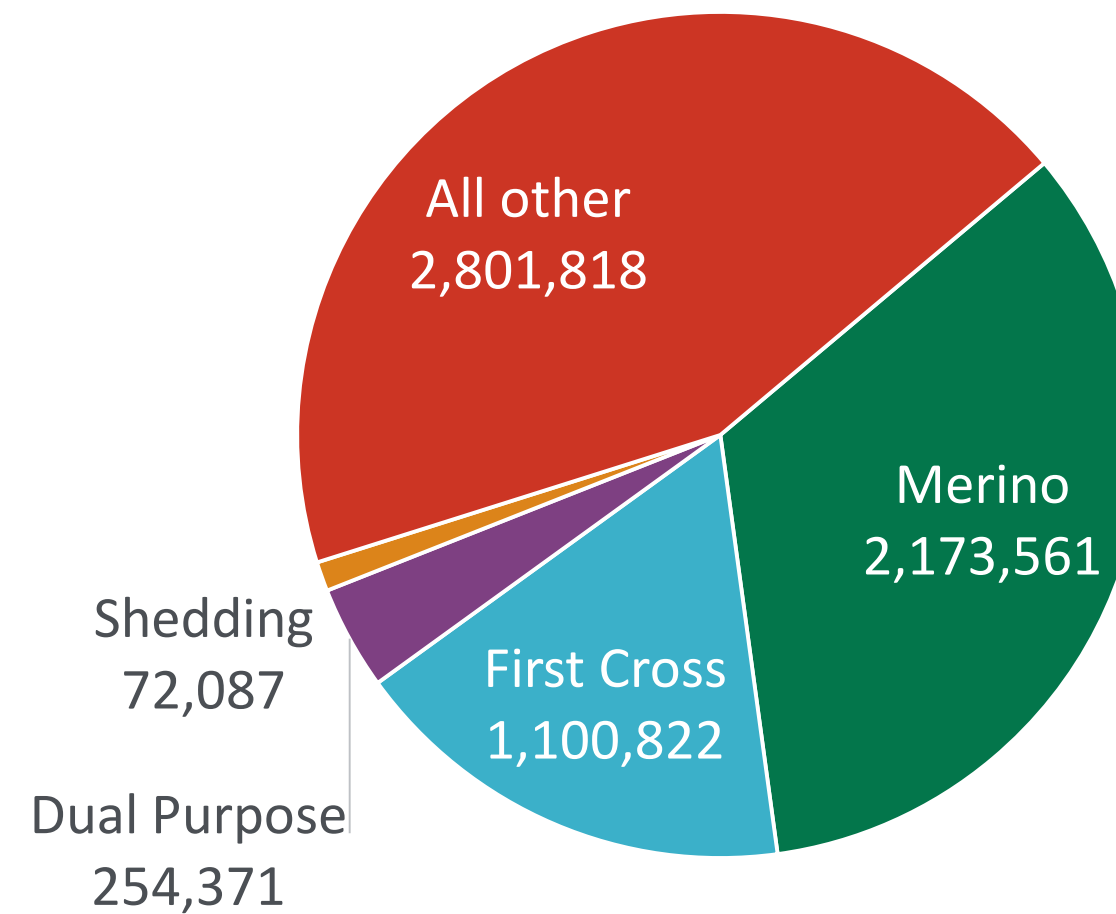
Breeding ewes on hand	2,714,097
Lambs on hand	1,555,798
Expected lamb sales in the next 4 months	788,348
Lambs marked in the past 4 months (1 Mar – 30 Jun)	1,212,644
Number of ewes joined to produce marked lambs	1,757,357

