



Kangaroo Management Program 2024 annual report

Wildlife Trade Management Plan for the Commercial
Harvest of Kangaroos in NSW 2022–26

Department of Climate Change,
Energy, the Environment and Water



Acknowledgement of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the Traditional Custodians of the lands where we work and live.

We pay our respects to Elders past, present and emerging.

This resource may contain images or names of deceased persons in photographs or historical content.

© 2025 State of NSW and Department of Climate Change, Energy, the Environment and Water

With the exception of photographs, the State of NSW and Department of Climate Change, Energy, the Environment and Water (the department) are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged. Specific permission is required to reproduce photographs.

Learn more about our copyright and disclaimer at www.environment.nsw.gov.au/copyright

Artist and designer Nikita Ridgeway from Aboriginal design agency Boss Lady Creative Designs created the People and Community symbol.

Cover photo: Red kangaroo (*Macropus rufus*). John Spencer/DCCEEW

Published by:
Environment and Heritage
Department of Climate Change,
Energy, the Environment and Water
Locked Bag 5022, Parramatta NSW 2124
Phone: +61 2 9995 5000 (switchboard)
Phone: 1300 361 967 (Environment and Heritage enquiries)
TTY users: phone 133 677, then ask for 1300 361 967
Speak and listen users: phone 1300 555 727, then ask for 1300 361 967
Email info@environment.nsw.gov.au
Website www.environment.nsw.gov.au

ISBN 978-1-923436-26-8
EH 2025/0097 April 2025

Find out more at:

environment.nsw.gov.au



Contents

Introduction	1
Commercial harvest by zone and species	2
Harvest of each species by zone during 2024	5
Harvest by species during 2024	7
Special quota	8
Gender bias by species and zone	9
Average weights by species and zone	12
Non-commercial culling within the commercial harvest zones	17
Monitoring compliance in the commercial harvest zones	20
Compliance	20
Inspections of premises	21
Infringement notices	21
Licence suspensions	22
Prosecutions	22
Other factors affecting the commercial harvest in 2024	23
Reduced or suspended quotas	23
Program and policy developments	24
Harvester knowledge course and assessment	24
Online licensing system enhancements	24
Research involvement in 2024	25
Research funded in 2024	25
More information	26
Appendix A: Progress against performance indicators in 2024	27
Aim 1: Ensure commercial harvest of kangaroos in New South Wales is humane	27
Aim 2: Ensure commercial harvest of kangaroos in New South Wales is ecologically sustainable	28
Aim 3: Be open, accountable and transparent	30

Aim 4: Implement effective and efficient regulation and administration	32
Aim 5: Effectively promote, monitor and enforce compliance	33
Aim 6: Facilitate adaptive management and research	34
Aim 7: Undertake program reporting and review	36

List of tables

Table 1	Harvest by zone for all species combined during 2024	3
Table 2	Eastern grey kangaroos – 2024 harvest summary	5
Table 3	Red kangaroos – 2024 harvest summary	6
Table 4	Wallaroos – 2024 harvest summary (harvesting of wallaroos is permitted only in the northern tableland zones)	6
Table 5	Western grey kangaroos – 2024 harvest summary	7
Table 6	Total harvest of each species	7
Table 7	Maximum non-commercial cull by commercial zone and by species	18
Table 8	Maximum non-commercial cull as a percentage of total kangaroo population	19
Table 9	Number of chiller and processing works inspections undertaken by year	21
Table 10	Compliance outputs 2024	22
Table 11	Zones with reduced or suspended quotas in 2024	23

List of figures

Figure 1	Total harvest and percentage contribution to the 2024 harvest for each zone	4
Figure 2	Contribution to the total harvest of each of the 4 commercially harvested species (percentages don't total 100 due to rounding)	8
Figure 3	Average gender bias per species in the commercial harvest for 2024 compared with the averages for the 25-year period from 1999–2023	9
Figure 4	Eastern grey gender bias by zone in the 2024 commercial harvest	10
Figure 5	Red kangaroo gender bias by zone in the 2024 commercial harvest	10
Figure 6	Wallaroo gender bias by zone in the 2024 commercial harvest	11
Figure 7	Western grey gender bias by zone in the 2024 commercial harvest	11
Figure 8	Average weights (in kilograms) of male and female carcasses by species for 2024 compared with the averages of the 25-year period from 1999 to 2023	12
Figure 9	Average weights in kilograms of eastern grey kangaroo male and female carcasses harvested each month in each zone in 2024	14
Figure 10	Average weights in kilograms of red kangaroo male and female carcasses harvested each month in each zone in 2024	15
Figure 11	Average weights in kilograms of common wallaroo male and female carcasses harvested each month in each zone in 2024	15
Figure 12	Average weights in kilograms of western grey kangaroo male and female carcasses harvested each month in each zone in 2024	16

Introduction

The NSW Department of Climate Change, Energy, the Environment and Water and its predecessor organisations have been researching, monitoring, and managing the commercial harvesting of kangaroos in New South Wales since the 1970s. During this period, kangaroo management plans have provided the framework for harvesting kangaroos, in accordance with legislative requirements and population variations.

In December 2021, the Australian Government declared the Wildlife Trade Management Plan for the Commercial Harvest of Kangaroos in New South Wales 2022–26 to be an approved wildlife trade management plan for the purposes of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. This plan sets the framework for the commercial harvest of kangaroos in New South Wales.

This report provides details of the operation of the Wildlife Trade Management Plan for the Commercial Harvest of Kangaroos in New South Wales 2022–26 in its third year (2024), as required by *Action 7.1: Produce and publish regular reports of the Plan*. Appendix A describes each performance indicator and the progress made against it during 2024.

The following information is presented:

- actual harvest, by zone and species, compared with the approved quotas
- details of any special quota used (see page 8 for an explanation of special quotas)
- harvest gender bias for each species in each zone
- average carcass weights for each species in each zone
- compliance statistics
- number of licensees
- number of premises inspected
- number of penalty infringement notices issued and the reasons
- number of prosecutions undertaken (offence and outcome)
- any joint surveillance or enforcement activities completed
- any unusual situations that arose (e.g., flood, disease outbreaks, market factors)
- any experiments or research undertaken by the department or sponsored by the department.

Details of population survey methods, the results of aerial surveys and the setting of quotas are given in a separate report, the 2025 Quota Report, available from the *Kangaroo management plans, reports and research* webpage.

Commercial harvest by zone and species

The 2024 harvest was 532,415 kangaroos for all species across all management zones. This represents 5.5% of the population and 35.9% of the quota. The harvest for 2024 for each management zone is summarised in Table 1.

Data includes management zone number and name, combined population estimate (p), combined quota per zone (q), quantity harvested (harvest), the commercial harvest as a percentage of the population estimate (%p), the commercial harvest as a percentage of the approved quota (%q), the percentage of harvested animals that were males (% harvest male) and the average carcass weight in kilograms (Av. wt) of harvested males (M) and females (F).

The 2024 commercial harvest was higher than that reported for the previous year, in both absolute terms and as a percentage of quota. The total kangaroos harvested in 2023 was 509,671, which represented 4.3% of the population and 27.5% of the 2023 quota. The increased harvest in 2024 is attributed to:

- more moderate weather conditions that increased the opportunity for harvesters to access properties that were wetter and less accessible in 2023
- and a steady demand for kangaroo from processors.

Table 1 Harvest by zone for all species combined during 2024

Zone	Population (p)	Quota (q)	Harvest	%p	%q	% harvest male	Av. wt. (M)*	Av. wt. (F)*
01 – Tibooburra	545,828	89,370	8,432	1.5	9.4	97.7	29.7	18.2
02 – Broken Hill	899,138	149,700	101,195	11.3	67.6	91.7	29.0	19.5
04 – Lower Darling	634,831	103,726	53,643	8.4	51.7	89.9	29.0	19.7
06 – Cobar	138,764	22,943	14,488	10.4	63.1	91.7	28.4	19.1
07 – Bourke	295,749	49,315	3,122	1.1	6.3	95.5	28.7	18.3
08 – Narrabri	674,494	96,853	26,116	3.9	27.0	85.7	28.4	18.5
09 – Armidale	582,712	87,407	43,973	7.5	50.3	83.9	29.1	19.0
10 – Coonabarabran	914,837	143,296	65,774	7.2	45.9	88.7	28.8	18.2
13 – Glen Innes	555,844	83,377	21,256	3.8	25.5	88.0	29.0	18.4
14 – Upper Hunter	373,630	56,044	26,957	7.2	48.1	85.8	29.5	19.6
16 – SE NSW	1,428,800	214,320	31,998	2.2	14.9	77.2	32.4	19.9
17 – Griffith Nth	326,619	43,091	22,830	7.0	53.0	85.9	29.5	19.5
18 – Griffith Sth	657,467	103,701	77,595	11.8	74.8	84.3	29.5	20.5
48 – C/T North	866,790	130,019	17,222	2.0	13.2	83.0	30.5	19.2
49 – C/T South	739,397	110,910	17,814	2.4	16.1	84.7	32.7	20.3
Total	9,634,900	1,484,072	532,415	5.5	35.9	87.3	29.4	19.5

C/T: Central Tablelands

*Average weights are in kilograms.

The harvest data in Table 1 are shown graphically in Figure 1 to illustrate the absolute and relative contributions to the total harvest made by each commercial kangaroo management zone in 2024. This shows the Broken Hill zone contributed the highest number of kangaroos, with 19% of the total harvest. It also shows there were low numbers of kangaroos harvested in Tibooburra and Bourke zones.

