# Kangaroo Harvesting Program

2019 Report





Environment, Land, Water and Planning

#### **Acknowledgment**

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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## Introduction

The Victorian Kangaroo Harvesting Program commenced operation on 1 October 2019. This document reports on the operation of the program from its commencement until 31 December 2019.

During that period the program operated according to the *Victorian Kangaroo Harvest Management Plan 2019* (KHMP). The Department of Environment, Land, Water and Planning (DELWP) prepared the plan and is responsible for setting harvest quotas, as well as for managing the Authority to Control Wildlife (ATCW) system which allows the non-commercial control of kangaroos for damage mitigation. The Department of Jobs, Precincts and Regions (DJPR) and the Game Management Authority (GMA) administer the Kangaroo Harvesting Program, including authorising harvesters, allocating quota among authorised harvesters and monitoring compliance with program requirements.

The KHMP sets the requirements for the program under a series of objectives with associated management actions and targets.

Objective 6 of the KHMP is "Maintain openness, accountability and transparency". One of the requirements under that objective is that "DELWP and DJPR will make relevant documents available online to ensure information about the requirements of this plan and the operation of the program are accessible to all interested parties". Included in the description of relevant documents is "a summary of harvest return data on an annual basis" and "information on the total take of kangaroos (in Victoria) across both the commercial harvest and the ATCW system, on an annual basis".

This report has accordingly been prepared to address the above requirement. While the report has been prepared in the context of the Kangaroo Harvesting Program, ATCW figures are included as they are accounted for in quota setting.

### Population estimates and calculation of quotas

The sustainability of kangaroo populations under commercial harvest is ensured by setting quotas that limit the number of kangaroos that can be harvested on an annual basis. The total sustainable level of take for Eastern and Western Grey kangaroos annually has been set at 10 per cent of the population in each harvest zone. The 10 per cent figure includes kangaroo mortality under both the commercial Kangaroo Harvesting Program and the ATCW system.

Given that the Kangaroo Harvesting Program operated for only the final quarter of 2019, the quota calculations for 2019 were based on a total take (across the Kangaroo Harvesting Program and ATCW system) of 2.5 per cent of the kangaroo population in each harvest zone<sup>1</sup>. About one-third of this was allocated to the Kangaroo Harvesting Program.

Kangaroo population figures on which the quota calculations are based are from statewide aerial kangaroo surveys undertaken in 2018<sup>2</sup>.

Refer to the *Victorian Kangaroo Harvest Management Plan 2019* for more information about the location of the harvest zones referred to throughout this report.

<sup>1.</sup> Scroggie, M.P., Moloney, P.M., Ramsey, D.S.L. (2019) Interim harvest quotas for kangaroos in Victoria, October – December 2019. Arthur Rylah Institute, Unpublished Client Report.

Moloney, P.D., Ramsey, D.S.L., and Scroggie, M.P. (2018). State-wide abundance of kangaroos in Victoria: results from the 2018 aerial survey. Arthur Rylah Institute for Environmental Research Technical Report Series No. 296. Department of Environment, Land, Water and Planning, Heidelberg, Victoria.

# **Kangaroo Harvest Program statistics**

Table 1 provides a summary of commercial Kangaroo Harvesting Program quota allocated and consumed (i.e. kangaroos harvested) for each harvest zone from October-December 2019.

Harvest zone	Estimated population	Commercial quota for the Kangaroo Harvesting Program	Quota harvested	% of quota harvested	% of est. population harvested
Mallee	47,491	485	69	14.23%	0.15%
Upper Wimmera	92,316	945	456	48.25%	0.49%
Lower Wimmera	402,499	4,115	3,340	81.17%	0.83%
Central	274,953	2,810	1,631	58.04%	0.59%
Otway	182,537	1,865	455	24.40%	0.25%
North East	288,098	2,945	1,727	58.64%	0.60%
Gippsland	90,711	925	157	16.97%	0.17%
Statewide total	1,378,605	14,090	7,835	55.61%	0.57%

#### Table 1. Kangaroo harvest data: 1 October 2019 - 31 December 2019

Overall, around 55% of the total statewide commercial quota was harvested under the Kangaroo Harvesting Program. This equates to less than 1% of the estimated statewide kangaroo population.

The amount of quota that was harvested varied greatly between harvest zones. Central, North East and Lower Wimmera zones had the highest quotas and also the highest proportion of quota harvested. The Mallee and Gippsland harvest zones had the lowest proportion of quota consumed.

While a single quota is issued for Eastern Grey and Western Grey Kangaroos, harvesters are asked to report post-harvest on the numbers of each kangaroo species they have harvested. The harvest of 6,550 Eastern Grey Kangaroos and 1,285 Western Grey Kangaroos was reported.

Harvesters reported some confusion with the reporting requirements in the mobile reporting platform they are required to use. This has likely artificially inflated the reported figure of 1,285 Western Grey Kangaroos – which equals 16% of the total harvest, whereas Western Grey Kangaroos comprise around 9% of the total kangaroo population. The figure for Western Grey Kangaroos includes reports from harvest zones where they do not occur, for example the North East harvest zone. DJPR is investigating required enhancements to the reporting tool to elicit more accurate figures for Western Grey Kangaroos in future.

Harvesters also reported that 6,358 (81%) of the kangaroos harvested were male and that 1,118 dependent young were destroyed.