Wimmera Mallee Murray

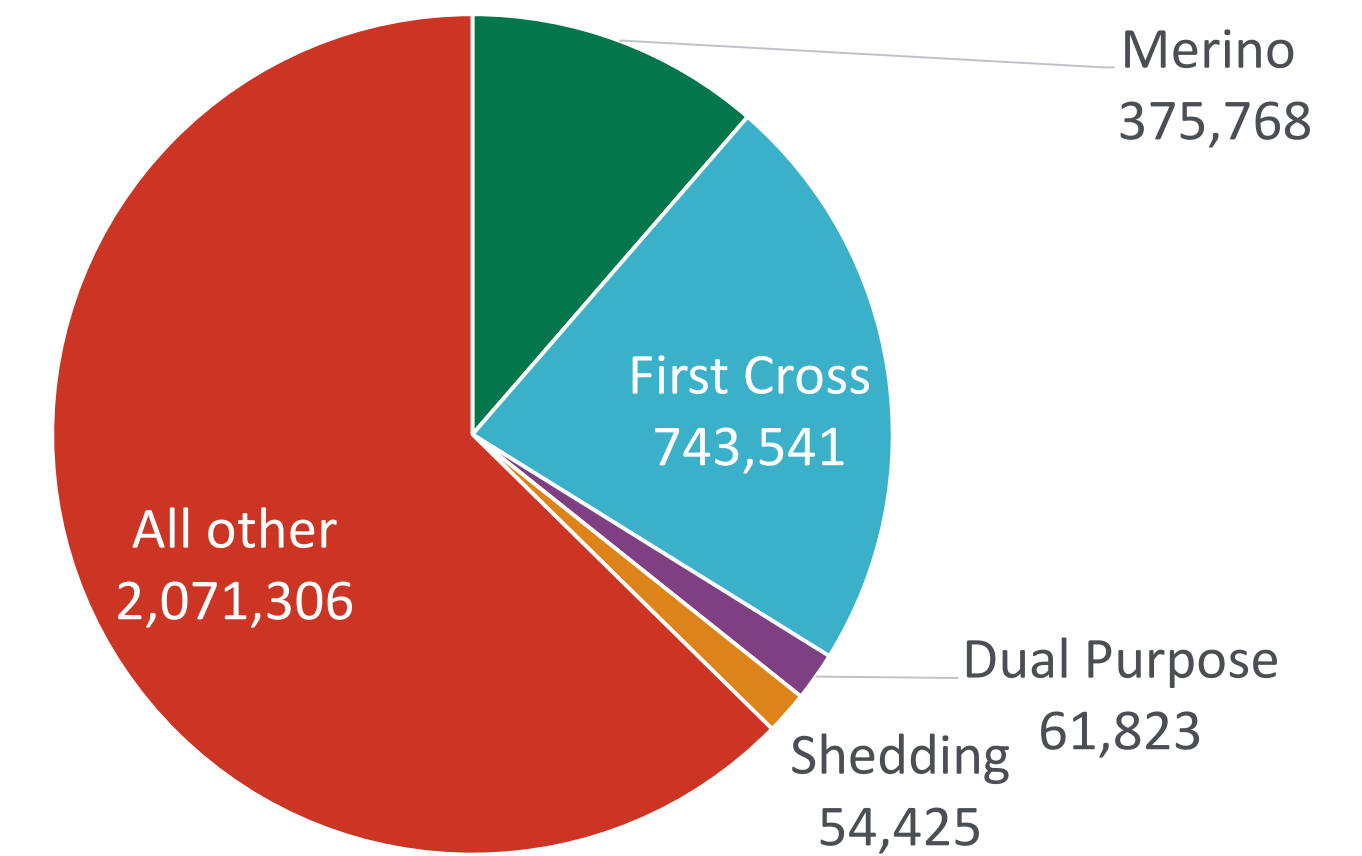
Breeding ewes on hand



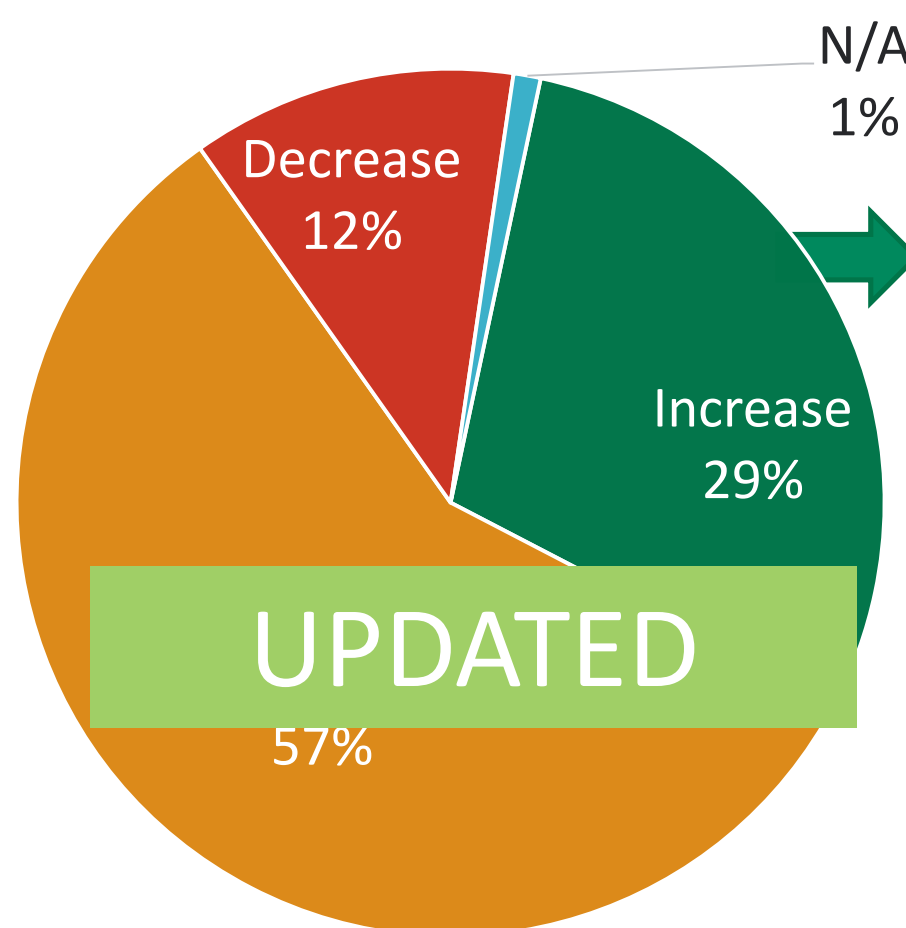
Lambs on hand



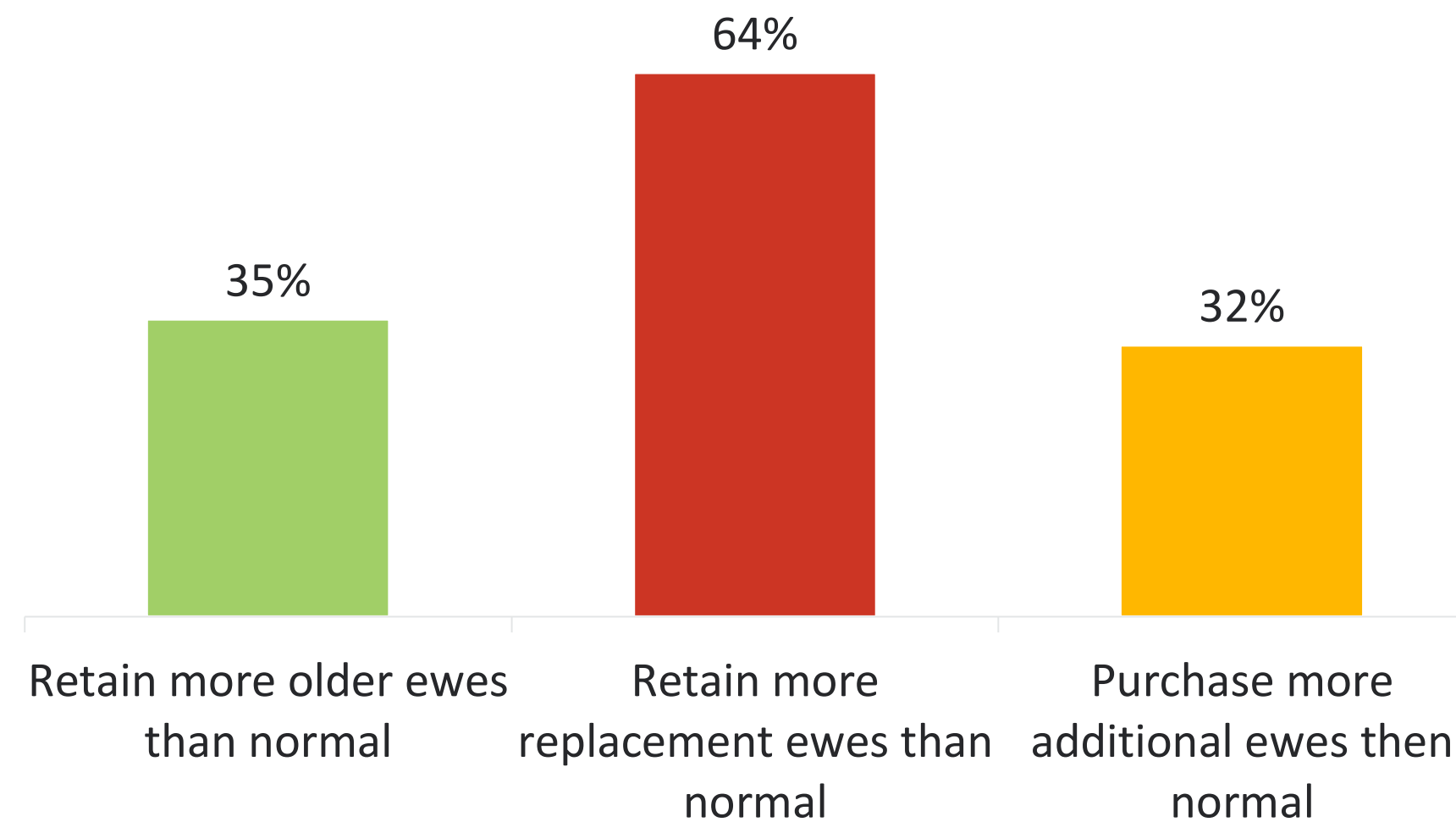
Lamb sales in next 4 months



Ewe Flock intentions



How to achieve increase

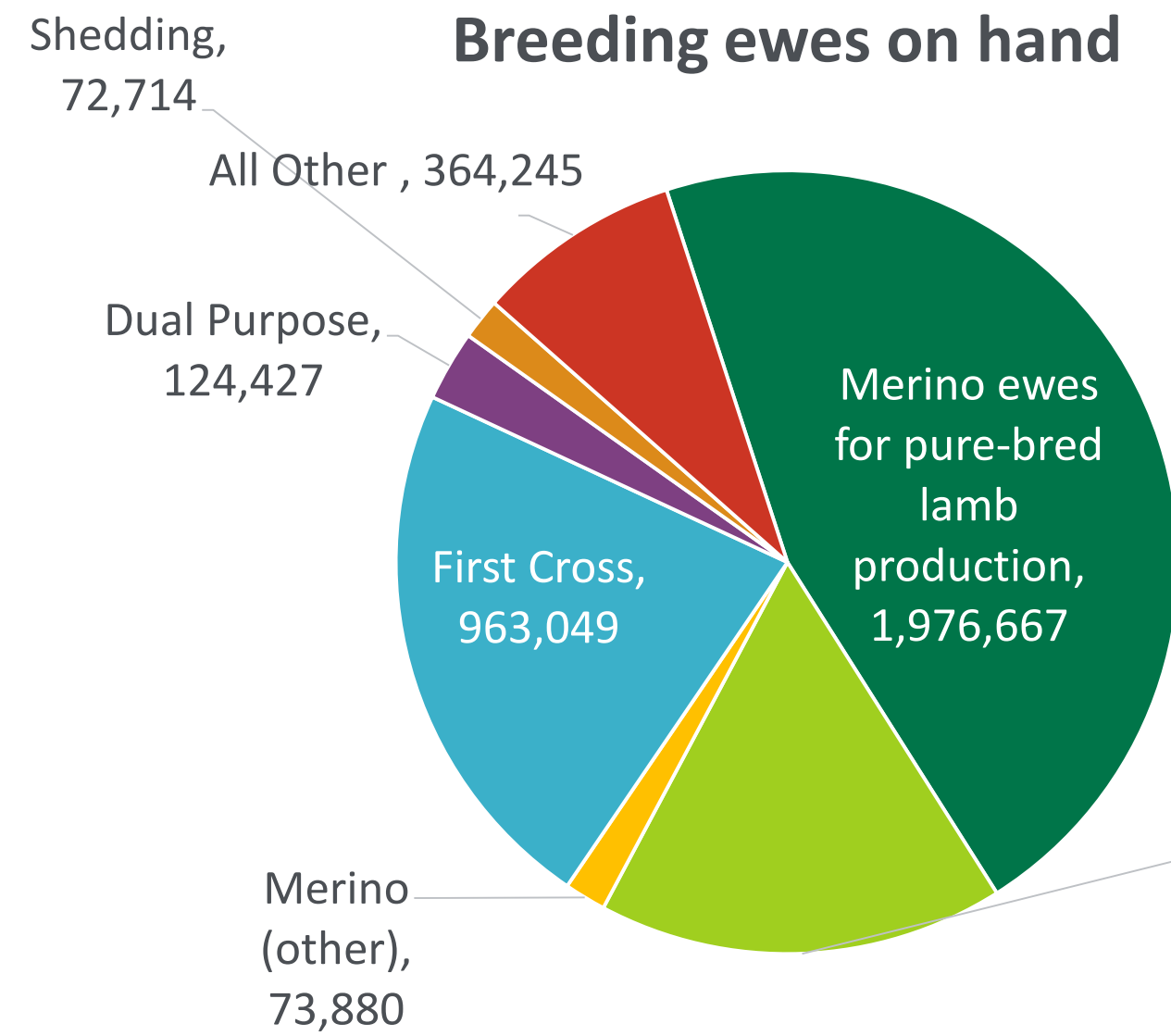