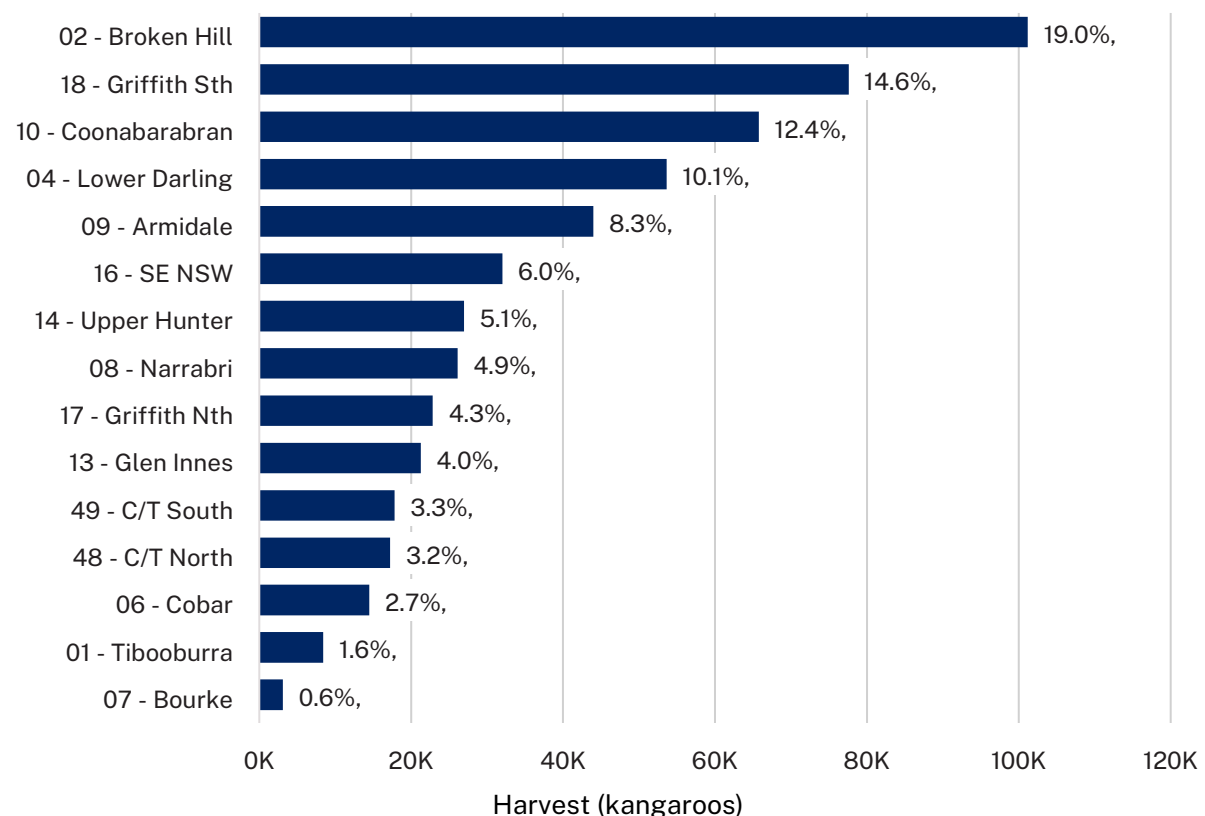


Figure 1 Total harvest and percentage contribution to the 2024 harvest for each zone

Tables 2 to 5 list the details of the 2024 harvest for each species by zone. Data includes the management zone number and name, population estimate (p), quota per zone (q), quantity harvested (harvest), the commercial harvest as a percentage of the population estimate (%p), the commercial harvest as a percentage of the approved quota (%q), the percentage of harvested animals that were males (% harvest male) and the average carcass weight in kilograms (Av. wt) of harvested males (M) and females (F). Table 6 provides the details of the total harvest by species.

Harvest of each species by zone during 2024

Table 2 Eastern grey kangaroos – 2024 harvest summary

Zone	Population (p)	Quota (q)	Harvest	%p	%q	% harvest male	Av. wt (M)	Av. wt (F)
01 – Tibooburra	136,844	20,527	12	0.0	0.1	100.0	30.2	0.0
02 – Broken Hill	66,224	9,934	1,973	3.0	19.9	89.9	30.6	20.0
04 – Lower Darling	65,031	9,755	9,364	14.4	96.0	82.4	30.9	21.5
06 – Cobar	13,575	2,036	1,919	14.1	94.3	92.5	28.1	18.6
07 – Bourke	29,858	4,479	820	2.7	18.3	95.4	28.7	17.7
08 – Narrabri	248,343	24,834	20,159	8.1	81.2	85.4	28.3	18.7
09 – Armidale	446,700	67,005	39,108	8.8	58.4	81.9	29.3	19.0
10 – Coonabarabran	568,516	85,277	52,245	9.2	61.3	88.7	28.4	18.2
13 – Glen Innes	439,220	65,883	18,989	4.3	28.8	86.6	29.3	18.4
14 – Upper Hunter	260,650	39,098	22,149	8.5	56.6	82.7	29.7	19.6
16 – SE NSW	1,428,800	214,320	31,998	2.2	14.9	77.2	32.4	19.9
17 – Griffith Nth	238,438	35,765	21,357	9.0	59.7	85.9	29.6	19.5
18 – Griffith Sth	334,865	50,230	46,468	13.9	92.5	81.9	29.9	20.9
48 – C/T North	866,790	130,019	17,222	2.0	13.2	83.0	30.5	19.2
49 – C/T South	739,397	110,910	17,814	2.4	16.1	84.7	32.7	20.3
Eastern grey total	5,883,251	870,072	301,597	5.1	34.7	83.9	29.8	19.6

C/T: Central Tablelands

*Average weights are in kilograms.

Table 3 Red kangaroos – 2024 harvest summary

Zone	Population (p)	Quota (q)	Harvest	%p	%q	% harvest male	Av. wt (M)	Av. wt (F)
01 – Tibooburra	374,773	63,711	8,252	2.2	13.0	97.7	29.7	18.1
02 – Broken Hill	741,462	126,048	87,248	11.8	69.2	92.1	28.9	19.5
04 – Lower Darling	425,054	72,259	33,347	7.8	46.1	91.5	29.1	18.8
06 – Cobar	106,443	18,095	10,479	9.8	57.9	91.8	28.9	19.3
07 – Bourke	247,591	42,091	2,101	0.8	5.0	95.6	28.7	18.3
08 – Narrabri	423,642	72,019	5,957	1.4	8.3	86.5	28.9	18.1
10 – Coonabarabran	303,529	51,600	13,482	4.4	26.1	88.8	30.7	18.4
17 – Griffith Nth	39,344	0	0	0.0	0.0	0.0	0.0	0.0
18 – Griffith Sth	254,015	43,183	28,687	11.3	66.4	87.7	29.0	19.6
Red total	2,915,853	489,006	189,553	6.5	38.8	91.5	29.1	19.2

Table 4 Wallaroos – 2024 harvest summary (harvesting of wallaroos is permitted only in the northern tableland zones)

Zone	Population (p)	Quota (q)	Harvest	%p	%q	% harvest male	Av. wt (M)	Av. wt (F)
09 – Armidale	136,012	20,402	4,865	3.6	23.8	99.9	27.9	22.8
13 – Glen Innes	116,624	17,494	2,267	1.9	13.0	99.9	26.9	16.0
14 – Upper Hunter	112,980	16,946	4,808	4.3	28.4	100.0	29.0	16.0
Wallaroo total	365,616	54,842	11,940	3.3	21.8	99.9	28.2	20.1

Table 5 Western grey kangaroos – 2024 harvest summary

Zone	Population (p)	Quota (q)	Harvest	%p	%q	% harvest male	Av. wt (M)	Av. wt (F)
01 – Tibooburra	34,211	5,132	168	0.5	3.3	97.0	27.3	20.6
02 – Broken Hill	91,452	13,718	11,974	13.1	87.3	89.1	28.9	19.8
04 – Lower Darling	144,746	21,712	10,932	7.6	50.4	91.3	27.4	19.0
06 – Cobar	18,746	2,812	2,090	11.1	74.3	90.6	26.3	18.8
07 – Bourke	18,300	2,745	201	1.1	7.3	94.5	27.7	17.7
08 – Narrabri	2,509	0	0	0.0	0.0	0.0	0.0	0.0
10 – Coonabarabran	42,792	6,419	47	0.1	0.7	85.1	22.7	16.7
17 – Griffith Nth	48,837	7,326	1,473	3.0	20.1	86.1	28.1	19.3
18 – Griffith Sth	68,587	10,288	2,440	3.6	23.7	88.0	27.9	19.4
Western grey total	470,180	70,152	29,325	6.2	41.8	89.9	28.0	19.4

Harvest by species during 2024

Table 6 Total harvest of each species

Species	Population (p)	Quota (q)	Harvest	%p	%q	% harvest male	Av. wt (M)	Av. wt (F)
Eastern grey	5,883,251	870,072	301,597	5.1	34.7	83.9	29.8	19.6
Red	2,915,853	489,006	189,553	6.5	38.8	91.5	29.1	19.2
Wallaroo	365,616	54,842	11,940	3.3	21.8	99.9	28.2	20.1
Western grey	470,180	70,152	29,325	6.2	41.8	89.9	28.0	19.4
Total	9,634,900	1,484,072	532,415	5.5	35.9	87.3	29.4	19.5

Figure 2 shows the proportion of the total harvest made up of each species. It illustrates that 57% of the kangaroos harvested in 2024 were eastern grey kangaroos. Wallaroos contributed just 2% of the total harvest in 2024.