# **ATCW** statistics

Table 2 provides a summary of numbers of kangaroos approved for control under ATCW in each commercial harvest zone from October-December 2019. As noted above, these figures are included in this report to enable an assessment of total kangaroo mortality across the Kangaroo Harvesting Program and the ATCW system.

It is important to note that the ATCW figures reported in Table 2 are numbers of kangaroos approved for control during this period – not kangaroos actually controlled. There is no reporting of kangaroos controlled under ATCWs issued for private land, unlike for the Kangaroo Harvesting Program, so actual figures controlled are generally unknown (however, see discussion about exceptions on page 4).

It is very unlikely that all kangaroos approved for control under ATCW during this period were controlled during the reporting period. ATCWs are typically issued for one year and control may happen at any time during that year. Permits are frequently not exhausted before expiry. However, it should also be noted that kangaroos may have been controlled during this period from ATCWs issued during the previous 12 months.

### Table 2. ATCW data: 1 October 2019 – 31 December 2019

Harvest zone	Estimated population	Kangaroos approved for control	% of est. population approved for control
Mallee	47,491	12,176	25.64%
Upper Wimmera	92,316	440	0.48%
Lower Wimmera	402,499	2,175	0.54%
Central	274,953	4,918	1.79%
Otway	182,537	503	0.28%
North East	288,098	7,152	2.48%
Gippsland	90,711	1,046	1.15%
Statewide total	1,378,605	28,410	2.06%

While ATCWs are issued for a single species, numbers are aggregated in Table 2 to enable direct comparison with kangaroo harvest data. A breakdown for Eastern Grey and Western Grey kangaroos is provided in Table 3.

Table 3. Number of Eastern Grey Kangaroos (EGK) and Western Grey Kangaroos (WGK) approved for control in each commercial harvest zone from October-December 2019.

Harvest zone	EGK approved for control	WGK approved for control	
Mallee	0	12,176	
Upper Wimmera	385	55	
Lower Wimmera	2,175	0	
Central	4,918	0	
Otway	503	0	
North East	7,152	0	
Gippsland	1,046	0	
Statewide total	16,179	12,231	

Overall, ATCWs issued during this period equate to about 2% of the total statewide grey kangaroo population. In most harvest zones, numbers of kangaroos approved for control equalled 1% or less of the population.

The number of kangaroos approved for control under ATCW in the Mallee harvest zone during this time appears particularly high. More than 10,000 of the kangaroos approved for control in that harvest zone under the ATCW system during this time are attributable to several large ATCWs issued during this period for the management of kangaroos on public land. Large-scale ATCWs like these are issued to control kangaroos in line with a management plan, generally to protect other vulnerable species on public land.

Unlike for private land ATCWs, data is available on the number of kangaroos actually controlled under ATCWs issued for public land management programs. Between 1 October and 31 December 2019, 4,482 of the more than 10,000 Western Grey Kangaroos approved for control on public land in the Mallee harvest zone were controlled.

Therefore, the figures provided for the Mallee region in the Tables 2 and 3 have been adjusted in Table 4 to reflect the actual numbers controlled on public land, rather than the numbers approved for control. The adjusted figures show that less than 14% of the Western Grey Kangaroo population in the Mallee harvest zone was controlled (on public land) or approved for control (on private land) under ATCW between October and December 2019.

Table 4. Number of kangaroos actually controlled on public land and approved for control on private land in the Mallee harvest zone from October-December 2019.

Harvest zone	Estimated population	EGK approved for control	WGK controlled (public land) or approved for control (private land)	% of est. population controlled or approved
Mallee	47,491	0	6,430	13.53%

### Summary: combined total kangaroo control October – December 2019

Table 5 provides a summary of the combined total number of Eastern Grey and Western Grey kangaroos harvested under the Kangaroo Harvesting Program and approved for control under the ATCW system from 1 October – 31 December 2019.

### Table 5. Combined total number of kangaroos harvested under the Kangaroo Harvesting Program and approved for control under ATCW from October-December 2019

Harvest zone	Estimated population	Kangaroos harvested under Kangaroo Harvesting Program	Kangaroos approved for control under ATCW or controlled (Mallee public land)	Total number of kangaroos approved (ATCW), controlled (Mallee public land ATCW) and harvested (commercial program)	% taken of est. population
Mallee	47,491	69	6,430	6,499	13.68%
Upper Wimmera	92,316	456	440	896	0.97%
Lower Wimmera	402,499	3,340	2,175	5,515	1.37%
Central	274,953	1,631	4,918	6,549	2.38%
Otway	182,537	455	503	958	0.52%
North East	288,098	1,727	7,152	8,879	3.08%
Gippsland	90,711	157	1,046	1,203	1.33%
Statewide total	1,378,605	7,835	28,410	30,499	2.21%

Across the state, 2.21% of Eastern and Western Grey kangaroos were subject to either commercial harvest or ATCW control (approved for control, or in the case of public land in the Mallee zone, actually controlled). On a statewide basis and in the majority of harvest zones, this is consistent with the recommended 2.5% total take from the population for this period<sup>3</sup>.

The exception was the Mallee harvest zone, where the proportion of the population that was harvested, controlled or approved for control was significantly above the recommended figure. However, in this case, the majority of kangaroo control was undertaken in line with a scientifically-developed and approved management plan.

 Scroggie, M.P., Moloney, P.M., Ramsey, D.S.L. (2019) Interim harvest quotas for kangaroos in Victoria, October – December 2019. Arthur Rylah Institute, Unpublished Client Report.