Totals

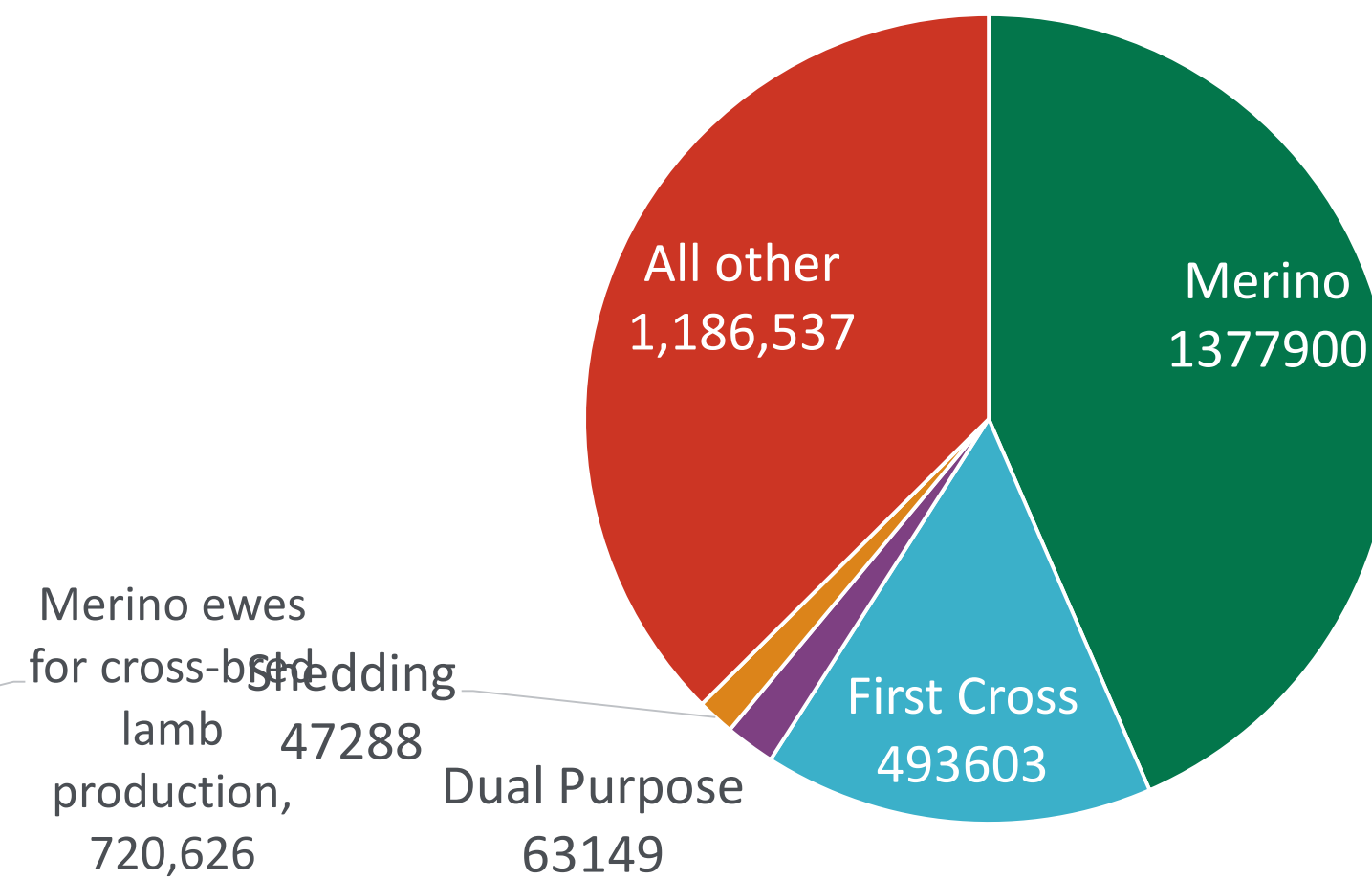
Breeding ewes on hand	8,295,557
Lambs on hand	6,402,659
Expected lamb sales in the next 4 months	3,306,862
Lambs marked in the past 4 months (1 Mar – 30 Jun)	5,345,367
Number of ewes joined to produce marked lambs	5,135,720