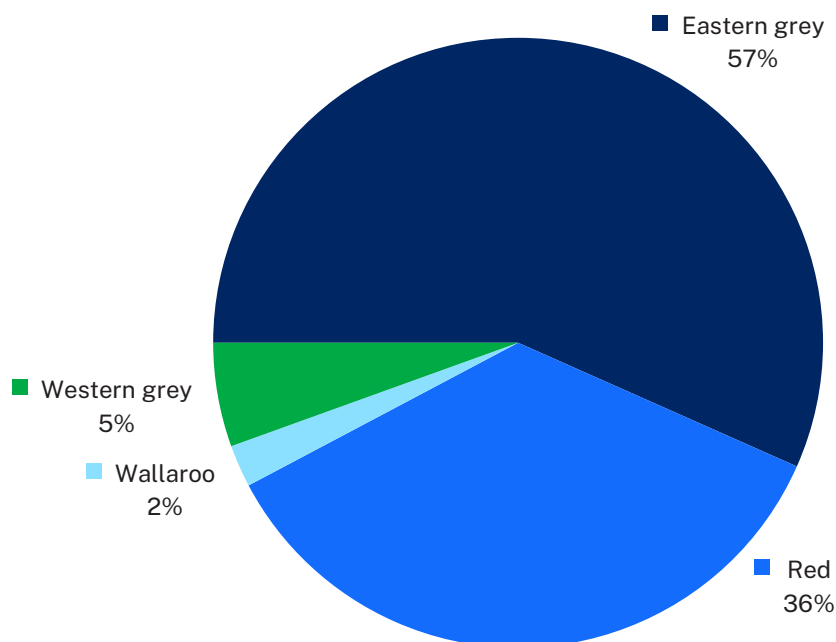


Figure 2 Contribution to the total harvest of each of the 4 commercially harvested species (percentages don't total 100 due to rounding)

Special quota

The Wildlife Trade Management Plan for the Commercial Harvest of Kangaroos in New South Wales 2022–26 allows for the setting of a special quota as an addition to the overall commercial quota if the commercial quota was exhausted or likely to be fully allocated. The intent of using a special quota is to minimise the number of kangaroos shot under non-commercial licences by allowing increased commercial use of kangaroos that would otherwise be shot and left in the field.

In deciding whether to release a special quota, the department will consult the Kangaroo Management Advisory Panel and consider local conditions, climatic trends, population trends and Western Lands de-stocking orders to ensure populations can remain viable with increased harvest. When used, special quotas will be set at a maximum of 5% of the population estimate of each kangaroo species in any one zone, and a maximum of 1.5% of the population of each species across all zones. Special quotas will not be allocated where the commercial harvest is reduced or suspended due to low populations.

The special quota was not used during 2024.

Gender bias by species and zone

Harvesting is typically biased toward male animals because they are larger, heavier and provide a better return, as harvesters are paid a price per kilogram. Over the 25-year period 1999 to 2023 inclusive, the average proportion of males harvested was 74.3% for eastern greys, 75.6% for red kangaroos, 92.4% for wallaroos and 71.2% for western greys (Figure 3). These percentages vary between years. In 2024, much higher percentages of male eastern greys (83.9%), red kangaroos (91.52%), wallaroos (99.9%) and western greys (89.9%) were harvested when compared with the average of the previous 25 years.

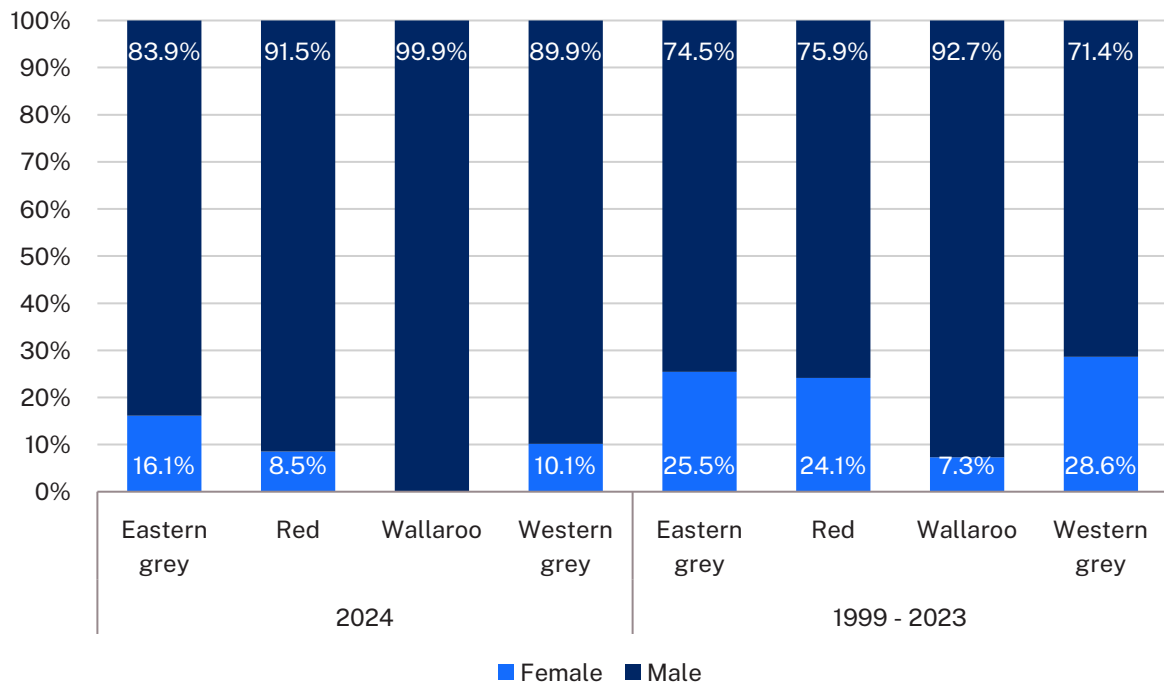


Figure 3 Average gender bias per species in the commercial harvest for 2024 compared with the averages for the 25-year period from 1999–2023