East Victoria

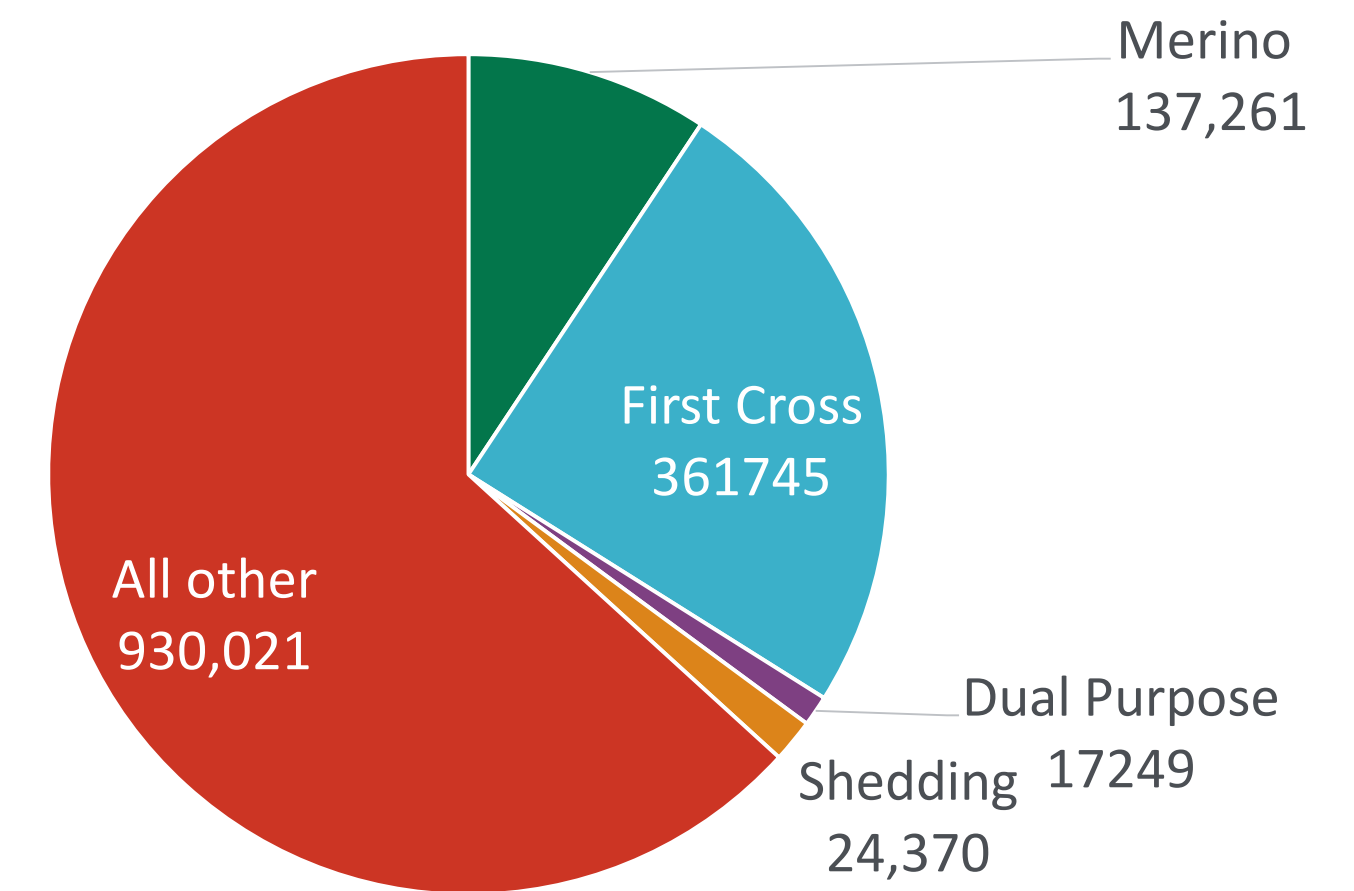
Breeding ewes on hand



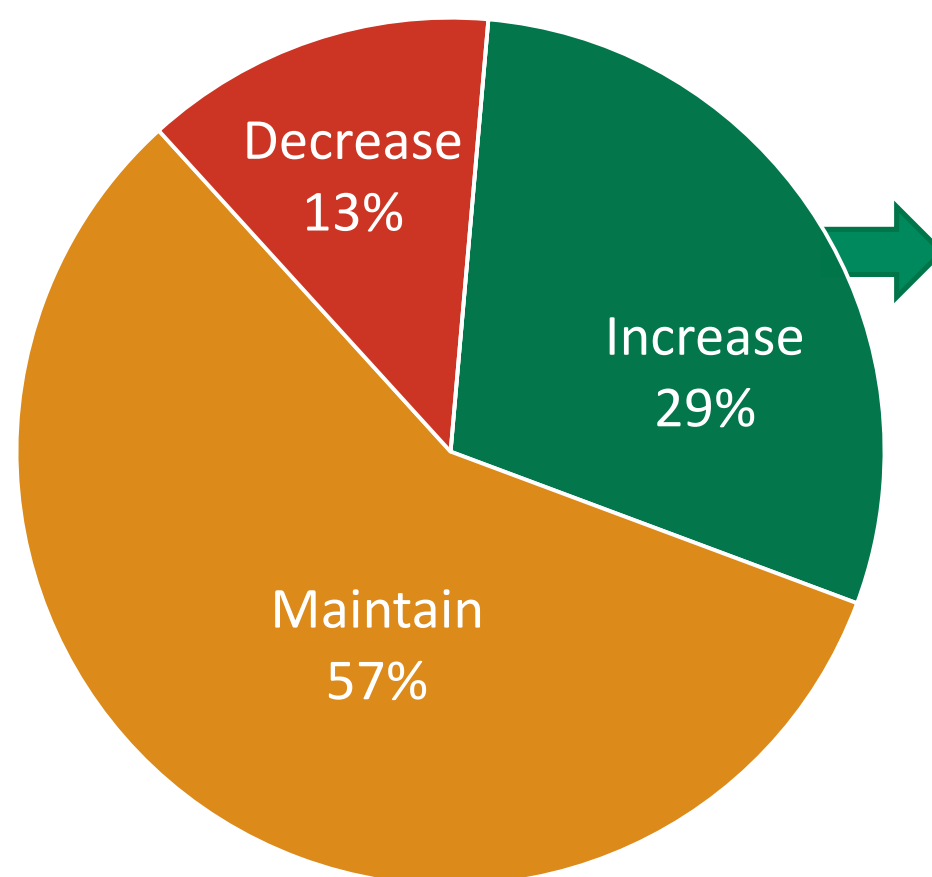
Lambs on hand



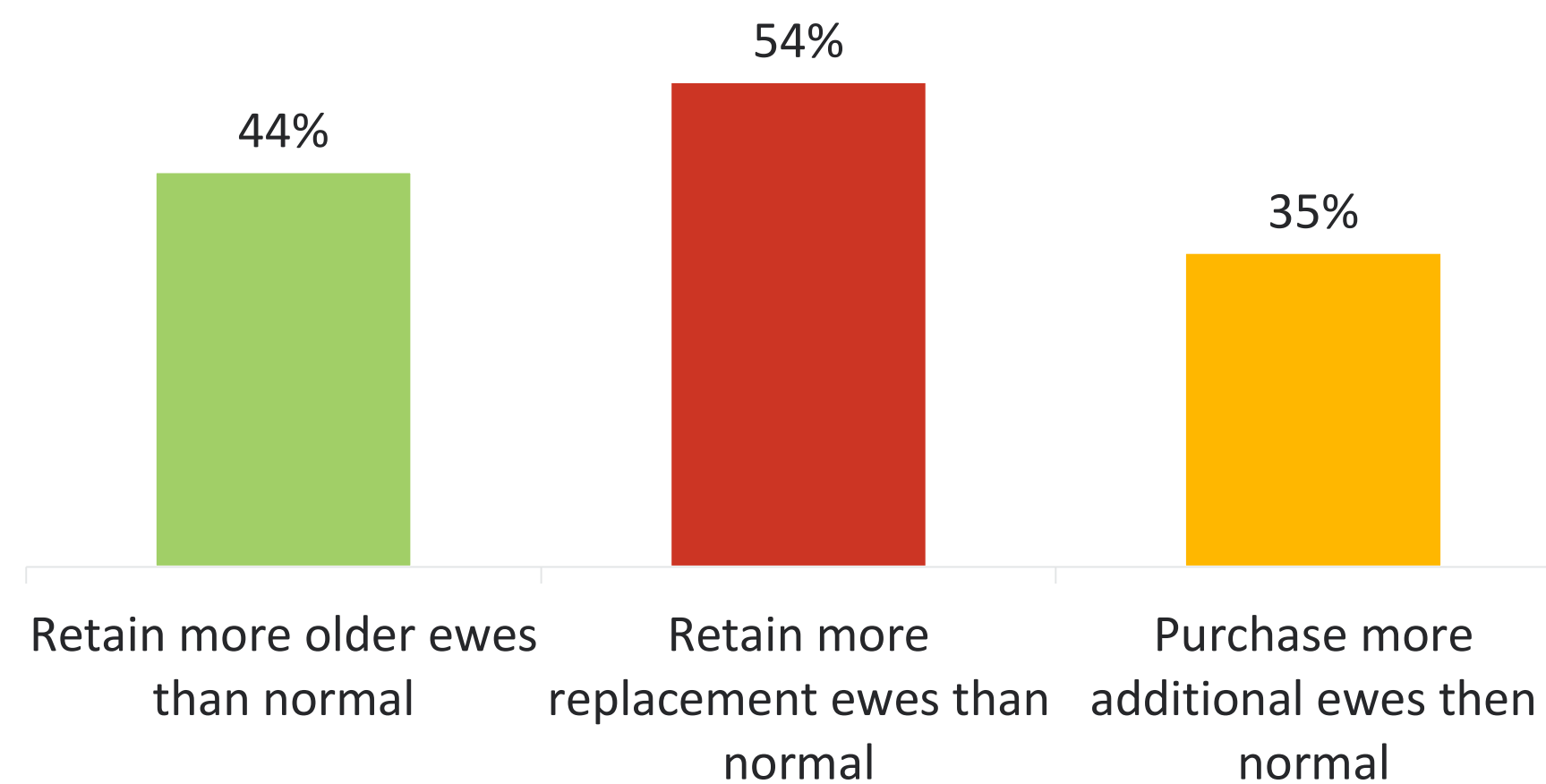
Lamb sales in next 4 months



Ewe Flock intentions



How to achieve increase

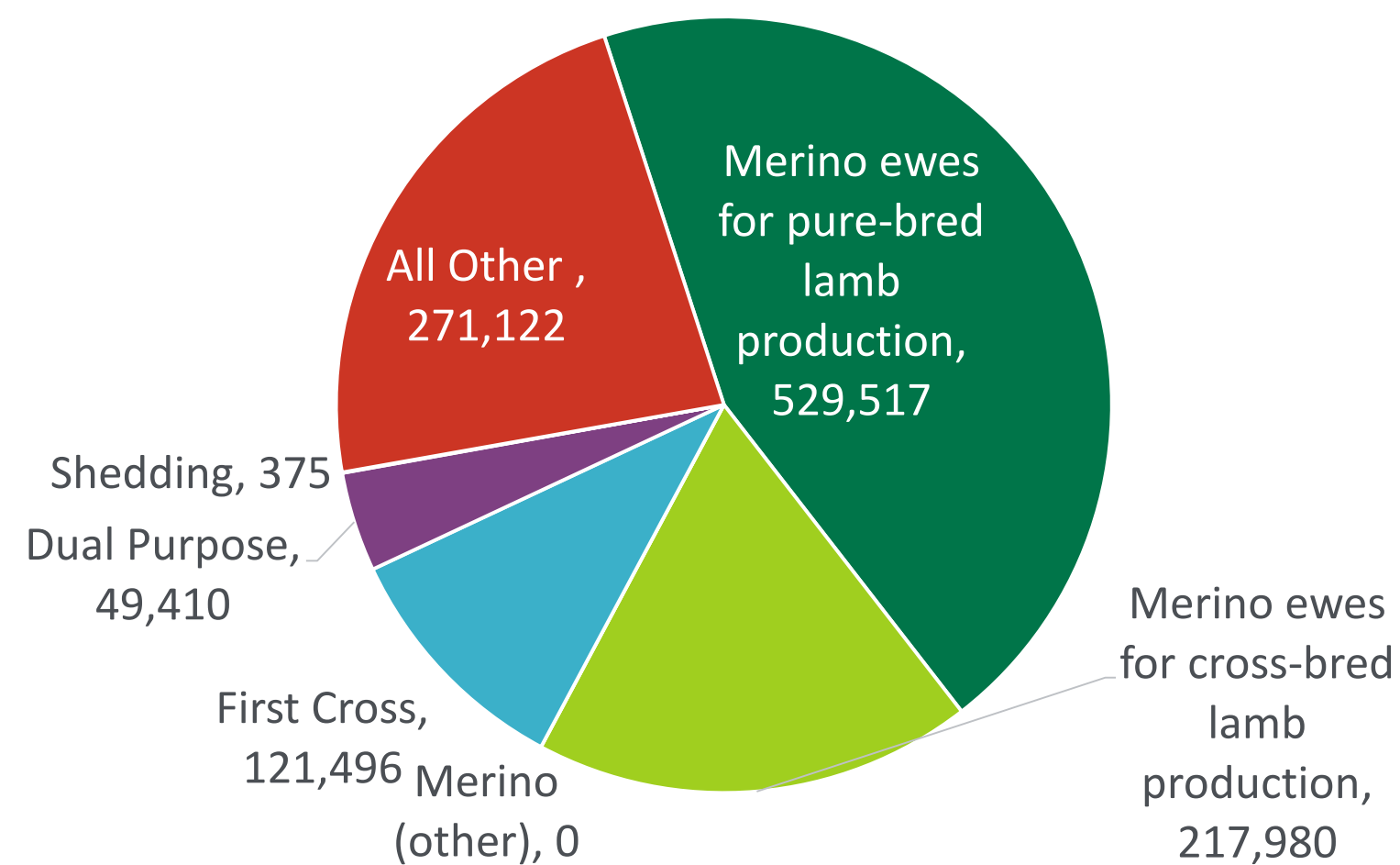


Totals

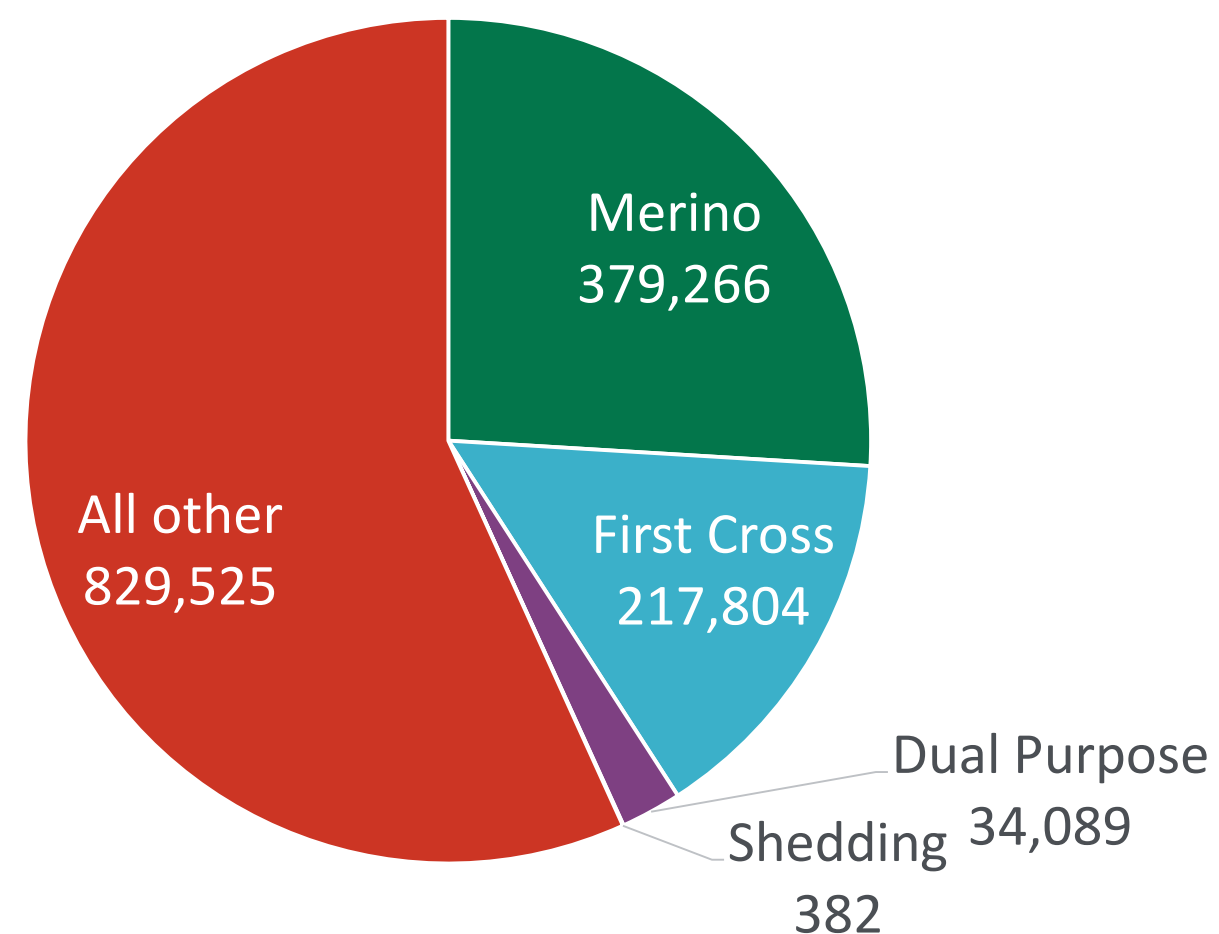
Breeding ewes on hand	4,295,608
Lambs on hand	3,168,477
Expected lamb sales in the next 4 months	1,470,645
Lambs marked in the past 4 months (1 Mar – 30 Jun)	2,508,822
Number of ewes joined to produce marked lambs	2,760,987