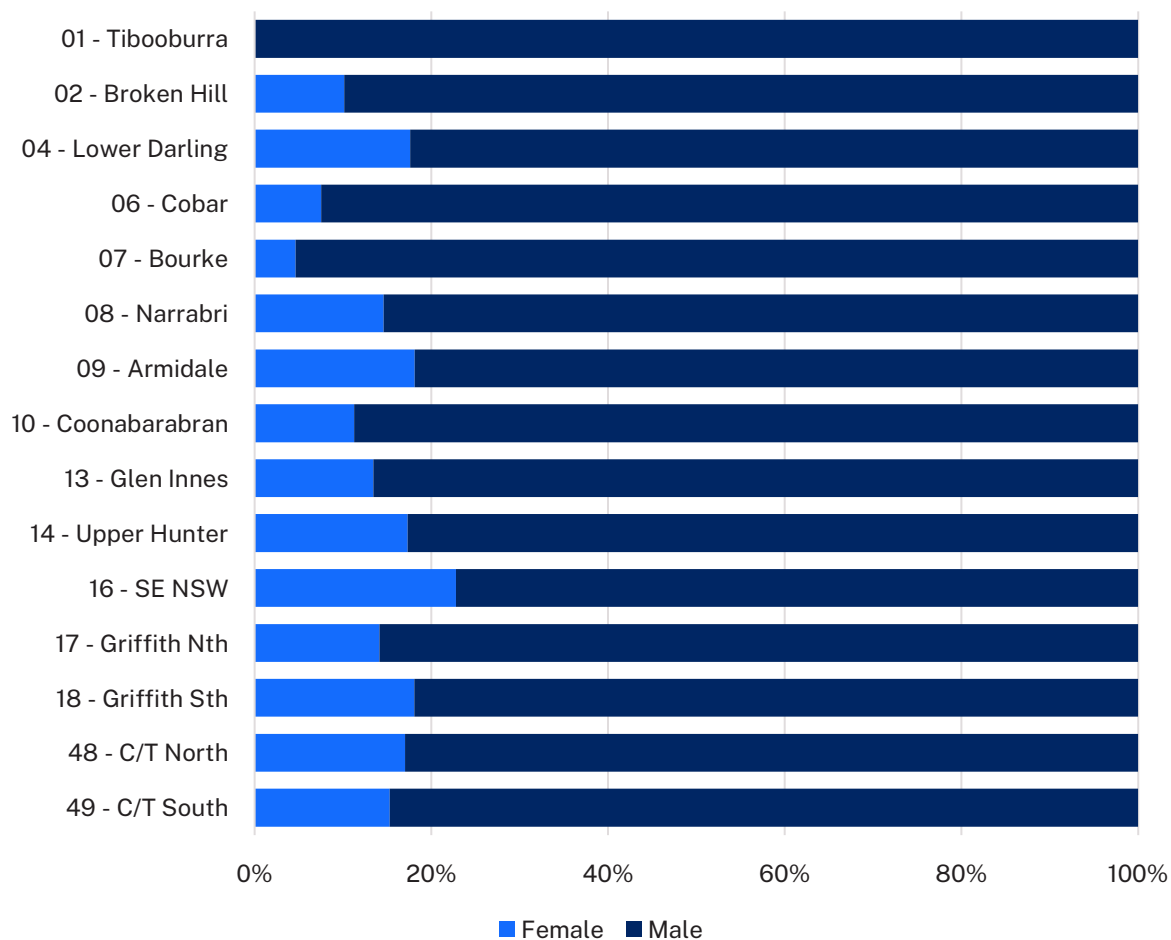


Figure 4 Eastern grey gender bias by zone in the 2024 commercial harvest

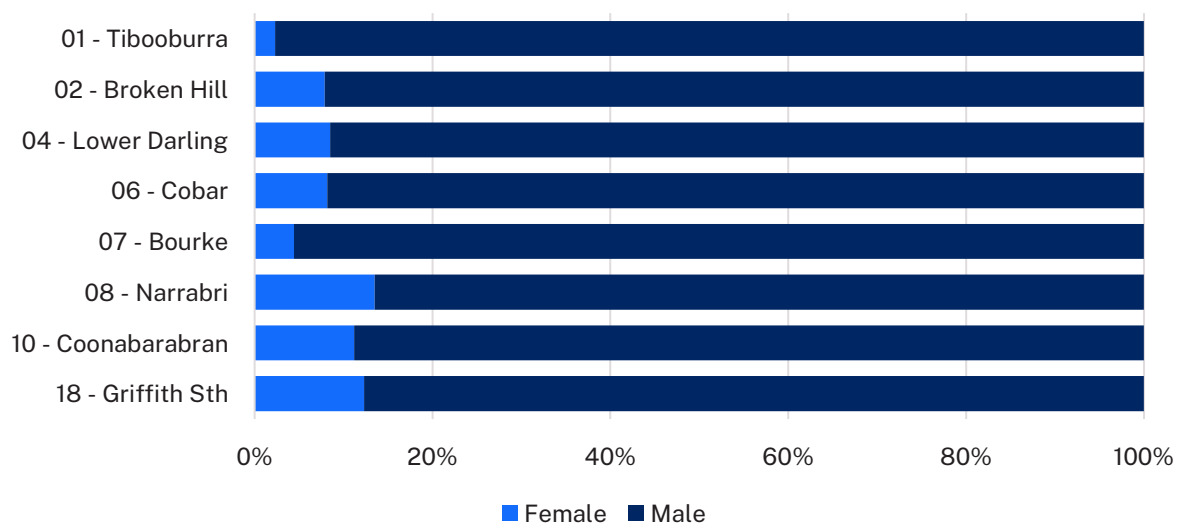


Figure 5 Red kangaroo gender bias by zone in the 2024 commercial harvest

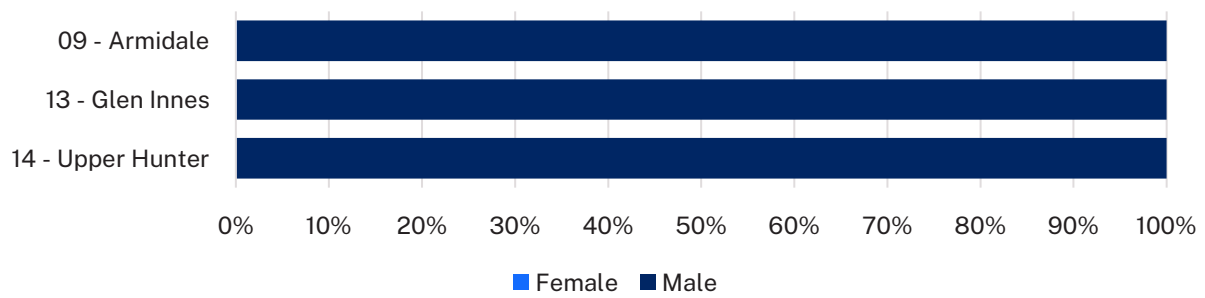


Figure 6 Wallaroo gender bias by zone in the 2024 commercial harvest

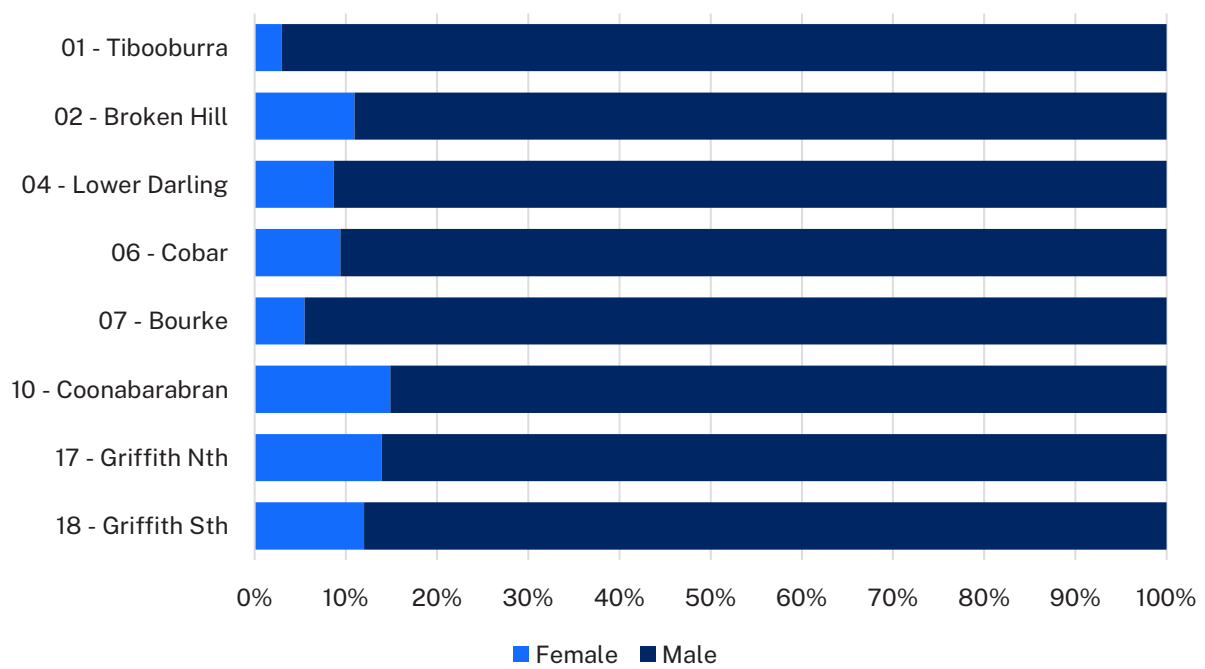


Figure 7 Western grey gender bias by zone in the 2024 commercial harvest

Average weights by species and zone

During 2024, commercial harvest licence conditions required that kangaroo carcasses delivered to chillers for sale were not to weigh less than 14 kilograms dressed weight or less than 20 kilograms undressed weight.

Before 1 January 2008, the minimum carcass weights were 12 and 13 kilograms dressed and undressed, respectively. Above these minimum weights, a wide range of weights are consigned by harvesters.

The 25-year average (1999–2023) carcass weights by gender and species (across all zones) are shown in Figure 8. Data collected from harvester returns during 2024 indicate average carcass weight across all species was 29.4 kilograms for males and 19.5 kilograms for females (Tables 1 and 6); these values are higher than the long-term averages. This is to be expected, given the increase in minimum carcass weight as part of licence conditions.

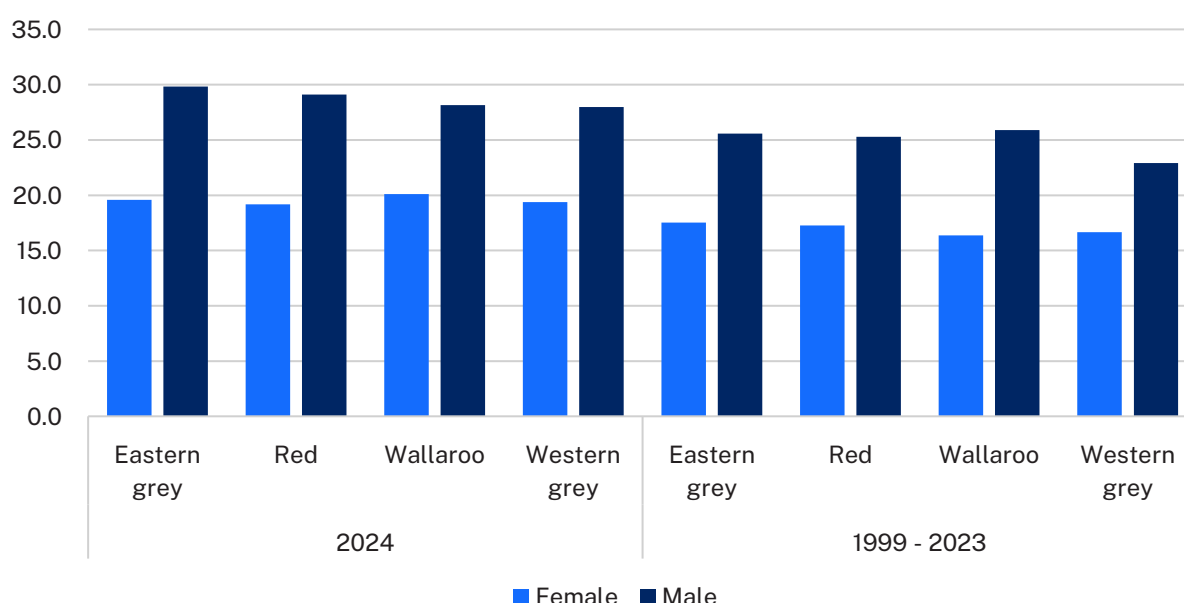


Figure 8 Average weights (in kilograms) of male and female carcasses by species for 2024 compared with the averages of the 25-year period from 1999 to 2023

The department does not require licensees to record individual carcass weights. Instead, harvester returns provide total weights for each category of carcass (e.g. mean weight of male eastern grey kangaroos equals total weight of male eastern grey kangaroos divided by the number of male eastern grey kangaroos). These totals are used to calculate the average weights of carcasses by gender, species and zone (Figure 8 to Figure 12).