Tasmania

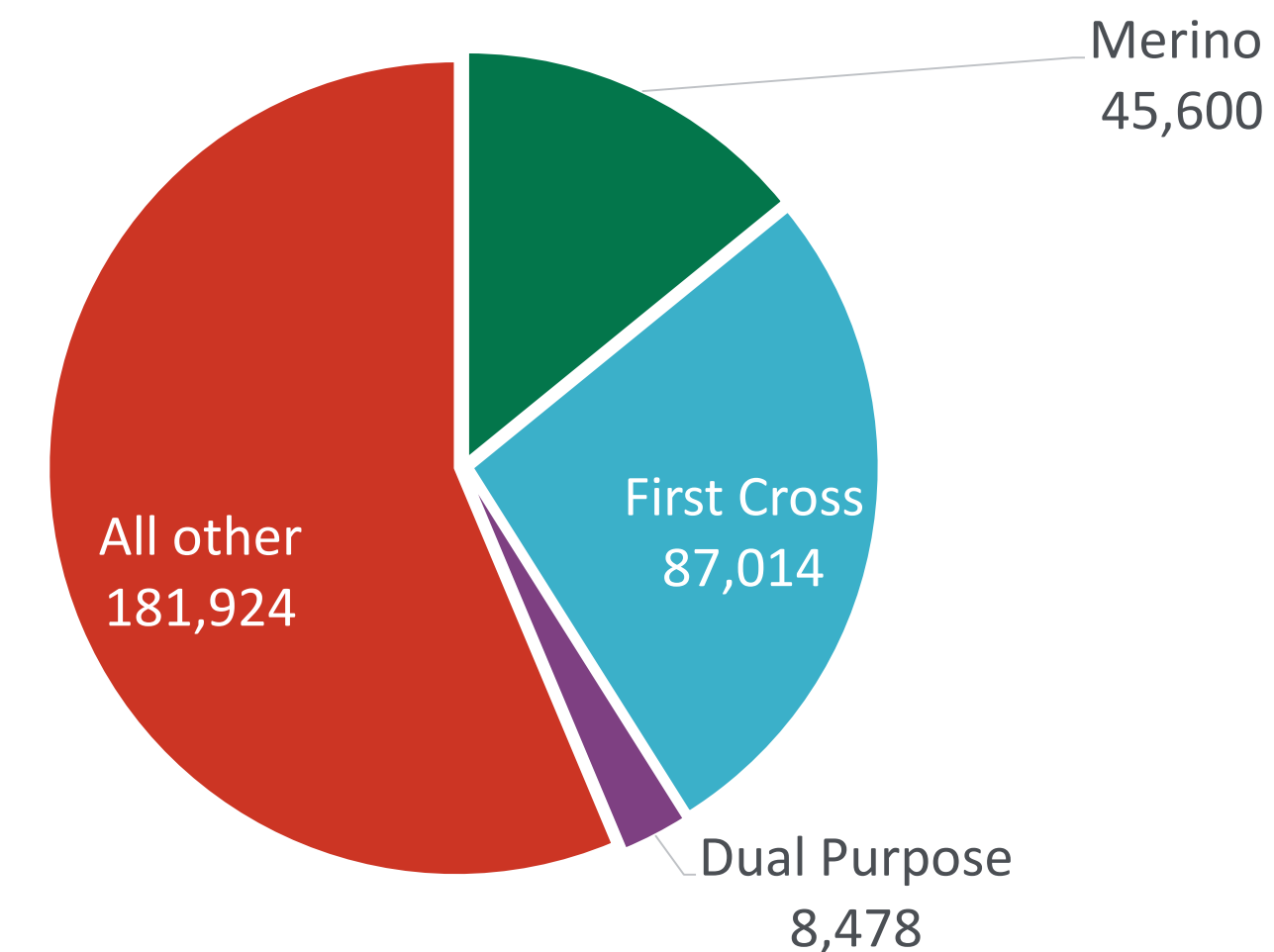
Breeding ewes on hand



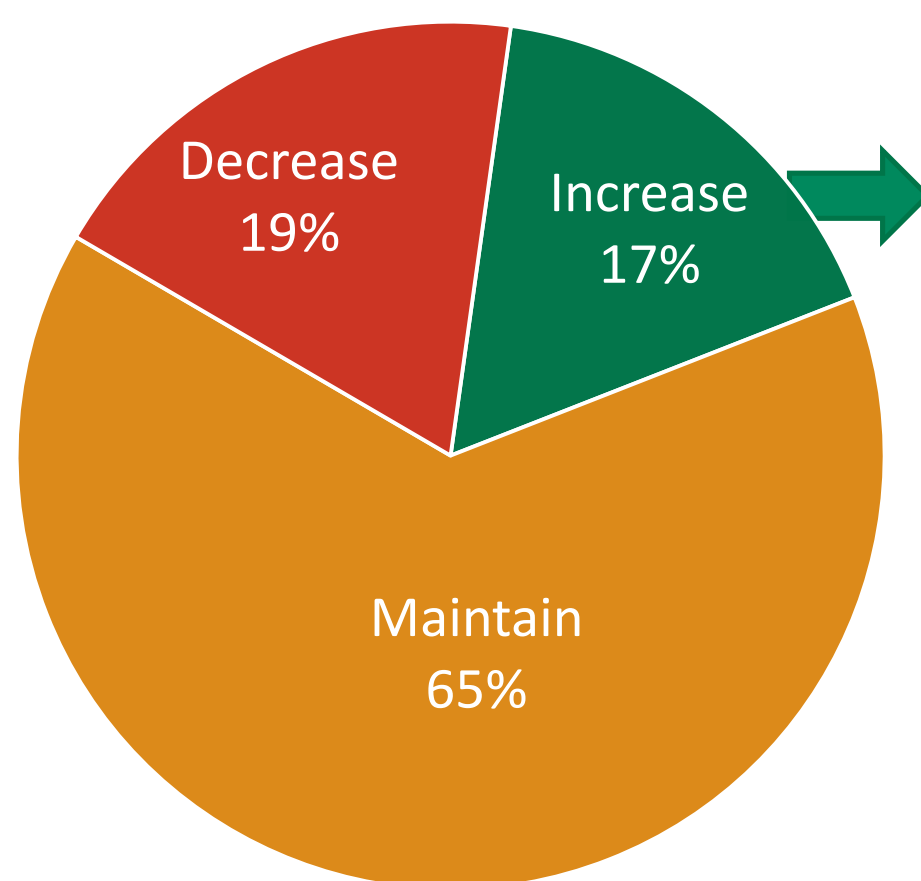
Lambs on hand



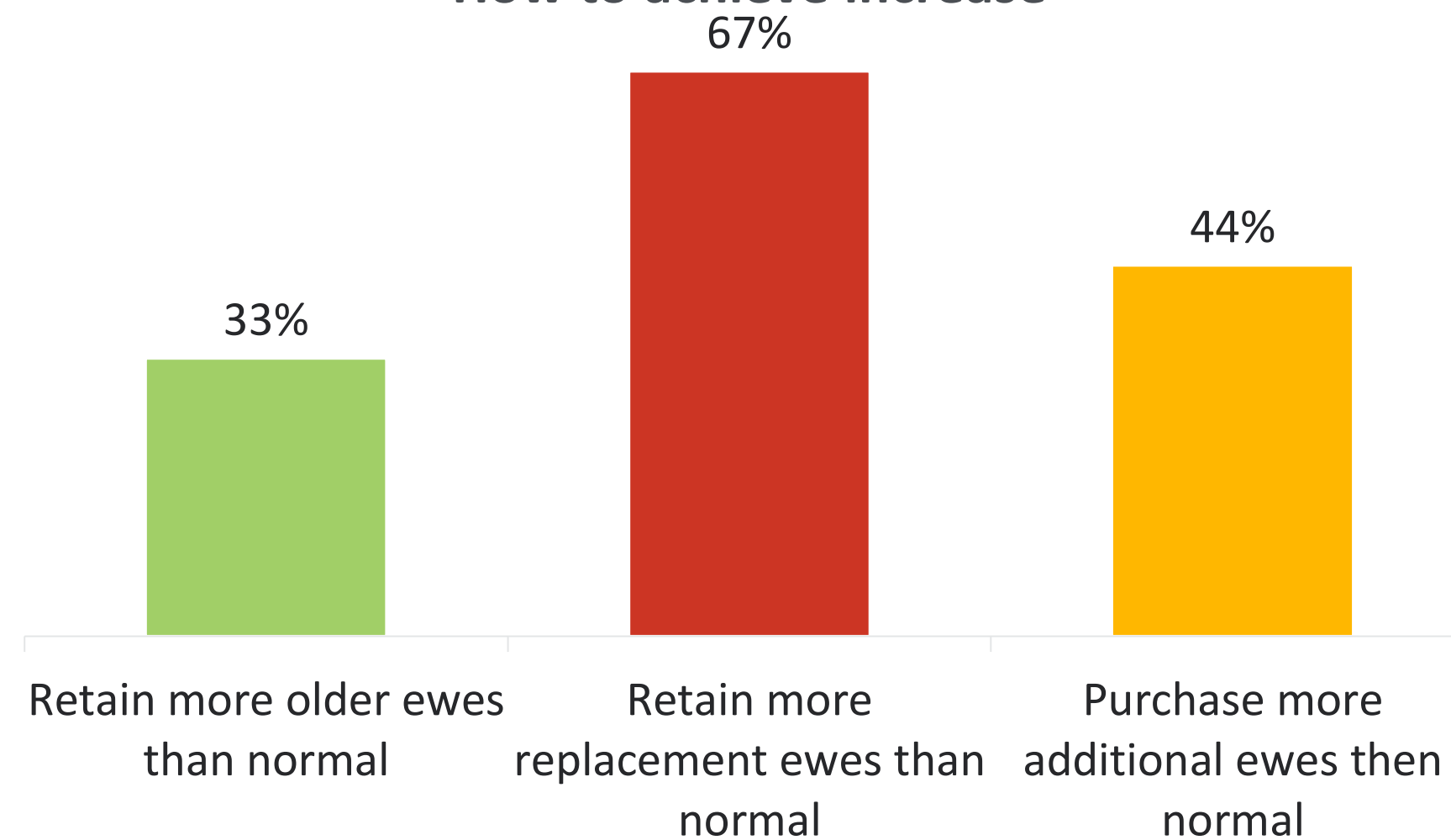
Lamb sales in next 4 months



Ewe Flock intentions



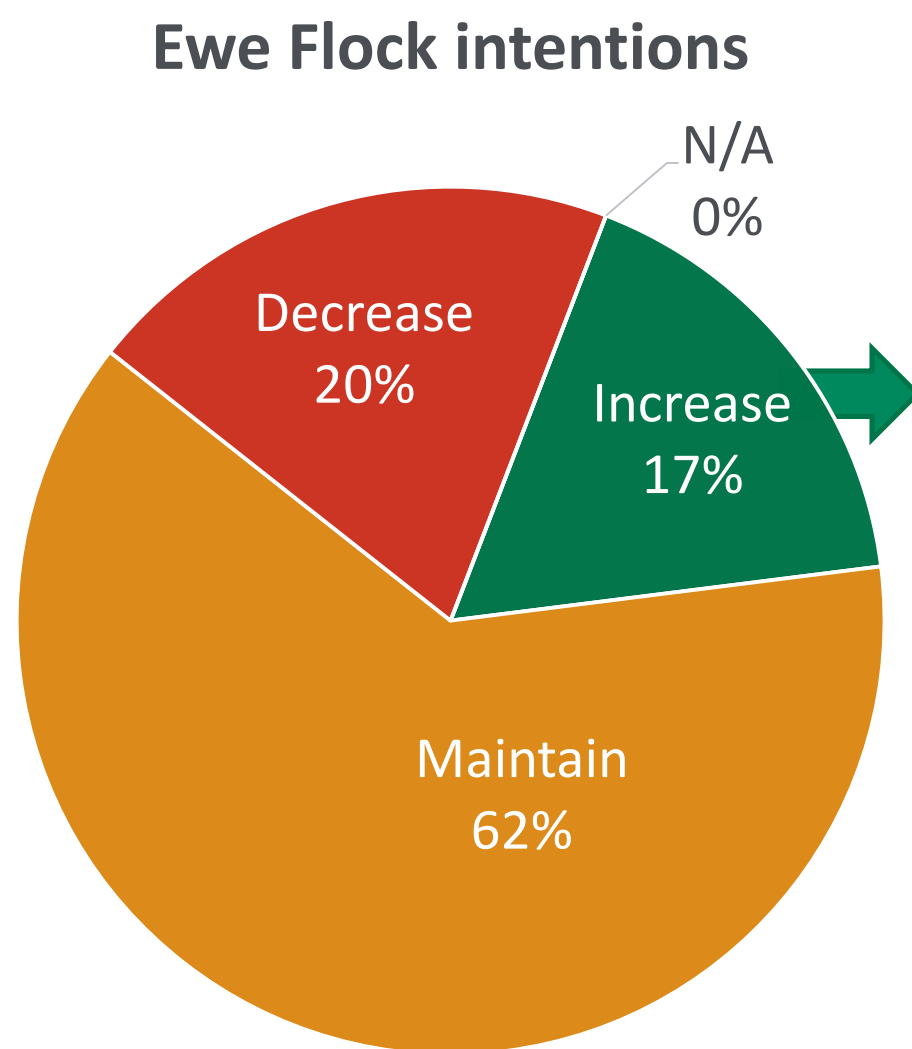
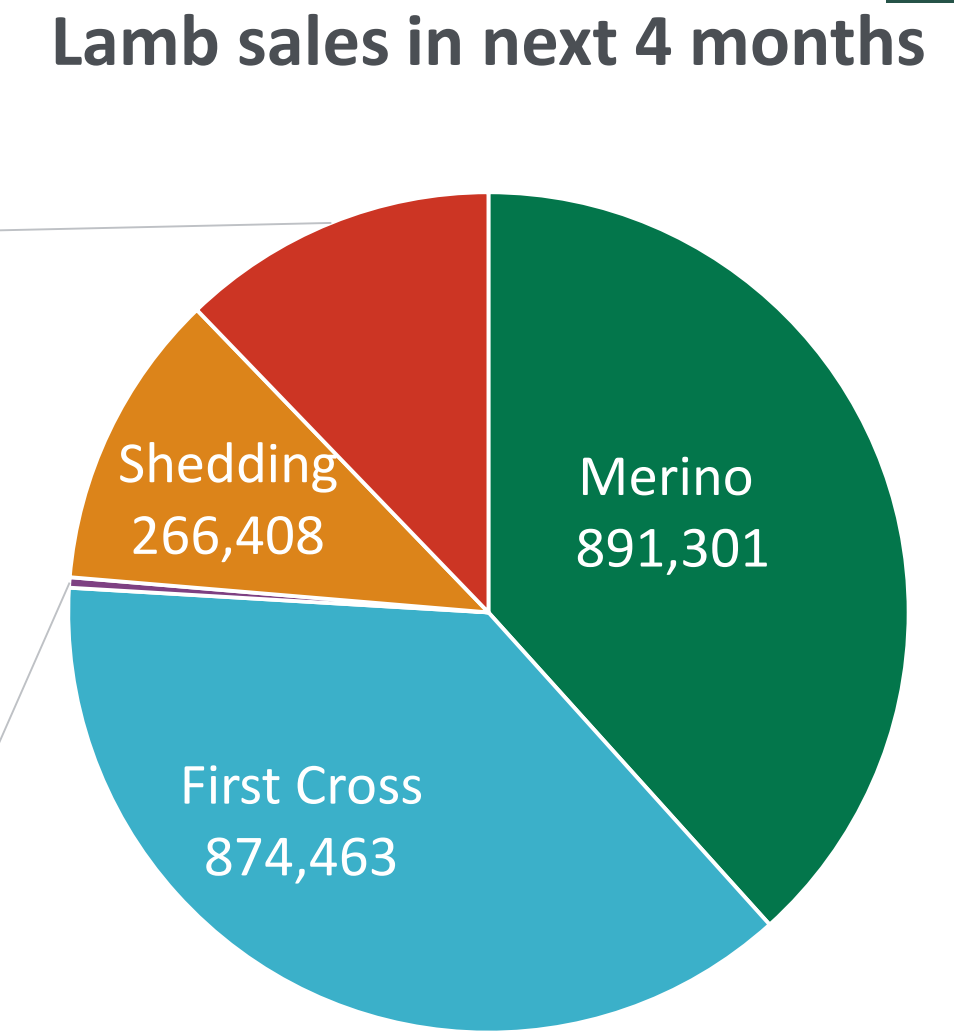
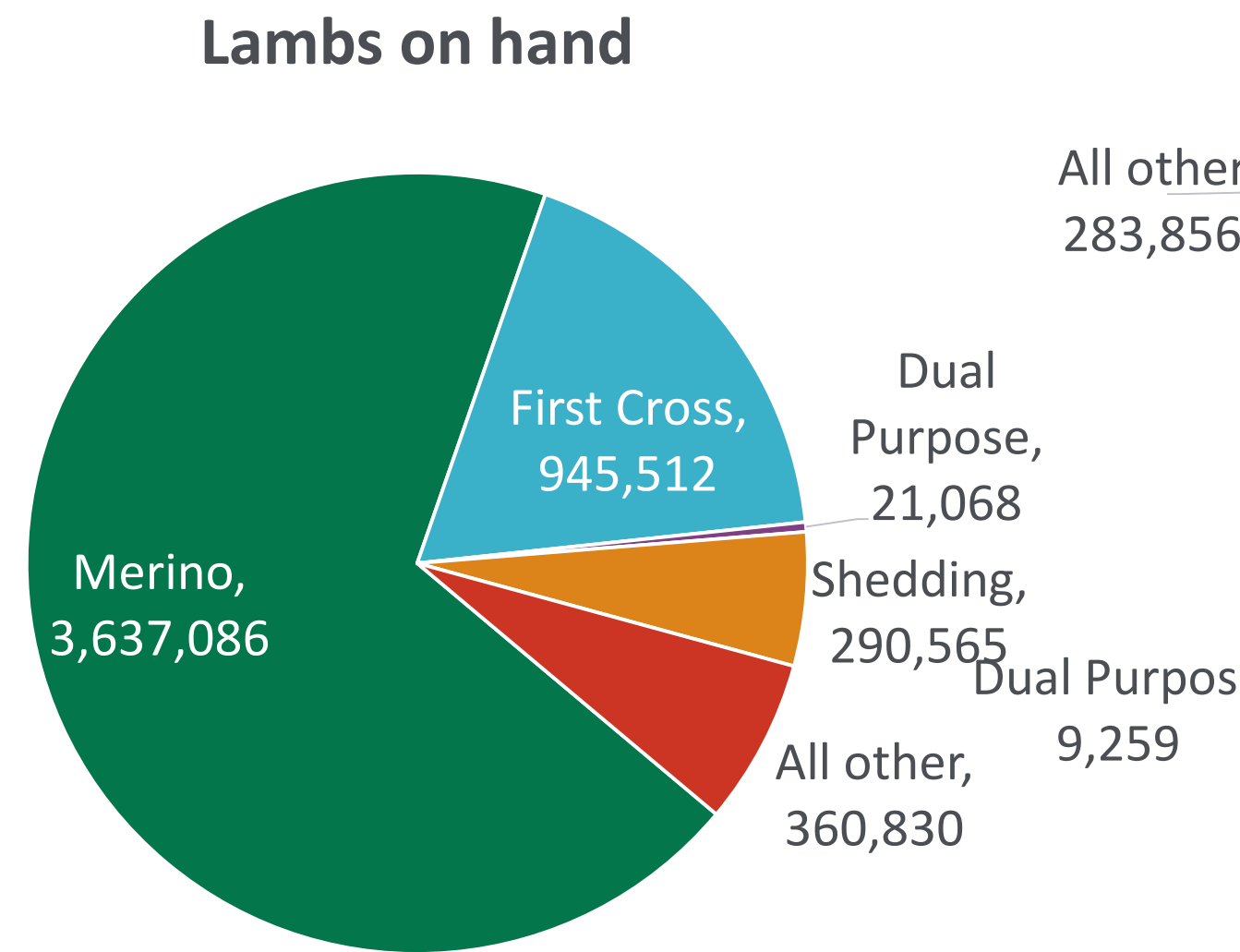
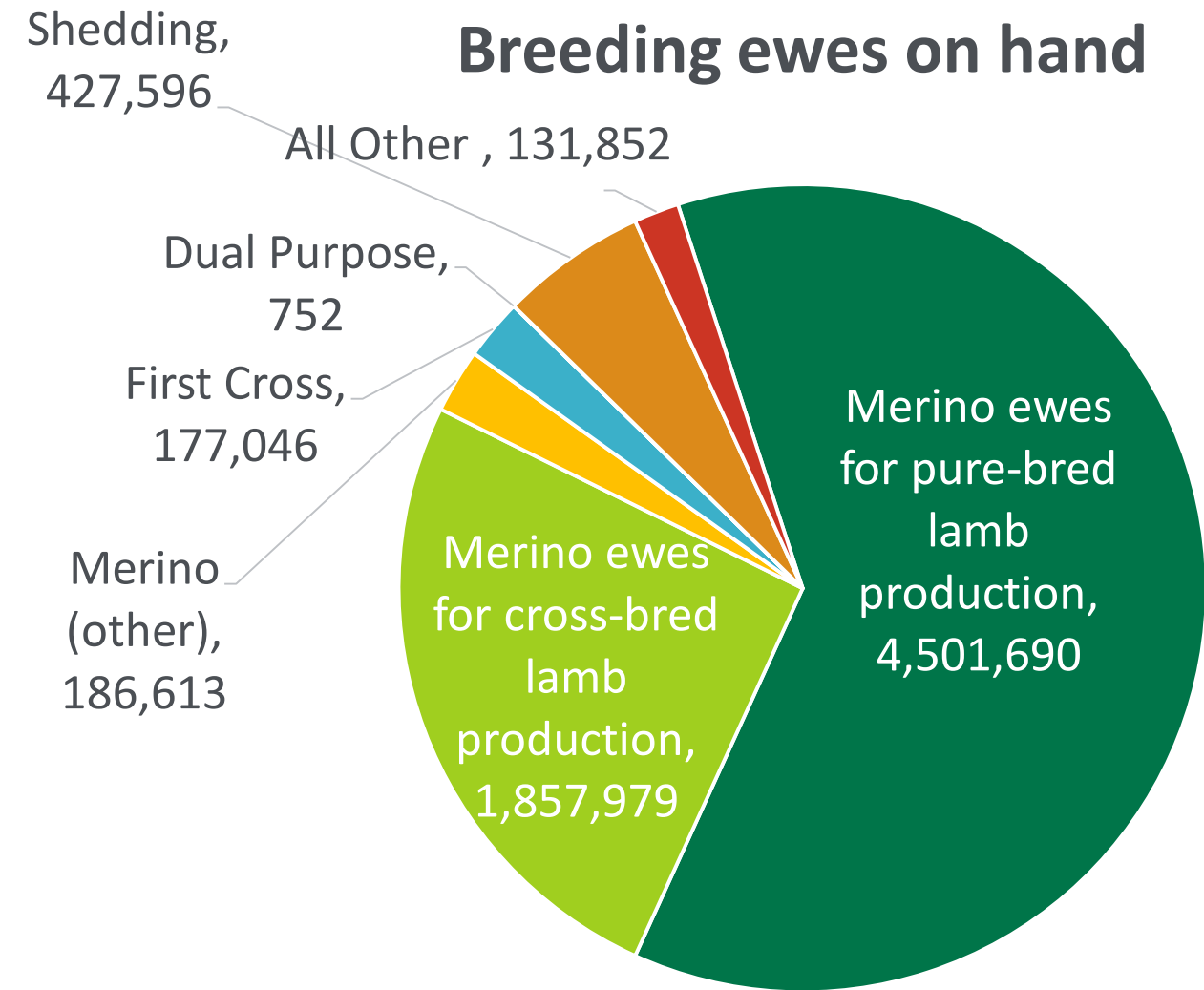
How to achieve increase