For most combinations of species, gender and zone, average carcass weights were reasonably consistent from month to month. In the following charts, no consideration is given to the differences in sample sizes between gender, species and zones.

Where large fluctuations occur, the sample size is usually very small and statistical reliability is lower. This variation is usually a result of statistical processes and is not a reflection of changes in the kangaroo population. Weights do not vary very much where larger samples are available.

In the charts that follow (Figure 9 to Figure 12), there are several months in which no animals of a given gender or species were harvested in a particular zone; this results in missing columns in the charts. For example, in Figure 9 there were no eastern grey kangaroos harvested in the Tibooburra zone from March to December 2024.

During routine inspections of chiller premises and processing works, a selection of smaller animals is weighed individually by compliance officers to ensure the minimum weight standards are being maintained. If underweight carcasses are detected, the harvester responsible may be cautioned or fined, depending on the circumstances.

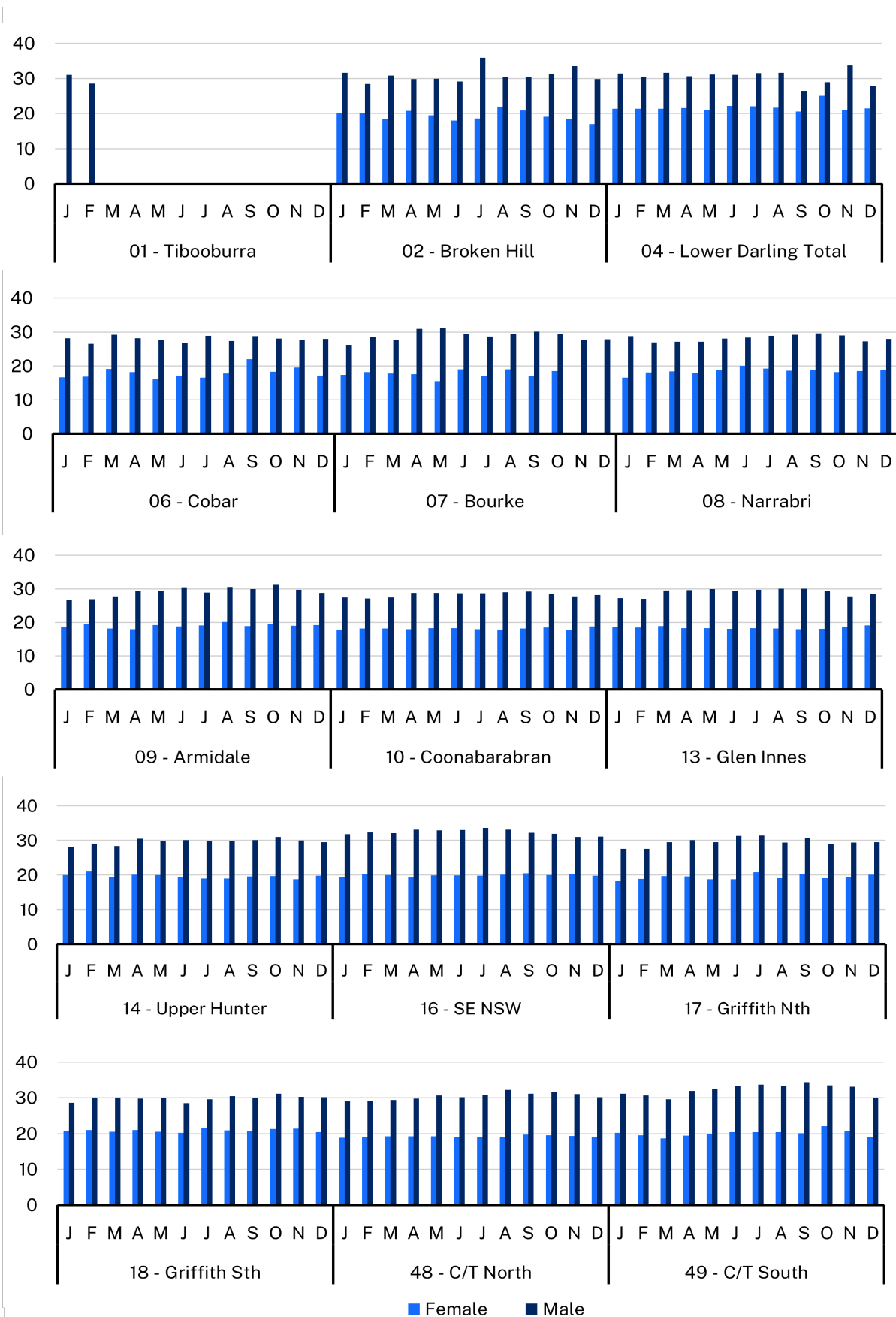


Figure 9 Average weights in kilograms of eastern grey kangaroo male and female carcasses harvested each month in each zone in 2024

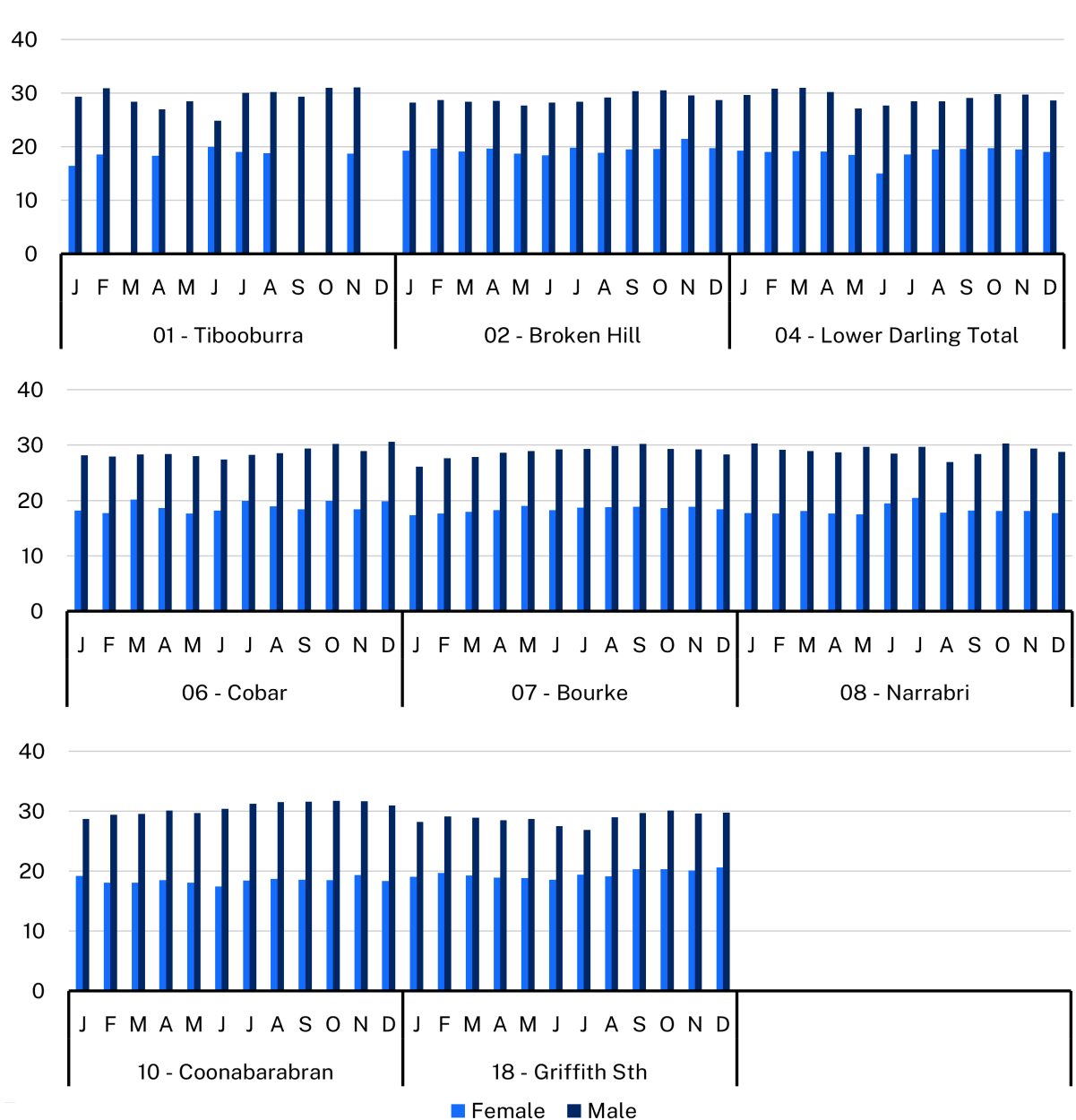


Figure 10 Average weights in kilograms of red kangaroo male and female carcasses harvested each month in each zone in 2024

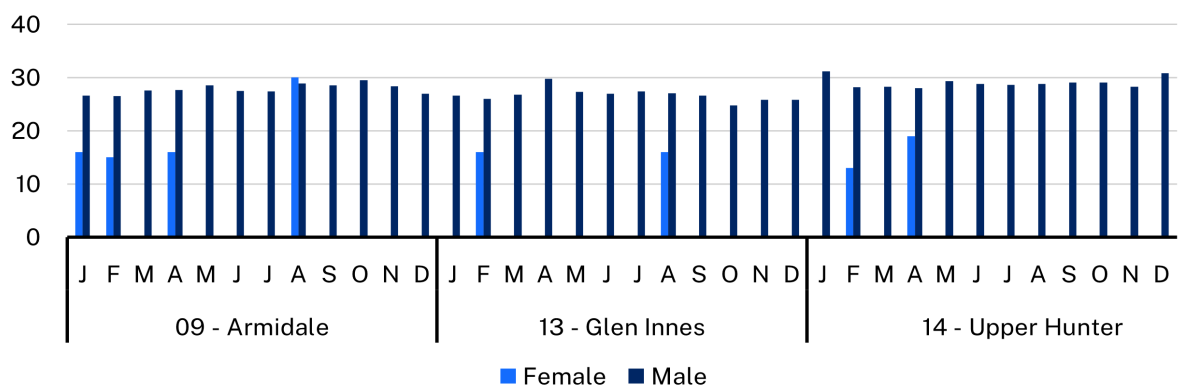


Figure 11 Average weights in kilograms of common wallaroo male and female carcasses harvested each month in each zone in 2024

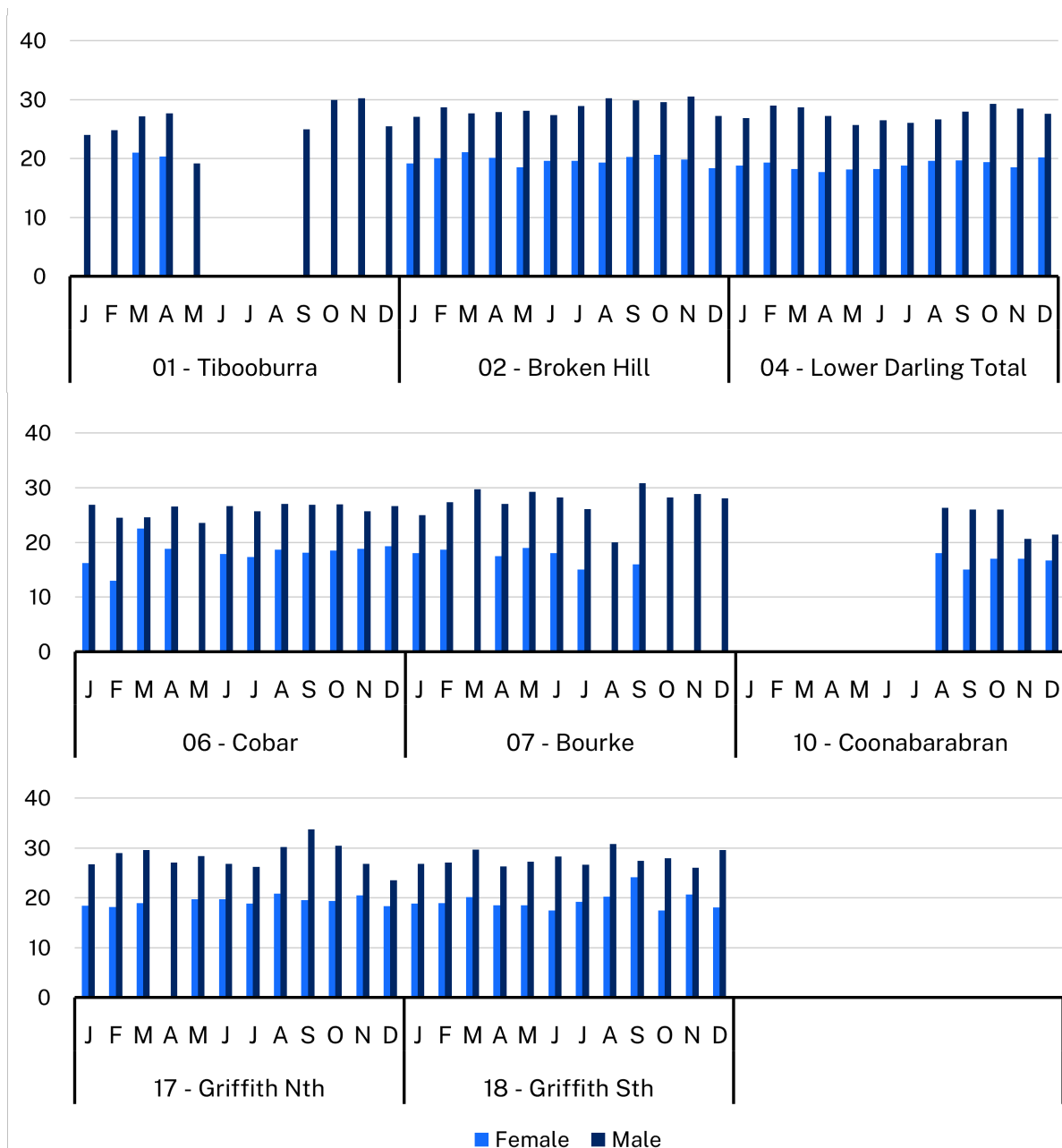


Figure 12 Average weights in kilograms of western grey kangaroo male and female carcasses harvested each month in each zone in 2024

Non-commercial culling within the commercial harvest zones

In New South Wales, landholders who are negatively impacted by kangaroos may apply to the NSW National Parks and Wildlife Service for a non-commercial culling licence. These licences are generally issued where impacts such as property damage, risk to human health or safety, or economic hardship cannot be adequately managed by non-lethal measures or commercial harvesting.

Non-commercial licences are available statewide and can be issued for properties where commercial harvesting is also undertaken. While these licences may authorise culling of any non-threatened macropod species, for consistency with the rest of this report, the figures below only relate to the 4 species subject to commercial harvest in New South Wales. The non-commercial cull is usually highest in those areas where high-value pastures and winter crops are important.

In 2024, licences were issued to cull 231,452 kangaroos within the commercial harvest zones. Licensees who submitted reports indicated 80,339 kangaroos were culled, with these licences authorising culling of up to 145,777 kangaroos. Several licensees have not yet submitted reports, with these licences authorising culling of up to 86,275 kangaroos.

Combining the number reported as culled (where a return has been received, this equals 80,339) with the number authorised to be culled (where a return has not been received, this equals 86,275) gives a maximum non-commercial cull figure of 166,614 kangaroos. Please note that these figures are the non-commercial cull for the 4 commercially harvested large macropod species across the commercial kangaroo management zones of New South Wales.

Maximum non-commercial cull by species and by commercial kangaroo management zone is shown in Table 7.

Table 7 Maximum non-commercial cull by commercial zone and by species

Zone	Wallaroos	Eastern grey kangaroos	Red kangaroos	Western grey kangaroos	Total
01 – Tibooburra	10	260	1,066	10	1,346
02 – Broken Hill	525	1,785	4,237	2,930	9,477
04 – Lower Darling	272	370	3,479	1,925	6,046
06 – Cobar	–	1,606	716	674	2,996
07 – Bourke	–	–	–	–	0
08 – Narrabri	50	1,656	636	50	2,392
09 – Armidale	144	1,762	–	–	1,906
10 – Coonabarabran	746	6,260	586	–	7,592
13 – Glen Innes	1,252	11,606	0	345	13,203
14 – Upper Hunter	104	1,264	2	–	1,370
16 – South East NSW	257	55,369	–	–	55,626
17 – Griffith North		5,620	1,095	1,167	7,882
18 – Griffith South	99	15,702	1,455	408	17,664
48 – C/T North	1,964	16,680	–	–	18,644
49 – C/T South	188	20,269	7	6	20,470
Totals	5,611	140,209	13,279	7,515	166,614

C/T: Central Tablelands

The highest maximum non-commercial cull was in the South East zone at 55,626 kangaroos. This is almost 75% more than the commercial harvest in the South East zone in 2024 (31,998) and is 3.9% of the estimated kangaroo population in the South East zone (Table 8).

Table 8 **Maximum non-commercial cull as a percentage of total kangaroo population**

Zone	Total kangaroo population	Potential non-commercial cull	Non-commercial cull percentage
01 – Tibooburra	545,828	1,346	0.2
02 – Broken Hill	899,138	9,477	1.0
04 – Lower Darling	634,831	6,046	0.9
06 – Cobar	138,764	2,996	2.2
07 – Bourke	295,749	0	0
08 – Narrabri	674,494	2,392	0.3
09 – Armidale	582,712	1,906	0.3
10 – Coonabarabran	914,837	7,592	0.8
13 – Glen Innes	555,844	13,203	2.4
14 – Upper Hunter	373,630	1,370	0.4
16 – South East NSW	1,428,800	55,626	3.9
17 – Griffith North	326,619	7,882	2.4
18 – Griffith South	657,467	17,664	2.7
48 – C/T North	866,790	18,644	2.1
49 – C/T South	739,397	20,470	2.8
Totals	9,634,900	166,614	1.7

C/T: Central Tablelands

The difference in method for calculating maximum non-commercial cull figures (based on reports and extrapolation) and commercial harvest figures (solely based on reports) should be taken into account when combining data from these 2 different sources.

Monitoring compliance in the commercial harvest zones

Compliance

During 2024 there were 456 licensed commercial harvesters with approximately 2,541 approved landholder consents (some properties may have provided consent to multiple harvesters) for commercial harvesting. These properties cover 14.9 million hectares. There were also 98 registered premises, 21 licensed animal dealers and 4 licensed skin dealers.

Compliance monitoring of licensees is performed by the department's compliance officers, with additional monitoring by NSW Food Authority, firearms licensing audits by NSW Police Force and field inspections by departmental regional compliance and regulation officers.

Regional compliance and regulation officers inspect carcasses, harvesters' vehicles and equipment, chiller premises and processors for compliance with licence conditions.

Licensing staff contributed to compliance by communicating with and educating licensees, assessing applications, compiling reports and reporting suspect activities and irregularities to regional compliance officers.

Regional compliance and regulation officers investigate reports of illegal harvesting activities. During 2024, compliance action was taken against 23 reports of potential licence breaches and other illegal activity involving commercial licensees or for commercial purposes.