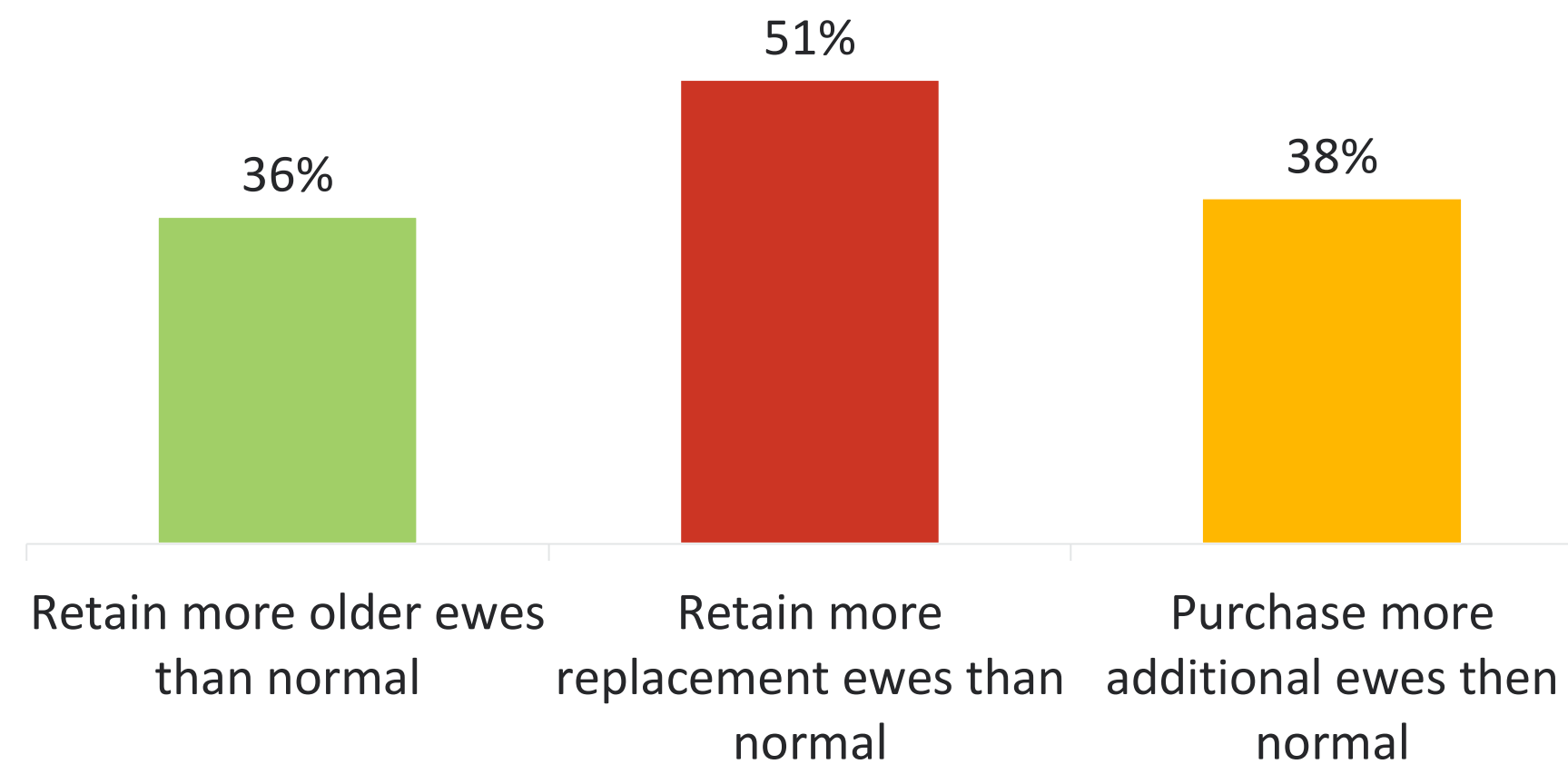
Totals

Breeding ewes on hand	1,189,900
Lambs on hand	1,461,066
Expected lamb sales in the next 4 months	323,016
Lambs marked in the past 4 months (1 Mar – 30 Jun)	799,713
Number of ewes joined to produce marked lambs	785,559

Western Australia



How to achieve increase



Totals

Breeding ewes on hand	7,283,528
Lambs on hand	5,255,061
Expected lamb sales in the next 4 months	2,325,287
Lambs marked in the past 4 months (1 Mar – 30 Jun)	5,241,735
Number of ewes joined to produce marked lambs	5,639,989

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.

MLA makes no representations and to the extent permitted by law excludes all warranties in relation to the information contained in this publication. MLA is not liable to you or to any third party for any losses, costs or expenses, including any direct, indirect, incidental, consequential, special or exemplary damages or lost profit, resulting from any use or misuse of the information contained in this publication.