Information to assist law enforcement, including compliance with the *Biodiversity Conservation Act 2016* (BC Act), *Firearms Act 1996* and *Food Act 2003*, is shared as required with NSW Police Force, NSW Food Authority, the Australian Department of Climate Change, Energy, the Environment and Water, and interstate fauna protection agencies, within the boundaries of NSW privacy legislation. For example, from late 2020, a monthly report detailing licensed professional kangaroo harvesters and registered chiller premises has been supplied to NSW Police Force.

Reports involving matters related to food safety were referred to NSW Food Authority in accordance with the memorandum of understanding between the department and the NSW Food Authority.

Activities involving non-commercial shooting were referred to the relevant NSW National Parks and Wildlife Service office.

Inspections of premises

Regional compliance officers and NSW Food Authority compliance staff inspected chillers in commercial kangaroo management zones for:

- non-head-shot carcasses
- underweight carcasses
- valid tags
- correctly affixed tags (correct species and zone)
- untagged carcasses
- display of premises registration number and certificate
- presence of other animal carcasses.

Harvester vehicles are checked for:

- appropriate NSW Food Authority registration (for either human consumption or pet food)
- correct set-up and fit-out
- untagged and underweight carcasses.

Harvesters are also checked to ensure they are carrying a kangaroo harvester's licence issued under the BC Act.

During 2024, there were 98 registered premises. The department conducted 112 chiller inspections, 14 processing works inspections and one skin dealer inspection during 2024. The NSW Food Authority conducted a further 17 audits of chiller premises and 95 inspections of game meat harvester vehicles.

Table 9 shows the number of chiller and processing works inspections undertaken in each of the last 5 years.

Table 9 **Number of chiller and processing works inspections undertaken by year**

Year	Chiller inspections	Processing works inspections
2020	364	32
2021	152	16
2022	109	13
2023	128	11
2024	112	15

Infringement notices

Issuing of verbal cautions, written warnings or penalty infringement notices is at the discretion of the regional compliance officer, in accordance with the department's Compliance Policy (OEH 2018).

Although cautions do not attract penalties, they are recorded and taken into account in any future compliance considerations and risk assessment procedures. Table 10 summarises compliance response outputs for 2024.

Table 10 Compliance outputs 2024

Offence	Advisory letter	Official caution	Warning letter	Penalty infringement notice	Total
Non-head shot	–	1	9	3	13
Underweight carcasses	–	–	–	–	–
Incorrect display on chiller	2	0	4	1	7
All other breaches of licence conditions	–	–	3	–	3
Total	2	1	16	4	23

Licence suspensions

In the 2024 licensing year there were no licence suspensions.

Prosecutions

There were no prosecutions finalised in 2024.

Other factors affecting the commercial harvest in 2024

Reduced or suspended quotas

A zone quota is reduced to 10% of the population estimate when the population falls between 1.5 and 2.0 standard deviations below the long-term average. A zone is closed to harvesting when the population estimate is 2 or more standard deviations below the long-term average.

In 2024 the harvest quota for eastern grey kangaroos in the Narrabri zone was reduced to 10% of their estimated population. The Griffith North zone was closed to harvesting of red kangaroos, even though their population was above the reduction threshold. This precautionary decision was made because long-term population data was limited, with the zone only established in 2020.

Table 11 Zones with reduced or suspended quotas in 2024

Management zone	Species	Status
Narrabri – Zone 08	Eastern grey	Reduced (10% quota)
Griffith North – Zone 17	Red	Closed (no quota)

No quota is set for western grey kangaroos in the Narrabri zone because it has only a small population due to being the eastern edge of their range.

Program and policy developments

Harvester knowledge course and assessment

In 2022 an online harvester knowledge refresher course and assessment was developed in conjunction with TAFE Digital. The course and assessment was introduced during 2023 as a mandatory requirement for new licence applicants. In 2024 all licensed commercial harvesters were required to successfully complete the course and assessment by the end of the calendar year, and the conditions of the Professional Kangaroo Harvester Licence were amended to include the course and assessment as a mandatory requirement.

Online licensing system enhancements

The Wildlife Management System enhancements in 2024 focused on:

- development to support the rollout of the TAFE harvester knowledge course enhancement
- development to automate manual processing functions.

These enhancements are part of an ongoing continuous improvement approach adopted by the Kangaroo Management Program.

Research involvement in 2024

Apart from annual population surveys, no research projects were undertaken by the Kangaroo Management Program in 2024.

Research funded in 2024

In 2022 the NSW Kangaroo Management Program and AgriFutures agreed to jointly fund 2 PhD scholarships for research to improve the NSW Kangaroo Management Program.

One of the PhDs is being undertaken by Evan Curtis and is titled 'Determining optimal management strategies for 4 large macropods in NSW'. It commenced in late 2022 and continues to make good progress. An update can be found on the AgriFutures Australia website.

The second PhD scholarship is to be progressed in 2025.

More information

- [2024 Quota Report: NSW Commercial Kangaroo Management Program](#)
- [2025 Quota Report: NSW Commercial Kangaroo Management Program](#)
- [Biodiversity Conservation and Science Compliance policy webpage](#)
- [Kangaroo management in New South Wales webpage](#)
- [AgriFutures Australia, Kangaroo webpage](#)

Appendix A: Progress against performance indicators in 2024

Aim 1: Ensure commercial harvest of kangaroos in New South Wales is humane

Performance indicator	Performance in 2024
Action 1.1: Implement and enforce the National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes across all commercial harvesting activity in New South Wales	
1. Licence conditions specify the commercial harvesting of kangaroos in New South Wales must be done in accordance with the National Code.	100% of harvester licences include conditions requiring compliance with the National Code.
2. All identified incidences of non-compliance with licence conditions related to inhumane harvesting are investigated, and appropriate compliance action is taken.	Complete. All detected incidences of non-compliance were investigated, and appropriate action was taken.
3. Harvester licences are issued only to applicants who have completed the game harvester statement of attainment or equivalent, have met shooter competency standards, and hold a current firearms licence.	100% of harvesters licensed in 2024 had completed game harvester statement of attainment or equivalent, met shooter competency standards, and held a current firearms licence. These are a prerequisite to obtaining a harvester licence.
Action 1.2: Facilitate capacity building and engagement opportunities to maintain harvester competency to meet National Code requirements	
1. Copies of the National Code and education materials are provided to all licensees and made available through the department's website.	All harvesters are mailed a copy of the National Code upon their first licence approval following publication of the code in late 2020.
2. A capacity building program to improve and maintain harvester competency, and increase voluntary compliance with licence conditions, is developed and implemented within the life of this plan.	In 2022 NSW KMP worked with TAFE NSW to develop an online harvester knowledge course and assessment tool focused on the National Code and the NSW harvester licence conditions. In 2024 the course became a mandatory requirement for all licensed harvesters and has been incorporated into the harvester licence conditions.

Aim 2: Ensure commercial harvest of kangaroos in New South Wales is ecologically sustainable

Performance indicator	Performance in 2024
Action 2.1: Kangaroo population estimates are determined using scientifically rigorous population surveys	
1. Fixed-wing aircraft surveys are conducted annually on the inland plains during winter. Population estimates are calculated for each inland plains commercial kangaroo management zone by 30 November each year.	Completed for 2024.
2. Helicopter surveys are completed in one region annually, and tableland regions are surveyed triennially. Population estimates are calculated by 30 November in the year of survey.	Completed. In 2024 the South East Tablelands region was surveyed.
Action 2.2: Proportional commercial harvest quotas are set and reported annually for each commercial kangaroo management zone	
1. Quota reports are submitted to the relevant Australian Government department and published on the NSW Department of Climate Change, Energy, the Environment and Water website by 1 December each year.	Completed.
2. Annual commercial harvest quotas are set for each species and commercial kangaroo management zone for harvesting to commence 1 January each year.	Completed. See quota report.
3. Maximum harvest quotas are set at 15% of the population for eastern grey kangaroos, western grey kangaroos and common wallaroos, and 17% of the population for red kangaroos.	Completed. See quota report.
4. Quotas on populations that are between 1.5 and 2 standard deviations below their long-term averages are calculated at a reduced rate of 10% of the population.	Completed. See quota report.
5. Quotas on populations that are 2 or more standard deviations below their long-term averages are suspended.	Completed. See quota report.

Performance indicator	Performance in 2024
Action 2.3: Harvest data are monitored to ensure quotas are not exceeded	
1. Proportion of monthly harvester returns submitted on time.	Harvester returns were monitored monthly. Harvesters with late returns were emailed and blocked from ordering new tags. Across the year 98% of returns were submitted.
2. Proportion of monthly harvester returns submitted accurately.	All harvester returns are consistent with their Commercial Tag Advices. Tag allocation does not exceed quota in any zone at any time, ensuring harvest does not exceed quota in any zone at any time.
3. Monthly tag allocations and harvester returns analysed and published online within 14 days of the end of the month.	Completed.
Action 2.4: Identify any potential threats to population health	
1. Any reports received relating to kangaroo health or mortality events are recorded and referred to the appropriate authorities.	No reports of unusual health or mortality events were received in 2024.

Aim 3: Be open, accountable and transparent

Performance indicator	Performance in 2024
Action 3.1: Maintain public website with relevant documents and current information	
<ol style="list-style-type: none"> 1. The following information, as a minimum, is regularly reviewed and kept current on the Kangaroo Management Program webpages: <ol style="list-style-type: none"> a. a statement of the reasons commercial harvest is undertaken in this state b. current versions of the NSW Commercial Kangaroo Harvest Management Plan, annual report and quota report Wildlife Trade Management Plan for the Commercial Harvest of Kangaroos in New South Wales 2022–26 c. annual reports and quota reports from the past 5 years d. commercial harvest and tag allocation reports from at least the past 12 months e. current licence conditions for kangaroo harvesters, kangaroo dealers and kangaroo skin dealers f. National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes g. contact information for the NSW Kangaroo Management Program. 	<p>Completed. The ‘Kangaroo management in New South Wales’ webpage is regularly revised, and new reports are published to maintain website currency. The department website was revised in 2024 and is transferring to a new platform in 2025. New documents, including the independent review of the NSW kangaroo aerial surveys, were uploaded to the KMP webpage in 2024.</p>
Action 3.2: Engage a Kangaroo Management Advisory Panel to provide expert advice on relevant kangaroo management issues	
<ol style="list-style-type: none"> 1. The panel meets at least twice per year to review progress and provide advice on implementation and review of the management plan. 	<p>Completed. KMAP met on the 27 March 2024 and 13 November 2024.</p> <p>Minutes are on the KMP website.</p>
<ol style="list-style-type: none"> 2. The department provides the panel with timely and relevant information and reports to perform its functions throughout the life of the plan. 	<p>Completed. Regular updates were provided to KMAP members.</p>

Performance indicator	Performance in 2024
Action 3.3: Respond to information requests	
1. A stakeholder communication and engagement strategy is developed in the first 12 months and implemented throughout the life of this plan.	Completed.
2. Media releases on issues of interest to the community are prepared for approval by the NSW Minister when appropriate.	A media campaign (print, radio and social media) to notify the community of the 2024 helicopter surveys was undertaken in September 2024.
3. Responses to all media enquiries are provided in a timely way.	Completed.
4. Approved relevant departmental staff will participate in relevant interviews with the media upon request.	No media interviews were provided during 2024.
5. Enquiries received will be responded to within 2 working days for simple requests and within 28 working days for more complex responses.	Completed.

Aim 4: Implement effective and efficient regulation and administration

Performance indicator	Performance in 2024
Action 4.1: All activities relating to the commercial harvest of kangaroos in New South Wales are licensed in accordance with BC Act, Regulation and policy	
1. Databases of licensee and registration information are accurate, complete and up to date.	Completed. The Wildlife Management System (WMS) is a real time licensing system.
2. A sample of licences is assessed annually to confirm they are being processed and issued in accordance with relevant legislation and departmental policy.	Completed.
Action 4.2: Licence conditions are effectively applied	
1. Licence conditions are reviewed biennially.	Completed. Licence conditions were reviewed prior to implementation in 2024 and in preparation for the 2025 licensing year. New conditions were added to the 2025 licences to mandate the harvester knowledge course.
2. Licensees are advised of changes to licence conditions in writing within 7 days of the changes taking effect.	Completed.
3. Advisory materials to explain changes to licence conditions are developed and distributed with the notification of change.	Not required. Changes to licence conditions were minor and clearly communicated.
Action 4.3: Tagging, landholder consent and reporting processes enable program accountability and compliance	
1. Opportunities to improve carcass traceability, compliance, data accuracy and utility will be evaluated when available.	Completed. In 2023 NSW KMP conducted a digital tagging system trial. Analysis in 2024 concluded that a scannable tag and phone app could reliably capture harvest data. Cost benefit analysis should be undertaken before considering any implementation of a digital tagging system.

Aim 5: Effectively promote, monitor and enforce compliance

Performance indicator	Performance in 2024
Action 5.1: Develop and implement a kangaroo management compliance strategy and annual action plan	
1. Annual review and prioritisation of compliance and enforcement focus areas that respond to current risks and trends in the industry.	Regional compliance forum was held virtually in September 2024. The forum led to development of a new KMP Compliance Plan and priorities for implementation in 2025.
Action 5.2: Regular and opportunistic monitoring of licensees for compliance with licence conditions and legislation	
1. Chiller premises and processing works (kangaroo carcasses and skins) are inspected on average a minimum of 1.5 times per year to ensure compliance with NSW legislation and licence conditions.	A total of 98 premises were registered in 2024. Department compliance officers and NSW Food Authority inspectors undertook a total of 144 registered premises inspections, meeting the targeted average of 1.5 inspections per premises.
2. At least 0.5% of carcasses are inspected each year for signs of unlicensed activities, breaches of licence conditions and other evidence contrary to the program's objectives for a humane and sustainable harvest.	Chiller inspections aim to assess 5 carcasses per chiller. The total number of carcasses inspected in 2024 was approximately 720, or 0.14% of the total carcasses harvested.
Action 5.3: Investigation of and appropriate response to non-compliance	
1. All reports of unauthorised activities and activities in breach of licence conditions are submitted to relevant compliance teams. Compliance teams may impose enforcement actions such as issue of verbal cautions, written warnings or infringement notices, and prosecution or revocation of licences and registrations in accordance with the department's <i>Compliance Policy and Prosecution Guidelines</i> .	Completed.
Action 5.4: A collaborative approach to compliance	
1. Review and establish formal agreements with other New South Wales and cross-border agencies to develop collaborative approaches, establish cross-authorisation and share intelligence and information that leads to improved compliance.	Two Memoranda of Understanding were signed in 2024, between KMP (DCCEEW) and DPIRD (Hunting), and KMP (DCCEEW) and NSW Food Authority. The Memoranda of Understanding provide for the sharing of intelligence and enable joint field operations for improved compliance outcomes.

Aim 6: Facilitate adaptive management and research

Performance indicator	Performance in 2024
Action 6.1: Foster and support research to improve animal welfare outcomes	
1. Contribute to any review of the <i>National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes</i> during the life of this plan.	N/A. No code review was undertaken during 2024.
2. Assess all research proposals for opportunities to facilitate improvements to animal welfare outcomes in the Kangaroo Management Program.	No new research proposals developed in 2024.
3. All research led by the department involving animals will be conducted in accordance with approval from the department's Animal Ethics Committee and the Australian code for the care and use of animals for scientific purposes (National Health and Medical Research Council, 2013).	N/A. KMP did not contribute to research involving animals.
Action 6.2: Foster and support research to improve kangaroo census and population modelling	
1. All research proposals are assessed for opportunities to identify improvements in kangaroo census and population modelling techniques.	NSW KMP contributed funds in 2022 to support a PhD scholarship focussed on improving kangaroo population estimation and management. That project continues to make good progress. An update is provided on the AgriFutures Australia webpage.
2. All research led by the department involving animals will be conducted in accordance with approval from the department's Animal Ethics Committee and the Australia code for the care and use of animal for scientific purposes.	N/A. No research was led by the NSW KMP.
Action 6.3: Facilitate adaptive management experiments to test deliberate management interventions where practicable	
1. Any proposals to undertake active adaptive management experiments are reviewed and assessed by the department in accordance with the criteria outlined in this plan.	N/A. No adaptive management experiments were proposed during 2024.
2. All adaptive management experiments undertaken by, or in partnership with, the department are monitored and conducted according to approved conditions, including any animal welfare and ethics approvals.	N/A. No adaptive management experiments were proposed during 2024.

Performance indicator	Performance in 2024
Action 6.4: Share historical survey and harvest data	
1. A strategy, data structure and suitable platform to make historical survey and harvest data available to the public is investigated within the first 2 years of this plan.	Work in progress. Publishing historical survey and harvest data in a more accessible format will be considered as part of a website rebuild in 2024–25. Historical survey and harvest data are currently available in reports on the KMP website.
2. Subject to the plausibility of this strategy (as above), historical data are released by the end of year 4 of this plan.	N/A at this stage.

Aim 7: Undertake program reporting and review

Performance indicator	Performance in 2024
Action 7.1: Produce and publish regular reports	
1. The following reports will be produced and published on the department's kangaroo management website: <ol style="list-style-type: none"> monthly tag allocation report by the fifth day of the month for the preceding month monthly harvest report by the fifteenth day of the month for the preceding month. 	Completed. Monthly tag allocation and harvest reports are published within the required timeframes.
2. The following reports will be produced and published on the department's kangaroo management website and provided to the Australian Government on time: <ol style="list-style-type: none"> annual allocation and harvest reports by the end of February each year for the preceding year annual report on the operation of the plan by the end of March each year for the preceding year quota report, stating population size and quota allocated for the following year, by 1 December each year. 	<p>The annual tag allocation is as reported in the '2024 December monthly total', on the KMP website. Annual harvest data are included in this Annual Report rather than separately reported.</p> <p>2025 quota report was provided to the Australian Government on time.</p>
3. The annual report on the operation of the plan will include as a minimum the following information: <ol style="list-style-type: none"> actual harvest, by commercial harvest zone and species, compared with available quotas any special quota used gender bias and average weights for each species in each commercial harvest zone non-commercial cull allocation statistics within the commercial harvest zones compliance statistics including: <ul style="list-style-type: none"> premises inspected penalty infringement notices issued and reasons for the issue prosecutions 	Completed. As reported in this Annual Report.

Performance indicator	Performance in 2024
<ul style="list-style-type: none"> f. any unusual situations affecting the commercial harvest (e.g. disease outbreaks, drought conditions, market factors) g. any research on kangaroos supported by the department h. progress against performance indicators. 	
Action 7.2: Review of the Wildlife Trade Management Plan for the Commercial Harvest of Kangaroos in New South Wales 2022–26	
1. The department will commence review of this plan at least 12 months before its expiry and resubmit for public exhibition and assessment by the Australian Government before approval by the Commonwealth Minister for the Environment in the timeframe prescribed by the Commonwealth department.	N/A at this stage.